

PROCEEDINGS

3rd EURASIAN MULTIDISCIPLINARY FORUM,

EMF 2015

19-21 October, Tbilisi, Georgia

PROCEEDINGS

**3rd EURASIAN MULTIDISCIPLINARY FORUM,
EMF 2015
*19-21 October, Tbilisi, Georgia***

European Scientific Institute, ESI (publishing)

Impressum

Bibliographic information published by the National and University Library "St. Kliment Ohridski" in Skopje, Macedonia; detailed bibliographic data are available in the internet at <http://www.nubsk.edu.mk/>;

CIP – 3(100)(062)

COBISS. MK-ID 100222218

Any brand names and product names mentioned in this book are subject to trademark, brand or patent protection and trademarks or registered trademarks of their respective holders.

The use of brand names, product names, common names, trade names, product descriptions etc. even without a particular marking in this works is in no way to be construed to mean that such names may be regarded as unrestricted in respect of trademark and brand protection legislation and could thus be used by anyone.

PROCEEDINGS: 3rd Eurasian Multidisciplinary Forum (3, 2015; Tbilisi)
/ 3rd Eurasian Multidisciplinary Forum, EMF 2015, 19-21 October, Tbilisi, Georgia

European Scientific Institute, ESI, 2015. (376 p.) : ilustr. ; 21 cm

Kocani, Republic of Macedonia

Email: contact@eujournal.org

Printed in Republic of Macedonia

ISBN 978-608-4642-46-6

Copyright © 2015 by the authors, ESI and licensors

All rights reserved. 2015

PROCEEDINGS

**3rd EURASIAN MULTIDISCIPLINARY FORUM,
EMF 2015
*19-21 October, Tbilisi, Georgia***

Table Of Contents:

A FRAMEWORK FOR A EURASIAN RELIGION-BASED SOCIAL MARKETINGCAMPAIGN IN OPPOSITEION TO HUMAN TRAFFICKING.....	1
<i>Vernon Murray</i>	
<i>Sherry Dingman</i>	
<i>Julia Porter</i>	
ANCIENT MODERN BRAND “THE TIMES”.....	15
<i>Khatuna Kacharava</i>	
DEVELOPMENT OF THE MAIN MACROECONOMIC INDICATORS AND THE FINAL CRISIS.....	20
<i>Lali Chagelishvili-Agladze</i>	
<i>Gela Aladashvili</i>	
<i>Nodar Bagrationi</i>	
<i>Amiran Tavartkiladze</i>	
<i>Lia Totladze</i>	
<i>Tamar Agladze</i>	
DYNAMICS OF SHADOW ECONOMY IN RUSSIA.....	34
<i>Margarita Perova</i>	
<i>Evgeniy Perov</i>	
THE THEORETICAL AND PRACTICAL ASPECT OF SELECTING THE CAPITAL BUDGETING METHODS.....	47
<i>Tamar Gamsakhurdia</i>	
<i>Ketevan Maisuradze</i>	
NEW PUBLIC MANAGEMENT (NPM) PARADIGM IN GEORGIA.....	58
<i>Vasil Kikutadze</i>	
FEATURES OF QUALITY-MANAGEMENT POLICIES IN GEORGIA.....	67
<i>Ioseb Batiashvili</i>	

AN ANALYSIS OF THE STUDIES ON THINK TANKS SUCCESS AND RANKING.....73

Hüseyin Özgür

Onur Kulaç

STRATEGIC DIRECTIONS OF STRENGTHENING COMPETITION ON HIGHER EDUCATION MARKET OF GEORGIA.....91

Lasha Tabatadze

THE ROLE OF EDUCATION IN THE FORMATION OF CIVIL SOCIETY.....100

Lamara Kadagidze

CHALLENGES OF INCLUSIVE EDUCATION IN GEORGIA.....112

Nino Samarguliani

ACTUAL ISSUES OF GUARDIANSHIP AND TUITION.....119

Nino Mindiashvili

LEGAL CULTURE AND LEGAL CONSCIOUSNESS IN TERMS OF SET AND ATTITUDE.....123

Vakhtang Nadareishvili

Tinatin Chkheidze

THE RIGHTS OF THE INTERESTED PERSONS ACCORDING TO “THE LAW OF GEORGIA ON ENFORCEMENT PROCEEDINGS”.....130

Gocha Abuseridze

LEGITIMATE TYPES OF THE COURT ACCESSIBILITY RESTRICTION ACCORDING TO CIVIL PROCEDURE CODE OF GEORGIA.....134

Irine Rokva

ASPECTS OF THE CURRENT FOCUS OF TENSION IN THE EUROPEAN UNION.....139

Michaela Ševčíková

GENEOLOGY OF AUTHORITY AND THE PUZZLE OF SOVEREIGNTY.....146

Lasha Matiashvili

Dictatorship and Theory (Varlam Cherkhezishvili's Critic of Social-Democratic Movement).....154

Mikheil Gogatishvili

Analysis of Employment and Unemployment in Municipalities of Georgia.....159

Murtaz Kvirkvaia

How to Architect the Rural Regions into Smart Society.....171

Munadil Khaleel Faaeq Al-Sammarraie

Alaa K.Faieq

Sinan A. Harjan

Mohammad Maher Rasheed

Practical Impediments to Convergence of U.S. GAAP and IFRS.....181

Krista Gray

Angela Spencer

Lela Pumphrey

Management of Art Centres in Georgia.....192

Tamar Tavkheldidze

R1A Subclades and Bronze Age Migrations on the Eurasian Steppes.....195

Csaba Barnabas Horvath

The Theoretical Basics of the Post-Soviet Media.....207

Nino Shoshitashvili

Significant Factors for the Sustainable Development of Tourism in Georgia.....214

Maka Piranashvili

Nodar Grdzelishvili

Ketevan Maisuradze

The Importance of the Role of Local Food in Georgian Tourism.....222

Maia Meladze

MAIN TRENDS OF DEVELOPING MEDICAL TOURISM IN GEORGIA.....	228
<i>Otar Gerzmava</i> <i>Ana Tegetashvili</i>	
EVALUATION OF EDENTULISM, INFLUENCE OF SOCIO-ECONOMIC, BEHAVIOURAL FACTORS AND GENERAL HEALTH ON PROSTHETIC STATUS OF ADULT POPULATION OF GEORGIA.....	233
<i>Galaktion Makhviladze</i> <i>Lela Tsitaishvili</i> <i>Vladimer Margvelashvili</i> <i>Manana Kalandadze</i>	
MUSIC THERAPY.....	244
<i>Marina Shakarashvili</i> <i>Mania Arabuli</i>	
GHANA’S JUBILEE FIELDS OIL AND GAS EXTRACTION: ACCOUNTABILITY AND PROSPECTS.....	249
<i>Collins Adu-Bempah Brobbey</i>	
STUDING RADIOECOLOGICAL PROBLEMS IN THE CASPIAN REGION.....	270
<i>Otar Gerzmava.</i> <i>Rukhsara Alieva</i> <i>Niazy Hajizade</i>	
SMART AUDIO AMPLIFIER.....	275
<i>Josue Zarate V</i> <i>Enrique Muñoz C</i> <i>Ruben Diaz C</i>	
PERSPECTIVES OF FORMATION MARITIME LOGISTIC CLUSTERS IN GEORGIA.....	295
<i>Medea Kavtaradze</i> <i>Nataliia Revutska</i> <i>Natia Bejanidze</i>	
DENTURE - “BRIDGE OF BRUKLIN”.....	302
<i>Tamar Dolidze</i>	

GENDER STEREOTYPES AND LABOUR SEGREGATION IN DENTAL OFFICES.....307

Sopio Samkharadze

Zurab Alkhanishvili

Landa Lursmanashvili

Nino Gvasalia

RISK FACTORS WHILE PERFORMING LOCAL ANESTHESIA IN DENTAL PRACTICE.....314

Nino Tsilosani

Marika Kublashvili

TOWARD A PSYCHOLOGICAL THEORY OF BODY LANGUAGE.....324

Ramaz Sakvarelidze

Manana Buachidze-Gabashvili

GROUP PSYCHOTHERAPY IN GEORGIA.....332

Revaz Korinteli

FACE-ATTACKING AND FACE-ENHANCING STRATEGIES.....345

Natalia Koroshinadze

PERCEIVED STRESS AND COPING STRATEGIES IN UNIVERSITY ADMINISTRATION AND SERVICES STAFF.....350

Angelines Díaz Corchuelo

Ramona Rubio Herrera

Eulogio Cordón Pozo

CATEGORIES OF VISUAL PUNS.....362

Meri Giorgadze

FORMATION OF WORDS ON THE EMIC LEVEL.....372

Nino Kemertelidze

Liana Koroshinadze

A FRAMEWORK FOR A EURASIAN RELIGION-BASED SOCIAL MARKETING CAMPAIGN IN OPPOSITION TO HUMAN TRAFFICKING

Vernon Murray, PhD

Sherry Dingman, PhD

Marist College, Poughkeepsie, NY, USA

Julia Porter, MS (student)

University of South Florida, Tampa, USA

Abstract

In theory, religion-based anti-human trafficking appeals may dissuade traffickers from engaging in certain offensive behaviors, and victims from engaging in certain risky behaviors. This discussion correlates religion, religiosity and human trafficking data to identify the potential for religion-based anti-trafficking social marketing campaigns in Eurasia. Based on a sample of sixty Eurasian nations, it indicates which religions (e.g. religious leaders) would be more or less likely to participate in anti-trafficking prosecution, protection, prevention and partnership interventions.

Keywords: Religion, Human trafficking

Introduction

Human trafficking involves using force, fraud and coercion to exploit vulnerable populations for commercial benefit (UNODC 2008 p. 13). It encompasses prostitution, labor, debt bondage, organ trafficking, and sometimes the crossing of international borders (Pennington, Ball, Hampton and Soulakova 2009). Thus, it often involves gritty work that presumably requires a certain degree of callousness on the trafficker's part.

The traffickers who engage in force, fraud and coercion presumably hold some mix of religious beliefs and values from childhood, etc. (Hood, Hill and Spilka 2009 p. 4). However, those social cognitions do not appear to influence traffickers' behavior as much as they might. In contrast, if those values can be incorporated into anti-trafficking marketing campaigns, then perhaps they can attenuate some aspects of trafficking. This would potentially improve quality of life (Samli 2010 p. 1) for victims worldwide (U.S. TIP Report 2014).

Religion is a complex concept and is practiced differently across groups and regions (e.g. Pew 2012). For instance American conservative and liberal Christians differ on certain issues (Dorrien 2001 p. 2). Thus, social marketers should consider using religious segmentation in their efforts to oppose trafficking, as Christians, Muslims, Hindus, etc. will probably respond differently to such appeals.

Accordingly, this discussion identifies a European and Asian religion-based segment for which anti-trafficking social marketing strategies may be developed. We use correlation analysis to determine which religions (including Buddhism, Christianity, Folk, Hinduism, Islam, Judaism and Other) are more or less associated with human trafficking. However, the data does not indicate whether the focal religions' followers are traffickers, victims, or both. We investigate those correlations with specific trafficking-related areas including gold, diamonds, fish, rubber and child soldiers. Furthermore, we indicate which religions are more or less associated with three key anti-trafficking interventions: prosecution, protection and prevention (U.S. TIP Report 2014). We also identify opportunities for religions to form anti-trafficking alliances. Finally, we indicate the relative devoutness of each religion to identify the most promising segments for religion-based anti-trafficking appeals.

We approached this analysis in the spirit of Cukier and Maier-Schoenberger (2013), who advised academic researchers to “*shed our preference for... pristine data and instead accept messiness: ... [wherein] ...a bit of inaccuracy can be tolerated, because the benefits... outweigh the costs of ... very exact data.*” Cukier et al. (2013) also state that “*...we will need to give up our quest to discover the cause of things, in return for accepting correlations.*”

Thus, we offer a religion-focused analysis upon which anti-trafficking theory and social marketing intervention may be applied. The “messy” part of our analysis is that we offer strategy recommendations based on assumptions of causality, even though correlation data does not identify causal relationships. For instance, we assume that a positive correlation between Folk Religion and Fishing-related trafficking means that the religion influences the amount of trafficking, rather than trafficking leading people to join the religion. We take this approach because social marketers rarely have the resources to prove causality. Thus, they must make assumptions.

Accordingly, in this discussion we assume that religion is the cause or independent variable, and trafficking (e.g. gold or diamond-related) and national interventions (i.e. prosecution, protection and prevention) are the effects or dependent variables. Our social marketing interventions are offered in the spirit of Colin Powell's (1995 p. 393) advice to take action before one

has all the facts when in competitive situations. To delay until one has all the facts, he warns, typically worsens the outcome.

We also recognize that trafficking is related to poverty. For instance a UN report (2008) explained that, “Extreme poverty can also drive people to traffic their own family members...,” and there is anecdotal evidence that connects trafficking with poverty (U.S. TIP Report 2007). However, our analysis does not address poverty for two reasons. First, interventions would essentially require the unlikely end of Eurasian poverty. Second, religions do not appear to be closely associated with poverty. Globally, we found that the correlations between the percent of each religion by country and the percent below poverty ranged from -.15 (wealthier) for Buddhists to .13 (poorer) for Christians. Therefore we abandoned poverty as an explanatory variable in human trafficking’s connection with religion in Eurasia.

Review of the Literature

Human trafficking

While clear definitions of human trafficking have posed a problem in scholarly research (Weitzer, 2014), it is generally regarded as sex or labor exploitation of a vulnerable population via force, fraud or coercion (U.S. TIP Report 2007). There is a plethora of anecdotes about people being tricked into brothels, factories etc. (Bales and Soodalter 2009, p. 83; Baker, Gentry and Rittenburg 2005; Ringold 2005), having their blood (Carney 2011 p. 153) or kidneys (Carney 2011 p. 61) stolen, their hair shaved and sold by unscrupulous religious leaders (Carney 2011 p. 221) and more.

Religion and Trafficking

Some discussions have addressed religious people intervening to oppose human trafficking (Zimmerman 2011), and others have addressed instances wherein members of one religion traffic those of another (Christian Century 2014). However, there has been little or no discussion about traffickers’ religions, how closely they adhere to their religions’ tenets, or how to use traffickers’ religious orientations to influence them.

Murray, Dingman, Kochanowski, Porter and Otte (2011) analyzed secondary data from the Gallup World Poll on religion of 2009 and the U.S. State Department’s TIP report from 2009. They found that nations low in religiosity consistently scored high in opposing human trafficking, but their more religious counterparts inconsistently scored high. Their finding was counterintuitive, as anecdotal evidence would suggest that highly religious people would be kinder, and therefore, nations with many religious people would more consistently oppose trafficking.

Cho, Dreher and Neumayer (2011) created the 3P Anti-trafficking Policy Index in the areas of *prosecution* of traffickers, *protection* of potential

victims, and *prevention* of victimization and used it to study governments. They found that governments perform best at prosecution, second best at prevention and third best at protection. They also found that political corruption tends to reduce a nation's compliance with international anti-trafficking standards. Subsequently, in applying the 3P index to religion, Potrafke (2013) found that "governments in countries with Christian majorities implement stricter anti-trafficking polices than countries with Muslim majorities."

Accordingly, we build on Murray et al's. (2011) and Potrafke's (2013) efforts to understand how religion and human trafficking are connected. We go beyond Murray et al. (2011) in that we address specific religions. We also go beyond Potrafke (2013) in that we address all major religions instead of only Christianity and Islam. Our effort was to discover which religions engage in more or less trafficking (whether as victims or traffickers) in Eurasia. Such information could form the basis for a religion-based social marketing campaign to influence traffickers' behavior. Accordingly, the next sections describe social marketing and the methodology we used to connect religion with trafficking.

Social Marketing Intervention

Kotler, Roberto and Lee (2002 p. 5) define social marketing as the "use of marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behavior for the benefit of individuals, groups, or society as a whole." Accordingly, it identifies and defines markets, segments them into homogenous groups, targets segments with specific messages, addresses competing ideas, etc.

Social marketing, therefore, may be used to oppose human trafficking. Recent examples include activists' support for California's Transparency in Supply Chains Act of 2010 (California 2010), Invisible Children's "Kony 2012" campaign against child soldier trafficking (Dorrell 2012) and many others.

Methodology

Religion by Country

The basic methodology of this study was correlation analysis of secondary data. The sources of religion percentages by Eurasian country were the Pew Forum's Global Religious Landscape (2012), the CIA's World Factbook (2012), and the U.S. State Department's International Religious Freedom Report for 2012. The religions addressed in this study are: Buddhism, Christianity, Folk, Hinduism, Islam, Judaism and Other.

The Asian sample in this study consisted of eighteen nations (n = 18) and the European sample consisted of forty two (n = 42) nations. The Asian

nations in this sample include: Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Japan, Laos, Malaysia, Myanmar, Nepal, Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand, and Vietnam. The sixteen Western European nations include: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. Finally, the twenty-six Eastern European nations in this study include: Albania, Azerbaijan, Belarus, Bosnia & Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Tajikistan, Ukraine and Uzbekistan.

Religiosity by Nation

The information source for religiosity by Eurasian nation was the Gallup World poll of 2009. Their phone survey of 150 countries (n = 1,000 per country) asked, “*Is religion an important part of your daily life?*” Their results indicate the percentage of respondents who answered that question affirmatively.

Overall Human Trafficking:

We define overall human trafficking as a composite that subsumes labor, prostitution, organs, etc. We use the term “overall” to distinguish it from such sub-categories as fishing-related trafficking, gold mine-related trafficking, etc. The problem with correlating overall human trafficking with religious variables or other types, however, is that there are no reliable sources of overall human trafficking counts (Weitzer 2014). It is unknown whether the number of victims is in the thousands or millions (Weitzer 2014).

In theory, a dichotomous scale indicating whether or not a nation has an overall trafficking problem could be used to indicate a correlation. However, because overall trafficking is a ubiquitous problem, such an approach would prove useless. It would entail essentially zero variance and therefore a zero correlation. Accordingly, we circumvented the problem of unreliable overall trafficking counts by using Cho et al’s. (2009) 3P Anti-trafficking Policy Index as a proxy. Thus, we assume that a nation’s 3P score is strongly and positively correlated with its amount of trafficking. Therefore, the corollary is that strong anti-trafficking policies (i.e. a high 3P score) indicate a relatively low amount of trafficking. Our task was to get a sense of the general directions and magnitudes in which religion counts move with trafficking.

Cho et al’s. (2009) 3P scale operates as follows. Each nation is scored from 1 to 5 for three intervention variables: prosecution, protection and

prevention. Five (5) means that the nation has enacted strong anti-trafficking policies and is making a very good effort to oppose trafficking. Thus, a nation that receives a top score for each of the 3P's earns a total score of 15.

To simplify interpretation of the 3P's as a proxy for overall trafficking, we reversed the 3P scores (i.e. Let 1 = 5, 2 = 4, etc.) prior to running the correlations. This way, positive correlations between religion and overall trafficking or gold-related etc. would be interpreted the same way.

As a test of the 3P scores accuracy we rescaled the TIP scale as follows: Tier 1 = 1, Tier 2 = 2, Tier 2W (Watchlist) = 3, and Tier 3 = 4. Then we reversed the 3P scores and used Spearman's Rho to correlate each nation's 3P score with its 2012 TIP score. The result was a coefficient of .62, which is relatively high. Thus, there is evidence that the 3P scores appear to measure essentially the same variable as do the TIP scores.

Categories of Human Trafficking

Human trafficking's sub-categories were measured by performing a content analysis of the 2014 TIP Report Country Narratives. Those that specifically mentioned *gold, diamonds, rubber, fishing* or *child soldier* trafficking as a problem were scored with a 1 ("Yes") or 0 ("No"). Thus, we assumed that no biases in the narratives resulted in the inconsistent use of trafficking category wording. Then, consistent with Warner (2013 p. 325), we ran Pearson Correlations between these dichotomous variables and the remaining ratio-scaled variables. Pearson is the recommended estimate of the point-biserial correlation (Warner 2013 p. 325).

Categories of Intervention

Cho et al. (2012) measured nation-specific trafficking intervention successes in prosecution, protection and prevention. As stated previously, those scores range from 1 to 5, where 5 indicates effective anti-trafficking policies. We did not reverse scores for these individual p's as we were not using them as proxies for trafficking. Thus, a positive correlation between national percentages of Christians and national prosecution scores, for instance, may indicate that Christians generally favor the prosecution of traffickers. Cho et al. (2012) did not address partnerships as the 4th "p" (U.S. TIP Report 2014) to oppose trafficking. However, we present it as correlations between religions. Religions whose percentages of the population are positively correlated would appear to be amicable, or at least not adversarial.

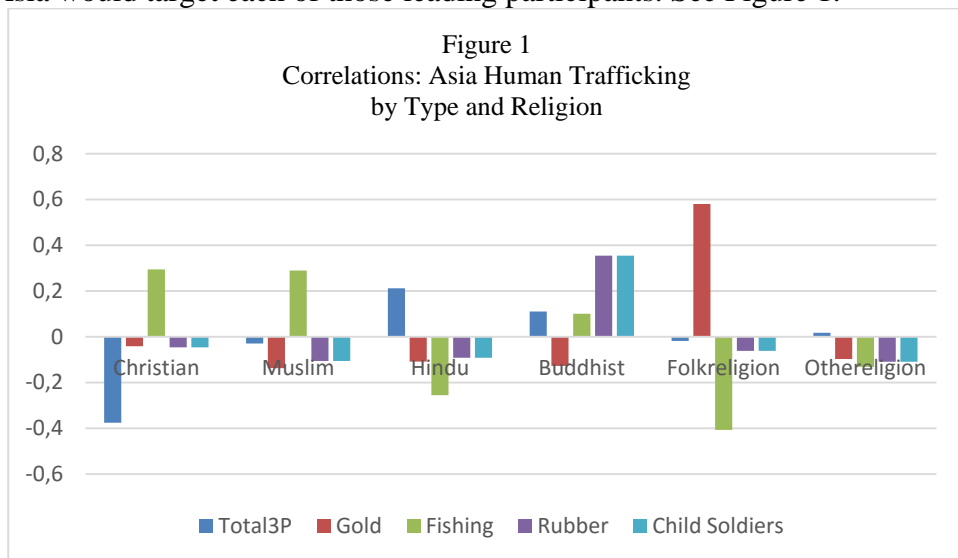
Results

The purpose of this discussion is to offer Eurasian social marketing anti-trafficking recommendations. We results present: 1) the connections between human trafficking and religion, 2) the connections between the 3P interventions and religion, 3) the connections between religion and religiosity, 4) opportunities for inter-faith anti-trafficking alliances, and 5) religion-based social marketing strategy recommendations.

Asia

Asian Trafficking by Religion

Christianity and trafficking are strongly negatively correlated in Asia. Islamic percentages in Asia are essentially uncorrelated with overall human trafficking. Christians and Muslims are the leaders in Fishing-related trafficking in Asia, and there is relatively low representation by Buddhists. Hindus lead in overall trafficking in Asia, followed by Buddhists. Rubber and child soldiers are largely the domain of Buddhists in Asia, while gold is most associated with Folk religions. Thus, a social marketing invention in Asia would target each of those leading participants. See Figure 1.

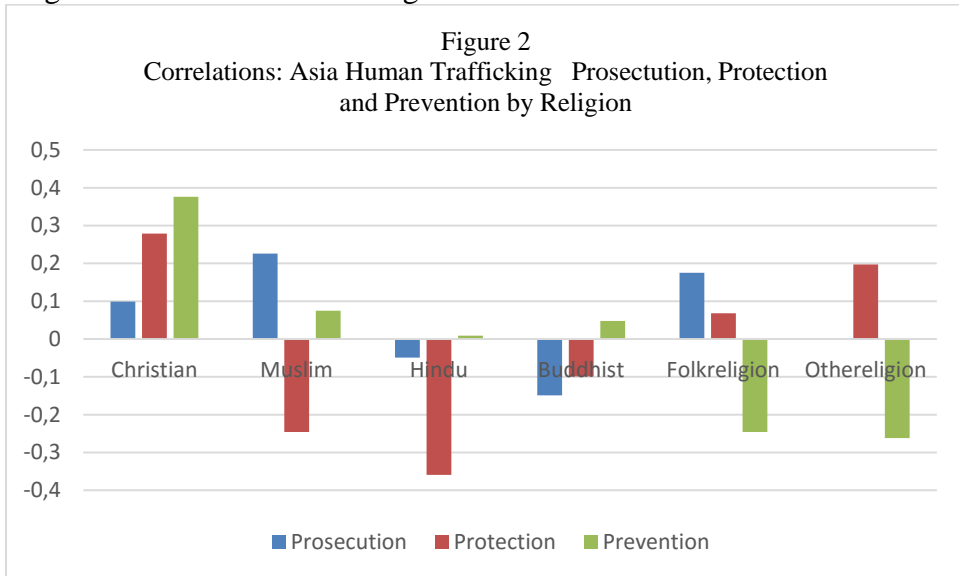


Statistical significance ($p < .05$, $N = 18$) was found with Folk religion and gold-related trafficking.

Asian 3P's Intervention by Religion

Muslims in Asia are supportive of all 3 P's. Thus, an anti-trafficking appeal in Asia should encourage Muslims participate in prosecution and prevention campaigns, with a focus on the strongest area, prosecution. But

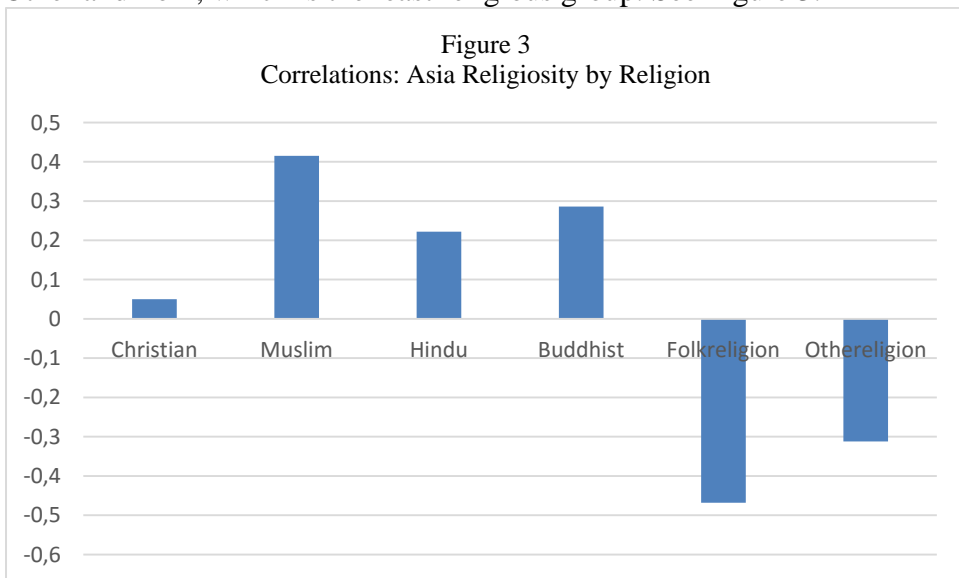
overall, prosecution-oriented appeals should be made to Muslims, Folk religions and Christians. See Figure 2.



No statistical significance was found among any religion for any of the three anti-trafficking interventions in Asia (N = 18).

Asian Religiosity by Religion

Muslims are the most religious group in Asia, followed closely by Buddhists. Hindus are the next most religious group, followed by Christians, Other and Folk, which is the least religious group. See Figure 3.



Statistical significance ($p < .05$, $N = 16$) was found only for Folk religion.

Asian Interfaith Alliance Opportunities

Folk and Other had the only positive correlation between their population percentages in Asia. They appear to thrive together, such that the more Folk the more Others. Accordingly, there is a possibility for those groups to collaborate on an anti-trafficking campaign.

Asian Social Marketing Strategy Recommendations

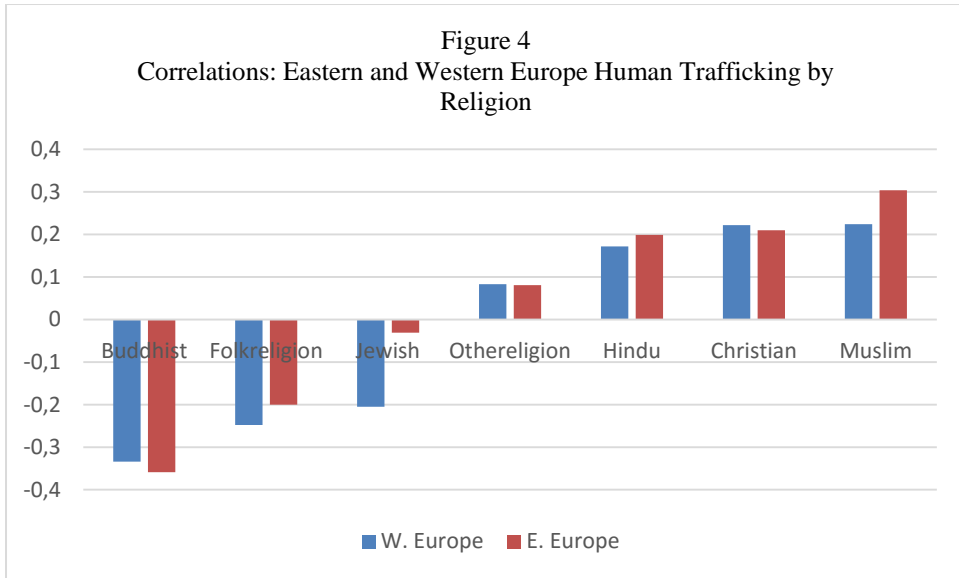
Social marketers should target Christians and Muslims for Fishing, Hindus for overall trafficking, Buddhists for rubber and child soldiers, and Folk for gold. In addition, they should target Christians to intervene against trafficking by using all 3P's, and Muslims and Folk for prosecution campaigns. Others should be recruited for protection efforts. However, as Muslims, Hindus and Buddhists are the most religious in Asia, they should be the primary targets for religion-based campaigns in Asia.

Europe

European Trafficking by Religion

The TIP report does not mention gold, rubber, etc. in connection with Europe. Accordingly, only overall human trafficking in Europe is presented in this discussion. To facilitate social marketing efforts, we divided Europe into East and West according to the traditional use of the terms. Thus, Eastern Europe generally consists of those nations formerly associated with the Soviet Union.

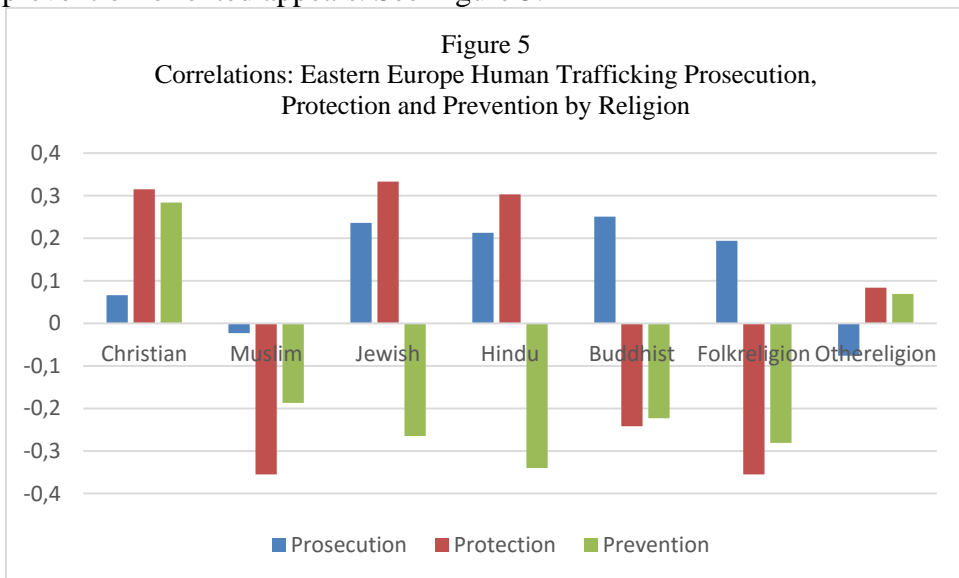
As Figure 4 indicates, there are slight differences for most religions when comparing East and West Europe. The largest difference is between east and west Jewish, and east and west Muslim groups. The strongest opponent of human trafficking is Buddhists, followed by Folk, Jewish, Others, Hindus, Christians and Muslims. Thus, anti-trafficking campaigns in Europe should mostly target those groups with the strongest positive correlations. See Figure 4.



No statistical significance was found for any religion for any type of human trafficking in Eastern Europe (N = 26) or Western Europe (N = 16).

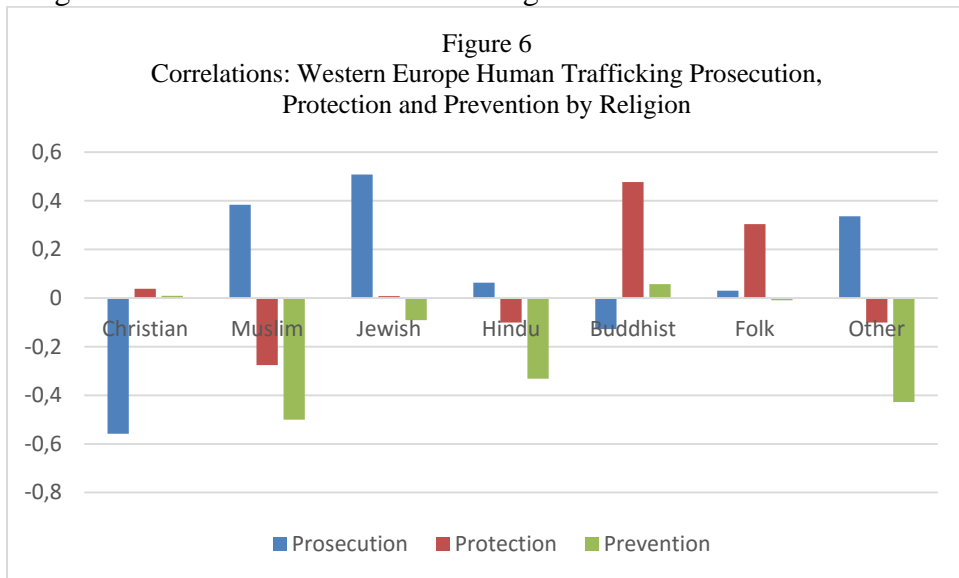
European 3P's Intervention by Religion

As Figure 5 indicates, the most likely religions in Eastern Europe to participate in prosecution campaigns would be Buddhists, Jews, Hindus and Folk religions. Christian, Jewish, and Hindu groups would be likely to support protection efforts. Christians and Others would be likely to support prevention-oriented appeals. See Figure 5.



No statistical significance found for any religions in Eastern Europe (N = 26) for any of the three anti-trafficking interventions.

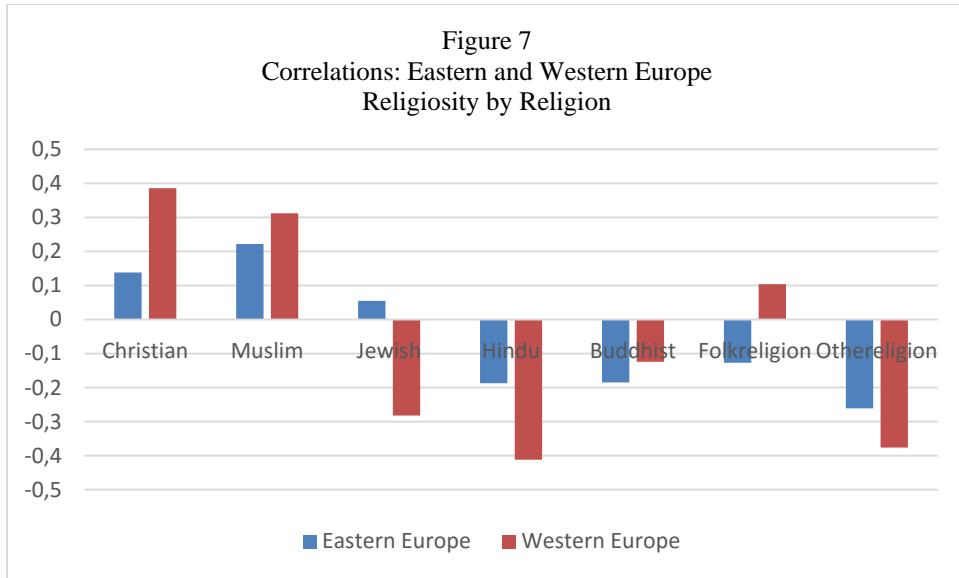
Western Europe differs from Eastern Europe in several ways. Christians in Western Europe do not support any of the 3 P's, and they are negative for prosecution. Muslims in Western Europe are more likely to support prosecution. Jewish and Hindu groups in Western Europe are less supportive of protection and prevention than they are in Eastern Europe. Thus, overall, Eastern Europeans across religions seem to have stronger feelings regarding the interventions, whether for or against (positive or negative correlations). This is evidenced by the higher peaks and deeper troughs for the east than the west. See Figure 6.



For Western Europe statistical significance ($p < .05$, $N = 16$) was found among Christians and Jews for prosecution, and prevention among Muslims.

European Religiosity by Religion

Western Europeans Christians are the most religious among all of the major religions. This is consistent with the location of the Vatican in Rome. Christian religiosity is followed by Western and Eastern European Muslims, and Eastern European Christians. Eastern European Jews and Western European Folk are slightly religious, while the others tend to be unreligious. See Figure 7.



For Eastern Europe (N = 26) and Western Europe (N = 16) no statistical significance was found among any religions for religiosity.

European Inter-faith Alliance Opportunities

Eastern European Christian, Hindu and Jewish group percentages are positively correlated, suggesting that they do not try to avoid each other. Thus, the three groups can potentially unite in their anti-trafficking efforts. Muslims, Buddhists and Others are positively correlated, as are Hindu, Buddhist, Folk and Jewish groups.

Western European Christians and Buddhists, and Muslims and Jews are positively correlated. However, the coefficients are relatively low (below .1). Therefore, they are not likely to form strong anti-trafficking coalitions.

European Social Marketing Strategy Recommendations

Christian, Muslim and Hindu groups do the most trafficking in Europe, while Jewish, Folk and Buddhists do less of it. In Eastern Europe social marketers should target Christians, Jews and Hindus to develop protection strategies, and Jewish, Hindu, Buddhist, and Folk to participate in protection campaigns. Jewish, Muslim and Other groups should be recruited to participate in *prosecution* campaigns in Western Europe, and Buddhists and Folk should be targeted to support *protection*. No religions in Europe appear to be good candidates for *prevention*-based campaigns.

Western European Christians are the most devout, followed by Western European Muslims. These are followed by Eastern European Muslims and Christians. The remaining religious groups in Europe are

relatively unreligious. Therefore, they should be low-priority targets for a religion-based anti-trafficking campaign in Europe.

Summary

Overall, the data indicates opportunities to focus on certain religions in Eurasia with religion-based anti-human trafficking appeals, depending on whether the social marketing campaign focuses on protection, prevention or prosecution. Human trafficking interventionists should pay careful attention to whether the target nation is in Eastern versus Western Europe, or in Asia, and specifically which religions are being identified for assistance in opposing human trafficking.

References:

- Baker, S., Gentry, J.W, & Rittenburg, T. L. (2005). Building understanding of the domain of consumer vulnerability. *Journal of Macromarketing*, 25 (2) (December), 128-39.
- Bales, K. & Soodalter, R. (2009). *The slave next door: human trafficking and slavery in america today*, California: University of California Press.
- California (2010). Senate bill no. 657 - California transparency in supply chains act of 2010.
Available at: <http://www.state.gov/documents/organization/164934.pdf>.
- Carney, S. (2011). *The red market: on the trail of the world's organ brokers, bone thieves, blood farmers, and child traffickers*. New York: Harper Collins.
- Cho, S., Dreher, A. & Neumayer, E. (2014). The determinants of anti-trafficking policies – evidence from a new index. *Scandinavian Journal of Economics* 116 (2). P. 429-54.
- Christian Century (2014). Militant nigerian leader calls captives 'our slaves.' Vol. 131.11. May 28, p. 18. Available at: <http://www.christiancentury.org/article/2014-05/militant-nigerian-leader-calls-captives-our-slaves>.
- CIA (2013) World Factbook. Field Listings-Religion. Available at: <https://www.cia.gov/library/publications/the-world-factbook/fields/2122.html>.
- Dorell, O. (2012). 'Kony 2012' viral video by invisible children stirs debate. USA Today. Available at: <http://usatoday30.usatoday.com/news/nation/story/2012-03-08/invisible-children-kony-2012/53422862/1>.
- Dorrien, G. (2001). *The making of american liberal theology: imagining progressive religion 1805 – 1900*. Louisville, KY: Westminster John Knox Press.
- Hassan, S. R. (2014). Pakistan's hindus, other minorities face surge of violence. Reuters, May 5th. available at:

<http://www.reuters.com/article/2014/05/05/us-pakistan-minorities-idUSBREA440SU20140505>.

Hood, R.W., Hill, P.C., and Spilka, B. (2009). *The psychology of religion: an empirical approach*. New York: The Guilford Press.

Kotler, P., Roberto, N. & Lee, N. (2002). *Social marketing: improving quality of life*. Thousand Oaks, California: Sage Publications.

Murray, V., Dingman, S. Kochanowski, S. Porter, J. & Otte, M. (2011). National religiosity and human trafficking. Society for the Scientific Study of Religion Annual Meeting.

Pennington, J., Ball, D.A., Hampton, R.D., & Soulakova, J.N. (2009). The cross-national market in human beings. *Journal of Macromarketing*, 29 (2) (June), 119-34.

Pew Research (2012). *The world's muslims: unity and diversity*. Religion & Public Life Project. Available at: <http://www.pewforum.org/2012/08/09/the-worlds-muslims-unity-and-diversity-executive-summary/>

Potrafke, N. (2013). *Policies against human trafficking: the role of religion and political Institutions*. Unpublished Working Paper, Center for Economic Studies and the IFO Institute at Ludwig-Maximilian University.

Powell, C. & Persico, J. (1995). *My american journey*. New York: The RandomHouse Ballantine Publishing Group.

Ringold, D. (2005). Vulnerability in the marketplace: concepts, caveats, and possible Solutions. *Journal of Macromarketing*, 25 (2) (December), 202-14.

Samli, A. (2010). *Infrastructuring: the key to achieving economic growth, productivity, and quality of life*. New York: Springer.

U.S. State Department (2012). *International religious freedom report of 2012*. Available at:

<http://www.state.gov/j/drl/rls/irf/religiousfreedom/index.htm#wrapper>

----- (2014). *Trafficking in Persons Report*. Available at: <http://www.state.gov/documents/organization/226844.pdf>.

UNODC (2008). *An introduction to human trafficking: vulnerability, impact and action*. United

\Nations.United Nations (2008). 016 Workshop: profiling the traffickers. Background Paper, The Vienna Forum to Fight Human Trafficking, February, Austria Center, Vienna.

U.S. TIP Report (2007). Available at: <http://www.state.gov/documents/organization/82902.pdf>

-----U.S. TIP Report (2014). Available at: <http://www.state.gov/documents/organization/226844.pdf>.

Warner, R. (2013). *Applied statistics: from bivariate through multivariate techniques*. Thousand Oaks, California: Sage Publications.

Zimmerman, Y. (2011). Christianity and human trafficking. *Religion Compass* 5, 567-578.

ANCIENT MODERN BRAND “THE TIMES”

Khatuna Kacharava, Associate Professor

Grigol Robakidze University, Tbilisi, Georgia

Abstract

The worldwide newspaper *The Times* does not change its principles even in XXI century. Its managing editor George Brock (1981-2008) considers that we do not have to expect that even such a respectable newspaper as *The Times* will be able to maintain status quo. He states: “Every newspaper tries to change a chemical process without exploding a laboratory. A newspaper should match with society’s character and a reader’s taste”. *The Times* was the first newspaper that chose this title. It was established on January 1, 1785. At that period it was named as “The Daily Universal Register”. In 1788 it was renamed as “*The Times of Universal Register*”. Later, the title was shortened and the newspaper was called simply “*The Times*”. In 1981 *The Times* faced a hard period. It was losing readers and advertisement income. Namely at that period Rupert Murdoch's News International bought *The Times* and *The Sunday Times* from Thomson. The acquisition followed three weeks of intensive bargaining with the unions by company negotiators, John Collier and Bill O'Neill. After this, Murdoch made the decision to modernize *The Times* and save the British newspaper industry from “gloomy” Medieval darkness. Notwithstanding great competition, *The Times*, that is the origin of print media, still manages to be traditional and modern at the same time.

Keywords: Newspaper, readers, tabloid, publish

“There are a lot of newspapers in the world including the word “Times” in their titles, but “The Times” is unique”.

Robert Thomson

Introduction

The Times is often compared to the British luxury brand Burberry. Why? The answer is simple: Burberry never changes textile; it merely creates new models based on traditional fabric. Similarly, *The Times* always maintains its tradition and tries to be super modern.

Today, we cannot meet an English gentleman with a hat, a walking stick holding the newspaper *The Times*. Though, *The Times* is lined with other symbols of Britain that still embody England.

The Times is not only the world brand, but the brand that people trust. Honesty is the inseparable part of their reputation. “We create fantastic journalism, the best one. We can do even more”, says the editorial board of *The Times*. *The Times* does not change its principles even in XXI century. Its managing editor George Brock (1981-2008) considers that we do not have to expect that even such a respectable newspaper as *The Times* will be able to maintain status quo. He states: “Every newspaper tries to change a chemical process without exploding a laboratory. A newspaper should match with society’s character and a reader’s taste”.

The Times strived for attracting young readers though he faced a lot of obstacles in this process. For instance, *The Times* is blamed that it avoids serious analytical publications and develops vulgar commercialization. It was proved when its tabloid version was published in 2003.

Nowadays, the world is “jammed” with information. “You have money, but no time. You are attacked by media; you want to know what’s going on. But how to choose which topic is most significant? We can tell you it”, write Milner.

History

The Times was the first newspaper that chose this title. It was established on January 1, 1785. At that period it was named as “The Daily Universal Register”. In 1788 it was renamed as “*The Times of Universal Register*”. Later, the title was shortened and the newspaper was called simply “*The Times*”.

The Times was the first newspaper that was printed on the new steam-driven cylinder press developed by Friedrich Koenig. It was in 1814. This method of printing enabled *The Times* to raise its circulation and spread news. In 1815, *The Times* had a circulation of 5,000.

Thomas Barnes was appointed as a general editor in 1817. In the same year, the paper's printer, James Lawson, died and passed the business to his son John Joseph Lawson (1802–1852). Under the editorship of Barnes and his successor in 1841, John Thadeus Delane, the influence of *The Times* rose to great heights, especially in politics and amongst the City of London. The increased circulation and influence of the paper was partially based on its early adoption of the steam-driven rotary printing press. Distribution via steam trains to rapidly growing concentrations of urban populations helped ensure the profitability of the paper and its growing influence.

The Times was the first newspaper to send war correspondents to cover particular conflicts. In 1932, the newspaper created its own type *Times*

New Roman. The aim of creating this type was to make reading the newspaper easier. Later, this type was used by Penguin Books for cheap issues in thin cover. Today, *Times New Roman* is the most popular font in the world.

The Times was the first English newspaper that was taken to Paris by train in 1849.

In 1890, under Arthur Fraser Walter's editorship, *The Times* faced financial crisis, but it was saved by an energetic editor, Charles Frederic Moberly Bell (1890–1911). During this period, *The Times* became associated with selling the *Encyclopedia Britannica* using aggressive American marketing methods introduced by Horace Everett Hooper and his advertising executive, Henry Haxton.

1900, *The Times* was facing a hard period. It was gradually losing money as well as readers. As a result, the newspaper was sold as a very cheap price: at the beginning it is cost 3 pence, then -2 pence and finally -1 pence.

Owing to legal fights between the *Britannica's* two owners, Hooper and Walter Montgomery Jackson, *The Times* cut off its connection in 1908 and was bought by new newspaper magnate, Alfred Harmsworth, later Lord Northcliffe. Though, until 1960, the Walters kept the share package.

In 1921, multimillionaire John Jacob Astor, son of the 1st Viscount Astor, bought *The Times* from the Northcliffe estate. The newspaper was under his ownership until 1960.

During 1960-1966, *The Times* was again facing crisis. It was under the threat to join *The Financial Times*, but in 1966 Roy Thomson saved the newspaper; it still remained independence. In 1966, members of the Astor family sold the paper to Canadian publishing magnate Roy Thomson. His Thomson Corporation brought it under the same ownership as *The Sunday Times* to form Times Newspapers Limited.

An industrial dispute prompted the management to shut the paper for nearly a year (1 December 1978 – 12 November 1979).

The Thomson Corporation management were struggling to run the business due to the 1979 Energy Crisis and union demands. Management were left with no choice but to find a buyer who was in a position to guarantee the survival of both titles, and also one who had the resources and was committed to funding the introduction of modern printing methods.

Several suitors appeared, including Robert Maxwell, Tiny Rowland and Lord Rothermere; however, only one buyer was in a position to meet the full Thomson responsibility, Australian media magnate Rupert Murdoch.

Rupert Murdoch was born in Australia in 1931. He graduated Oxford University. In 1952, his father inherited him the newspaper *The Adelaide*

News which very soon gained the greatest success. Murdoch bought two more newspapers: *The News of the World* and *The Sun*.

In 1981 *The Times* once more faced a hard period. It was losing readers and advertisement income. Namely at that period Rupert Murdoch's News International bought *The Times* and *The Sunday Times* from Thomson. The acquisition followed three weeks of intensive bargaining with the unions by company negotiators, John Collier and Bill O'Neill. After this, Murdoch made the decision to modernize *The Times* and save the British newspaper industry from "gloomy" Medieval darkness.

Fleet Street printing press became out-of-date. That is why Murdoch decided to build a new building in Wapping and moved *The Times* there. It was not easy for Murdoch as he faced great opposition. Demonstrations that took place were followed the attack with police. Owing to this fact Murdoch took security measures and the place where *The Times* was moved was called Wapping Castle. Wapping is a district in East London, England, in the London Borough of Tower Hamlets. It is situated between the north bank of the River Thames and the ancient thoroughfare simply called The Highway. At the end of Pennington Street we can notice the façade of *The Times*.

It was said that *The Times* was betraying the traditions and was risking a great deal. The tabloids issued by *The Times* prove this suspicion. *The Times* did not have any other choice. It significantly lagged behind *The Daily Telegraph* whose circulation reached one million and had great influence on establishment.

Present

Earlier only mid-aged people read *The Times*. It was a board of high society and establishment. The newspaper should not lose the basic principles, quality, preciseness and authority. Meanwhile, it should be a newspaper for young readers. Price reduction also became necessary.

The Times ceased its policy of using courtesy titles ("Mr.", "Mrs.", or "Miss" prefixes) for living persons before full names on first reference, but it continues to use them before surnames on subsequent references. The more formal style is now confined to the "Court and Social" page, though "Ms" is now acceptable in that section, as well as before surnames in news sections.

In November 2003, News International began producing the newspaper in both broadsheet and tabloid sizes. On 13 September 2004, the weekday broadsheet was withdrawn from sale in Northern Ireland. Since 1 November 2004, the paper has been printed solely in tabloid format.

In the editorial strategy of *The Times* two main directions are important – to describe everything that takes place in Britain and to remain neutral position in politics. *The Times* uses marketing strategies. For

instance, it offers readers compact discs for free together with the newspapers; the Sunday issue has the supplement *The First Film* where are clips and announcements of new film. Everything this is done to attract young people (between 25 – 40). Many people think that *The Times* is the part of establishment. In reality, *The Times* represent Britain on the international market. When Hollywood wants to show Britain, one can always see a person reading *The Times*.

Not only British people read *The Times*, but also those who live beyond Britain.

In a 2007 meeting with the House of Lords Select Committee on Communications, which was investigating media ownership and the news, Murdoch stated that the law and the independent board prevented him from exercising editorial control.

In May 2008 printing of *The Times* switched from Wapping to new plants at Broxbourne on the outskirts of London, and Merseyside and Glasgow, enabling the paper to be produced with full colour on every page for the first time.

On 26 July 2012, to coincide with the official start of the London 2012 Olympics and the issuing of a series of souvenir front covers, *The Times* added the suffix "of London" to its masthead.

The General Director of the newspaper Paul Heys states that newspaper administration permanently tries to prove that this most ancient brand is a modern newspaper. The newspaper's editing strategy is changed; it better describes British society.

Readers can read news in *The Times* with deep analysis, but unlike Guardian's and The Daily Telegraph's positions, it does not impose on society its position.

Conclusion

Notwithstanding great competition, *The Times*, that is the origin of print media, still manages to be traditional and modern at the same time.

References:

Tungate M. Media Monoliths: How Great Media Brands Thrive and Survive - kogan page, London, 2004.

DEVELOPMENT OF THE MAIN MACROECONOMIC INDICATORS AND THE FINAL CRISIS

Lali Chagelishvili-Agladze, Professor

Gela Aladashvili, Professor

Nodar Bagrationi, Professor

Amiran Tavartkiladze, Professor

Lia Totladze, Professor

Guram Tavartkiladze Teaching University, Tbilisi, Georgia

Tamar Agladze, PhD student

Caucasus University, Tbilisi, Georgia

Abstract

On the background of global financial crisis, the successful solution of economic and social problems Georgia is facing is linked to the qualitative changes in the macro-economic efficiency, which is based on the construction of a market economy in Georgia. The reality of monetary policy developed by the National Bank and practical value is determined by how well it takes into account the results of country development of the and future objectives, the macroeconomic environment in the region, the ongoing processes in the world market. Established tendencies in Financial and foreign exchange markets, pricing changes and the factors affecting them, the hazards and their prevention, opportunities for adaptation to the changing environment in this policy. The paper analyzes and evaluates basic macroeconomic indicators of Georgia and gives positive and negative results of economic policy.

Keywords: Monetary policy, macroeconomic indicators, balance of payments, inflation targeting

Introduction

On the background of global financial crisis, the successful solution of economic and social problems Georgia is facing, is linked to the qualitative changes in the macro-economic efficiency, which is based on the construction of a market economy in our country.

Table # 1 Basic Macroeconomic Indicators of Georgia 2005-2014

	Unit of Measurement	Years				
		2010	2011	2012	2013	2014
1.real sector Nominal GDP	Million Lari	20,74 3.4	24,34 4.0	26,16 7.3	26,84 7.4	29,18 7.0
Industry production	Million Lari	5,855.3	7,458.7	8,019.2	8,493.4	9,193.6
Agricultural production	Million Lari	2,396.7	2,396.7	3,018.7	3,393.6	3,579.0
Real GDO growth rate	%	106,3	107,2	106,4	103,3	104,8
2.investments	Million USD	814.5	1 117.2	911.6	941.9	1 758.4
3. Foreign trade	Million USD	6935	9225	10413	10921	11454
Export	Million USD	1677	2187	2376	2910	2861
Import	Million USD	5257	7038	8037	8012	8593
4.State budget Income	Million Lari	5,421.5	6,388.8	7,058.2	6,808.1	7,377.2
Expanses(Costs)	Million Lari	5,466.5	5,926.9	6,641.5	6,514.5	7,447.7
Balance Surplus(+) Deficit(-)	Million Lari	-918.6	-293.9	-121.0	-393.8	-687.77
5. Inflation Consumer Price index	%	111.2	102.0	98.6	102.4	102.0
6.Unemployment level	%	16,3	15,1	15,0	14,6	12,4
7. Gross Foreign debt	Million US dollars	10,102.8	11,578.7	13,242.8	13,459.8	

Analysis of data Table #1 shows that over the past 9 year period, the economy was characterized by a certain inequality. The real GDP rate growth of 1005-2012 is significantly million reduced in 2013-2014 that is mainly explained on the one hand by the influence of negative external global economic factors, on the other hand, by election-related uncertainty expectation factors of entrepreneurs, especially investors. The situation is particularly significant in 2014, which is characterized by fluctuation of global economic, that negatively affected our country's economy. In 2014 geopolitical crisis (the Russian-Ukrainian conflict, and economic sanctions of EU and US against Russia), the global financial and economic crisis, the heavy legacy of the international markets of tradable goods (especially oil, metal and food) prices' decline and the growth of the US dollar exchange rate negatively impacted not only economically undeveloped, but on the figure of economic growth performance of developed countries. The IMF

estimates the 2014 global economic growth of 3.3%, which is almost no different from the figure of 2013.

Doubt raises about the global economy in the years 2015 and 2016, respectively 3,5 and 3,7% percent growth.¹ This year the growth of domestic product of Euro zone increased by 0.8%. The IMF predicts growth of 1.2% in 2015 to 1,4% in 2016, which is a very low figure.² Apart from Euro zone different picture is observed in the US, where in 2014 the GDP growth amounted to 2.4% and was more than expected.

The weakening of economic activity around the world to strengthen the dollar against foreign currencies in many countries, including Georgia was due to the weak inflation (see Table №1) particularly notable is the fall in prices of oil, metals, food products).

Geopolitical conflict between Ukraine and Russia and the related economic results negatively impact on the economy of Georgia and of many trading partners. International economic sanctions imposed on Russia and deterioration of trading conditions could not compensate the 85% devaluation of Russian ruble against the dollar which is reflected in higher inflation and reduced the real income.

This has a negative impact on exports from Georgia, its amount decreased in 2014. As the case shows it is real, that the negative trends will continue in 2015 as well, which will be reflected on the economy of Georgia, especially if the government and the private sector do not find alternative markets and do not provide the development of already existing ones. The conflict has negatively affected the situation in Ukraine (in 2014, its economy decreased by about 8%, and the local currency - the hryvnia has depreciated by 98% to the US dollar.). The economic situation of Armenia as an important trade partner of Georgia, has deteriorated (which is reflected in its close economic ties with Russia) There is a prediction that in 2015 the economy of Armenia will have a 0% increase. Difficulties are seen also in Azerbaijan, as well as an important economic partner of our economies, but to a lesser extent, due to the energy exports. Better perspectives are seen in case of our closest and the main economic partner Turkey economy growth amounted 2.9% in 2014 (the same growth is forecast for 2015), which is a good for our country trade turnover and other kinds of economic ties.

The indicator of the country import dependence is important while the country export does not exceed the quarter, such balance causes the shortage nature of the country payment balance, the outflow of foreign exchange resources; it also adversely affects the stability of our currency and the domestic consumer goods prices.

¹ WEO update, Jan. 2015

² WEO update, Jan. 2015

The low rate of agricultural products, from real economic sector deserves attention which is perfectly not adequate to the country natural abilities and problem solving tasks in the food industry. Compared to 2005 under the conditions of industry growth by 2,9 times, the output of agricultural products increased by only 38\$.

As for the previous year 2014, the economic activity and development trends appears to be instable. In 2014 real growth of domestic products related to 2013 amounted 4.8%, but it is lower than the indicator of 2010-2012 years. During the year, the speed of economic growth was uneven. The first 3 quarters of the year was relatively of a high growth amounted 5.9%. In the fourth quarter GDP growth was reduced and amounted only 1.8% due to the decline of market orders compared to previous three quarters. The main reason for this are negative foreign factors. Reduced demand for the country export products had a negative impact on the processing industry, where a large part of the export products is produced (if during the first 3 quarters of the year average growth was apparent, in the fourth quarter there was 6.9% drop).³

Deteriorating economic conditions in the countries of trade partners adversely affected the other areas, in the fourth quarter reduced the number of visitors and the flow of foreign remittances, which had a negative impact on the 2014 economic growth indicators.

The main objectives of the National Bank is to insure price stability in the country and to maintain purchasing power of national currency. Georgia, in its short history of independence not once has suffered from severe inflationary consequences. It should be noted that until 1995 inflation had a less controlled nature, in the following period, in proportion to economic recovery, especially after the reform of money inflation processes subsequently got manageable character. The opportunity of this was largely due to the creation of financial and banking legislative framework, monetary policy of National Bank, taking fixed exchange rate of the national currency-Lari to a free-floating rate, inflation targeting regime since 2009, relatively effective enforcement of monetary policy instruments. It is also very important if government makes positive changes in social sector, in budget fiscal policy. However under the influence of various objective factors price fluctuations not only by years, but in whole, according to individual types of market products is often crucial. In Georgia many factors are the reasons of inflationary processes, including the low level of economic development and its unstable growth rate, the economy dependence on imports and significant lack of export growth, high level of economy dollarization, not eligible efficiency of budget fiscal policy and the other reasons as well.

³ www. Statistics. ge

Table2 The consumer price index (inflation) 2010-2014 years ⁴

#	Years				
	2010	2011	2012	2013	2014
The annual average to the previous average annual	107,1	108,1	99,1	99,5	103,1
December to the previous year December	111,2	102,0	98,6	102,4	102,0

Data analysis of the abovementioned table shows that in Georgia there have been significant fluctuations in the Consumer Price List. Besides there is some regularity in the abovementioned changes in the inflation rate. The inflation rate is higher in those years when there is the growth in economy activity, and in the years when it is reduced (2012, 2013, 2014).

We have approximately the same picture in case of investments made in the country as well. Foreign direct investment in 2011 amounted to 11172 million US\$, in 2012- 911,6 - million US\$, in 2013- 941.9 mln. US\$, 2014- 127.2 million US\$. Inflation change rate is adequate for this period (growth-reduction). In 2012-2014 among the reasons for economic growth and inflation squeeze was reduced markets and a decline in investment on the basis of Russian-Ukrainian conflict, some confusion caused by elections and expectation factor from entrepreneurs and investors side, oversea transfer decline, also, inefficient state regulation in tourism field. Some other low inflation rate, together with the affecting factors from delivery side, was supported by the negative factors as well. The evidence of it is the reduction of import growth rate. If in 2011 comparing to previous years the growth rate of imports amounted 28,8% in 2012-15.7% and in 2013 it was reduced up to 4,1% . Thus, 2012-2014, compared to the previous three years in Georgia, was characterized by deflation processes, which has a negative impact on the country economic activity. For this purpose, the actual inflation rate is significantly less than the inflation target of central bank for 2012-2014.

In 2014 because of internal and external factors, food prices grew slowly. In spite of the fact that in the end of the year exchange rate of Lari declined significantly, according to data for December, annual inflation of consumer food basket amounted 2.7%, while its impact on the overall index amounted 0.8 percentage points. The impact of fuel price dynamics on the changes of general price level was very important. Since the second half of 2014 began the decline in fuel prices in the local market. By the end of 2014, the annual reduction in fuel prices amounted 5-6 percent, and its contribution to overall price level was 0.3 percentage points.

⁴ www. statistics. ge

The price movement dynamic on imported goods, which has its significant share in the consumer basket, influences on low inflation.

The Ongoing Economic Processes are fully reflected in regularity changes of payment balance.

Table3

Title	2010	2011	2012	2013	2014
Current account	-1,193	-1,841	-1,855	-930	-1,611
Goods	-2,590	-3,494	-4,216	-3,493	-4,225
Export	2,462	3,254	3,502	4,246	4,073
Import	-5,052	-6,748	-7,718	-7,738	-8,299
Service	513	747	1,101	1,405	1,341
Credit	1,599	2,008	2,544	2,964	3,019
From here-Tourist income	659	955	1,411	1,720	1,787
Debit	-1,085	-1,261	-1,443	-1,559	-1,678
Incomes(net)	-215	-423	-147	-308	-158
Of which interest payments	-252	-311	-395	-377	-375
Transfer(net)	1,098	1,329	1,408	1,466	1,432
Of which public sector	174	144	118	91	54
Of which remittance credit	417	618	712	786	761
Of which other private transfers credit	534	583	587	600	636
Capital Account	206	153	134	134	115
Financial Account	1,019	1,672	1,744	824	1,546
Direct investments(net)	679	902	614	829	1,077
Of which direct investment in Georgia	814	1,048	911	949	1,279
Portfolio investments(net)	250	133	848	-37	210
Financial derivatives(net)	1	5	5	-2	8
Other investments(net)	297	1,205	314	-12	218
Of which public sector	336	278	398	490	355
Reserve assets	-208 -	572	-38	45	33
Net errors and omissions	-33	15	- 23	-28	-50

Source: www.nbg.ge The National Bank Of Georgia, Annual report 2014, p. 9

The analysis of abovementioned chart shows that the current account of payment balance in the process of analysis is characterized by deficiency, and in whole, over the years there is no significant change, although because of influence of various factors we have a different picture. The picture is particularly noteworthy since 2013-2014. If in 2012 the current account deficit of GDP was 11.7% in 2013 it amounted 5.8% as it is seen it reduced by up to 5,9 percentage points. (Mainly at the expense of export, services, transfers, direct investment, net revenue growth). In 2014 the situation

reversed. The current account deficit amounted to 9.7% of GDP, which is higher in 4,0 percentage points than the figures of previous(2013) year. The current account deficit, in absolute figures, increased by \$ 681million and amounted to1,611 billion Dollars. In 2014, in the second half of the year external shocks contributed to the increase of deficit. Deficit deepening was mainly caused by the deterioration of the balance of goods trade. The assessment of deficit of trade in goods to GDP amounted to 25,6%, which is 3.9 percent higher than the figure of 2013. Already mentioned deterioration is mainly caused by the crisis in main trading partner countries. In 2014, exports of registered goods in these countries compared to last year decreased by 1.7%.

From some largest commodity groups, 26,4% the decrease of automobile exports is noteworthy. Reduced spirits (-4,7%), steel semi(-24,5%), gold(-46,3%), cattle(-36,8) and the export of trucks. The decrease in export of abovementioned commodity groups more or less was balanced by the increase in export of ferroalloys(+24,3%),cooper concentrates(+53,5), hazelnut(+ 10.0%), wine(+41,4%), mineral water(+28,3%), drugs(+76,8%),textiles(+76,2%)and electricity (+114,9%).⁵

As for the export geography, in 2014 export increased by 2.1% in the direction of EU and amounted to 620.8million US dollars. Export decreased by 9.6% in the CIS, which was mainly due to decrease in exports ; Azerbaijan(-23,3%), Ukraine(-27,3%), Armenia(-8,7%) and Moldova (-67,5%). At the same time, exports increased to Russia by 44,5%. In other countries, exports grew by 13.9%, mainly in Turkey it reached (+30,9), USA(+52,1) and China(+166,9%) at the expense of gross export.⁶

Despite the decline in export markets, Azerbaijan and Armenia still remain as the largest export markets for Georgia. Among the top three export markets there appeared Russia in 2014, which replaced Ukraine.

In 2014 increase of import in registered goods mainly was due to the annual growth of consumer(13,1%) and intermediate type of goods (+9,1%). 2% increase in import of investment goods was also apparent, although its contribution to the overall growth of import is small.

National Bank is responsible for the monetary policy in Georgia. According to main monetary and foreign exchange policy approved by Parliament, which is the key document for the National Bank activities, inflation rate for 2014 is determined to be 6 percent of level, by 2015-2016-5 percent of level and by 2017 it would be reduced to 4 percent for long-term period. The reality of monetary policy and practical value, developed by the National Bank, is determined by how it takes into account the results and

⁵ www. Ststatistics.ge

⁶ www. Ststatistics.ge

future objectives of county development, macroeconomic environment in the world and in region, the ongoing processes in the world markets. Established trends in financial and foreign exchange markets, pricing changes and the factors affecting them, hazards and their prevention, opportunities for adaptation to the changing environment in this policy.

Since 2008, the activities of National Bank is highly appreciated from the side of international financial and monetary organizations as well as from rating organizations. It is considered to be a model for other countries. However, this doesn't mean that his work was not the flows of errors.(Inadequate attitude in some bank's activity, the delayed effects towards the exchange rate fluctuations in 2014and etc.) In 2012-2014, the country recorded inflation below at its target level. From the second half of 2012 from the side of supply, reduction of aggregate demand was added to the negative impact of prices, although from the second half of 2013 to the end of 2014 economic growth indicator a little, but still increased. This allowed National Bank start gradually exit from accommodative monetary policy, which is confirmed by the increase of monetary policy rate up to 4% (0.25percentage points). But these trends cannot be sustained. In 2014 inflation gradually strengthened. Negative factors in trading partner economies, decrease in prices on imported goods and oil, tourism flow decline and other unfavorable economic trends reflected the economy of Georgia; weakened foreign demand, together with export decrease, the decline in fixed remittances inflow was apparent. Despite the depreciation of the dollar against the gel, its nominal effective exchange rate hasn't decreased as the trading partner countries' currencies have experienced a higher devaluation. This stopped the growth of imported inflation. Under such circumstances, it was impossible to make inflation rate closer to the target level of 5 %. The rate did not changed it remained in the 4%. By the end of the year it became more distant. Consumer prices grew by 2%. As in previous years, the low level of economic Larization still remained the main obstacle in increasing the efficiency on monetary policy. Under the conditions of high dollarization the impact of interest rate transmission mechanism is weakened, because the exchange rate changes are much more transmitted to inflation which prevents exchange rate flexibility, causes currency exchange rate fluctuation which in its side causes price changes, particularly in the consumer basket components. In low Larization process increase the risk of exchange rate fluctuation for disadvantaged economic operators, especially for borrowers of commercial banks who receive the income in the currency-Lari and loans are taken in foreign currency. Classical example f all these is our country, where strengthening the dollars against the Lari in 2015 (and thereafter) make people detrimental who had loans denominated in dollars. Therefore, the development of Lari market is

of a paramount importance of monetary-exchange policy of the National Bank. Compared to 2014 the rate of Gel in case of deposits improved by 1,7% and amounted to 39,8%, in case of loans it increased by 3,3% and amounted to 39,2%.⁷

Analysis shows that in recent years the volume of trade in the securities market significantly increased. In 2014 compared with 2010 circulation of Treasury securities balance increased 3 times and in previous years the growth amounted to 80%. As the growth for secondary market, it was contributed by the growth of repo operations with securities. If in 2013 only 4 repo deals was signed, in 2014 their number reached 86.⁸

As the result of monetary policy pursued by the National Bank, in recent years activity of commercial banks in the money market has increased. In 2014, the volume of transactions in the national currency increased by 39% from the previous year and amounted to 18.9 billion GEL. In order to get the monetary policy rate the national bank developed operational framework, which consists of monetary instruments such as refinancing loans, overnight loans, overnight deposits, certificates of deposit and minimum reserve requirements. Effective use of these instruments significantly provided stability and liquidity of the banking sector, protection from the risks and shocks which took place in the international market.

In the period of analysis the development of monetary market was supported with Treasury bills and Treasury bonds by the Ministry of Finance which is the form of funds mobilization for the needs of the State. Their portfolio amounted to 1.3 billion GEL by the end of 2014, which is 4.5% of GDP. They may be purchased by physical as well as by legal entities. As for government bonds, by December 2014 the National Bank owned 80 million Lari, and commercial banks 53 million government bonds. Unfortunately, in 2014 compared to 2013 in the secondhand market of Treasury bills. If in 2013 there were concluded 22 treasury transaction deals with the amount of 56 million, therefore in 2014 there were 8 treasury transaction deals which amounted to 35,4 million Gel. Treasury bonds was concluded 67 deals in 2013 with amount of 248.9 million GEL, while in 2014, respectively, the amount of deals reached to 10 with 21.5 million GEL.⁹ Certificates of deposits of the National bank are in great demand in securities market, which are circulated for 3 and 6-month maturity segment. In 2014 there were 505 million GEL deposit certificate in the circulation. In 2014 in the second hand market of CDs 5 deals with 66.5 million Gel of total amount was signed.

⁷ www.nbg.gov.ge, annual report of the National Bank of Georgia, 2014 p. 42

⁸ www.nbg.gov.ge The National Bank Of Georgia ,Annual report 2014, p. 42

⁹ www.nbg.gov.ge The National Bank Of Georgia ,Annual report 2014, p. 50

To measure the value of the securities market, we can see that it is one of the weakest developed segment of Georgian economy and therefore cannot effectively perform the functions of economic regulation and growth. US

The main objective of the National Bank monetary policy is to ensure the stability of the national currency and to increase effectiveness of the regulation of its exchange rate mechanism. In Georgia we have a floating exchange rate regime of the national currency, which is considered the optimal exchange rate regime. The character of the regime is exchange rate fluctuations (often important) in the short-term, but due to its inherent flexibility, it maintains stability in the long-term and is adequate to economic conjuncture changes. Table 4 highlights the changing nature of Lari rate in 2008-2014.

Table 4 Lari exchange rates (period, average)¹⁰

	2008	2009	2010	2011	2012	2013	2014	2015
US Dollars/Lari	1,4902	1,6705	1,7829	1,6860	1,6513	1,6634	1,7494	
Euro/Lari	2,1886	2,3307	2,3644	2,3473	2,1232	2,2094	2,3969	

Conclusion

The National Bank has no target index of exchange rate, in such circumstances the course is determined by the demand and the supply of the currency in the foreign exchange market, which is affected by both the fundamental economic factors as well as by a temporary, short-term fluctuations. In such circumstances, in order to prevent significant changes in the exchange rate The National Bank uses the instruments of monetary policy, including foreign exchange intervention. In 2008-2014 the instrument of the National Bank intervention was foreign exchange auction mechanism. In January 2013 in order to extinguish the inflation expectations, the National bank sold 220 million dollars, but then in February and August he carried out interventions in reverse-procurements, which served to increase foreign exchange reserves. In 2014 the National Bank carried out foreign exchange intervention 18 times, which increased the circulation of Lari mass. In 2014 exchange rate of Lari to dollars is decreasing and these trends significantly strengthened in the first quarter of 2015. Throughout 2014 in the world foreign exchange market the strengthening of dollar is observed, which was caused by the 2013 Federal Reserve System decision about gradual completion of quantitative easing policy introduced in 2008; as a result the dollar began to strengthen against foreign currencies, which affected our country, its economic and the currencies of our trade partner.

¹⁰ [www. Statistics.ge](http://www.Statistics.ge)

This process reflected GEL exchange rate relatively late and The National Bank has several reasons for it:

1. A large amount of foreign direct investment inflow during the first three quarters of 2014, especially in the third quarter;

2. Seasonal increase of foreign currency inflow, concerning the summer tourist season;

3. As far as the dollar touched a stick in the first place those countries where the financial market is relatively developed, later as a result of devaluation of partner countries' currencies the balance of payment of current account fell to convey. As a result, the restraining factors of the Lari nominal exchange rate depreciation has been weakened.

As for the end of 2014 the specific reasons of Lari depreciation are of several types, including primary: the global strengthening of the dollar exchange rate to other currencies, including Georgian currency and the currencies of its trading- partner countries; reduction of exports and tourist flow; A significant increase in the realization of social programs; Increase of salaries, bonuses and other benefits in State structure; visa restrictions and complicated regulations towards some of the partner countries; Inequalities in the state budget fulfillment for the last month of the year; the reduction of Investment growth; GEL mass growth in calculation; Decline of money transfers from abroad; Reduction of investment growth rate; An increase of inflation expectations; The delay(the prevention) of adequate response on Lari depreciation by the National Bank.¹¹

Depreciation doesn't occur at once, the symptoms were evident in 2013 which is confirmed also by interventions of the National Bank, when in January it sold 220 million US dollars.¹² Refinancing loans which were given in December to commercial banks to fill liquidity negatively impacted on the growth of Lari mass in circulation. In 2014 the National bank carried out intervention only two times which was not enough. For this action the National Bank has the following arguments: During floating exchange regime due to the shocks the depreciation of exchange rate is natural reaction. In this process currency intervention carried out by the National Bank is counterproductive, as on the one hand it prevents to correct foreign misbalance existed in economic, and on the other hand, it supports appearing speculative expectation. Accordingly, the foreign currency policy of the National Bank was leading policy of less interference, so that to correct foreign misbalance quickly. In abovementioned period the National Bank carried out only two interventions in foreign exchange market, which mainly was a signal for the market that mentioned rate misbalance tremors wasn't

¹¹ www.nbg.ge The National Bank Of Georgia ,Annual report 2014, p. 55

¹² www.nbg.ge The National Bank Of Georgia ,Annual report 2014, p. 54

the result of out of control process.¹³ Unfortunately the reality was controversial. Lari rate falling kept going on during the fourth month of 2015 and only after that it became stable on its high benchmark. As for the reserves of international currency by the end of December 2014 it amounted 2,7 billion US dollars, which is less by 4,4% to the same indicator of 2013. During 2014 with the help of currency auctions the National bank net sales amounted to 100 million US dollars. In the same year our country got 188,4 million US dollars as the loan in total and grants from donor organizations to finance various programs. (EU-18,8 million dollar; The World Bank- 91,1 million dollars; Asia Development Bank- 73,5 million dollars; the other- 40 million dollars), projects and loans for projects amounted- 238,4 million US dollars (the World Bank – 54,4 million dollars, Europe investment Bank- 75,5 million dollars; Japan-47,8 million dollars, Asia Development Bank- 17,8 million dollars, the other-42,9 million dollars). The past year was marked by coverage of important debts of the national Bank and the government which amounted to 429.4 USD.¹⁴

The trends in the economy of the country in 2013-2014, and the process of foreign debt service caused abovementioned reduction of the international reserves.

Consumer confidence index as business confidence index provide qualitative information useful for monitoring the current economic situation and advance warning of turning points in economic activity. Consumer confidence is the degree of optimism that consumers feel about the overall state of the economy and their personal financial situation. How confident people feel about stability of their incomes determines their spending activity and therefore serves as one of the key indicators for the overall shape of the economy. In essence, if consumer confidence is higher, consumers are making more purchases, boosting the economic expansion. On the other hand, if confidence is lower, consumers tend to save more than they spend, prompting the contraction of the economy.

The U.S. consumer confidence index (CCI) is an indicator designed to measure consumer confidence, which is defined as the degree of optimism on the state of the economy that consumers are expressing through their activities of savings and spending. Global consumer confidence is not measured. Country by country analysis indicates huge variance around the globe. In an interconnected global economy, tracking international consumer confidence is a lead indicator of economic trends. In the United States consumer confidence is issued monthly by The Conference Board, an independent economic research organization, and is based on 5,000

¹³ www.nbg.ge www.nbg.ge The National Bank Of Georgia ,Annual report 2014, p. 56

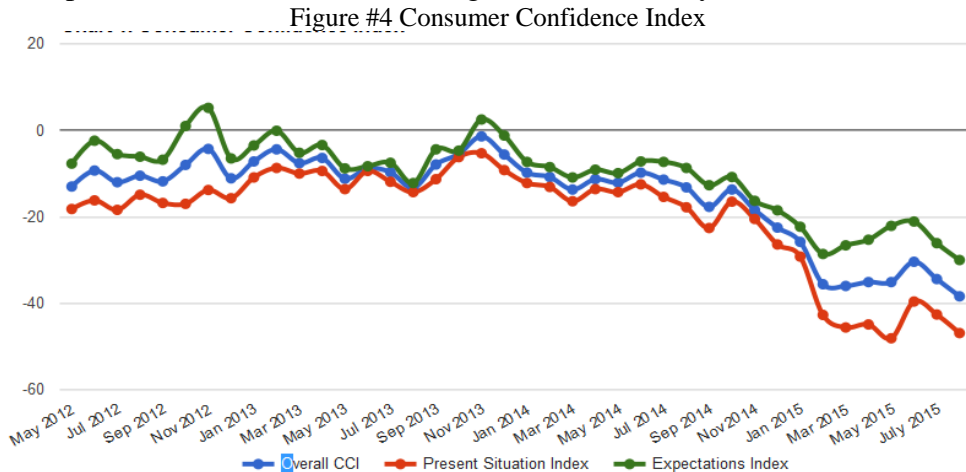
¹⁴ www.nbg.ge The National Bank Of Georgia, Annual report 2014, p. 57

households. Such measurement is indicative of consumption component level of the gross domestic product. The Federal Reserve looks at the CCI when determining interest rate changes, and it also affects stock market prices.

The consumer confidence index was started in 1967 and is benchmarked to 1985=100. This year was chosen because it was neither a peak nor a trough. The Index is calculated each month on the basis of a household survey of consumers' opinions on current conditions and future expectations of the economy. Opinions on current conditions make up 40% of the index, with expectations of future conditions comprising the remaining 60%.

OECD also calculate The Index each month on the basis of a household survey of consumers' opinions on current conditions and future expectations of the economy. OECD data is regularly published for OECD countries, index is estimate for OECD overall. There are Consumer Confidence Index as well as Business Confidence Index.

Consumer Confidence Index for Georgia is calculated since 2012. Consumer Confidence Survey by ISET follows the standard EU methodology - There are randomly sample 300-350 individuals on a monthly basis and question them about the past, current and future financial situation of their families and the country as a whole. The chart below shows that after several months of incremental improvements, Consumer Confidence Index dropped 4.1 points in August 2015, to reach a new historical minimum of -38.4 points. Data are available through the ISET survey.



The survey measures how optimistic or pessimistic consumers are with respect to the economy in the near future, consequently we see consumers' pessimism. **The results of survey reflect people's**

dissatisfaction with the GEL continuing to lose in value against the US dollar. It also means that consumers are mainly concerned about future prices, a worsening in unemployment and the general economic situation.

Another well-established index that measures consumer confidence is the University of Michigan Consumer Sentiment Index, run by University of Michigan's Institute for Social Research.

References:

The National Bank of Georgia, annual report, 2014

WEO Update, Jan.2015

Marcellino M. (2005) Leading Indicators. IEP-Bocconi University, IGIER and CEPR;

Romer D. (2012) Advanced Macroeconomics, 4th edition, Mc Graw-Hill/Irvin;

The Conference Board Leading Economic Index (LEI) for the United States and Related Composite Economic Indexes for July 2014. Available at <https://www.conference-board.org/press/pressdetail.cfm?pressid=5265>

www.nbg.ge

www.geostat.ge

www.mof.ge

<http://www.iset-pi.ge/index.php/en/consumer-confidence-index/1040-may-2015-cci-rising-consumer-expectations-point-to-a-somewhat-brighter-future>

<https://data.oecd.org/leadind/composite-leading-indicator-cli.htm>

DYNAMICS OF SHADOW ECONOMY IN RUSSIA

Margarita Perova, Doctor of Economics

Vologda State University, Russia

Evgeniy Perov, Ph.D. in Economics

Vologda Scientific Centre for Studying Social and Economic Conflicts,
Russia

Abstract

The article considers methods for the assessment of the shadow economy that are used worldwide. It demonstrates the possibilities of the application of the physical input method, the method of the comparison of income and expenditure, currency demand method for the assessment of the shadow economy. The article presents the results of the assessment of the shadow economy in dynamics when using the indicator of the share of hidden wages. It suggests the dynamic equation of the share of hidden wages that allows the projected values of the indicator to be set for the short term at current trends. Regression equations make it possible to determine the projected values of the share of hidden wages depending on the variation of factor attributes affecting the level of the shadow economy.

Keywords: Shadow economy, assessment methods, dynamics, Russia

Introduction

In one way or another, the shadow economy is present in all countries; therefore, the issues concerning the assessment of its extent are given much prominence in Russian and foreign academic literature. The problem of identifying the shadow economy, selecting the method and evaluating the level of the shadow economy is rather urgent.

The notions of the shadow economy, approaches and methods concerning its assessment vary in accordance with specific tasks and aims of the research. A broader definition is used in order to evaluate the size of the shadow economy at the country level: the shadow economy comprises economic activities – and income earned from them – that circumvent government regulation, taxation, or observation (Del Anno R., 2003). It includes unreported income from the production of legal goods and services, from either monetary or barter transactions and includes all economic activities that would generally be taxable were they reported to the state (tax)

authorities. Hence, the shadow economy involves undisclosed production, hidden income and expenditures for final consumption and accumulation not specified in statistics.

Methods of estimating the shadow economy

The shadow economy structurally comprises the formal production of goods, services and the activities of a redistributive nature. Not all shadow economic activities can be measured and evaluated, which is explained by the very nature of the shadow economy; therefore, indirect methods are used to measure its extent. They can be conveniently classified into three groups: methods of open inspections, special economic and legal methods and statistical methods.

Methods of open inspections are applied by specially created regulatory agencies. They detect and deter the violations of tax, customs, currency, banking, antitrust legislations, of trade regulations, sanitary standards, fire safety rules, etc. The results of such inspections can be used for accounting and statistical purposes.

Special methods of economic and legal analysis (accounting, documentary, economic approaches) are used by experienced economists and accountants to detect traces, causes and conditions of economic crimes.

Statistical methods are based on the methodology of the system of national accounts (SNA). They are most appropriate for studying shadow economic activity at the macro level in order to estimate the hidden production of legal goods and services. The shadow economy is identified on the basis of indirect data. The production of unrecorded goods is determined by the balance method, which assumes the comparison of the data from different sources and the recalculation of the missing information. The advantage of statistical methods is the possibility of the quantitative assessment of the concealed part of the production economic activities. These procedures can be used to identify the production sectors of the shadow economy, to assess their scope, to formulate economic and legal policy. The most widespread among statistical methods are the method of specific indicators, the method of soft modeling, structural and expert methods (F. Schneider, 2006).

Methods of specific indicators assume the use of the indicator reflecting the level of economic activities that was obtained directly or indirectly.

Direct methods involve the use of special surveys, polls or tax audits aimed at identifying discrepancies between income and expenditure and characterizing certain aspects of shadow activity by groups of taxpayers. These methods do not allow determining the dynamics of the shadow economy, but they make it possible to obtain information concerning shadow

economic activities, the structure and composition of the employed in the shadow economy. Sample surveys were used in the assessment of the shadow economy by A. J. Isachsen, J. Klovland, S. Strom (1982); A.J. Isachsen, S. Strom (1985); G. V. Mogensen, H. K. Kvist, E. Körmendi, S. Pedersen (1995), and others.

Indirect methods are applied when the straightforward direct fixation of the examined parameters is not possible. They are based on the official statistical information, the data of financial and tax agencies. Indirect methods include the method of the comparison of income and expenditure, resource methods, monetary methods (currency demand approach), the Italian method (labour approach), transaction (operation) method, trade flow method, as well as different modifications of the methods.

The method of the comparison of income and expenditure uses discrepancies of the statistical data on income and expenditure. In the system of national accounts the income amount of GNP should be equal to the expenditure amount of GNP. The difference between expenses and revenues can be used as an indicator of the extent of the shadow economy. This method was applied by A. Franz (1983), K. A. MacAfee (1980), H.-G. Petersen (1982), and others.

In Russia all the accounts of the household sector were first measured in 1996; that allowed directly correlating all revenues of households with all expenses. Consequently, the expenses significantly exceeded revenues. However, it should be taken into account that the discrepancy reflects all omissions and errors in the system of national accounts.

The physical input method implies the use of indirect data to calculate the real amount of GDP. The electricity consumption approach is most often applied for that purpose, the best known methods of which are Kaufman-Kaliberda method (D. Kaufmann, A. Kaliberda, 1996) and Lacko method (M. Lackó, 2000). The physical input methods are very simple and appealing, but they have a number of disadvantages: not all shadow economic activities require a considerable amount of electricity (e.g. building sector), and other energy sources can be used as well; the use of electricity becomes more efficient in both formal and shadow sectors of economy; there may be considerable differences or changes in the elasticity of electricity/GDP across countries and over time.

The method of assessment by the employment indicator (the Italian method) is based on a labour cost survey. The average number of hours worked derived from the sample data is compared to the official data. The Italian method provides the best results at a relatively low mobility of population. There are several varieties of the Italian method, providing similar results (F. Schneider, 2006).

The monetary (currency demand) method is based on the fact that when making transactions within the shadow economy, the preference is given to cash. The classical method of the analysis of the currency demand is based on the supposition that the shadow (hidden) transactions are made in the form of cash, so as to avoid the control from the regulatory agencies. The share of the shadow economy is estimated on the assumption of constant money velocity in the formal and informal sectors of economy (F. Schneider, 2006). The currency demand method was used and developed by P. M. Gutmann (1977), V. Tanzi (1980, 1983), G. Kirchgaessner (1983, 1984), F. Schneider (1986), and others. The given method has several drawbacks: not all payments in the shadow economy are made in cash; the correlation between the mass of banknotes and bank deposits of population does not remain constant; it is difficult to set up a correspondence between money velocity in both sectors; it is hard to determine a base period with no shadow economy; the effect of foreign currency is not considered.

Transaction (operation) method is based on the assumption that there must be a constant relation over time between the volume of transaction and official GNP. Relating total nominal GNP to total transactions, the GNP of the shadow economy can be calculated by subtracting the official GNP from total nominal GNP (E. L. Feige, 1986). The disadvantages of this method are the following: the assumptions of a base period with no shadow economy, and of a “normal” ratio of transactions to nominal GNP; the need to know the precise figures of the total volume of transactions, which is difficult for cash transactions; the assumption that all variations in the ratio between the total value of transaction and the officially measured GNP result from the shadow economy.

The commodity flow method implies the construction of the balance model and the detection of weak points in the existing data base. The commodity flow, i.e. the behaviour of value in the process from production to use (consumption), is constructed for certain most important goods and product groups. This approach allows making a quantitative assessment of foreign economic mediation, including the extent of “shuttle” business in Russia.

The methods of soft modeling are aimed at calculating the relative size of the shadow economy by distinguishing the combination of factors determining it. This approach was used by D. Giles (1997); D. Giles, L. M. Tedds, W. Guga (2002); S. Chatterjee, K. Chaudhury, F. Schneider (2006), and others. In Russia it was applied by S. Nikolaenko, Ya. Lissovlik, R. Mac Farkar (2009); N. Suslov, S. Ageyeva (2009).

The structural method is based on the use of the information concerning the extent of the shadow economy in different production branches.

The expert method relies on the intuition and experience of qualified professionals, who determine the degree of data reliability, interconnections and relations that are difficult for quantitative description.

Assessment of the shadow economy in Russia

The most widespread among the methods for the assessment of shadow economic activities at the macro level are the statistical methods of specific indicators, in particular the physical input method, the method of the comparison of income and expenditure, and the currency demand method that use official statistical information. Let us consider the results of the assessment of the shadow economy in Russia when applying these methods.

The physical input method, which is based on electricity consumption and successfully used in countries with established economies, is inapplicable for Russia. In the Soviet economy the electric intensity of products was unreasonably high, despite a low cost of electricity. In the context of the transition to the market economy concurrently with the growth of the shadow economy the electric intensity of production decreased at a more rapid rate. In addition, since 2000 the growth rates of construction, retail and service sectors that consume relatively less amount of electricity has been faster than the growth rates of industry (Federal State Statistics Service). The graph based on the World Bank data (*Figure 1*) reflects the growth rates of GDP, industrial production and electricity consumption. As follows from the graph, the growth rates of GDP and industrial production have been exceeding the growth rate of electricity consumption practically all years since 1997, except for the years of financial crises.

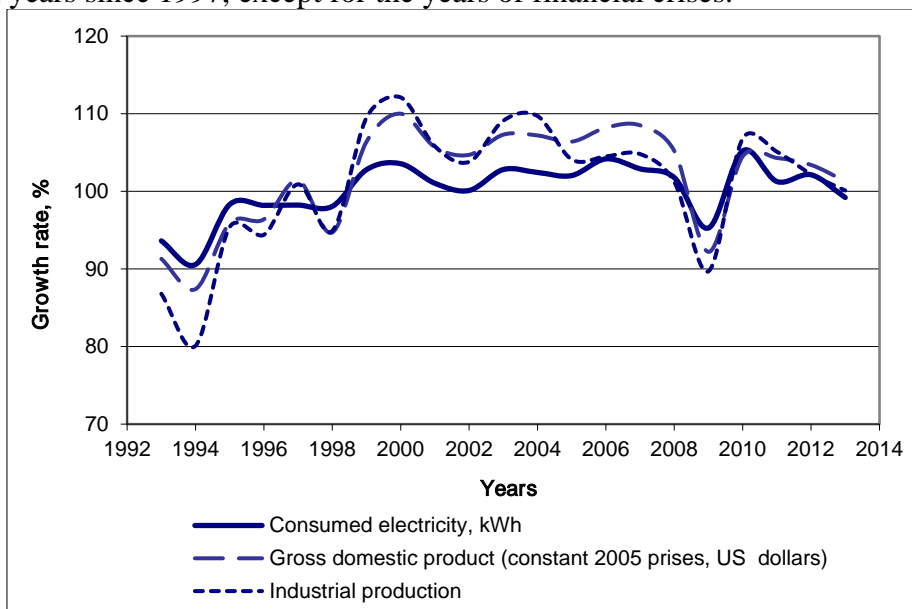


Fig. 1. Growth rate of economic indicators

In accordance with the *currency demand method*, it is assumed that the growth of the shadow economy leads to an increase in the ratio of cash to deposits. Then the share of cash in all money supply is accepted as a resulting attribute. The ratio of cash and non-cash turnover is expressed by the cash coefficient:

$$K_1 = \frac{M_0}{M_2},$$

where K_1 is the cash coefficient;

M_0 is cash in circulation;

M_2 is the amount of cash in circulation and non-cash funds.

The cash coefficient allows the structure of money supply and the factors affecting cash turnover to be assessed.

According to the data of the Federal State Statistics Service, the cash coefficient in Russia has been decreasing almost all the years (*Figure 2*), i.e. the share of cash in circulation has been declining in the total amount of cash in circulation and non-cash funds. There are many reasons for this, including the introduction of plastic cards at enterprises, non-cash payments to employees, and noncash transactions in retail trade.

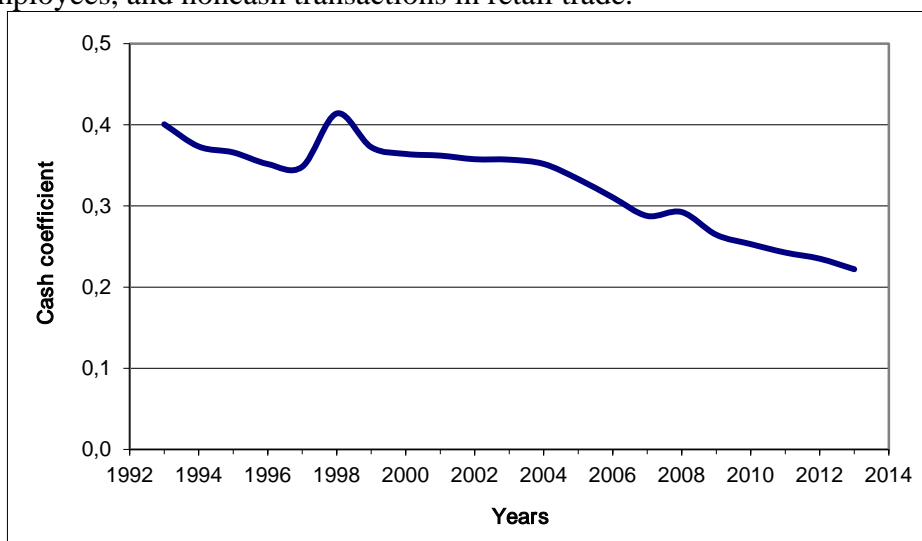


Fig. 2. Dynamics of the cash coefficient

The exceptions were the years of financial crises, when the cash coefficient increased (by 18.8% in 1998 and by 1.7% in 2008). The multidirectional dynamics of cash increase due to the growth of the shadow economy and of cash decrease resulting from other reasons makes the qualitative determination of the share of the shadow economy rather time-consuming when using the currency demand method.

The method of comparison of income and expenditure is applied by statistical agencies to detect hidden remuneration. Hidden (unreported)

wages and salaries comprise payments in non-taxable forms: unrecorded payrolls; by means of monetary aid, loans, insurance scheme payments, bank deposits; remuneration in kind through purchasing real estate, durables, etc. for the employees. The main reason for hidden wages is the intention of the employers to avoid payments of consolidated social tax and other taxes. This allows them to raise wages of the employees and to reduce the costs of production, making it more competitive.

In accordance with SNA methodology, hidden wages of hired workers are determined by applying the balance method as the difference between total households' expenditures, including increase in their financial assets, and formally registered incomes.

Population incomes comprise all tangible assets received by households as a result of economic activities or as transfers in cash and in kind (in-house production and in-kind transfers).

Household expenditure include all expenses on acquisition of consumer goods and services, as well as the cost of goods and services that were consumed in kind (agricultural production grown at personal subsidiary plots, imputed service charges for living in own houses) and received as earnings and humanitarian supplies.

According to the statistical data, the share of hidden wages over the years in the period under review increased from 17.0% in 1993 to 28.8% in 2006 (*Figure 3*). In subsequent years the share of hidden wages fell within the range of 26.6% to 28.8% from the earnings of employees. Consequently, in the last decade the population has been receiving more than a quarter of income bypassing taxation, and the given share continues to increase.

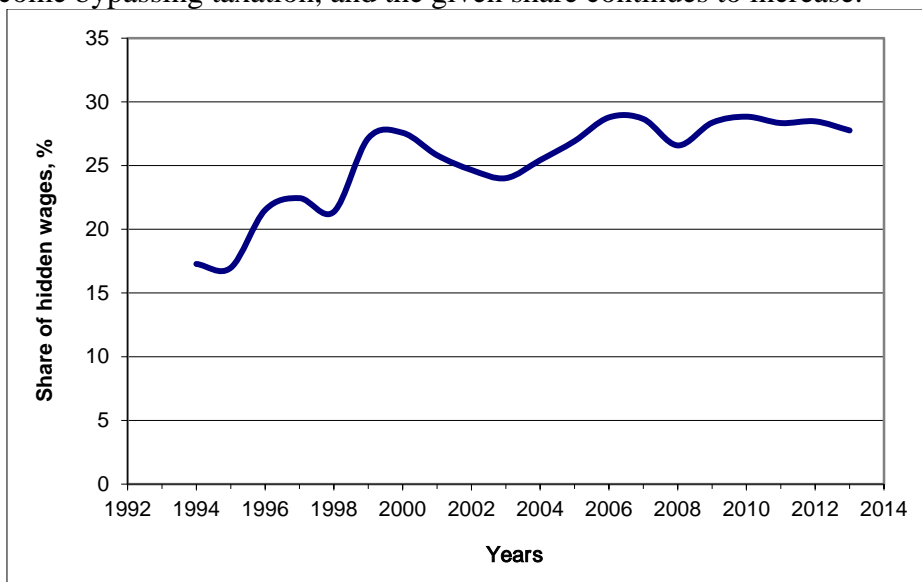


Fig. 3. Share of hidden wages

A significant advantage of the given method is the availability of official statistical data obtained within one technique that allows evaluating the dynamics of the indicator.

Modelling the dynamics of the share of hidden wages

The modeling of the dynamics of the share of hidden wages for the long term can be conducted in two ways:

- extrapolation of the existing tendencies using a dynamic equation (short-term forecast);

- on the basis of a regression equation with the inclusion of the time factor (mid-term forecast).

The dynamic equation is constructed from time series data concerning the share of hidden wages. It is taken into account that of interest is not the modeling of the complex dynamics of the index, but the main tendency of the indicator to change in time, particularly in the last time segment. The dynamics of the indicator can be well described by the logarithmic equation:

$$y = 16,6 + 4,133 \ln t \quad (R= 0,95)$$

where t are the years of the period under review ($t = 1$ in 1994)

The equation is of rather high quality, which is proved by the correlation index. Standard errors of the equation parameters and the equation in general are within permissible values. Fisher and Student criteria confirm the reliability of the equation and its parameters.

All empirical values lie within a confidence interval. The discrepancy between empirical and theoretical values of the last time segment does not exceed 1.8%. Hence, at current trends the value of the share of hidden wages is expected within the range of 29% in the next two years.

However, in contrast to regression equations, the extension of retrospective dynamics does not allow considering the impact of various factors on the dynamics of the examined parameter.

The modeling of the interrelation between the share of hidden wages and various socio-economic factors makes it possible to predict the value of the given indicator for a longer term extending the dynamic range of factor attributes. The modeling of interrelation implies the construction of double and multiple regression equations of the share of hidden wages when using different factor attributes.

As a result of the correlation analysis, it was possible to establish an interrelation between the share of hidden wages and the following factors: total share of taxes in GDP; the share of net taxes on production and import in GDP; average tax rate; interest rate on deposits; the share of the personnel of public administration, military security, and social insurance institutions; the share of the employees in public and local authorities; GDP per capita at

constant prices; household final consumption per capita at constant prices; average annual income per capita at constant prices; the share of wages in gross national income; consumer price index; overall unemployment rate; number of displaced families and refugees.

Double regression equations represent the dependence of the share of hidden wages from each of the factors distinguished in the correlation analysis. All indicators change in dynamics, therefore, the time factor is eliminated, and the influence of the explicitly analyzed factor is revealed. For some factor attributes the time factor was insignificant. Double regression equations of the share of hidden wages are as follows:

$$y = 25,537 + 0,384 t - 3,059 x_1 \quad (R = 0,91);$$

$$y = 22,787 + 1,211 t - 3,815 x_2 \quad (R = 0,90);$$

$$y = 8,191 x_3^{0,722} \quad (R = 0,89);$$

$$y = 26,544 + 1,273 t - 6,325 x_4 \quad (R = 0,89);$$

$$y = 26,610 + 1,193 t - 1,217 x_5 \quad (R = 0,88);$$

$$y = 12,622 + 0,753 t - 0,601 x_6 \quad (R = 0,88);$$

$$y = 5,739 x_7^{0,600} \quad (R = 0,87);$$

$$y = 32,396 + 0,572 t - 0,267 x_8 \quad (R = 0,86);$$

$$y = 2,206 x_9^{0,863} \quad (R = 0,85),$$

where t are the years of the analyzed period ($t = 1$ in 1994);

x_1 is the consumer price index, times;

x_2 is household final consumption per capita at constant 2005 prices, thousands US dollars;

x_3 is the share of the employees of the public administration, military security, and social insurance institutions, %;

x_4 is the average annual per capita income at constant 2000 prices, thousands US dollars;

x_5 is GDP per capita at 2005 PPP, thousands of US dollars;

x_6 is the overall unemployment, % of total labour force;

x_7 is the total share of taxes in GDP, %;

x_8 is the share of wages in gross national income, %;

x_9 is the share of net taxes on production and import in GDP, %.

All regression equations are of rather high quality, which is proved by the correlation indices. Moreover, standard errors of all equations and their parameters are within permissible values. Fisher and Student criteria confirm on the whole the reliability of the equations and their parameters.

Other factor attributes affect the size of the share of hidden wages insignificantly. The shares of direct and indirect taxes have a slight impact on the resultative indicator. The effect of the average tax rate (the given factor was insignificant by Student criteria when taking into account the time factor) and the impact of the financial crisis have not been determined.

Regression equations demonstrate that the share of hidden wages rises along with an increase in the overall share of taxes, the share of net taxes on production and import, the share of the employees of the public administration, unemployment rate and a decrease in GDP per capita at constant prices, final consumption and average annual income per capita at constant prices, the share of labour remuneration in gross national income.

Increased tax burden provokes businessmen to make partial payments of salaries and wages bypassing taxation. The burden of state regulation, which is expressed as a growth in the number of the employees of the public administration, also contributes to an increase in hidden wages. The growth of population income (household final consumption per capita at constant prices, average annual income per capita at constant prices, GDP per capita at PPP, share of labour remuneration in GNI) leads to a decrease in secondary employment and employment in the informal sector, where the probability of hidden wages is higher. Since the consumer price index is an indicator of economic development, the reduction in the consumer price index points to economic stabilization and economic growth. Economic growth and rising income of population also promote an increase in the volume of housing construction. Trade and small business are recovering. More employment opportunities emerge in these spheres. It is easier to hide income in the sectors of housing construction, trade and small business.

The distinguished factor attributes underlie the construction of multiple regression equations. Additionally, the time factor is eliminated. Considering the existence of duplicate factors, all factor attributes are divided into three groups: 1) factors reflecting tax burden; 2) factors reflecting the burden of state regulation; 3) socio-economic indicators. No more than one factor from each group is included in the equations. As a result, the following regression equations were obtained:

$$y = -0,408 t + 0,896 x_1 + 3,896 x_3 \quad (R = 0,99);$$

$$y = 17,657 + 0,690 t + 1,238 x_1 - 1,300 x_4 \quad (R = 0,90);$$

$$y = 18,157 + 0,793 t + 1,156 x_1 - 6,664 x_6 \quad (R = 0,89);$$

$$y = 19,649 + 0,859 x_1 - 3,591 x_7 \quad (R = 0,89);$$

$$y = 1,652 x_1 + 0,640 x_8 \quad (R = 0,99);$$

$$y = 1,699 x_1 - 2,192 x_7 + 0,885 x_8 \quad (R = 0,99);$$

$$y = 4,667 x_3 + 0,339 x_8 \quad (R = 0,99),$$

where t are the years of the analyzed period ($t = 1$ in 1994);

x_1 is the total share of taxes in GDP, %;

x_2 is the share of net taxes on production and import in GDP, %;

x_3 is the share of the employees of the public administration, military security, and social insurance institutions, %;

x_4 is GDP per capita at 2005 PPP, thousands of US dollars;

x_5 is household final consumption per capita at constant 2005 prices, thousands of US dollars;

x_6 is the average annual per capita income at constant 2000 prices in thousands of US dollars;

x_7 is the consumer price index, times;

x_8 is the overall unemployment, % of total labour force.

The regression equations show that the share of hidden wages rises, in case of an increase in the total share of taxes in GDP, in the share of net taxes on production and import, in the share of the employees of the public administration and in the unemployment rate, and a decrease in GDP per capita at 2005 purchasing power parity, in average annual income per capita at constant 2005 prices and in the consumer price index.

Multiple regression equations confirm the conclusions drawn from regression equations, and allow for a mid-term forecasting of the share of hidden wages. It is possible to expect an insignificant growth in the share of hidden wages, which will fall within the range of 30% in the next three years.

Conclusion

To sum up, it may be stated that the variety of the applied methods indicates the absence of a generalized most accurate approach for the quantitative estimation of the parameters of shadow economic activities, suitable for different countries and time periods. Each method has its advantages and disadvantages, its own field of application.

The dynamics of the shadow economy in Russia is most adequately reflected by the share of hidden wages. The dynamic equation and the system of double and multiple regression equations allow forecasting the dynamics of the given indicator for the short and medium terms. An insignificant growth in the share of hidden wages is predicted in the next three years, but still it will fall within the range of 30%.

References:

Nickolayenko S., Lissovolik Ya., Mc Farkar R. (2009). *Tenevaya ekonomika v rossiyskikh regionakh* [Shadow economy in Russian regions]. Moscow: Delo.

Suslov N., Ageyeva S. (2009). *Vozdeystviye tseny energii na razmery tenyevoy ekonomiki: mezhsranovoy analiz* [The impact of energy price on the size of the shadow economy: cross country analysis]. *Economics Education and Research Consortium. Scientific Papers Series*. Kyiv: EERC.

Del'Anno R. (2003). Estimating the shadow economy in Italy: A structural equation approach. *Discussion Paper*. Department of Economics and Statistics, University of Salerno, 2003.

- Chatterjee S., Chaudhury K., Schneider F. (2006). The size and development of the Indian shadow economy and a comparison with other 18 Asian countries: An empirical investigation. Forthcoming in the *Journal of Development Economics*, April, 2006.
- Feige E.L. (1986). A re-examination of the "Underground Economy" in the United States. *IMF Staff Papers*, 33(4), 768-781.
- Franz A. (1983). Wie groß ist die "schwarze" Wirtschaft? *Mitteilungsblatt der Österreichischen Statistischen Gesellschaft*, 49(1), 1-6.
- Giles D.E.A. (1997). Causality between the measured and underground economies in New Zealand. *Applied Economic Letters*, 4, 63-67.
- Giles D., Tedds L.M., Gugsa W. (2002). The Canadian underground and measured economies. *Applied Economics*, 34(4), 2347-2352.
- Gutmann P.M. (1977). The subterranean economy. *Financial Analysts Journal*, 34(1), 24-27.
- Isachsen A.J., Klovland J., Strom S. (1982). The hidden economy in Norway. In Tanzi V. (Ed.), *The underground economy in the United States and Abroad* (pp. 209-231). Heath, Lexington.
- Isachsen A.J., Strom S. (1985). The size and growth of the hidden economy in Norway. *Review of Income and Wealth*, 31(1), 21-38.
- Kaufmann D., Kaliberda A. (1996). Integrating the unofficial economy into the dynamics of post socialist economies: a framework of analyses and evidence. In B. Kaminski (Ed.), *Economic Transition in Russia and the New States of Eurasia* (pp.81-120). London: M.E. Sharpe.
- Kirchgaessner G. (1983). Size and development of the West German shadow economy, 1955-1980. *Zeitschrift für die gesamte Staatswissenschaft*, 139(2), 197-214.
- Kirchgaessner G. (1984). Verfahren zur Erfassung des in der Schattenwirtschaft erarbeiteten Sozialprodukts. *Allgemeines Statistisches Archiv*, 68(4), 378-405.
- Lackó M. (2000). Hidden Economy – An unknown quantity: Comparative analysis of hidden economics in Transition countries 1989-95. *Economics of Transition*, 8(1), 117-149.
- MacAfee K.A. (1980). Glimpse of the hidden economy in the national accounts. *Economic Trends*, 136, 81-87.
- Mogensen G.V., Kvist H.K., Körmendi E., Pedersen S. (1995). The shadow economy in Denmark 1994: Measurement and results. *Study No. 3*. Copenhagen: The Rockwool Foundation Research Unit.
- Petersen H.-G. (1982). Size of the public sector, economic growth and the informal economy: Development trends in the Federal Republic of Germany. *Review of Income and Wealth*, 28(2), 191-215.

Schneider F. (1986). Estimating the size of the Danish shadow economy using the currency demand approach: An attempt. *The Scandinavian Journal of Economics*, 88(4), 643-668.

Schneider F. (2006, August). *Shadow Economies of 145 Countries all over the World: Estimation Results over the Period 1999 to 2003*. Retrieved from: http://www.brookings.edu/metro/umi/events/20060904_schneider.pdf

Tanzi V. (1980). The underground economy in the United States: Estimates and implications. *Banca Nazionale del Lavoro*, 135(4), 427-453.

Tanzi V. (1983). The underground economy in the United States: Annual estimates, 1930-1980. *IMF-Staff Papers*, 30(2), 283-305.

Federal State Statistics Service Official Web Site. Retrieved from: <http://www.gks.ru>

World Bank Official Web Site. Retrieved from <http://data.worldbank.org>

THE THEORETICAL AND PRACTICAL ASPECT OF SELECTING THE CAPITAL BUDGETING METHODS

Tamar Gamsakhurdia, Professor

Ketevan Maisuradze, Assistant

Grigol Robakidze University, Tbilisi, Georgia

Abstract

This paper reports the results of a survey with respect to the current practice of capital budgeting techniques in the countries with different levels of economic development. The choice of capital budgeting methods used by companies show that the main reason for the use of the NPV was its superiority as it accurately takes into account the time value of money. The IRR method is used owing to its ability to rank projects and to indicate the actual return of each project, thereby informing managers whether an investment will increase the company's value. The results indicated that the continual use of PB was based on the simplicity of the technique. Financial managers should utilize multiple tools in the capital budgeting process; these results reflect a better alignment of views between academia and business.

Keywords: Capital Budgeting, Simple Payback Period Method, Discounted Payback Period Method, Payback Period Method, Accounting Rate of Return, Net Present Value Method, Internal Rate of Return Method, Real Options

Introduction

Capital budgeting is one of the areas that have attracted a lot of academic attention during the last decades and a lot of descriptive literature has emerged. Capital budgeting decision of the firm is of strategic importance not only for the growth of the firm but for the overall growth of the economy because such decisions involve the firm committing its limited productive resources to its production system as they strengthen or renew their resources.

Corporation in Georgian play a vital role in enhancing the country's economic growth and creating employment. Capital assets are used by the corporation in the physical process of producing goods and services and are ordinarily used for a number of years.

Capital budgeting is a plan to finance long-term outlays, such as fixed assets like facilities and equipment. Previous research studies on capital budgeting have mainly focused on the application and improvement of modeling techniques; for instance: Brealey and Myers (1991), Stanley, B. (1997), Van Horne (1980) and Weston and Brigham (1981) adopted operational research techniques to model the budgeting of capital finance. Other researchers proposed the use of mathematical and optimization methods for capital budgeting Bhaskar, 1978.¹⁵

Our paper focuses on the latter research line, which emerged over half a century ago with Miller's (1960) and Istvan's (1961) studies on capital budgeting practices in U.S. companies, and has subsequently been updated and has spread with evidence from a wide range of countries. The puzzles of Capital budgeting was conducted as a in highly-developed countries mostly in North America, Australia and Western Europe, i.e the USA and Canada (Graham, Harvey, 2001), Germany (Brounen et al., 2004), the Netherlands (Hermes, Smid, 2007), Sweden (Sandahl, Sjögren, 2003), Swedish (Sven-Olov, Daunfeldt F. Hartwig, 2005), the UK (Brounen et al., 2004), as in developing countries Kester et al. (1999) and G. Andor, S. Mohanty, T. Toth et al. (2011).¹⁶

As a whole, this literature reveals that managers use multiple techniques, some of which are theoretically appropriate, while others are less so. The most popular evaluation techniques are Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Method.

¹⁵ Stanley, B. (1997). Capital budgeting techniques used by small business firms in the 1990s. *The Engineering Economist*, Vol. 42, (Nos. 4, Summer) 289-302; Brealey, Richard A. *Principles of corporate finance* / Richard A. Brealey, Stewart C. Myers, Franklin Allen.—10th ed. Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies 2011; J. C. Van Horne, John M. Wachowic. *Fundamentals of Financial Management*, thirteenth edition Jr. FT Prentice Hall. 2008; Bhaskar, K.N. (1978) Linear programming and capital budgeting: the financial problem, *Journal of Business Finance and Accounting*, 5 (2), Spring, 159–194

¹⁶ Miller, James H., "A Glimpse at Practice in Calculating and Using Return on Investment," *N.A.A. Bulletin* (now *Management Accounting*), June, 65-76. 1960. Istvan D.F. The economic evaluation of capital expenditures. *J. Bus.*, 36 (1) (1961), pp. 3–53; Graham, J. & Harvey, C. The theory and practice of Corporate Finance: evidence from the field. *Journal of Financial Economics*, 60 (Nos. 2-3, May), 2001. 187-243; D. Brounen, A. de Jong, K. Koedijk Corporate finance in Europe: confronting theory with practice. *Financ. Manage.*, 33 (4) (2004), pp. 71–101; N. Hermes, P. Smid, L. Yao. Capital budgeting practices: a comparative study of the Netherlands and China. *Int. Bus. Rev.*, 16 (5) (2007), pp. 630–654; G. Sandahl, S. Sjögren. Capital budgeting methods among Sweden's largest groups of companies. The state of the art and a comparison with earlier studies. *Int. J. Prod. Econ.*, 84 (1) (2003), pp. 51–69. Gyorgy Andor. Sunil K. Mohanty. Tamas Toth. *Capital Budgeting Practices: A Survey of Central and Eastern European Firms*. Word Bank, 1 (2011), pp. 1–45.

Finally, the literature on corporate finance practices has helped pinpoint and explore the gap between theory and practice. It is obviously that a good investment remains good business even if it is not optimally financed, but that a bad investment will be a wrong decision even with the best financing policy¹⁷

International studies

Capital budgeting is one of the areas that have attracted a lot of academic attention during the last decades and a lot of descriptive literature has emerged. Miller (1960), Mao (1969), Schall, Sundam, and Geijsbeek (1978), and Pike (1996) report payback technique as the most preferred method, while Istvan (1961) reports a preference for accounting rate of return.¹⁸ Since the surveys (e.g., Klammer 1972, Brigham 1975) of capital budgeting methods used in firms, discounted cash flow (DCF)-based methods such as the Internal Rate of Return (IRR) and, especially, the Net Present Value (NPV) rule, have increasingly gained ground as the main methods for evaluating investment decisions.¹⁹

From the 1980s financial theoreticians (Graham and Harvey (2001) and Ryan and Ryan (2002)) proved that the number of NPV and IRR using really increased²⁰. In their investigation Graham and Harvey (2001) and

¹⁷ Brealey, Richard A. Principles of corporate finance / Richard A. Brealey, Stewart C. Myers, Franklin Allen.—10th ed. Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies 2011.

¹⁸ Miller, James H., 1960, "A Glimpse at Practice in Calculating and Using Return on Investment," N.A.A. Bulletin (now Management Accounting), June, 65-76. Schall, Lawrence D., Gary L. Sundem, and William R. Geijsbeek, Jr., 1978, "Survey and Analysis of Capital Budgeting Methods," Journal of Finance 33 (No. 1, March), 281- 288; Pike, Richard, 1996, "A Longitudinal Survey on Capital Budgeting Practices," Journal of Business Finance and Accounting 23 (No. 1, January), 79-92.

¹⁹ In the Brigham (1975) study, 94% of the large U.S. firms in their survey use NPV, IRR or a profitability index criterion in their capital budgeting. In most U.S. studies from 1977 (Gitman and Forrester 1977) to the early 2000's (Stanley and Block 1984, Bierman 1993, Graham and Harvey 2002), NPV and/or IRR are typically the most common method(s), with IRR being either more or at least approximately equally as common as the NPV. For Europe, Brounen et al. (2004) report that payback is still the most common. See also, e.g., Jagannathan and Meier (2002) and Anand (2002) for evidence and review of capital budgeting methods and their development over time. For the Nordic markets studied here, see Holmén and Pramborg (2006) for Sweden, and Liljebloom and Vaihekoski (2004) for Finland.

²⁰ Binder, J. J. and J. S. Chaput (1996) "A Positive Analysis of Corporate Capital Budgeting Practices," Review of Quantitative Finance and Accounting, 6(3), pp.245-257; Haka, S. (2006) "A Review of the Literature on Capital Budgeting and Investment Appraisal: Past Present, and Future Musings," Handbooks of Management Accounting Research, vol.2, edited by C. Chapman, C., A. Hopwood, and M. Shields, Elsevier Publishing, B.V.: North Holland, pp.697-728.

Ryan and Ryan (2002) have shown that corporate managers and academics are not always in agreement with regard to their choice of theoretical method²¹. Graham and Harvey (2001) examined that IRR is the most appreciated method, while NPV and IRR are more popular than SPP, DPP, or ARR. At the same time, Ryan and Ryan (2002) proved that NPV and IRR are preferred over all other capital budgeting methods.

In connection with the point previously mentioned, payback period methods are more frequently used than NPV or IRR. This is surprising because Brealey and Myers (since 1981) have for many decades mentioned of the disadvantages of using the approach. It is a surprising and noteworthy gap between academic theory and practice. These results contrast with the situation regarding the lack of use of ARR because ARR is not theoretically regarded as an excellent tool for the evaluation of corporate value.²² Despite some debate concerning the appropriateness of the NPV in all situations,²³ the NPV is generally considered superior to, e.g., the payback method and the IRR.²⁴

There are a lot of countries practices about most commonly used capital budgeting technique in Table 1.²⁵

²¹ Arnold, G. C. and P. D. Hatzopoulos (2000) "The Theory-Practice Gap in Capital Budgeting: Evidence from The United Kingdom," *Journal of Business Finance and Accounting*, 27(5-6), pp.603-626; Alkaraan, F. and D. Northcott (2006) "Strategic Capital Investment Decision - Making : A Role for Emergent Analysis Tools? A Study of Practice in Large UK Manufacturing Companies," *The British Accounting Review*, 38(2), pp.149-173.

²² Tomonari Shinoda. Capital Budgeting Management Practices in Japan. *Econ. J. of Hokkaido Univ.*, Vol. 39 (2010), pp. 39 – 50.

²³ Berkovitch, E., and R. Israel, 2004, Why the NPV criterion does not maximize NPV, *Review of Financial Studies* 17, 239–255.

²⁴ Empirical studies also indicate an increasing use of methods complementing the DCF calculus, e.g., by real options applications (see, e.g., Graham and Harvey 2002).

²⁵ Pablo de Andrés, Gabriel de Fuente, Pablo San Martínc. Capital budgeting practices in Spain. *BRQ Business Research Quarterly* (2015) 18, p.,37—56.

Table 1. Capital budgeting methods in the different countries.

Countries	Techniques						
	DCF (NPV or IRR)	NPV	IRR	PB	RO	ARR	ROI
USA	Chen (2008)	Trahan and Gitman (1995) and Ryan and Ryan (2002)	Bierman (1993), Burns and Walker (1997), Payne et al. (1999) and Graham and Harvey (2001)	Mao (1970), Schall et al. (1978), Moore and Reichert (1983) and Block (1997)		Istvan (1961)	Miller (1960)
Canada		Bennouna et al. (2010) and Baker et al. (2011a)	Payne et al. (1999) and Graham and Harvey (2001)				
UK	Busby and Pitts (1997)	Alkaraan and Northcott (2006)	Arnold and Hatzopoulos (2000)	Pike (1996), Drury and Tayles (1996) and Brounen et al. (2004)			
Netherlands		Brounen et al. (2004) and Hermes et al. (2007)					
Germany		Sridharan and Schuele (2008)		Brounen et al. (2004) and Sridharan and Schuele (2008)			
France					Brounen et al. (2004)		
Spain				Ayala and Rodríguez (2000), Iturralde and Maseda (2004) and Rayo et al. (2007)			
Sweden				Sandahl and Sjögren (2003) and Holmen and Pramborg (2009)			
Australia		Kester et al. (1999) and Truong et al. (2008)					
Hong Kong				Ann et al. (1987) and Kester et al. (1999)			
Indonesia		Kester et al. (1999)		Leon et al. (2008)			
Malaysia				Ann et al. (1987) and Kester et al. (1999)			
Philippines				Kester et al. (1999)			
Singapore				Ann et al.			

				(1987) and Kester et al. (1999)			
South Africa							Hall and Millard (2010)
Argentina	Pereiro (2006)						
Japan				Shinoda (2010)			
Colombia			Velez and Nieto (1986)				
China			Hermes et al. (2007)				
Persian Gulf		Chazi et al. (2010)					
Latin-America		Maquieira et al. (2012)					

All evidence have shown that the theory of capital budgeting supports Net Present Value (NPV) method most, which involves discounting all relevant cash flows at a market determined discount rate such as the cost of capital.

It is known that every manager should have the goal of maximizing a shareholder wealth; so NPV is aligned with this goal, it also considers the timing of these cash flows and use of relevant cash flows. In NPV the future cash flows are discounted and if NPV is positive then the project will be acceptable.²⁶ If there are more than one project then that project should be accepted which has higher NPV.²⁷ Some researches which were conducted in Japanese show that the most firms use combination of payback period method and net present value method.²⁸

The budget appraisal methods, such are the internal rate of return (IRR) (disadvantage: economies of Scale Ignored; impractical implicit assumption of reinvestment rate; dependent or contingent projects; mutually exclusive projects) and pay-back (disadvantage: ignores the time value of money and also ignores cash-flows that occur after the maximum pay-back time. In time, when discounted pay-back does not ignore the time value of

²⁶ Michael C. Ehrhardt and Eugene F. Brigham Financial Management: Theory and Practice, Thirteenth Edition Michael 2011 South-Western; Brealey, Richard A. Principles of corporate finance / Richard A. Brealey, Stewart C. Myers, Franklin Allen.—10th ed. Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies 2011; Fundamentals of Financial Management thirteenth edition James C. Van Horne, John M. Wachowicz, Jr. FT Prentice Hall. 2008

²⁷ Financial Management for Decision Makers. Atrill P. 6th edition FT Prentice Hall. 2012; Financial Management: Theory and Practice. 13th. Education.

²⁸ Tomonari Shinoda. Capital Budgeting Management Practices in Japan. Econ. J. of Hokkaido Univ., Vol. 39 (2010), pp. 39 - 50

money, but still ignores cash-flows after the maximum pay-back point) methods are often criticized.

The earnings multiple or price/earnings (P/E) approach (which presents a variation on pay-back methods) as Pay-back methods, do not consider the time value of money.

Value-at-Risk (VaR), is a widely used measure of financial risk, which provides a way of quantifying and managing the risk of a portfolio. However, VaR does not give a consistent method for measuring risk, as different VaR models will come up with different VaR results. It should also be noted that VaR only measures quantifiable risks; it cannot measure risks such as liquidity risk, political risk, or regulatory risk. In times of great volatility, such as war, it may also not be reliable. For this reason, VaR models should always be used alongside stress testing.²⁹

Liesio et al (2006.68) states that —'Real options' explores the possibilities that the option-pricing approach offers. Especially considering the non-linearity and the cost of waiting and hedging, real options could provide valuable information in terms of capital budgeting. Real Options (RO) is a useful tool for making investment decisions, taking into account uncertainty and building flexibility in the system. RO often deals with projects that do not have a lot of historical statistics. The application of real options makes use of risk to add value to a project and therein lays its potential benefit for a field development decision process.

In many literatures, real options theory was praised for its effective capture of timing. There is even a bold argument that NPV is equal to real options only when investments cannot be postponed. In other words, net present value cannot capture value obtained by managerial flexibility to invest at the right time. However, argued quoting Schwartz (1997a)³⁰ study. In this literature it is concluded that DCF induces investment too early, in conformity with other researches that it cannot take into account timing. However, as good challenge to widely accepted theory, the real options approach is also criticized as inducing investment too late when it neglects mean reversion.

RO is generally used by managers who face situations that involve strategic options in the future and who must consequently conduct strategic decision-making under uncertain conditions. Since RO applies option pricing models (put option and call option valuation techniques) to capital budgeting

²⁹ James, T.: Energy Price Risk: Trading and Price Risk Management. Gordonsville, VA, USA: Palgrave Macmillan, 2003, p.133.

³⁰ Eduardo S. Schwartz. The stochastic behavior of commodity prices: Implications for valuation and hedging. *Journal of Finance*, 52(3):923–973, 1997. Lundquist, C. G. (2002, Spring). Real Option Valuation vs. DCF Valuation- An application to a NorthSea oilfield. Stockholm Business School, Stockholm, Sweden.

decisions, it is a very sophisticated and advanced technique in financial theory; when put into practice, however, it seems to involve unavoidable difficulties.

Adjusted present value (APV), defined as the net present value of a project if financed solely by equity plus the present value of financing benefits, is another method for evaluating investments. It is similar to NPV. The difference is that it uses the cost of equity as the discount rate rather than WACC. The APV separates the value of operations from value created or destroyed by how the company is financed. The APV may be a better tool to analyze the value of entities with unique financing because it separates the value of the operations of a business purely from the value that is created through the way the business is financed. As such, the APV can also be used as a management tool to break out the value created from specific managerial decisions.

Discussing about the capital budgeting method, McDonald (2006) proves that the simultaneous use of many capital budgeting methods parallel to DCF, such as IRR, payback, and P/E multiples, may mean that managers perform a variety of formal calculations and then make decisions by weighing the results and using subjective judgment. A part of such judgment may represent their “adjustments” of DCF methods to take into account real option values.³¹

We can assure everyone that while most financial managers utilize multiple tools in the capital budgeting process; these results reflect a better alignment of views between academia and business.

However, there are some factors that influence on decision makers - a lot of researches proved that on the one hand use of more sophisticated capital budgeting methods is related to the CFO's education and on the other hand was showed that the use of NPV as a primary method, and the sophistication of the capital budgeting is related both to the company and CFO characteristics.³²

Conclusion

Widespread opinion among scholars and practitioners is that a firm's future success and survival ultimately depend on it getting its current investment decisions right. All evidence have shown that the theory of capital budgeting supports Net Present Value (NPV) method most, which involves discounting all relevant cash flows at a market determined discount

³¹ McDonald, R.L., 2006, The role of real options in capital budgeting: theory and practice. *Journal of Applied Corporate Finance* 18, 28-39.

³² Brunzell T, Liljebloom E, Vaihekoski M (2011). “Determinants of capital budgeting methods and hurdle rates in Nordic firms”. *Account. Financ.* 51(4):1-26.

rate such as the cost of capital. It is known that every manager should have the goal of maximizing a shareholder wealth; so NPV is aligned with this goal, it also considers the timing of these cash flows and use of relevant cash flows. The IRR method is used owing to its ability to rank projects and to indicate the actual return of each project, thereby informing managers whether an investment will increase the company's value. The results indicated that the continual use of PB was based on the simplicity of the technique.

In many literatures, real options theory was praised for its effective capture of timing. There is even a bold argument that NPV is equal to real options only when investments cannot be postponed. In other words, net present value cannot capture value obtained by managerial flexibility to invest at the right time.

A lot of researches proved relationship between the capital budgeting method used and the organization and decision maker's characteristics, also firm's size (large companies used NPV, IRR, PB, and sensitivity analysis more than small companies).

Our point of view, financial managers should utilize multiple tools in the capital budgeting process, these results reflect a better alignment of views between academia and business.

References:

- Arnold, G. C. and P. D. Hatzopoulos "The Theory-Practice Gap in Capital Budgeting: Evidence from The United Kingdom," *Journal of Business Finance and Accounting*, 27(5-6), 2000, pp.603-626.
- Alkaraan, F. and D. Northcott "Strategic Capital Investment Decision - Making: A Role for Emergent Analysis Tools? A Study of Practice in Large UK Manufacturing Companies," *The British Accounting Review*, 38(2), 2006, pp.149-173.
- Atrill P. *Financial Management for Decision Makers*. 6th edition FT Prentice Hall. Theory and Practice. 13th 2012.
- Berkovitch E., and R. Israel, 2004. Why the NPV criterion does not maximize NPV, *Review of Financial Studies* 17, 239–255.
- Bhaskar, K.N. (1978) Linear programming and capital budgeting: the financial problem, *Journal of Business Finance and Accounting*, 5 (2), Spring, 159–194.
- Brealey, Richard A. *Principles of corporate finance* / Richard A. Brealey, Stewart C. Myers, Franklin Allen.—10th ed. Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies 2011.
- Brunzell T, Liljebloom E, Vaihekoski M (2011). "Determinants of capital budgeting methods and hurdle rates in Nordic firms". *Account. Financ.* 51(4):1-26.

- Block, S. (2007) "Are "Real Options" Actually Used in the Real World?" *The Engineering Economist*, 52(3), pp.255-267.
- Binder, J. J. and J. S. Chaput "A Positive Analysis of Corporate Capital Budgeting Practices," *Review of Quantitative Finance and Accounting*, 6(3), 1996, pp.245-257.
- D. Brounen, A. de Jong, K. Koedijk Corporate finance in Europe: confronting theory with practice. *Financ. Manage.*, 33 (4) (2004), pp. 71–101.
- Eduardo S. Schwartz. The stochastic behavior of commodity prices: Implications for valuation and hedging. *Journal of Finance*, 52(3):923–973, 1997.
- Lundquist, C. G. (2002, Spring). *Real Option Valuation vs. DCF Valuation- An application to a NorthSea oilfield*. Stockholm Business School, Stockholm, Sweden.
- G. Andor, S. Mohanty, T. Toth. Capital Budgeting Practices: a Survey of CEE an Firms. *Word Bank*, 1 (2011), pp. 1–45.
- Graham, J. & Harvey, C. The theory and practice of Corporate Finance: evidence from the field. *Journal of Financial Economics*, 60 (Nos. 2-3, May), 2001. 187-243.
- Graham, J.R., Harvey, C.R., and Rajgopal S. (2005), "The economic implications of corporate financial reporting", *Journal of Accounting and Economics*, Vol. 40 (1-3), pp. 3-73.
- G. Sandahl, S. Sjögren. Capital budgeting methods among Sweden's largest groups of companies. The state of the art and a comparison with earlier studies. *Int. J. Prod. Econ.*, 84 (1) (2003), pp. 51–69.
- Haka, S. "A Review of the Literature on Capital Budgeting and Investment Appraisal: Past Present, and Future Musings," *Handbooks of Management Accounting Research*, vol.2, edited by C. Chapman, C., A. Hopwood, and M. Shields, Elsevier Publishing, B.V.: North Holland, 2006. pp.697-728.
- Istvan D.F. The economic evaluation of capital expenditures. *J. Bus.*, 36 (1) (1961), pp. 3–53.
- James, T.: *Energy Price Risk: Trading and Price Risk Management*. Gordonsville, VA, USA: Palgrave Macmillan, 2003, p.133.
- J. C. Van Horne, John M. Wachowic. *Fundamentals of Financial Management*, thirteenth edition Jr. FT Prentice Hall. 2008.
- Lundquist, C. G. (Real Option Valuation vs. DCF Valuation- An application to a NorthSea oilfield. Stockholm Business School, Stockholm, Sweden. 2002.
- McDonald, R.L., The role of real options in capital budgeting: theory and practice. *Journal of Applied Corporate Finance* 18, 2006, 28-39.
- Michael C. Ehrhardt and Eugene F. Brigham *Financial Management: Theory and Practice*, Thirteen Edition Michael 2011 South-Western.

- N. Hermes, P. Smid, L. Yao. Capital budgeting practices: a comparative study of the Netherlands and China. *Int. Bus. Rev.*, 16 (5) (2007), pp. 630–654.
- Pablo de Andrés, Gabriel de Fuente, Pablo San Martínc. Capital budgeting practices in Spain. *BRQ Business Research Quarterly* (2015) 18, p. 37-56.
- Miller, James H., “A Glimpse at Practice in Calculating and Using Return on Investment,” *N.A.A. Bulletin (now Management Accounting)*, June, 65-76. 1960.
- Pike, Richard, 1996, “A Longitudinal Survey on Capital Budgeting Practices,” *Journal of Business Finance and Accounting* 23 (No. 1, January), 79-92.
- Ryan, P.A., and Ryan, G.P., “Capital budgeting practices of Fortune 1000: how have things changed?,” *Journal of Business and Management*, Vol. 8 (4), 2002, pp. 355-364.
- Stanley, B. Capital budgeting techniques used by small business firms in the 1990s. *The Engineering Economist*, Vol. 42, (Nos. 4, Summer), 1997. 289-302.
- Schall, Lawrence D., Gary L. Sundem, and William R. Geijsbeek, Jr., 1978, “Survey and Analysis of Capital Budgeting Methods,” *Journal of Finance* 33 (No. 1, March), 281- 288.
- Tomonari Shinoda. Capital Budgeting Management Practices in Japan. *Econ. J. of Hokkaido Univ.*, Vol. 39 (2010), pp. 39 – 50.

NEW PUBLIC MANAGEMENT (NPM) PARADIGM IN GEORGIA

Vasil Kikutadze, Associate Professor
Grigol Robakidze University, Tbilisi, Georgia

Abstract

New Paradigm of the public administration, under the name of “new public management” acquired the actual importance in the late 70s and early 80s of the 20th century, while the new view on public administration finally opposed the traditional concept of public sector administration and started to find effective ways to solve the problem³³. New public management concept is based on the classic theories of the public sector management and the synthesis of private sector management experience, it is closely linked to the quality and productivity problems in the government. The basic postulates of which is based on the essence of the New Public Management, in the implementation process of Public administration is focused on product, internal processes and customer service, decentralized responsibility and central management; employee qualification and motivation, teaching and and public impact-oriented administration. An attempt to implement new public management (npm) concept in Georgia started since the country gained its independence. However, since 2004 as a result of the governmental changes in the country radically changed the situation, conducted wide-scale reforms in the direction of improving and optimizing the public administration system in the public sector, where emerging the challenges and opportunities implementation of the basic postulates of New Public Management reform programme. Mentioned process is still actively underway in Georgia. The government is trying to establish the final version of social impact oriented public administration.

Keywords: New public management (npm), Public Administration, the public sector, flexible state

³³ Genrod Gruening, Origin and theoretical basis of New Public Management, International Public Management Journal, Hamburg, Germany, 4 (2001), p. 1.

Introduction

Increasing of the new public management ideas significantly contributed to the criticism of economic policy pursued by Thatcher (UK) and Reagan (US), namely public discontent was growing along with the growth of state intervention in social processes, which led to the public to focus on the simplification of bureaucratic procedures, reduced government spendings, effective management processes and helped the formation and development of so called “Flexible state” idea, and then the New Public Management³⁴. New Public Management is a combination of interdisciplinary research aspects about administration which means human resources, finances, physical capital, information and political resource management in the process of planning, organization and control functions using³⁵. New public management is normative conceptualization of public administration which consists of several interrelated components: Supply of high quality goods and services for public purposes; increase of the autonomy for Public sector managers; Human and technology resource availability; Rewarding opportunities for organizations and individuals according to the pre-determined target indicators; Availability of healthy competition and more involvement of private sector Achieve public goals³⁶. Despite the fact, that using the form of new public management in various countries are different, the reform program consistently tries to create mission-oriented, decentralized and incentive-based organizations. Effectiveness of New Public Management concept has been proved by the experience of countries, such as: USA, New Zealand, UK, Canada etc³⁷. In addition, it is known also that implementation of NPM paradigm could potentially lead the implementation of the State Administration in the old style at the initial stage. However, its implementation would require changes in the bureaucratic structures, in their attitudes and behaviors. The bureaucracy breaks the traditional boundaries of its power in NMP conditions. It is results-oriented instead of the Control-oriented and directs with the outdated role of Defender of the law. NMP should ensure more transparency and accountability in the process of State Administration. Georgia's public administration system is partly focused on the use of new public management paradigms. The country's public administration is gradually

³⁴ L. Izoria, Tbilisi, The modern state and modern administration. 2009 . p. 95.

³⁵ G. David Garson, E. Samuel Overman, Public Management Research in the United States. New York: Praeger, 1983, p. 275.

³⁶ Sandford Borins, The new public management is here to stay, Canadian Public Administration, March 1995, 9. 12; Article first published online: 9 JAN 2008, DOI: 10.1111/j.1754-7121.1995.tb01133.

³⁷ Robert B. Denhart, Jennet V. Denhart, Public Management (management of performance), Ilia State University. Tbilisi 2012. p. 544

approaching the standards established in democratic countries. But often the process becomes under the influence of more complex foreign and domestic political, social and economic factors. This prevents it and hinders development of democratic processes. New Public Management concept could be considered as transitional stage of traditional public administration system, in establishing the principles Modern public administration system i.e so called "Good governance". With the development of society, changes public tastes about the style of "Administrative governance", forms and principles. Changes role of the state, which should ensure in modern conditions not only legal protection of the public, but also actively should seek to improve current situation, including social, legal, economic and civil intergovernmental issues.

Georgia gained its independence twice in XX century. At first time in 1918, however, soon the country was annexed by Russia in 1921. It also ended the first attempt of Public administration system formation and development in the country. In 1991, the country regained its independence for the second time and the formation of modern system of public administration is still ongoing in the country. The formation processes of public and state administration in Georgia is still continuing; the system is experiencing reforming, however, due to a variety of political and economic factors its resistance is very fragile. Since 1991, the country's public governance processes conventionally can be divided into several periods.

The First Period - 1991-1997.

The mentioned period is characterized by a deep crisis in the public system. The country adopted first constitution in 1995, revealed the contours of the structure of public administration, however, the country was drawn into the various types of domestic and foreign conflicts, that caused a very negative impact on the state and public administration processes. At the given period between the country's public institutions were duplicating functions which inhibited their effective functioning. The country's administrative system did not focus on the public interest and the need for products (outcomes). State agencies were actively interfered in the functioning of the private sector, which in turn contributed the growth of corruption and criminality. The public sector became actually the only employer in the country, which in turn contributed nepotism and gross violations of human rights. The system was oriented partly internal processes, which mainly expressed in the internal political quarrels and in the last years of the given period the formal activation of the fight against crime, actually it was impossible to focus on the customers or citizens. Established delayed salaries and frozen pensions practice, which further aggravated the social situation. Management processes were mainly marked by centralized

style. And all the power was gathered with high levels of government, which in fact discarded the local authorities' decision-making mechanisms and accordance with, their work, became ineffective.

Since 1995 government more or less stabilized the situation, in the same year it introduced a new currency, carefully managed the money, eliminated price controls and reduced trade barriers. As a result of the previous year was significantly increased in almost all macroeconomic indicators and after the crisis of the 1992-1994 period the economy began to grow at a rapid pace³⁸. In 1997 was adopted the law on "Public Service", This law determined the legal basis of organising civil service in Georgia; regulated relations concerning the execution of civil service; defined the legal status of a civil servant³⁹. Due to absence of a proper legal and normative basis, in the given period public services were not stable. Public officials were mainly exposed and infringed their rights; the system was primarily tailored to the individual persons and their exemption from specific positions caused being in vulnerable situation of ordinary civil servants. In accordance with their level of motivation, there were low recruitment rules for civil servants raising a lot of questions, which made a major influence on the functioning of public sector efficiency.

Second period – 1998 -2003

Since 1998, begins a wave of reforms in the country, are established Legal documents and systems for public and private sector, first launched the tax system, started reform the judicial system, started reforming of the healthcare system, launched an international investment projects, in 2001 launched reforms in the field of education, started working on the national examination designed, to eliminate corruption in university entrance exams, however, progress in various areas of public life still was diverse, and the public still had a severe socio-economic condition⁴⁰. Since 1997, started a massive privatization process in the country, which in turn is characterized by vagueness and unsystematic approach, which on the one hand reduced the number of people employed in the public sector, however, failed to create new jobs, which has also significantly increased the number of self-employed, in accordance with the state's social function was not developed⁴¹.

³⁸ The World Bank, Fighting Corruption in Public Services Chronicling Georgia's Reforms, 2012 p. 2.

³⁹ Law of Georgia on "Civil Service" №1022-Il– October 30th 1997.

⁴⁰ The World Bank, Fighting Corruption in Public Services Chronicling Georgia's Reforms, 2012 p.4.

⁴¹ European Initiative – Liberal Academy Tbilisi, The economic transformation of Georgia in its 20 years of

Independence, Summary of the discussion paper . Tbilisi 2012 , p. .23.

Since 1998, the decentralization of management processes starts functioning local authorities in the country, however their functioning due to insufficient financial and human resources was not very effective. They, as well as central government agencies were unable to be focused on internal processes and demands of the citizens. In most cases the qualification of employees was low in the public sector and Public Administration hardly reacted to public pressure. In the same period begins to intensify the civil sector, which were mostly organized by /with non-governmental organizations, for their activities and the main financial source were various international donors. In 2001, in parallel with the prevalence of corruption cases in the country's public sector, is established the Anti-Corruption Council by the government, the existence of which the first stage to curb/obtain and eventually eliminate such cases, however, this goal could not be achieved because the lack of proper will at high political echelons

High degree of centralization of management, the fear of decision-making , in fact, blocked the formation of the middle and lower level management initiatives and overall, fails to provide the basic principles of the new public management. Public displeasure reached its peak in late 2003, Revealed he requirements the existence of a modern democratic system. Where every citizen would have the opportunity to make self-realization within the system and improve their socio-economic status

Third Period - 2004 to present

In November 2003, the government changed in Georgia. People have finally rejected the old government and the new team took over governance. In consequence of which the following issues were solved soon⁴²:

- Started to optimize/optimization of the number of civil servants
- Improved motivation system for civil servants;
- Reduced opportunities corruption deals;
- Improved budget planning and spending mechanisms;
- Improved transparency level of government activities;
- Reduced from the government regulation of the private sector etc.

Since 2004 national reform became intense. Started and implemented internal institutional changes. In order to increase the flexibility of the public sector set up a new consolidated institutions, Causing reduced public on the optimal threshold, the number of servants in public agencies, Due to reforms undertaken increased budgetary revenues and structural changes led to significant budgetary funds economy, Therefore, it became possible to increase the salary of public servants, In the public service (2004-2005

⁴²csb.gov.ge/uploads/changes.doc – Civil Service Bureau

years), the average salary increased approximately 15-fold⁴³, which in turn increased their motivation. That is low level of motivation linked Woodrow Wilson in 1887 in his famous essay on the US administration's ineffective work and the fabric of corruption⁴⁴.

Implemented the restructuring of the executive structures, implemented system evaluation of functions and role of the public sector and the orientation of the product is made for citizens to raise the quality of goods and services supplied. In 2004 launched the Law of Georgia, on the Structure, Authority and Activity Rule", that a greater emphasis on the structural optimization of the public administration system. Reduced the number of ministries and the certain government departments, was carried out in some of the structure integration-reorganization, and finally was established 15 ministries instead of 18 ministries and 18 state departments. It is also actively started optimization of internal processes, namely, in order to increase the flexibility and effectiveness of the Institutions it was carried out internal restructuring of various government agencies, also improved Budgeting and managing process of the state funds. Has been introduced Medium Term Expenditure framework (MTEF) procedure, which significantly contributed effectiveness and transparency of budgetary spending. Public Service to facilitate the implementation unified policy and professional, career-based civil service development, Legislation optimization, Effective and transparent governance and ethical Standards implementations, also, in support of the anti-corruption policy was established "Civil Service Bureau" in 2004⁴⁵. 2013-2014 years was set up/established Civil Service Reform Coordinating Council Defined public service reform objectives.

- Formation of Free of politics, open and efficient civil service;
- Public service, which will be based on a consistent and clear legal framework;
- Career-based Institute of a public official
- enable for civil/ public servants Constant development and training
- Establish system of fair remuneration and classification
- for the next steps towards European and Euro-Atlantic integration

In the public sector was carried out reforms Which resulted in the orientation of the system, not only for internal processes, but also the customer (citizen) In Public institutions were introduced,, one-stop shop "which significantly simplified and transparent process to citizen services,

⁴³ csb.gov.ge/uploads/changes.doc - Civil Service Bureau

⁴⁴ N. Zarnadze, D. Narmania; Public Administration Basics and Social administration in Georgia.- Tbilisi 2008 p. 18.

⁴⁵ csb.gov.ge - Civil Service Bureau

established civil and public registry services. Set up the patrol police in the country which replaced the so-called Traffic police and virtually destroyed the corruption, Introduced electronic tax service system, which made taxation procedures simplified and transparent. In addition were carried out reforms in field of the labor legislation, Criminal justice system, human rights, to combat corruption, thus existing public administration system closer to public Impact-oriented administration model. In 2013 the government launched a wide consultation process, which caused to elaborate the Civil Service Reform Concept. This initiative was supported by USAID / Democratic Governance in Georgia (G3) Program and other donor organizations⁴⁶. Under the program, actively started the training of civil servants in different directions in order to increase skills and knowledge in the governance fields the outgoing/in the recent years. Improved reimbursement procedure for public sector employees and in the provision of high-quality transparency, began to introduce pilot program about paying for data collection in the Public Service of Georgia. In 2014 was adopted new „ Local government code, Which was an important step toward self-government for more decentralization. Increased their authority and financial independence, Was implemented improvement of local self-regulatory normative acts. Local Self-Government Code set the participation mechanisms of local population in the strategic plan of the development and the budgeting of the municipal. In 2014 have also been developed the rule of bonuses determined in the Public institutions” according to which the bonuses were distributed on the basis of performance evaluation in the case, if in public institutions exist the job evaluation system.

Conclusioz

The process of the realization of New Public Management paradigms occurs with difficult and slow pace. Since country's independence to the present numerous reforms have been implemented in the country, however, the public administration system is still in the process of formation and is still experiencing a reformation. At the initial stage due to heavy political and socio-economic situation in the country, the country's public administration system could not ensure not for the realization of the principles of New Public Management, but also the realization of the fundamental functions. During this period, the country drawn into a variety of internal and external confrontation. Public administration could not provide implementation of its obligations There was an nihilistic attitude

⁴⁶ Ansi Shund , Democratic Governance in Georgia (G3); Program, Functional Review of the Civil Service Bureau of Georgia, Consultation Assessment Report and Recommendations., Tbilisi 2014, p.8.

towards the public sector in the society. Corruption captured the largest part of the public sector, businesses highlighted by heavy pressure, aggravated criminal situation in the country, which finally made the government less efficient. However, despite the current situation, public administration system with the help of various international organizations and developed countries still experienced a slight progress. In the first stage, started creation and perfection the necessary legal and normative basis for the functioning of a public system and for the development of democratic processes in the society, which by the way is still ongoing. The country was integrated in various international projects, which in fact brought a country function again and the issue about democratic development of Georgia re-emerged in the agenda of the world's developed democratic society. Since 1998, a new wave of reforms began in the country, however, the process of reforms were very hard and in some cases violations. Public administration system was still far from the desired condition.. The system could not ensure results-oriented, it was not oriented on the internal processes, Which in turn was due to inefficient spending of resources in the public sector, there was still a lot of corruption and nepotism facts, society hardly supplied the voice/connected to/of the public authorities, which ultimately contributed to the establishment of their irritation and antagonistic attitudes. In parallel with the development of such processes on the public agenda emerged the question of the legitimacy of the public administration system. Finally, in 2003 as a result of the famous Rose Revolution the government changed in the country and Started to build completely new construction of the system of public administration. Exactly from this period begins with the active use of the concept of New Public Management. It is carried out optimization of public agencies. Through their reorganization and restructuring greatly reduced bureaucratic procedures in the public sector. It is Being introduced "one-stop" principle , was implemented police reform, is established a new home of Justice, were being introduced tax and e-services for public, the facts of corruption were minimized in the public system. Mentioned changes were especially evident in the first 4 years after the new government came or so until 2008. Public administration system of the country turned out into crisis in 2008-2012 years. In 2008, the country suffered a serious war with the Russian Federation, which was actually a severe blow to the country's socio-economic and political development. In addition, the reaction of the system to community needs weakened. It became coarser and rough, consequently, there was a public demand for the existence of a Legal state. As a result, Government was handed over to the new political power through elections by Georgian society in 2012. In 2013 the government launched a wide consultation process, which led to develop the concept of the Civil Service Reform. In 2014, the local government adopted a new "Local Self-

Government Code” that was an important step taken toward self-government for more decentralization, increased their authority and financial independence, was carried out the perfection of Local self-regulatory normative acts.

Obviously, the formation of new public management is still going on in Georgia, improving forms of governance, the particular emphasis is place on the final outcome, The system is experiencing the decentralization, Large-scale training projects are carried out for civil servants. The administration is trying to learn as anyone else, as well as their mistakes. However, the fact remains that the process of development, appointment with a objective and subjective reasons due to undesirable social and economic conditions for the population. It makes a significant impediment to in the country the formation of a modern public administration system.

References:

Ansi Shund, Democratic Governance in Georgia (G3); Program, Functional Review of the Civil Service Bureau of Georgia, Consultation Assessment Report and Recommendations. Tbilisi, 2014.

N. Zarnadze, D. Narmania; Public Administration Basics and Social administration in Georgia. Tbilisi, 2008.

L. Izoria, The modern state and modern administration. Tbilisi, 2009.

Robert B. Denhart, Jennet V. Denhart., Public Management (management of performance), Ilia State University, Tbilisi, 2012.

The World Bank, Fighting Corruption in Public Services Chronicling Georgia’s Reforms. 2012.

European Initiative – Liberal Academy Tbilisi, The economic transformation of Georgia in its 20 years of Independence, Summary of the discussion paper. Tbilisi, 2012 .

Law of Georgia on “Civil Service” №1022-Il– October 30th 1997.

csb.gov.ge/uploads/changes.doc - Civil Service Bureau.

<http://www.unrisd.org/> - The United Nations Research Institute for Social Development (UNRISD).

G. David Garson, E. Samuel Overman, Public Management Research in the United States. New York: Preager, 1983.

Sandford Borins, The new public management is here to stay, Canadian Public Administration, March 1995, Article first published online : 9 JAN 2008, DOI: 10.1111/j.1754-7121.1995.tb01133.

Gernod Gruening, Origin and theoretical basis of New Public Management, International Public Management Journal, Hamburg, Germany, 4 (2001) 1–25.

FEATURES OF QUALITY-MANAGEMENT POLICIES IN GEORGIA

Ioseb Batiashvili, PhD Student

Grigol Robakidze University, Tbilisi, Georgia

Abstract

World global processes led to development of international trade in modern era. More attention was paid to product quality together with trade development. A non government organization - ISO was launched in 1947, in order to develop unified standards for quality management throughout the world. Economy of Georgia has been in transition for past 24 years. Transformations have had highly fractured characteristics during these years, A single politics of development could not be conducted during this period. Economical and political courses are altered in line with every change of government and this situation in turn affects business environment.

Keywords: Quality, management, global processes, product

Introduction

Quality is specific set of the features of a product or a service which can potentially or actually satisfy required demands to various extents when applied according to their purposes, including utilization and extermination. Quality is a capacious, complex and universal category that has many exclusive and special aspects. Modern concepts of quality management originate from '30s and '40s of previous century. Several theories has been developed in USA and Japan towards this direction. Quality planning and its management and improvement are based on core principle – quality of every product should be consistent with the demands and interests of a consumer. At present stage a product quality management problems has been solved by organizations such as: Organization of Product Quality Management of Japan, European Quality Management Organization, and Quality Control Organization of America. A non-government organization for standardization - ISO has been founded in 1947 in order to create unified international standards for quality management. Improvement of a product quality is derived from market economy and necessity of competition. The concepts of international quality management are based on solving the problems of satisfying demands at maximum level. In order to gain strategic

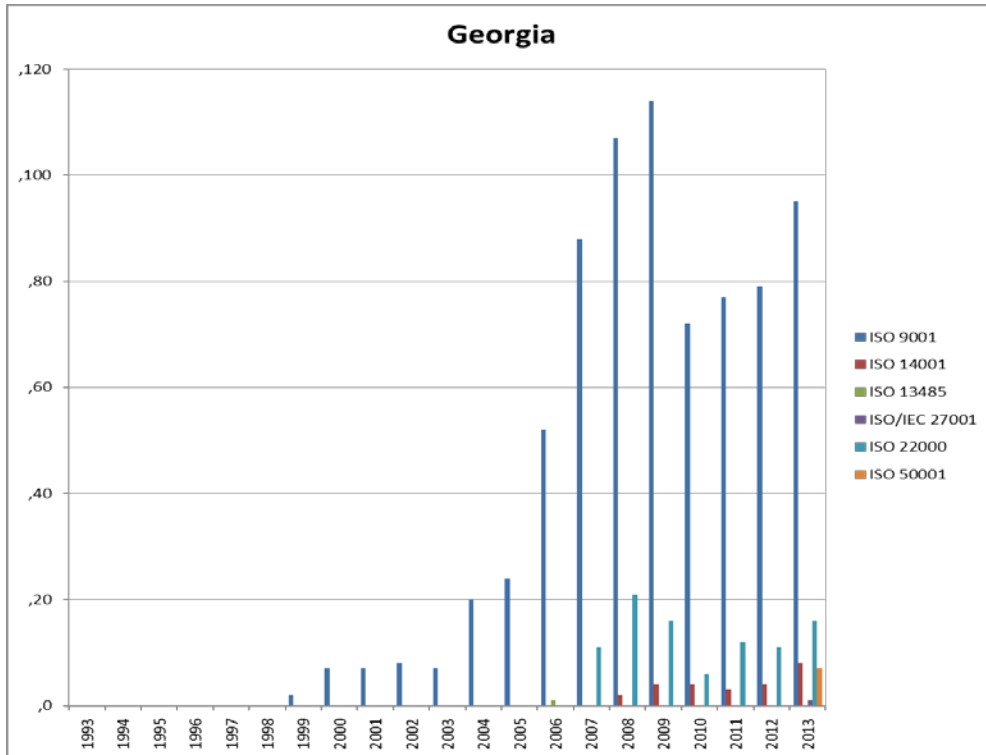
competitive advantage in service field, an obligatory term is to offer a service to a consumer that not only satisfies him but delights his expectations.

The subject of discussion in this article will be the opportunity of application of modern quality management systems in Georgian organizations and factors that hinder or stimulate this process. Georgian and foreign sources will be used for theoretical analysis; most of the sources are listed at the end of the article. Practical analysis of the situation will be conducted by observing current Georgian organizations.

The term 'quality' is used very often in everyday life: business quality, product quality, service quality, work quality, life quality etc. A quality is spacious and universal category that has many exclusive and special aspects, quality is specific set of the features of a product or a service which can potentially or actually satisfy required demands to various extents when applied according to their purposes, including utilization and extermination. In order to create international unified quality management standards a non-government organization for standardization - ISO was launched in 1947.

October 6, 1999 - WTO General Council approved the report of the working party and protocol of accession of Georgia in Marrakesh Agreement Establishing the WTO was signed. April 20, 2000 The Parliament of Georgia ratified the package of agreements on entrance to WTO and Georgia became 137th member of WTO 14 June. The accession of Georgia in WTO enabled Georgian companies to export their products, for which they had to fulfill various requirements.

For the first time in 1999 international system of quality management – ISO 9001 was introduced in Georgia. The system was introduced in Georgian companies almost with equal pace until 2004; however conditions were changed from the beginning of 2004 and standardization started to evolve, number of standards in the companies began to increase yearly.



The system of quality management in Georgia improves every year; however the proper development is hindered by particular problems. Let's discuss each problem separately:

- Lack of knowledge about quality management
- Lack of financial resources
- Legal framework

The basic problem that interrupts the development of international quality management systems is a lack of knowledge, entrepreneurs and company executives do not have enough data about purposes and benefits of standardization system. In majority of cases introduction of a standard is perceived as a formality and they fail to realize that obtaining a standard benefits not only relationships with the customers but it contributes to effective management and enables to carry out the planned work. The system application helps to improve work organization. Feeling of responsibility is increased among staff and work process management is simplified.

Next problem in system development is insufficiency of data about product quality standards for customers on domestic market. Georgian consumers do not realize the need and requirement for products and services to meet international standards. Thus without consumer demand companies do not intend to incur extra costs and introduce international standards. In

order to resolve above mentioned problems Georgian consulting companies for quality-management attempt to provide advisory services to the interested companies to improve the awareness of standards. However domestic companies do not seem to hold much interest.

Implementation of any standard is related to particular financial expenses. Each standard varies in cost. Therefore it is possible that a company realizes necessity of a standard and is ready to implement it, however in some cases lack of funds make them to refuse. Considering current economic situation most of the companies cannot afford to introduce a standard and make yearly audit, which is also related to extra expenditures. Since, quality-management systems require documented recording, they need to hire extra staff to record it, and this is another financial obstacle for some companies.

As for legal framework, there are no legislative requirements about standardization. A national food agency has recently initiated to set specific requirements for food safety that allowed implementation of food safety standard – ISO 22000.

Despite the above mentioned obstacles number of companies willing to introduce international standard grows. Implementation of quality-management system in companies is conditioned by many factors. Let's highlight primary factors:

- To expand into international markets
- To meet bidding requirements
- Improvement of company management system

Georgian companies that intend to follow foreign policy and desire to settle on external markets need to meet particular requirements, one of the primary requirement is to have international system of quality management. For those companies that have implemented the standard receive greater chances of successful negotiations. The standard, as we know carries the same requirements in every country; hence the companies that hold the standard generate general idea about each other. The trust is boosted between the sides. Establishing a quality management standard raises an image of a company. Thus, the 98% of the companies that are oriented on export has already implemented quality-management standard.

As we already know majority of state purchases in Georgia is fulfilled through bidding, each bid has specific set of requirements towards participating companies, one of the requirement in some cases is holding a quality-management standard, therefore the companies that wish to take part in bidding are obliged to establish a quality-management standard.

International system of quality management covers a complex of procedures that enable a company to have better business management. Thus, most of the companies acquire standardization to improve a

management system of the company. Since most common standard in Georgia is - ISO – 9001, let's discuss the role and benefits of this standard. It is worthy to be noted that the companies that have implemented the standard admit that they have improved the quality of their job, a work process is more organized and staff has more sense of responsibility towards their tasks, which improves overall management system. The Standard enables top management to conduct better analysis of company operations, to detect and eliminate errors, to monitor revising activities, to take necessary measures towards improvement and development.

Conclusion

World global processes led to development of international trade. More attention was paid to product quality together with trade development. Quality is specific set of the features of a product or a service which can potentially or actually satisfy required demands to various extents when applied according to their purposes, including utilization and extermination. Quality is a capacious, complex and universal category that has many exclusive and special aspects. No investment is able to save company in market economy if it is not capable of ensuring the competitiveness of its products or services. A quality of a product is a basis of competitiveness. Besides quality, competitiveness comprises of: price, delivery dates, guarantees, post-purchase services etc. priority is given to product quality when a buyer or a customer makes purchasing decision. It is a common practice for a customer to inspect in advance how seller organizes quality-activities and then settle a contract.

In order to create globally unified quality-management standard non-government organization – ISO was started in 1947. The NGO enabled companies throughout the world to implement international standards of quality-management, which simplified interaction among them.

The companies started to establish standards of quality management in Georgia since 1999. It is worth noting that together with the development of economic situation number of implemented standards in companies has increased.

It was established that in majority of the cases companies in Georgia implement quality-management systems in order to operate in foreign markets. Applied standards facilitate communication with their foreign partners. Implementation of a standard helped to improve quality of system as well. Work process has become more organized and sense of responsibility of staff towards their job increased. However, due to certain obstacles a development is not fulfilled at desired pace. One of the most influencing problems, as discovered is - lack of spreading the information about standards, in many cases top management doesn't hold data about

importance and necessity of implementation of the standard, and is considered as formality.

For the developing of international quality-management standards in companies it is recommended to propagate the information about quality-management system of a product, thus company executives gain knowledge about the importance of standard application. It is also required to support international standards of quality-management on legislative level.

If above mentioned obstacles resolve and supporting measures for standardization follow, I assume that international systems of quality-management should evolve in Georgian companies.

References:

Graeme Knowles „quality management” 2012.

Graeme Knowles - „ Managing quality in The 21st Century” 2012.

[http://www.iso.org/iso/home/standards/certification/iso-](http://www.iso.org/iso/home/standards/certification/iso-survey.htm?certificate=ISO%209001&countrycode=GE#countrypick)

[survey.htm?certificate=ISO%209001&countrycode=GE#countrypick](http://www.iso.org/iso/home/standards/certification/iso-survey.htm?certificate=ISO%209001&countrycode=GE#countrypick)

iso.org quality management principles.

“Economic transformation of Georgia: 20 years of freedom”- “European Initiative – Tbilisi Liberal Academy” – 2012.

AN ANALYSIS OF THE STUDIES ON THINK TANKS SUCCESS AND RANKING

Prof. Dr. Hüseyin Özgür

Res. Assist. Onur Kulaç

Pamukkale University Faculty of Economics and Administrative Sciences
Department of Political Science and Public Administration, Turkey

Abstract

In public policy process; official, unofficial and international actors play complicated roles. As unofficial actors, think tanks contribute to public policy making in various areas and ways and compete with each other. In historical perspective, American think tanks highly beneficial to formulation of internal and foreign policies in their respective country and some of them have noteworthy funding. This study which is structured into three parts starts with the analysis think tanks development and their influence on public policy. Later on, the literature on ranking, success and impact studies of think tanks is intensely scrutinised. Lastly, Global Go To Think Tanks (GGTTT) reports under the leadership of McGann are examined. This study reveals the think tanks ranking literature based on the evolution, citations, similarities and differences of think tanks. Moreover, GGTTT index reports are the most comprehensive, contemporary and prominent of these studies, despite some criticisms made by other scholars and experts.

Keywords: Think Tanks, Ranking, Success, Impact, GGTTT

Introduction

Ranking studies encourage think tanks to increase their success and efforts for visibility in the media. All these ranking and success studies help researchers to figure out the role and importance of think tanks on public policy. Ranking studies of think tanks can also be quite valuable to donors. A justification of ranking studies of think tanks and ranking of economists working for think tanks was described by Trimbath (2005: 12-13). According to Trimbath, having ranking of top economists provides some fundamental functions: Firstly, high quality economists for think tanks are determined so as to enhance their ranking. Secondly, graduate students can benefit from the ranking to measure reputational capital of the prospective

employers. Lastly, generating a ranking of top economists can inform the public about the experts whose research policymakers are probably to use.

Public policy that is conducted by numerous institutions or people in order to find a solution or meet social needs (Anderson, 2014: 7), influences and covers all or many citizens (Rose, 1989; Peters, 1996; Birkland, 2005). Thus, unofficial actors are getting involved in the policy process as well as official and international actors. Think tanks that produce policy in different fields of public policy are active in many developed countries, especially, in the US since the beginning of 20th century. On the other hand, under the impact of globalization, think tanks in developing countries also provide significant contribution and encouraging outcomes to public policy process. Even the number of think tanks is limited in developing countries; many remarkable consequences can be seen in the international think tank success index reports.

In-depth studies frequently reveals stories to understand impact of think tanks, however these studies do not provide rankings for large number of think tanks. Think tanks play important advisory roles in policy making and for policy makers. For instance, Smith (1991a) illustrates a discussion of the role of institutions like the Brookings Institution, the RAND Corporation, and the Committee for Economic Development with presidents, executive branch agencies, and business lobbyists, respectively, through the 1940s, 1950s, and 1960s in the US. Also in earlier decades, think tanks were at times visibly credited for important outcomes. A prominent example in the past is the Brookings Institution's influence in the establishment of the Congressional Budget Office (CBO) in 1973 (Smith, 1991a: 82–86). There are increasing number of ranking, success and impact studies of think tanks since 1997 and especially after 2001. Some of these studies specifically focus on ranking or success of think tanks and ranking is a secondary aim for some others. Some of ranking and success studies of think tanks are local or regional; only a couple of them are universal and comprehensive.

No major study has ever attempted to list, combine and systematise all or most of the ranking and success studies of think tanks, and only few studies cite and relatively organise previous ranking studies. Koellner (2013) provides brief information on some of the think tanks success index studies and criticises McGann's reports. McNutt and Marchildon (2009) offer and elaborate a web-based comprehensive think tanks success index and provide some insights about previous studies. Trimbath (2005) summarises earlier two studies published in the same Magazine in 2000 and 2002. Thunert has tracked down some of the earliest and/or hard-to-reach studies on success like Burson–Marsteller reports (1993; 1997), “Think Tanks Spectrum” series by Dolny (1996).

In this study, firstly, the development of think tanks which are one of the most momentous unofficial actors of public policy process will be dealt. Secondly, the emergence of think tanks ranking studies around the world in English literature will be examined and criticised. Lastly, GGTTT index reports which have been conducted and directed by McGann will be analysed and evaluated. This study reveals that even developing a comprehensive, reliable and respectful think tanks ranking and success assessment is pretty hard, promising attempts and some crucial progresses have been managed in the recent years after basic and exploratory studies were conducted in the past two decades. It seems that with the launch of worldwide GGTTT index reports; think tanks success and ranking studies attract the interest of academicians, politicians, directors and experts of think tanks.

The Development of Think Tanks in the Historical Process and Their Influence on Public Policy Making

Think tanks think and generate thoughts and reports for other organisations, aim to connect the world of ideas and innovate with the world of action and implementation (Bedford and Hadar, 2014: 64). Public policy, the relation of a government body with the environment (Eyestone, 1971: 18), is an action plan aimed at providing solutions to existing and arising problems (Kraft and Furlong, 2004: 4). Thus, public policy can be explained as the whole decisions and actions rather than one (Hill, 1997: 7). As a research institution, think tanks offer recommendations to policy maker in a specific or wide range of policy areas (Stone, 2007: 149), and affect policy process depending on expertise and ideas (Rich, 2004: 11). In this context, it is stated that think tanks are regarded as a bridge between information and power in the modern democracy (UNDP, 2003: 6). Think tanks as independent research institutions are occasionally ideologically neutral; it is indicated that they often have proximity to a political thought. However, there are also think tanks that have collaboration with universities and make great contribution to public policies (Birkland, 2005: 89).

The development of think tanks has consisted of three broad periods since early years of the 20th Century. These periods are pointed out as 1) before World War II, 2) Cold War era, and 3) after 1980 (Stone and Denham, 2004). Also according to Abelson (1998, 2000), the development period of the think tanks can be listed as four waves/generations. The concept of think tanks were firstly debated at the beginning of the 20th Century and think tanks such as Brookings Institution, the 20th Century Fund, Russell Sage Foundation, Fabian Society, National Institute for Economic and Social Research were established in the US and the UK (Abelson, 2000: 217; Stone, 2007: 150). In the period before 1939, think

tanks generally emerged in industrialized, urbanized and economically developed countries as US and other English spoken countries. The reason of the early emergence of think tanks in the US and English spoken countries is expressed as to provide solutions to the problems that arisen with rapid economic growth (Smith, 1991a; Abelson, 2002) and socio-economic transformation of the society. The second period for think tanks began with the Cold War and some adverse circumstances as economic stagnation, crisis and social depression led to the need for technical analysis. Hence, think tanks which were established in this period provided solutions to the needs of the society and the government utilizing statistical techniques and cost-benefit analysis (Stone, 2007: 150). In the period of after 1980, the number of think tanks increased dramatically due to the spread of neo-liberal political thoughts in many countries and so-called New Right think tanks such as Adam Smith Institute that started to operate in London (Denham and Garnett, 2004) and prepared main ideas and policies for Thatcher government and Thatcher herself before her position as prime minister. Today, the organizations like the World Bank (WB), the World Trade Organization (WTO) and the United Nations Development Program (UNDP) which are the financiers and customers of policy analysis offer a crucial contribution to the creation of new think tanks and networks (UNDP, 2003). For the fourth generation think tanks, Abelson (1998, 2000) identifies them as vanity and legacy-based think tanks. These types of generation think tanks have more determined and bounded mandate then other classic research institutions. Policy-making community are attracted in some cases by the fourth generation think tanks. Jimmy Carter Centre at Emory University, Richard Nixon Centre for Peace and Freedom can be given as prominent fourth generation legacy-based think tanks which established a wide range of research programs. On the other hand, vanity think tanks such as Senator Dole's Institute, Better America, and the Progress and Freedom Foundation are the latest generation of public policy research institutions in the US. Both legacy-based and vanity think tanks succeeded to have an influential institutional infrastructure with considerable budgets (Abelson, 1998: 114-115; Abelson, 2000: 221-222).

Evolution of Ranking, Success and Impact Studies of Think Tanks

The International Economy Magazine's (Ruble, 2000; Posen, 2002; Trimbath, 2005) rankings focus solely on economists affiliated with think tanks and economic policy ideas of think tanks. McDonald's (2008) dissertation concentrates on education policy; Rich (1999; 2004) emphasises health care and telecommunication policy impacts of think tanks. In this chapter, the classification of academic work is an original effort by the authors to provide pioneering ideas on success, impact and ranking of think

tanks studies in order to fill the void in the literature and help the readers to interpret current ranking writings and reports.

No major paper has classified neither think tanks ranking and success literature nor their theoretical bases. Thus, to us, three sets of studies may establish a base for ranking and success literature on think tanks: First set of literature is multi-country comparative or across nations think tanks studies, like McGann and Johnson (2005) edited book focusing on 20 countries in depth, Stone, Denham, and Garnett's edited book (1998) providing examples from 10 different major countries. Stone (2005) reviews think tanks and policy advice in transition countries. Two country comparative studies on think tanks success reflect second sets of this literature. Higgott and Stone (1994) US and Britain, Abelson, and Carberry (1998) US and Canada, Abelson (2000, 2009) US and Canada, Abelson and Lindquist (2000) North America (US and Canada), Thunert (2003) US and Canada, Braml (2006) US and Germany, Pautz (2010) the UK and Germany are among significant examples of the second group of literature. Third set of literature to overwhelmingly contribute think tank ranking and success studies is in-depth single think tank success and/or impact studies. There are increasing examples of these in-depth studies; some of the examples of this group are as follows: Frost and Vogel's (2007) German KGSt (Institute of Urban Affairs) study on German NPM reform on local governments; The Heritage Foundation (Edwards, 1998); The Brookings Institution (Smith, 1991b).

Earliest theoretical bases for measuring think tanks success and ranking can be found in Lindquist (1993), Ricci (1993), Abelson (1998), Radaelli and Martini (1998), Stone, Denham, and Garnett (1998), Stone and Garnett (1998), Stone (2000), Haas, Molnar, and Serrano (2002); Rich (1999; 2004); Abelson (2002); Later contributions to theoretical basis to think tank ranking comes from McGann (2006), Frost and Vogel (2007), McDonald (2008), Weidenbaum (2010), Koellner (2013), Kuntz (2013).

Based on publication year order, starting from the oldest, each ranking and/or success studies on think tanks studies are summarised below: McGann's contemporary and regular/repeating ranking study of GGTTT (2008-2015) is examined in a separate, following, chapter/title due to its importance, citation taken and comprehensiveness. It seems that one of the earliest studies on measuring success and providing framework for ranking think tanks is suggested by Lindquist with an article published in Canadian Public Administration in 1993. According to Lindquist "there is little understanding of their diversity beyond well-known value orientations, nor of how they differ from other 'think tank' organisations such as government councils and academic research centres". Lindquist (1993) offered concepts and a framework for assessing the capacity and role of policy institutes and

also compares the size and activities of several well-known Canadian institutes.

A Washington D.C. based institution Burson-Marsteller prepared two reports in 1993 and 1997 named Perceptions of Think Tanks among Washington Influentials based on pools conducted in 1992 and 1996. The second report (1997) prepared by Andrew Rich, who pursued his doctoral education on a same main topic, in 1999. Rich also presented a paper at the annual meeting of the American Political Science Association, Boston, in 1998 titled “Think tanks as sources of expertise for Congress and the media”. Thus, Rich became a pioneering academician on think tank influence on politicians and media; however, he did not specifically focus on ranking (Burson-Marsteller 1993; 1997; Thunert, 2003: 16-17).

Sociologist Michael Dolny collects media citations of the 25 leading think tanks in the United States for the left-leaning report Fairness and Accuracy in Reporting (FAIR) and its magazine called Extra!. In his first measurement, Dolny employed a search of the Nexis database on January 1996 of major newspapers radio and TV transcripts for the year of 1995. Dolny distinguished the political orientation of think tanks into the categories as ‘conservative or right-leaning’, ‘centrist’ and ‘progressive or left-leaning’. Moreover, as his leading contribution to ranking studies, Dolny developed a single table showing media references of major think tanks. In 1995, while the Heritage Foundation was cited 2,268 times as winner, the 25th place went occupied by the Centre for Defence Information with 136 cites. From a left-of-centre perspective, these numbers indicate a huge imbalance in think tanks visibility (Dolny, 1996; Thunert, 2003: 16). The invisibility of left think tanks is a longstanding phenomenon (Dolny, 1996). FAIR ranking study in 2011 of top 25 major US think tanks rankings based on citations and/or mentions has a new methodology as explained in Fair! Magazine published on July 2012 by Dolny. “FAIR’s annual surveys of think tank citations in corporate media uses a sample based on lists of think tanks generated by political observers, notably the National Institute for Research Advancement (NIRA), Project Vote Smart and the University of Michigan library Political Science Resources list. Rankings are based on the number of stories that refer to the groups in the sample in the Nexis databases of US based major newspaper articles and US radio and TV transcript databases. For some of the later ranking studies, Fox Business Network transcripts were eliminated because they were added for the first time in 2011, and as a result would have exaggerated the trend between the years of 2008 and 2011” (Dolny, 2012). Each study covers statistics in the previous year. So, starting from 1996 to 2013, for 18 years, 12 Think Tanks Spectrum study were published in the “Fair! Magazine; no ranking studies were published in the years of 1998, 1999, 2007, 2008, 2010, 2011.

Radaelli and Martini (1998) made allocation some significant space in their paper for major Italian think tanks and provided basis for assessing success through size of the office staff, number of researchers, total expenditures, and media exposure. Out of 69 total Italian think tanks, they compared 11 of them in most of these criteria. Therefore, they utilised complimentary criteria to measure success of think tanks in Italy.

Ruble (2000), Posen (2002) and Trimbath (2005), all published in *The International Economy (Magazine)*, conducted ranking studies of American think tanks focused on economic issues. Think tanks which are operating in the economic policy area were ranked by Ruble (2000) and the result was published in the *Magazine of International Economic Policy*. The press visibility of 12 economic policy think tanks and 171 their scholars between the years 1997-1999 were evaluated in order to present promising data for future studies. According to Ruble's study, the top three think tanks in press citations on economics were listed as the Brookings, the Institute for International Economics (IIE) and the American Enterprise Institute (AEI). On the other hand, Fred Bergsten, Robert Litan and Nicholas Lardy were found to be the top three individual economists. In 2002, Posen's study, which was also published in *Magazine of International Economic Policy*, dealt with the think tanks rankings overall period from 1997-2002 and 5 year average cites per economist. In this study, number of press citations by think tank and by scholar for 16 research organisations and 276 economists in the major new publications (*Asian Wall Street Journal, Business Week, Economist, Financial Times, Foreign Affairs, International Herald Tribune, New York Times, US Today, Wall Street Journal, Wall Street Journal Europe and the Washington Post*) were illustrated. It is surprisingly seen that the top think tanks by press citations are identical to Ruble's study. Brookings, IIE and AEI were ranked on the top in total cites. Also, the most cited individual think tank economist list were almost same and Bergsten, Litan, Lardy deserved to be ranked 1st, 2nd and 5th respectively.

In the UK, *Prospect Magazine* which is supported by the Shell Company have been conducted think tanks of the year awards since 2001. The main aim of the think tanks award is to encourage organizations that play a crucial role on the process of public and political thinking on policy questions. The selection of the best think tanks is basically based on some criteria. These are listed as; coherent selection of topics of importance, innovative and plausible policy prescription, rigor of analysis, influence on politics, influence on media and wider impact, convening power. On the other hand, the judge committee which comprises of different occupational groups like chief economists, editors of the journals, academicians, writers and commentaries, secretaries and others have the full authority in the selection process of the think tanks. The most of the awards are set for the

UK think tanks, in a separate award category; US think tanks are also chosen and honoured. Thus in the reports, it is feasible to follow the awards dedicated to US think tanks. In the reports, the way to list the successful think tanks is quite different than the other ranking reports. For instance, the reports of the UK Prospect Magazine do not only show the winner think tank in each award category, but also provide shortlists which consist of four successful think tanks including the winner. Beside one award category for the US, separate awards are given to the UK think tanks operating in various policy areas as international affairs, social policy, energy and environment, economy and finance (<http://www.prospectmagazine.co.uk>).

In 1995, think tanks in Canada, which were categorised according to their political proximity, were ranked in terms of their mentions in the *Globe and Mail* compiled by Campbell between 1993 and 1995. In respect of the *Globe and Mail* study, which was summarised and cited by Thunert, the Fraser Institute, known its closeness to conservative-libertarian ideology, got the 1st place and the runner-ups were C.D. Howe, Canadian Centre for Policy Alternatives, IRPP respectively. Thunert (2003) succeeded to design a ranking for the purpose of think tanks citations on Economic issues in US press between the years 1999-2000. This report was essentially based on the data of Ruble (2000) and made a crucial contribution to the rankings of US think tanks which are politically biased. As stated in the report, the Brookings Institute got the %30 of the citations on economic issues in the US press and ranked in the 1st place. Institute of International Economics and American Enterprise Institute became the runner-ups with the percentages 19 and 11 respectively.

After two pioneering studies published in the *Magazine of International Economic Policy*, Trimbath's (2005) study made a comprehensive assessment of the years 1997-2005. In this study; the ranking of think tanks in case of total citations, top thirty think tanks scholars, number of citations per month, number of scholars cited per month, political labels on the think tanks were analysed in detail. In the study totally 445 scholars in 17 institutions were examined to collect data for the publication. Accordingly, top 17 think tanks and top 30 think tanks scholar rank was created which represents the years between 1997-2005. As reported by Trimbath (2005); the Brookings Institution, IIE and AEI deserved to be listed in the top 3 ranking. On the other hand, Bergsten, Reischauer and Litan became the most cited think tanks scholar and got the top places in the ranking list.

In Canada, think tanks are very keen to benefit from web to reveal their finding in order to enhance their institution reputation. McNutt and Marchildon (2009) introduced visibility and relevance as web-impact measures of the think tanks. Thus, think tanks were listed and ranked in the

context of five policy subjects with important Canadian dimensions such as social policy, the child tax benefit, equalization, clean energy policy and peacemaking. In ranking of social policy web-based community, Canadian Policy Research Networks (CPRN) got the first place due to their considerable insider and broader community influence. For the ranking in child tax benefit web-based policy community, Canadian Council on Social Development deserved to be listed first and Canadian Centre for Policy Alternatives became the runner-up. In the list of ranking in equalization web-based policy community, Institute for Research on Public Policy ranked on the top in case of their core policy network and broader policy community impact.

The rankings of South Korean think tanks provided by the Hankyung Business Newspaper, published in Korean, which are based on consolidation of four main scores for 1) “public influence”, 2) “quality of research papers”, 3) “competency of researchers”, and 4) “scale of the institute” (<http://magazine.hankyung.com>)

According to Roodman and Clark (2012), GGTTT is the most detailed accomplishment that classifies and measures the performance of think tanks; also when looked at the top think tanks, it is obvious that most of them are so familiar for the public and thus they are generally comes out on top. Roodman and Clark (2012) focused on the top 20 think tanks which were listed in 2011 GGTTT and measured their impact in cases of Facebook and twitter fans, web traffic rank, incoming links, Nexis hits and Google news hits citations. In other words, some indicators like how often a think tanks work is reported, cited, downloaded, followed were the fundamental issues of the report created by Roodman and Clark (2012).

Clark and Roodman (2013) managed to conduct an index on the public profile of think tanks. Thus, their fundamental objective was not to have a comprehensive method for the ranking. In the report prepared by Clark and Roodman, the main focus was to develop an index, in cases of, best at garnering public attention, scholarly citations, media mentions, web traffic, and social network followers of the think tanks. Moreover, the size of the each think tank in terms of operational expenses was also handled to compare with the size of think tanks profile. In this context, 18 US think tanks were listed alphabetically in terms of their expenses per year, age, social media fans, web traffic, incoming links, media mentions and scholarly citations. In addition to this, international development think tanks which were ranked by GGTTT in 2011 were also listed alphabetically in order to provide data for the think tanks expenses per year, age, social media fans, web traffic, incoming links, media mentions and scholarly citations.

Quantitative metrics can only help to get a better idea of the output or visibility of think tanks and their staff. Quantitative metrics can be useful for

capturing the “intermediate goods” (Weidenbaum, 2010) offered by think tanks. Such metrics have, however, little to say about the actual impact that think tanks, individually or collectively, might have on policy processes. Whether policy makers make use of these goods is a different question. Reputational data –based, for example, on surveys asking policy makers how much they value individual think tanks and their experts– can be used to try and capture impact. But again, such data are more about perceptions and tell us little about actual impact. Moreover, it is difficult to link such data with other quantitative data in a convincing manner. Given these analytical problems, ranking think tanks in terms of influence remains a highly problematic undertaking, even at the national level.

Impact analysis of think tanks is predominantly concerned with the media presence of think tanks (Abelson, 2002; Clark and Roodman, 2013; Groseclose and Milyo, 2005; McNutt and Marchildon, 2009; Posen, 2002; Rich and Weaver, 2000; Roodman and Clark, 2012; Ruble, 2000; Trimbath, 2005). However, the visibility of think tanks in the media only reflects their recognition by journalists and ordinary people. In contrast, “citation analysis draws not on the mediation of their texts by others but on the direct consumption by the community of practice to which the focal think tank is targeted to” (Frost and Vogel, 2007: 33-34). Frost and Vogel (2007) assumed bibliometric techniques to offer further advancements in impact analysis of think tanks.

Think tanks are still important if they produce high quality, objective knowledge products and services, not otherwise available to policy and decision makers (Bedford and Hadar, 2014: 64). Think tanks may not be necessary, as many in the literature suggest, if their focus have shifted from research to advocacy (Bedford and Hadar, 2014: 64). Therefore, it becomes important to measure success and make ranking based on research products and capacity of think tanks; and some increasing number of comprehensive or narrow studies take into considerations in their calculations factors such as citations, number of full-time equivalent research personnel, budget, external funding as indicators of research capacity and research- based influence.

Global Go To Think Tanks Index (GGTTT) Reports

Launched in 2001, the Think Tanks, Politics and Public Policy Project was designed to provide factual and objective information about the state of independent policy advice in individual countries while establishing a framework for a cross-national comparison of five Regions of the World (Africa, Middle East, the Americas, Europe and Asia). This Project is an outgrowth of the international survey of think tanks conducted in 1999 that involved 817 think tanks in 126 countries around the World. This study

found that the number of think tanks varied from country and region to region (McGann and Johnson, 2005).

Authors in the book edited by McGann and Johnson (2005) utilised the think tanks data collected in 1999 and updated in December 2002, and presented and analysis of differences in think tanks that exist in the countries within each region. In order to reduce the pitfalls involved in making generalizations about an entire region, the specifics of the context are played out on a select group of countries in a given region. In each region, the countries were selected based on their different economic, political, social and legal systems in order to determine how variance in these factors impact think tanks and civil society organizations (McGann and Johnson, 2005).

GGTTT reports were prepared and directed by McGann (2008-2015) in the scope of Think Tanks Civil Society Program (TTCSP). International surveys of more than 1500 scholars, policy makers and journalists made great contribution to the ranking of over 6500 think tanks by using 18 criteria developed by TTCSP (<http://gotothinktank.com>). Think tanks were categorized in different ways regarding their region, research area and special achievement. In the reports top think tanks in the world were listed and also the number of the think tanks for each country was provided as part of data. Listing think tanks by region was critically significant; ranking reports were generated based on various regions. Definition and categories of regions vary in each report regarding the number of think tanks, economic contribution and importance of countries. In this context, top think tanks in North America, Central and South America, Latin America and the Caribbean, Middle East and North Africa, Southern Africa, Sub-Saharan Africa, Western Europe, Central and Eastern Europe, Central Asia, Southeast Asia and the Pacific were indexed in the recent GGTTT index reports (McGann, 2008-2015).

Think tanks are operating in numerous policy/research areas; therefore creating index lists in case of research area is overwhelmingly necessary. In GGTTT index reports, think tanks were ranked by their policy/research area. The research areas of the think tanks which were highly used in the index reports by McGann can be listed as International Development, Health Policy, Domestic Health Policy, Global Health Policy, Environment, Security and International Affairs, Domestic Economy Policy, Social Policy, Science and Technology, Defence and National Security, Education Policy, Energy and Resource Policy, Transparency and Good Governance, Foreign Policy and International Affairs. In research area indexes, most of the ranks were occupied by US and UK think tanks. In the recent reports, developing countries' think tanks have shown a promising achievement and ranked in the indexes (McGann, 2008-2015). Consequently, the think tanks ranking like GGTTT have a huge role to

encourage less-known think tanks in underdeveloped and developing countries. Thus, these think tanks might be more integrated to the public policy making processes. Moreover, GGTTT is the sole think tanks ranking effort covering many countries outside of US, UK and Canada.

In GGTTT index reports; there were also special achievement categories that think tanks were ranked. In these categories a diverse array of achievement list were taken basis to have an extensive index. In this context special achievement categories such as Think Tanks with the Most Innovative Policy/Idea Proposal, Best New Think Tanks, Outstanding Policy Oriented- Public Policy Research Program, Best Use of Internet to Engage the Public, Best use of Media to Communicate Programs and Research, Most Impact on Public Policy or Policy Debates, Best for Profit Think Tanks, Best Governed Affiliated Think Tanks, Best Institutional Collaboration involving two or more Think Tanks, Best Managed Think Tanks, Best New Idea or Paradigm Developed by a Think Tank, Best Policy Study/Report Produced by a Think Tank, Best Think Tank Conference, Best Think Tank Network, Best Think Tanks with Political Party Affiliation, Best University Affiliated Think Tanks, Best Use of Social Networks, Think Tanks to Watch, Think Tanks with the Best External Relations/Public Engagement Program, Think Tanks with the Best Use of the Internet and Think Tanks with Annual Operating Budgets of Less Than \$5 Million USD were used in order to rank the think tanks (McGann, 2008-2015). In terms of ranking award categories, McGann's index reports cover quite different policy areas and regions; the closest follower is the UK Prospect Magazine with around five categories.

When the GGTTT index reports are examined, it is possible to claim that the annual reports have a large scale of coverage of the think tanks in the world. Due to having many categories, many think tanks from variety of countries have been included in the indexes. Thus, GGTTT index reports are cited by the academic scholars who studies on the relevant topics. Moreover, many other ranking studies firstly start their discussion by addressing to GGTTT as analysed in the various parts of this paper.

Conclusion

Think tanks ranking and success measurement studies have been under development in the last two decades. The literature on think tanks success and ranking is relatively non-integrated. Starting from 2001 with the UK based Prospect Magazine's studies; several evaluation and assessment of successes of think tanks have been regularly calculated and broadcasted; however there were some one-shot pioneering studies on think tanks ranking. Most of the ranking studies are criticised from several aspects, even the studies by the UK Prospect Magazine have not any citation and critics at all in its 13 years of appearance despite its' potential contribution to the think

thanks ranking literature. Several think tank ranking, impact and success studies have existed since late 1990s and early 2000s; nonetheless these studies remain separate, non-integrated and mostly not comprehensive beside McGann's reports. Some of these ranking studies repeat annually, some others are occasional. Also there are ranking studies cover a relatively long periods at one ranking like Posen (2002), on the other hand several studies mostly focus on a single year like the UK Prospect Magazine and McGann's GGTTT.

Some ranking and success studies cover whole world (every or almost every country) (McGann, 2008-2015), some others focus a couple of countries (The UK Prospect Magazine, 2001-2014) and most focus on a single country (South Korea, The Hankung Business). Most ranking studies focus solely on US (Ruble, 2000; Posen, 2002; Trimbath, 2005) or US and another country, mostly Canada (Thunert, 2003) and UK.

Two country comparative studies, especially focusing on developed countries, are also seen. Ruble's (2002), Posen's (2002) and Trimbath's (2005) studies published by the International Economy (Magazine) predominantly concentrate on rankings for economics; others compile rankings at the same time on several different topics (McGann, 2008-2015; The UK Prospect Magazine, 2001-2014). With the leadership of McGann, GGTTT prepared and published annually since 2008 have a distinguished place among all ranking studies on think tanks. GGTTT index reports are comprehensive and influential; they attract interest both from practitioners and academicians.

Think tanks ranking studies seldom cite each other; thus the main of aim of this paper is to summarise and scrutinise ranking studies available in English literature including theoretical background and pioneering studies focusing on success measurement. Ranking studies published on the International Economy Magazine repeat only three times under the authorship of different researchers. On the other hand, the Prospect Magazine and GGTTT continue to provide ranking annually since their introduction in the years of 2001 and 2008 respectively.

Only two ranking studies were based on data of another study. The first one was published by Roodman and Clark (2012). Both McGann (2008) in his initial top successful think tank study and Roodman and Clark (2012) based on McGann's ranking study made an alphabetical list instead of ranking. The second ranking study based on data of another study was completed by Thunert (2003: 17), which compiled data based on Ruble (2000) and ranks nine think tanks. In addition to annual GGTTT index reports, three TIE studies by Ruble, Posen, Trimbath on think tanks ranking presented almost no theoretical background, even they successfully and directly focused on ranking of think tanks and their experts. On the other

hand, Abelson (2002), Rich (1999), McDonald (2008) reviewed theory and/or other aspects of think tanks development and allocated ranking some limited and secondary place in their studies. McNutt and Marchildon (2009) had a more balanced assessment between theoretical background and actual ranking on ranking and success of think tanks.

In some studies of think tanks ranking and success studies, citation becomes one of the few indicators to measure success (e.g. Thunert, 2003; Roodman and Clark, 2012). Thunert (2003) utilised citations and newspaper mentions to measure success of Canadian and American think tanks. Studies published in and conducted for TIE utilised only citations for the measurement of think tanks success and rankings in the area of economy in the US. Thunert (2003) uses both quantitative and qualitative measurement of think tanks impact. Detailed methodological explanation was not maintained in the most of the ranking and success studies of think tanks. However, a few studies like McGann (2008-2014), Haas, Molnar, and Serrano (2002); Trimbath (2005), Dolny (2012), the Prospect Magazine (2001-2014); McNutt and Marchildon (2009) furnished a detailed methodology to the readers and researchers.

To sum up, as an unofficial actor, think tanks play increasing research and advocacy roles in the process of public policymaking. Especially in the last two decades, the number of think tanks in all over the world has increased dramatically. In a similar fashion, diversification and increment of the think tanks rankings have been observed. In order to understand and encourage think tanks, well-designed, complementary, regional ranking papers and in-depth success studies and stories are highly needed. This paper attempted to create an outline which covers different types of ranking and success studies so as to fill the void in this part of recent think tanks literature. In this context, GGTTT index reports which are regarded as the most outstanding and contemporary studies were discussed in detail. Thus, it is possible to claim that the ranking reports which are policy issue based, regional based, worldwide based, special achievement based like GGTTT might lead to future studies in different countries. Still, we need more ranking studies to include other countries which are not well-cited/covered but have many think tanks like China, India, France, Argentina, Russia, and Japan.

References:

Abelson, D. E. (1998). "Think Tanks in the United States", Diane Stone, Andrew Denham, Mark Garnett (Eds.), *Think Tanks across Nations: A Comparative Approach*, Manchester, the UK: Manchester University Press, Chapter 5, 107-126.

- Abelson, D. E. (2000). "Do Think Tanks Matter? Opportunities, Constraints and Incentives for Think Tanks in Canada and the United States", *Global Society*, 14 (2) 213-236.
- Abelson, D. E. (2002). *Do Think Tanks Matter? Assessing the Impact of Public Policy Institutes*, Montreal: McGill-Queen's University Press.
- Abelson, D. E. (2009). *Do Think Tanks Matter?, Second Edition*, Montreal: McGill-Queen's University Press.
- Abelson, D. E., and Carberry, C. M. (1998). "Following Suit or Falling Behind? A Comparative Analysis of Think Tanks in Canada and the United States", *Canadian Journal of Political Science*, XXXI (3) 525-556.
- Abelson, D. E., and Lindquist, E. A. (2000). "Think Tanks in North America", James McGann and R. Kent Weaver (Eds.), *Think Tanks and Civil Societies*, New Brunswick: Transaction Publishers, 37-66.
- Anderson, J. E. (2014). *Public Policymaking: An Introduction, 8th Edition*, Stamford: Cengage Learning.
- Bedford, D., and Hadar, G. (2014). "Do Think Tanks Think?", Jim Rooney (Ed.), *Proceedings of the 11th International Conference on Intellectual Capital Knowledge Management And Organisational Learning, ICICKM 2014*, Reading, The UK: Academic Conferences and Publishing International Limited, 64-73.
- Birkland, T. A. (2005). *An Introduction to the Policy Process: Theories, Concepts, and Models of Public Policy Making, 2nd Edition* New York: M. E. Sharpe.
- Braml, J. (2006). "US and German Think Tanks in Comparative Perspective", *German Policy Studies*, 3 (2) 222-267.
- Burson-Marsteller (1993). *Perceptions of Think Tanks among Washington Influentials*, Washington D.C. September 1993.
- Burson-Marsteller (1997). *Perceptions of Think Tanks in American Politics*, Report by Andrew Rich, Yale University, Washington D.C., December 1997.
- Clark, J., and Roodman, D. (2013). *Measuring Think Tank Performance: An Index of Public Profile*, Centre for Global Development.
- Denham, A., and Garnett, M. (2004). "A Hollowed Out Tradition? British Think Tanks in the Twenty First Century", Diane Stone and Andrew Denham (Eds.), *Think Tank Traditions: Policy Research and the Politics of Ideas*, Manchester, Manchester University Press.
- Dolny, M. (1996). "The Think Tank Spectrum: for the Media, Some Thinkers are More Equal Than Others", *Extra!: The Magazine of Fairness & Accuracy in Reporting – FAIR*, May-June, . <http://fair.org/extra-online-articles/the-think-tank-spectrum/>
- Dolny, M. (2012). "Think Tank Spectrum Revisited: Conservatives Gain Within Still-Narrow Spectrum", *Extra!: Fairness in Accuracy and*

- Reporting*, July. <http://fair.org/extra-online-articles/think-tank-spectrum-revisited/>
- Edwards, L. (1998). *The Power of Ideas. The Heritage Foundation at 25 Years*, Ottawa: Illinois: Jameson Books.
- Eyestone, R. (1971). *The Threads of Public Policy: A Study in Policy Leadership*, Indianapolis: Bobbs-Merrill.
- Frost, J., and Vogel, R. (2007). "Framing Strategies of Think Tanks: A Case Study", Paper presented at *CREMA (Center for Research in Economics, Management and the Arts)*, Zürich, November 24, 2007.
- Groseclose, T., and Milyo, J. (2005). "A Measure of Media Bias", *Quarterly Journal of Economics*, 120 (4) 1191-1237.
- Haas, E., Molnar, A., and Serrano, R. (2002). *Media Impact of Think Tank Education Publications 2001*, Tempe, Arizona: Education Policy Studies Laboratory, AZU. <http://epsu.asu.edu/epru/documents/EPRU%202002-115/EPSL-0205-115-EPRU.pdf>
- Hankyung Magazine (South Korea). <http://magazine.hankyung.com> (Retrieved 15.09.2015).
- Higgott, R., and Stone, D. (1994). "The Limits of Influence: Foreign Policy Think Tanks in Britain and the US", *Review of International Studies*, 20 (1) 15-34.
- Hill, M. (1997). *The Policy Process in the Modern State, 3rd Edition*, Prentice Hall / Harvester Wheatsheaf, Hemel Hempstead Hertfordshire.
- Koellner, P. (2013). "Think Tanks: The Quest to Define and Rank Them", *GIGA Focus*, No. 10, 1-7.
- Kraft, M. E., and Furlong, S. R. (2004). *Public Policy: Politics, Analysis and Alternatives*, Washington D.C., CQ Press.
- Kuntz, F. (2013). *Communications and Impact Metrics for Think Tanks*, The Centre for International Governance Innovation (CIGI). <https://www.cigionline.org/blogs/tank-treads/communications-and-impact-metrics-think-tanks>
- Lindquist, L. (1993). "Think Tanks or Clubs? Assessing the Influence and Roles of Canadian Policy Institutes", *Canadian Public Administration*, 36 (4) 547-579.
- McDonald, L.E. (2008). *The Rise of Conservative Think Tanks: The Debate over Ideas, Research and Strategy in Public Education Policy*, Unpublished Doctoral Dissertation, Graduate Faculty in Sociology, the City University of New York.
- McGann, J. G. (2006). *Best Practices for Funding and Evaluating Think Tanks & Policy Research*, Prepared for The William and Flora Hewlett Foundation Ambler, Pennsylvania.
- McGann, J. G. (2008). *The Global Go-To Think Tanks Index Report*, Think Tanks and Civil Societies Program Report, University of Pennsylvania.

- McGann, J. G. (2015). *The Global Go-To Think Tank Index Report*, Think Tanks and Civil Societies Program Report, University of Pennsylvania.
- McGann, J. G., and Johnson, E. C. (2005). "Introduction", James G. McGann and Erick C. Johnson (Eds.), *Comparative Think Tanks: Politics and Public Policy*, Cheltenham and Northampton, MA: Edward Elgar, 1-9.
- McNutt, K., and Marchildon, G. (2009). "Think Tanks and the Web: Measuring Visibility and Influence", *Canadian Public Policy*, XXXV (2) 219-236.
- Pautz, H. (2010). "Think Tanks in the United Kingdom and Germany: Actors in the Making of Social Democracy", *British Journal of Politics and International Relations*, 12 (2) 274-294.
- Peters, G. (1996). *American Public Policy: Promise and Performance, 4th Edition*, CQ Press, Washington DC.
- Posen, A. S. (2002). "Think Tanks: Who's Hot", *The International Economy*, Fall, 9-11, 54-59.
- Prospect Magazine, <http://www.prospectmagazine.co.uk> (Retrieved 15.09.2015).
- Radaelli, C. M., and Martini, A. P. (1998). "Think Tanks, Advocacy Coalitions and Policy Change: The Italian Case", Diane Stone, Andrew Denham, Mark Garnett (Eds.), *Think Tanks across Nations: A Comparative Approach*, Manchester, the UK: Manchester University Press, Chapter 3, 59-81.
- Ricci, D. M. (1993). *The Transformation of American Politics: The New Washington and the Rise of Think Tanks*, New Haven, Connecticut: Yale University Press.
- Rich, A. (1997). *Perceptions of Think Tanks in American Politics: A Survey of Congressional Staff and Journalist*, Washington D.C.: Burson Marsteller Worldwide Report.
- Rich, A. (1999). *Think Tanks, Public Policy, and the Politics of Expertise*, Ph.D. Dissertation, Yale University.
- Rich, A. (2004). *Think Tanks, Public Policy, and the Politics of Expertise*, Cambridge University Press, Cambridge.
- Rich, A., and Weaver, R. K. (2000). "Think Tanks in the US Media", *The Harvard International Journal of Press/Politics*, 5 (4) 81-103.
- Roodman, D., and Clark, J. (2012). *Envelope, Please: Seeking a New Way to Rank Think Tanks*, Centre for Global Development, 1-12.
- Rose, R. (1989). *Ordinary People in Public Policy: A Behavioural Analysis*, London: Sage Publications.
- Ruble, N. S. (2000). "Think tanks: Who's Hot and Who's Not: The Results of a New Study Comparing Economic Think Tank Visibility in the Media", *The International Economy*, 14 (5) 10-16.

- Smith, J. A. (1991a). *The Idea Brokers: Think Tanks and the Rise of the New Policy Elite*, New York: The Free Press.
- Smith, J. A. (1991b). *Brookings at Seventy-Five*, Washington, D.C.: The Brookings Institution.
- Stone, D. (2000). "Think Tanks across Nations: The New Networks of Knowledge", *NIRA Review*, Winter, 34-39.
- Stone, D. (2005). "Think Tanks and Policy Advice in Countries in Transition", Toru Hashimoto, Stefan Hell and Sang-Woo Nam (Eds.), *Public Policy Research and Training in Vietnam*, Tokyo: Asia Development Institute, 38-109, www.adbi.org/files/2005.12.book.policy.research.vietnam.pdf
- Stone, D. (2007). "Public Policy Analysis and Think Tanks", F. Fischer, G. J. Miller, M.S. Sidney (Eds.), *Handbook of Public Policy Analysis, Theory, Politics, and Methods*, CRC Press, Boca Raton, 149-157.
- Stone, D., and Denham, A. (2004). *Think Tank Traditions: Policy Research and the Politics of Ideas*, Manchester, Manchester University Press.
- Stone, D., and Garnett, M. (1998). "Introduction: Think Tanks, Policy Advice and Governance", Diane Stone, Andrew Denham, Mark Garnett (Eds.), *Think Tanks across Nations: A Comparative Approach*, Manchester, the UK: Manchester University Press, 1-20.
- Stone, D., Denham A., and Garnett, M. (Eds.) (1998). *Think Tanks across Nations: A Comparative Approach*, Manchester, the UK: Manchester University Press.
- The Think Tanks and Civil Society Program, University of Pennsylvania <http://gotothinktank.com> (Retrieved 15.09.2015).
- Thunert, M. (2003). "Conservative Think Tanks in the United States and Canada", Rainer-Olaf Schultze, Roland Sturm, Dagmar Eberle (Eds.), *Conservative Parties and Right-Wing Politics in North America: Reaping the Benefits of an Ideological Victory?*, Leske + Budrich, Opladen (Springer-Verlag) VS Verlag für Sozialwissenschaften, 229-252.
- Trimpath, S. (2005). "Think tanks: Who's hot and who's not", *The International Economy*, 19 (3) 10-15, 39-47.
- UNDP-United Nations Development Program (2003). *Thinking the Unthinkable: From Thought to Policy. The Role of Think Tanks in Shaping Government Strategy: Experiences from Central and Eastern Europe*, Bratislava, UNDP Regional Bureau for Europe and the Commonwealth of Independent States.
- Weidenbaum, M. L. (2010). "Measuring the Influence of Think Tanks", *Society*, 47 (2) 134-137.

STRATEGIC DIRECTIONS OF STRENGTHENING COMPETITION ON HIGHER EDUCATION MARKET OF GEORGIA

Lasha Tabatadze, PhD student

Grigol Robakidze University, Tbilisi, Georgia

Abstract

In the present article the results of wide scale research for studying and analyzing the competition issues of Higher Education Market of Georgia, which is made by the author independently in 2015 under the framework of dissertation survey are reviewed. It contents detail description of activities needed for collecting and analyzing information to develop a research paper of Georgian Higher education market, which includes three level of higher education institutions (University, Teaching University and College). The article presents the research report and its comparative and critical analyze taking under consideration the experience of Baltic and European countries.

Keywords: HE market of Georgia, competition issues of HE

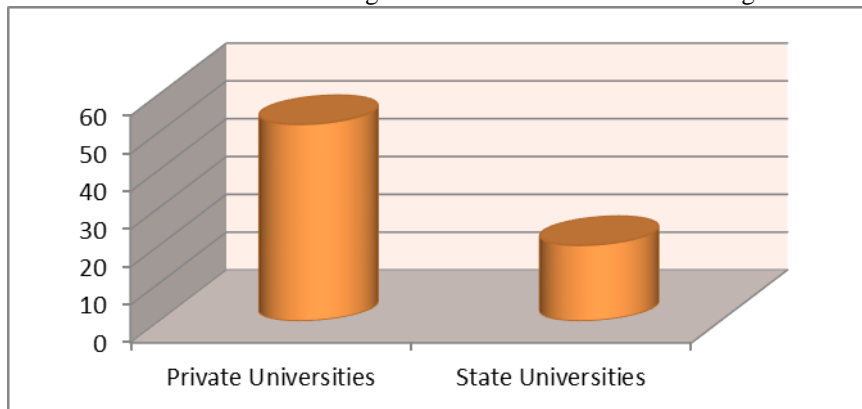
Introduction

It is worth mentioning that nowadays the world globalization processes reach the peak and it has a great influence on international competition. Accordingly, the impact is spreading not only on business companies, but also on HE market. The abovementioned changes prioritize discussing HEIs from other approaches. HEIs present not only education supplier local organizations, but also they are business organizations functioning in more and more growing competitive environment in which they are competing as all other types of companies for strengthening the positions in the local as well as in the international markets.

In fact, globalization defined the new standards of competition on HE market, in which the main strategic directions are internationalization of Higher Education, funding models of Higher Education, close connection between HEIs and employers.

According to the National Statistics Office of Georgia 72 HEIs are registered in Georgia today, including 52 private and 20 public one, where about 124000 students are studying. (See Chart 1) [11].

Chart.1. Number of Higher Education Institutions in Georgia



At first glance HE market seems competitive enough. It is paradox but existing quantity of HEIs may be considered as a prerequisite of unfair competition in the country with 3,7mln. population because of four qualification of graduates and hence the lack of professionals at labor market. [11].

Within the limits of research the study and critical analysis of Georgian and foreign authors' works dedicated to the problems of education market, of various scientific –practical conferences, international forums materials, research reports of international organizations, legal standards of local and international significance including declarations and agreements with regard for the experience of Baltic and European countries allowed us to determine main priorities of competitiveness of higher educational service market such as: internationalization of higher education, models of funding higher education, support and development of close relationship between higher educational institutions and employers.

At present, a great attention is focused on internationalization as on one of the main determinative components of supporting and improving higher education. For illustration we present international associations, well-known all over the world supporting higher education and internalization:

- European university Association (EUA) founded in 2001, consolidated European leading universities and is well-known in the world. it is especially well known by Lisbon Declaration, which has been jointly worked out by European leading universities, the members of the association and is considered as an active motivator of Bologna process;
- International Association of Universities (IAU) founded in 1950 on the basis of UNESCO, is the world organization of higher educational institutions which unites the world leading universities by means of educational and teaching strategy;

- International Association of University Presidents (IAUP) founded in 60-sof last century is the world association of high ranking officials of universities. These international association have common aims and purposes among which can be emphasized three main priorities:

1. Deeping international mission of universities on a world scale as a perquisite of sustainable development of the world
2. Formation of global vision of higher education development;
3. Sharing know-how and educational scientific collaboration between partner universities.

Moreover, IAUP has higher consultation rights to UNO and formal consultation rights to UNESCO. It must be noticed that the absolute majority of Georgian higher educational institutions has neither full member status nor member status, nor member candidate status; it is pity, because the worlds experience would be of great support for our country in the conditions of existing global challenges.

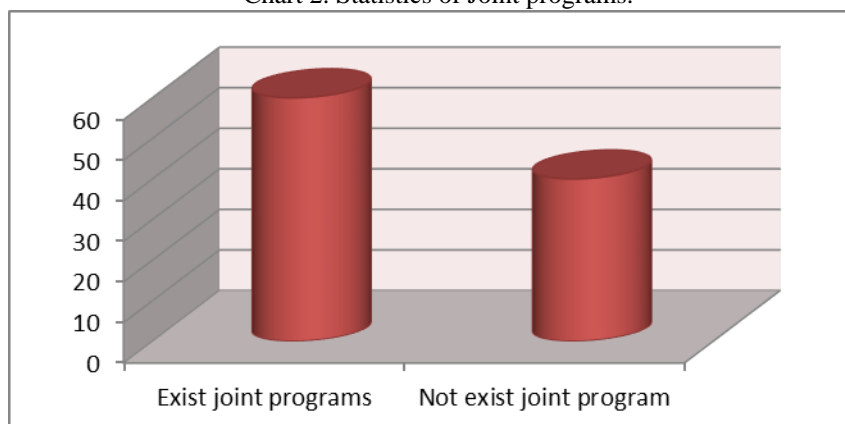
Besides ranking lists of world –fame higher educational institutions have been found within the limits of research where are considered internationalization components:

- Times Higher Educational Supplement (THES);
- Academic rank of World Universities (ARWU);
- Rank of World Universities of Quacquarelli Symonds (QS);
- Rank of Webometrics (WM).

It must be noted that unfortunately to day Georgian Higher educational institutions do not appear any where except WM ranking list. The situation is radically different in the universities of European leading countries (France, Germany, Great Britain) and in Baltic Sea countries as well (Lithuania, Latvia, Estonia). The above-mentioned countries take an active part in the internationalization processes. Moreover, they are the member countries of international associations and they also appear in the ranking lists of world-fame higher educational institutions [12].

The carried out research shows that higher educational service market of Georgia is steel facing a great number of unsolved problems, in particular 60% of respondents (HEI) announce that they have joint training programs, but 40% have not. (See Chart 2) [1].

Chart 2. Statistics of Joint programs.

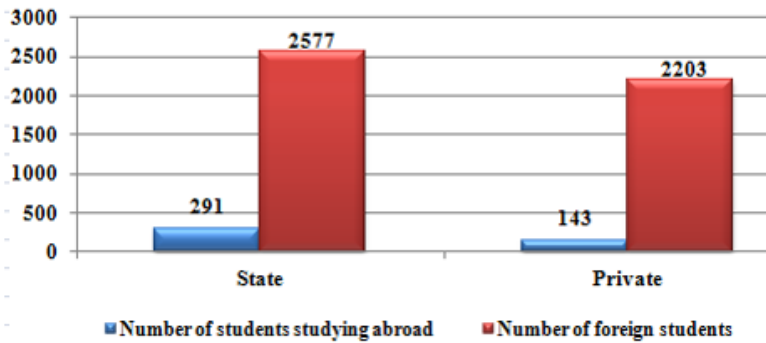


100% of respondents noted that international accreditation is very important for universities as prerequisite for increasing their competitiveness. Unfortunately, it should be noted that in Georgia the universities have no international accreditation at higher educational service market. The situation with respect to internationalization degree of personnel is deplorable top.100% of respondents answer that their academic personnel is staffed entirely by local specialists and absolute majority is engaged in training processes.

It should be noted that analogous index of European and Baltic Sea countries as well (Lithuania, Latvia, Estonia) is quite different. In the above-mentioned countries absolute majority of universities has got international accreditation with equal percentage ratio, towards local programs, realizes joint educational programs at three levels of training and the main thing is that their academic personnel speaks perfectly foreign languages and their academic activity is not only giving lectures and seminars, their scientific activity is realized in various leading universities of the world and published in high rank international reviewed journals with citation high index [13].

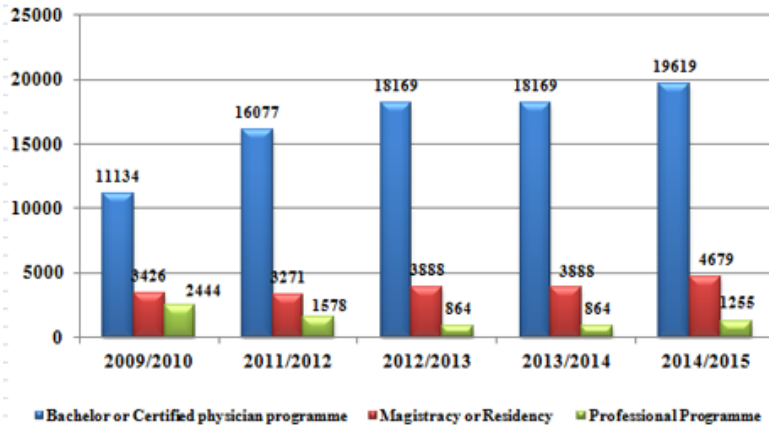
It would be interesting to know one more index of internationalization in higher educational institutions: the ratio between local and foreign students. According to official data of Georgian Department of Statistics, the number of students sent abroad from Georgia is 10%, in comparison with foreign students in Georgia. (see.Chart 3) [11].

Number of Students studying Abroad and Foreign Students, 2014-2015 school year, persons

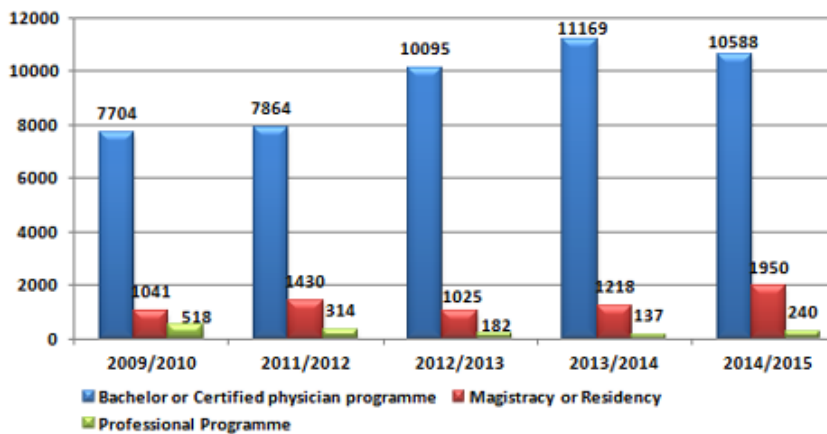


The share of foreign students in sum total of local students does not exceed 3,5%, (see.Chart 4), (see.Chart 5) [11].

Number of Students Admitted in Public Institutions, persons



Number of Students Admitted in Private Institutions by Programme, persons



The first case may be explained economically, the study and living in Georgia is more advantageous (cheap). The second case statistics shows evidently the low level of internationalization in Georgia.

For 2014-2015 studying year this indicator in Federal Republic of Germany was 17%, in Republic of Poland 12%, in Republic of Lithuania 8,3% and in Estonia 7.2%. Besides, 20-25% of students in Baltic countries have opportunities to participate in International Exchange Programs through state support. Special support is provided for students, who are on the third level of their education and 10% of PHD students receive funds for education [14,15,16,17,18].

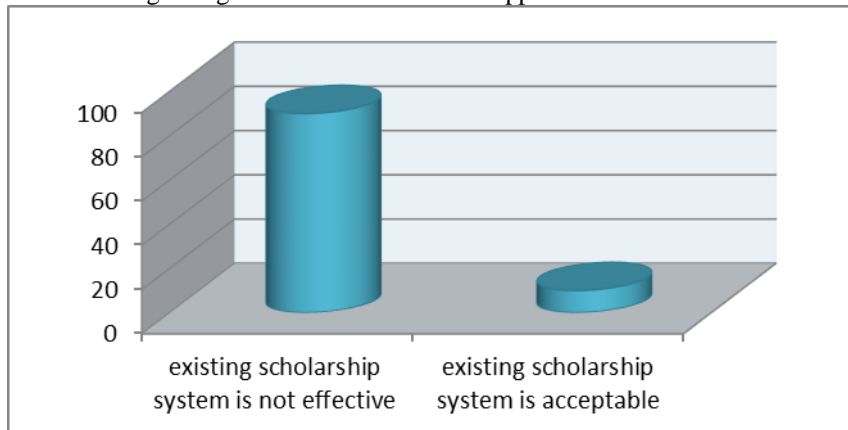
Distribution of foreign students by countries is very interesting. Particularly, if majority of foreign students in Georgia come from developing or third world countries, in Baltic region students come from developed countries, such as Finland, Scandinavian countries, western European countries and china. This again confirms high level and quality of internationalization in mentioned countries.

Student participation indicator in Erasmus higher education programs is also interesting. Lithuania, Latvia and Estonia take one of leading places in Eastern Europe and are absolute leaders in post-Soviet space. They have impressive positions in the international scholarship projects.

Analysis of research financial bloc is also very interesting. Here focus is made on financing of higher education and on state support model of education.

Absolute majority of respondents (90%) noted that existing scholarship system and practice of national examinations are not effective. Respondents think that scholarship should necessarily include secondary professional education, master and doctoral studies. Absolute minority of respondents (10%) deem that financing through state scholarship system is acceptable. (see Chart 6) [1].

Chart 6. Financing of higher education and state support model of education in Georgia.



At the same time, as 100% of respondents have answered, current education fee – 2250 Gel, only partially responds to the market price of studying and it is not real market value. According to educational infrastructure, material-technical base and modern methods of teaching, education fee should be higher.

Despite declaration of higher education, scientific-research activities as national priority, allocated funds in these spheres are not enough to provide their long-term, quality development and to create competitive product on the regional and international level. Existing state funding mechanism of higher education and research create instable environment and unfavorable conditions for higher educational institutions.

According to the data of National Statistics Office of Georgia 2015, expenditures on education with respect to GDP are 2.7%. Only third of this amount is spent on higher education, which is approximately 0,9% [11].

The same indicator in Baltic countries, where GDP is 5 times higher comparing with Georgia, fluctuates between 2-3%, which is solid number indeed [20,21].

According to existing reality, for more optimization of financial resources it is reasonable to increase limits on scholarship, which can bring double-sided effect. It will enable us to increase quantity and quality of funding. It is also desirable to determine limit, under which tuition fee should not go, because, in many cases, price cannot fully provide and satisfy functioning aims of higher education institutions and entail dumping characteristics, which hamper creation of competitive environment in the market. Considering European experience, where practice of national examinations practically does not exist, to improve higher education market competitiveness, it is reasonable to allocate bloc-grants for higher institutions from state budget. Amount of these grants will be counted according to the formula.

Formula may include following components:

- Quality of Academic Programs and Teaching;
- Quality of Internalization;
- Indicator of Relations with Private Sector;
- University Positions in the Prominent Ranking Lists.

Conclusion

It should be noted that we have important improvement in the field of higher education reforms according to the European standards from 2005. Although, relying on the research results, there are wide range of problems, of course. There appeared problems referring to come the Bologna process into force. Although universities meet demands, introduce new mechanisms of teaching and administrating, but it seems that procedures are carrying out

by only one reason, because it is crucial for achieving institutional accreditation.

At this stage, internalization degree is low (especially for academic staff). It would be better to improve detail mechanisms of creating joint programs and awarding by joint academic degree as well as the procedures for recognitions of studying periods.

The internationalization process is profitable for institutionalization growth of a university, for improving the quality of researching and studying, for attracting more financial resources. In the process of internationalisation the most crucial role has managing, coordinating and deciding the issue such as developing strategic plan of internationalisation.

The strategy will be directed to institutionalization of internationalization, which means introducing systems and processes that supports and develops infrastructure, exchange programs, which attracts foreign students, joint researches and so on.

The existing funding model which does not totally covers the three level of education should be reviewed, while the state grant amount is irrelevant to the existing free market price. The rule of defining studying price could not provide high quality oriented functioning. State grant awarding mechanisms contains some risks, too. National Examination model faces against the autonomy principle of a university, as it is not allowed to choose students itself independently but the process is totally outside of the university management.

Also, financing the only professions, defined by the government without developing any general rule and without taking under consideration possible results is risky, too. The existing model of financing by voucher system is restricting the autonomy of a university and is a breaking factor of a free competition in HE market, too.

References:

Prof.Dr. Kikutadze Vasili-(superwiser of research), Tabatadze Lasha-(Coordinator of research), Georgian HEI market research, Tbilisi, Georgia, 2015.

Miller Leon, Matveeva Elena, Nekrasova Natalia. The Internationalization of Estonian Higher Education:How the Estonian Cultural Context Impacts the Experience of Foreign Students, Talin Univesity of Technology, 2012.

Karveliėne Regina. The Bologna Process and the Features of Implementation of the Internationalization of Higher Education in Lithuania, Siauliai University, 2013.

Bunning Frank. The Transformation of Vocational Education and Training (VET) in the Baltic States - Survey of Reforms and Developments

(Technical and Vocational Education-Training: Issues, Concerns and Prospects) [1 ed.] 2010.

Bileviciute.E. Zalieniene.I. Higher Education Reform in Lithuania with Emphasis on Lithuanian Educational Strategy. 2013.

Prof. Dr. KreituseI, Prof. Dr. Gurbo S, (Rīga Stradiņš University Latvia). Higher Education in Latvia on the Threshold of Reforms. 2012.

Prof. Dr. Leisyte, L.& Dobbins, M. Analyzing the transformation of higher education governance in Bulgaria and Lithuania. 2011.

Prof. Dr. Jezierska, J. M Quality assurance policies in the European Higher Education Area: A comparative case study. Las Vegas: University of Nevada Las Vegas, 2009.

Prof. Dr. De Boer, H., Enders, J., & Schimank, U. On the Way towards New Public Management? The Governance of University Systems in England, the Netherlands, Austria, and Germany. 2007.

Erasmus in the Baltic Countries. Lifelong Learning Programme 2008-2013, Statistical Overview, 2013.

<http://www.geostat.ge/>

<http://www.usnews.com/education/bestglobaluniversities/search?region=europe&subjece>

<http://ec.europa.eu/eurostat/data/database>

<http://www.shanghairanking.com/World-University-Rankings/Vilnius-University.html>

<http://www.dw.com/en/germany-says-willkommen-to-foreign-students/a-17790362>

http://www.bachelorsportal.eu/countries/20/poland.html?gclid=CIn6tOvQ4scCFUZAGwodo_oCPQ

<https://www.hm.ee/en/news/foreign-students-value-studying-estonia-highly>

<http://www.bachelorsportal.eu/countries/17/lithuania.html>

<https://student.slu.se/en/studies/studyabroad/exchangestudies/wherecanistudy/nordicregion-baltic-states/>

<http://www.pmcg-i.com/publications/newsletter/item/850-issue-46-education-and-science-sector-2014>

http://www.oecd-ilibrary.org/education/education-at-a-glance-2014/expenditure-on-educational-institutions-as-a-percentage-of-gdp-for-all-levels-of-education-2000-2008-and-2011_eag-2014-graph118-en

THE ROLE OF EDUCATION IN THE FORMATION OF CIVIL SOCIETY

Lamara Kadagidze, Professor

Grigol Robakidze University, Tbilisi, Georgia

Abstract

Georgia has gone through a significant transformation in a recent decade and the educational sector is one of the many that has undergone considerable reforms. In an attempt to modernize and to bring it more in line with European and American standards the Georgian government adopted a national accreditation program and began tackling corruption in the sector. Societal involvement and a consensus-based agreement on general principles became of vital importance for the development of Georgia's higher education system. Citizens who actively participate in their nation's public affairs play perhaps the most important role in a vibrant democracy. An informed and engaged citizenry provides both a check on government power and valuable feedback the government can use to become more responsive. During the Soviet era, independent civic initiative was stifled and citizens were encouraged to believe that the state had the sole responsibility for providing for its citizens. Since the "Rose Revolution," there has been a renewed sense of civic pride, but this was demonstrated more in nationalist awareness than civic activism. Georgians have never been shy to take to the streets in demonstrations to express dissatisfaction with the government and this was considered to be the only means of civic participation. However, the summer flood 2015 manifested a completely new era of the commitment of Georgian youth to participatory democracy. The article highlights the case of how Georgian citizens (mostly youth with the academic background they obtained owing to the reformed west-oriented education system of Georgia) effectively engaged with other citizens (national and foreign) and set an example for the government to influence public policy and ensure greater socio-cultural responsiveness. Thus, proving that Georgia can score higher in socio-cultural environment encompassing elements like propensity to participate, trust and giving and volunteering, since these elements are fundamental to the development of a consolidated civil society.

Keywords: Educational reform, civil society indicators, civic engagement, volunteerism, government and public policy, socio-cultural environment, summer flood, youth, Georgia

Introduction

Today, Georgia is in a transitional period. It is undergoing the rebuilding of civil society and democratic institutions, as well as the development of a market economy. However, the final outcome of these processes depends on the success of the education system.

Every successful and powerful nation stands on the pillars of educated society. The law on Education, the Ministry of Education and Science as well as international obligations and commitments assumed by Georgia reflect the following basic principles of the State educational policy: a unified education system throughout the country; decentralized administration of educational institutions and transfer of management to local governments in the provinces; humanistic, scientific and democratic character of education and upbringing; recognition and appreciation of human and national cultural values; independence of educational institutions from political and religious organizations; modern and innovative educational and scientific environment in close cooperation with civil society advocating freedom of choice, fair competition, equal opportunities civil integrity and respect for cultural identity. Educational system as a whole focuses on developing citizens as free individuals, equipped with essential intellectual and physical skills and capacities, nurturing civil consciousness based on democratic and liberal values. Therefore, the main priority of the State policy in recent years has been to provide quality education and invest in future generations (UNESCO [1]).

As a result of reforms implemented since 2005, higher education in Georgia has moved decisively from a centrally-controlled, supply driven, public-funded, state system to a more complex, increasingly market-oriented system, with considerable cost-sharing through student fees and a strongly emerging private university sector.

A brief summary of the major reform initiatives are as follows (UNICEF [2]):

1. The government, in partnership with the World Bank and UNICEF, completed a Consolidated Education Strategy and Action Plan (2007 – 2011), which includes pre-school education and early childhood development, general education, vocational education, higher education, lifelong learning, non-formal education, inclusive education and children with special needs as national priorities and as requirements for the FTI and Catalytic Fund. In 2008 the program department has been established in the MoES to manage and implement these priorities.

2. The government introduced a per capita funding formula nationwide at the general secondary education level in January 2006. Under the new scheme, schools receive a direct transfer of funds from the Ministry of Education and Science (MoES) based on the number of students enrolled for a given year. The voucher covers current school expenditures, of which teacher salaries are the main component. All educational institutions were established as public legal entities. Nowadays, each school is governed by a Board of Trustees empowered by a financial management authority' and made up of teachers, parents and government officials.

3. The administrative structure of the education system has also been adapted. Former Education Departments have been replaced by a network of 72 Education Resource Centers (ERCs) responsible for facilitating schools' work through collecting data, organizing trainings, conducting research, and monitoring accounting.

4. As stated in the Consolidated Education Strategy and Action Plan (2007 – 2011) of the MoES of Georgia, the National Curriculum and Assessment Center, established in April 2006, has introduced a new curriculum, designed to encourage active learning rather than a mechanical transfer of knowledge.

5. The Teachers' Professional Development Center, established in July 2006, aims to develop standards and qualification requirements for teachers, to conduct a process of accreditation of teacher training and retraining programs and to introduce a system of teacher certification.

6. New and more transparent examinations have been introduced.

7. The government has invested heavily in repairing old buildings and improving infrastructure.

8. The *ECD 2007-2009 National Strategic Plan of Action* was drafted and budgeted to provide for programming, communication and policy development. The document was approved by the Parliament of Georgia in July 2008.

9. The Education Strategy and Action Plan for Children with Special Needs (2009 – 2011) has been developed by the MoES of Georgia in partnership with the Save the Children and USAID. In October 2008 the document was approved by the Minister of Education and Science of Georgia.

Starting in 2004, a systematic reform of the higher education system began so that Georgia's higher education system could dismantle the remains of the old Soviet-type system, as well as begin integrating itself into the European space. Despite the results achieved higher education reforms have remained an issue for almost ten years. Recent events (constant changes in legislation and staff of the managing structures (from December 2004 through October 2013, about 500 amendments were made to the Law of

Georgia on Higher Education; in the same time period, 8 Ministers of Education and Science and 5 Directors of the National Centre for Educational Quality Enhancement were changed)) have shown that the absence of a clear vision and a lack of coordination of the reform processes pose a serious threat to the achievement of sustainable results (IIEP [3]). But, as a whole, Georgia's education system has been positively transformed and continues to be so.

High quality higher education is an essential factor for building a contemporary, competitive and fair state and Georgia's further development heavily depends on easy access to high quality education.

Education is the sub-dimension of Social-Economic dimensions and indicators for the CIVICUS Civil Society Enabling Environment Index. Socio-political research suggests that participation and civic activism are supported by higher levels of education and the indicators are Inequality adjusted education index (1-0)/2011, population with at least secondary education at 25 and older (%) - females (2010), population with at least secondary education at 25 and older (%) – males, 2010, school enrollment, primary [% net] – (2010), school enrollment, secondary [% net] – (2010) based on the sources of UN Human Development Index (2011) and The World Bank World Development indicators (2010) (CIVICUS [4]).

The CSI (Civil Society Index) builds indicators on a scale of 0-100 which assess the strength of civil society on the five key dimensions of: the levels of civic participation; the institutional arrangements of CSOs (Civil Society Organizations); the extent to which CSOs practice progressive values; the perceived impact of civil society; and the external environment in which civil society operates (CIVICUS [5]).

Civil society sits between the family and the state. It is made up of associational life that reflects the extent to which citizens share their personal grievances and demands with others. It is the arena where the private becomes public; the social becomes political. The extent to which civil society is an integral part of policy-making, however, is an important factor in national development. How it relates to state institutions matters. Civil Society is not just an arena in which all nongovernmental organizations operate; the existence of universal values for a civil society as well as their attachment to specific historical and social contexts is also important [6].

Seen through the lenses of individual citizens, civil society has at least three main functions: (a) promoting voluntarism, (b) building social capital, and (c) creating an enabling environment for policy input.

Voluntarism is a key aspect of civil society. The notion that individuals make a choice of their own to associate with others or engage in pursuit of a particular goal in collaboration with others is at the root of development. In this respect, civil society has an important socializing effect.

Some people associate with others for altruistic reasons, but it is important to accept that voluntarism is as often the result of utilitarian calculation. As Mancur Olson [7] argued long time ago, collective action comes about as a product of individuals combining their private interests in pursuit of a common good. Regardless of motive, however, it is important that there is choice. Every human being is born into a family and a lineage to which he or she has an inscriptive relation. The extent to which lineage relations bear on a person's choice varies from one society to another. The stronger this pressure is on the individual, the more confined his choices are likely to be. Civil society does not necessarily engage the state or vice versa. For instance, in many countries, the state sees itself as primarily, if not exclusively, responsible for national development.

Weaknesses in Georgia's civil society can be traced, in part, to the relatively short period in which the sector has been active and to the state of socioeconomic relations established under Soviet rule. In fact, the Soviet state itself took the lead in organizing social experiences outside of private life through compulsory participation in various youth, professional, and other groups. Spontaneous, grassroots citizen initiatives were discouraged and seen as a threat to the state's control over society. This did not wholly prevent the formation of civil society, but it explains why it is consistently weak in post-Soviet contexts.

Despite strong political awareness demonstrated through relatively high voter turnout rates and frequent peaceful protests, civic participation in Georgia is not particularly high. Distrust in formal institutions (including NGOs) is widespread, and the strong role of social networks based on family ties, rather than perceived shared values across groups, is persistent. In a 2007 survey, 96% of Georgians said they had not been to a meeting of a club or civic organization in the last 6 months, and 92% had not engaged in volunteer work over the same period. Ninety percent had not made any charitable contributions. CSOs themselves cite a lack of public interest in their activities as one of their most acute problems. The decrease in NGO revenues from membership fees in the 2005–2010 period (from 30% to 13%) may be an indicator of this lack of a support base [8].

But there are positive signs as well. According to one assessment, "Georgia's customs, multi-ethnic citizenry, diverse sub-ethnic cultures, tradition of high educational achievement, the traditional optimism of the population and the capacity of its people to adapt to a new reality increase the chances for success" [8].

Another assessment [9] finds that the existing legal framework does not put up any hurdles for the registration and operation of CSOs. In practice, however, Georgian Civil Society Organizations (CSOs) rely almost entirely on foreign donors, lacking financial support from the government,

local businesses or a membership base. The mechanisms for ensuring accountability of CSOs and their transparent operation are weak, and integrity mechanisms (such as a sector-wide code of conduct) are virtually nonexistent. The ability of CSOs to hold the government accountable and to influence the formulation of its policies is constrained by internal weaknesses, including a shortage of capable professionals and lack of a broad social base, as well as the general political environment in which they operate.

Thanks in large part to U.S. political support and assistance (since 1992, the USG has invested over \$3 billion in Georgia (including funds allocated in response to the 2008 conflict [10]), with approximately half of these resources programmed through USAID), a country close to being a failed state eight years ago now is a strong partner in combating terrorism and nuclear proliferation, contributes substantially to NATO missions, has constructive relations with most of its neighbors, and is one of the most democratic countries in the former Soviet Union. At the same time, Georgia presents challenges to which the U.S. is committed to respond. Georgia requires further democratic development, reforms in other areas need to be sustained, and the Russian occupation of the separatist regions of both Abkhazia and South Ossetia undermines their reintegration into Georgia and puts a brake on the overall reform process, a U.S. priority.

Building on 20 years of partnership, the U.S. Government (USG) proposes to allocate new USAID development resources over the next five years to achieve the goal, *Georgia's democratic, free-market, Western-oriented transformation strengthened and sustained* [10]. To attain this goal, the US will concentrate effort on the following three development objectives: (1) democratic checks and balances and accountable governance enhanced, (2) inclusive and sustainable economic growth, and (3) an increasingly stable, integrated and healthy society. Country Development Cooperation Strategy (CDCS) cross-cutting themes include gender equality, youth, human and institutional capacity development, and transparency and evidence-based decision-making. As the Mission has focused from five objectives in the current post-conflict strategy to three objectives under this CDCS, assistance in key areas will graduate, including in large-scale infrastructure, basic education, and health.

Finally, the USG should and will continue to maintain its focus on the Georgian people as the beneficiaries of assistance and not any one administration or counterpart.

Programs under USG and other donor efforts will strengthen civil society, increase access to quality independent news sources, and enhance civic education. As a result, youth, women, and minorities will play an increased role in the governance of their communities; citizens will be better

informed about the political, social, and economic issues of their country; and CSOs will help citizens' voices to be heard, having a positive impact on government policies.

USAID/Caucasus [10] civic education is designed to achieve three broad goals:

- To introduce citizens to the basic rules and institutional features of democratic political systems and to provide them with knowledge about democratic rights and practices;

- To convey a specific set of values thought to be essential to democratic citizenship such as political tolerance, trust in the democratic process, respect for the rule of law, and compromise; and,

- To encourage responsible and informed political participation—defined as a cluster of activities including voting, working in campaigns, contacting officials, lodging complaints, attending meetings, and contributing money.

A central goal is to use civic education as a means to increase the skills and commitment of youth to participatory democracy. Programmatic efforts in this area will create a foundation for constructive and effective citizen participation in Georgia's political processes by expanding young people's knowledge about democratic institutions, principles and practices.

The expected end result will be changes in attitudes and behaviors, as a consequence of greater knowledge of how citizens can effectively engage with other citizens and the government to influence public policy and ensure greater government responsiveness.

A draft Law on Volunteerism is currently before parliament; it foresees granting legal status to volunteers for the first time, regulates labor relations between the volunteer and host organization, determines the employer's duties and responsibilities and introduces some tax-breaks on volunteer-related costs for employers such as transportation and accommodation.

The European approach [11] will also aim to strengthen links between CSOs throughout Georgia, both urban and rural, thereby building capacity, linkages, experience and accountability. At the same time, efforts will be made to link CSOs more actively with civic education curriculum, with the aim of increasing civic participation of all kinds in Georgian regions, especially among youth. At the same time, this should enhance the sustainability of civil society, as it becomes more diverse and vibrant and above all, more relevant, to local communities.

Civic education is supported and its practical aspects strengthened

Indicators

- ✓ Percentage of schools which establish links (visits, project activities) with local CSOs;
- ✓ Trend in pupils and people generally volunteering to work with CSOs;
- ✓ Trend in seed-funding for community-based development;
- ✓ Trend in participation in civic engagement mechanisms at local level;

- CSOs in Georgian regions increase their capacity and outreach

Indicators

- ✓ Trends in quality of policy dialogue and advocacy efforts conducted by regional CSOs;
- ✓ Frequency and regularity of meetings with local stakeholders (media, business, etc.);
- ✓ Trends in CSO staff members, training opportunities and annual turnover;

- Civic education is supported and its practical aspects strengthened:
 - ✓ Percentage of schools which establish links (visits, project activities) with local CSOs;
 - ✓ Trend in pupils and people generally volunteering to work with CSOs;
 - ✓ Trend in seed-funding for community-based development;
 - ✓ Trend in participation in civic engagement mechanisms at local level;

- Funding: Operational support including mainstreaming:
 - ✓ Support to strengthening of links between local CSOs and schools through visits, CSO volunteer programs and youth summer school
 - ✓ Support to strengthening youth engagement in local activism through Youth Councils, Youth Banks, etc.
 - ✓ Support to small community-based initiatives through the provision of seed funding, administered by local CSOs or Youth Banks [11].

The signs of existence of civil society and civil engagement in large scale matters in Georgia became particularly apparent after the summer flood this year. Heavy rainfall during the night 13 to 14 June caused flash floods in Tbilisi, the capital. Vere River overflow causing severe damage. The flooding was centered in the Vake and Saburtalo neighborhoods which are some of the most densely populated districts in the centre of the city. Along with casualties and some people still missing, out of the 380 households were affected, 100 families from Tbilisi and 180 families from the surrounding villages were not able to return to their homes [12]. The

flooding destroyed enclosures at the city's zoo - allowing a host of dangerous and scared animals to escape and roam the streets. Cars and debris were seen floating along the once busy streets and parks of Tbilisi turned into wasteland by the freak weather. When any type of natural calamity happens elsewhere, it is undoubtedly the state's job to take responsibility of taking care of the outcomes and the neighboring countries willingly try to assist and support along with other countries also willing to participate and donate worldwide. However, what is implied by the state needs to be clarified: the state refers to the officials and authorities, all the state governing structures first of all, with all the subordinate liable executive units and bodies. The latter are ordinarily expected, supposed and even obliged to act under such circumstances considering the interests of the people affected. But what was shocking and quiet surprising for everyone in the city and country was how youth (Georgian youngsters, mostly students) became united and showed the example to the rest of society and government how civic engagement matters and how much can be done if individuals or real citizens of the state stand together hand in hand not led by any political party, but motivated to contribute to the community, thus each understanding his/her own role and responsibility in doing so.

Self-organized youth aware of the benefits of social networking (they created the page on facebook and coordinated all the activities and needs single-handedly), leadership and management skills and social readiness (subconsciously or consciously possessing the high level of civil liability) along with originally encoded messages of humanity, being kind-hearted and helpful consolidated in times of a disaster. Standing together with some foreign students (from Iraq, Nigeria, a couple from Moscow who was offering free sandwiches to the volunteers, and even Dutch tourists who came to visit the city, but kindly offered their help when they thought their hands were needed) rescue teams, army and governmental or non-governmental organizations and groups, they worked day and night to clean the city from debris and mud. Initially they set up medical assistance points before the government joined them later. The will to "save" the city went contagious, those who could not work physically tried to be creative and help anyway: a young lady came out with an idea to charge volunteers' phones while they were working to keep in touch with the family members who were encouraging them from home, so she had been walking charging the phones all day long; another young lady made miniature statues of hippo a symbol of flooding, the one who escaped from the zoo and whose pictures became viral all over the world; this way she could donate the money she would get by selling them; another young man who could not help with either money or physical work offered free taxi service for volunteers; two guys had an idea of giving free flowers to the girls working in Mziuri park

(the area which took the heaviest heat of the flood) all day long, so by the end of the day they would give each some field flowers to express their gratitude thus encouraging them. Examples were many along with an old granny who was not reluctant to walk to Mziuri donating a couple of fresh water bottles she had brought for volunteers and most probably on her pension money; a middle-aged man sharing 5 apples and a loaf of bread (most probable that was all he had); every single person the way he/she could along with different funds, many national and foreign organizations (National state and private banks, business corporations, US embassy, Red Cross, etc.) and national TV projects (“X factor”, “One in One”, “Eka Khopera’s Show”, etc), concerts by nationally and internationally acknowledged stars Sukhishvilebi, Liza Batiashvili, Nikoloz Rachveli and Nato Metonidze (they all became charity after the disaster).

With the same success “Mziuri Generation” did not let the government arrest the director of the zoo who was accused of being irresponsible for providing population with the wrong information on the number of animals missing and eventually a man was killed accidentally by a tiger when he went into the storehouse to accomplish his job duties where a hiding tiger mauled him to death. The volunteers moved from their work places to demonstrate against the government’s attempt to put all the blame on Zurab Gurielidze, the director of the zoo, in front of the parliament and some hours later, the authorities had to announce Z. Gurielidze had never been accused officially and there were even no charges against him to drop. This was another case of consolidation for the truth and justice.

Finally, it is difficult not to see the merit and credit of the Western countries that had noticed the potential in a small country like ours about a couple of decades ago and did their best through implementing various reforms in education and other spheres we have talked above on top of different exchange academic and educational programs to lead the young generation to the point where it is now. Yet much is ahead and a lot is to be done, but one thing is certain: we have a generation serving a tremendous function in building a new type of society understanding the sense of community and citizenry; the generation we can rely on. I would like to end the article citing the words by one of the representatives of the generation - Davit Sarishvili (the former president of student self-governance and a present head of PR office at Grigol Robakidze University): “Recently, it has become urgent to select some names for our generation, some refer to us as to a “new generation” others choose some other names, etc. and I would like to express my point of view regarding the issue: our generation is the generation on the shoulders of whose our country should stand in the nearest future and each of us is profoundly aware of the fact; additionally, we are the generation who always express ourselves and our position when needed

and we are the generation who is always where needed. What makes me wondered is why you are all so astonished by us and speak about us in the way as if you had never known us and never had been aware of what we could do. We did what we had to do and what was coming from hearts and finally, I will say that we are the generation capable to contribute to the development of our country greatly always standing in its service” [13].

Conclusion

Civil society has often been regarded in the past ten years as the hope for the future, especially where governments are weak and corrupt. While it is sometimes true that civil society has accomplished things that the state has failed to do, the two should be treated as interlinked. The quality of the state reflects the quality of its societal base. Public officials are also members of society and carry the same values as other citizens. It is important, therefore, that efforts to improve governance tackle reforms of the state as part of strengthening civil society and the linkages between the two. The summer flood 2015 case revealed that groups of citizens, in non-governmental organizations and associations, as well as individual citizens (with the academic background they obtained owing to the reformed west-oriented education system of Georgia) play a vital role in educating the public and the government on important local and national policy issues. Their presence and activities help assure that the government and citizens comply with the rule of law. An informed and engaged citizenry provides both a check on government power and valuable feedback the government can use to become more responsive. Yet a lot need to be done in the sphere of formation of Civil Society in Georgia and, we hope the set plans of American and European partners (USAID/Caucasus and EU Country Roadmap for Engagement with Civil Society projects) will support the country on the way of promoting participatory democracy.

References:

World Data on Education – UNESCO 2010/11
http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Georgia.pdf

Education in Georgia – Country profile – UNICEF
<http://www.unicef.org/ceecis/Georgia.pdf>

The International Institute for Education Policy, Planning and Management - Strategic Development of Higher Education and Science in Georgia, Tbilisi 2013

<http://erasmusplus.org.ge/files/publications/Strategic%20Development%20of%20HE%20and%20Science%20in%20Georgia%20-%20en.pdf>

Dimensions and Indicators for the CIVICUS Civil Society Enabling Environment Index:

<http://www.civicus.org/downloads/Dimensions%20and%20Indicators%20for%20the%20CIVICUS%20Civil%20Society%20Enabling%20Environment%20Index.pdf>

Civil society Profiles, Part 2 – Context and Environment for Civil Society-CIVICUS. <http://civicus.org/cdn/2011SOCSreport/Civil-Society-Profiles.pdf>

Goran Hyden, Julius Court and Ken Mease, CIVIL SOCIETY AND GOVERNANCE IN 16 DEVELOPING COUNTRIES, World Governance Survey Discussion Paper 4, Overseas Development institute, July 2003. <http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/4102.pdf>

Mancur Olson, *The Logic of Collective Action*. Cambridge MA.: Harvard University Press 1965.

Civil Society Briefs: Georgia, Asian Development Bank, Publication Stock No. ARM113647 November 2011.

<http://www.adb.org/sites/default/files/publication/29305/csb-geo.pdf>

Transparency International Georgia, National Integrity System, Georgia, Civil Society - <http://www.transparency.ge/nis/2011/civil-society>

USAID/Caucasus – *Country Development Cooperation Strategy, Fiscal Year 2013-2017*, Georgia. July 2012.

<https://www.usaid.gov/sites/default/files/documents/1863/GeorgiaCDCS.pdf>

EU Country Roadmap for Engagement with Civil Society, Georgia, 2014-2017: http://nala.ge/uploads/EU%20roadmap_Georgia%20.pdf

<http://reliefweb.int/disaster/fl-2015-000071-geo>

<https://www.facebook.com/davit.sarishvili?fref=ts> June 25, 2015.

CHALLENGES OF INCLUSIVE EDUCATION IN GEORGIA

Nino Samarguliani (MA)
Grigol Robakidze University, Georgia

Abstract

The objective of this paper is to present the challenges that inclusive education system faces nowadays in Georgia. The paper reviews several issues connected with programs developed for supporting and further development of inclusive education in Georgia. The paper is aimed to describe the main problems and challenges and suggest their possible solutions.

Keywords: Inclusive education, Assistive programs, Disabilities, Special Education Needs, Integrated Classes

Introduction

In the last ten years, there have been significant changes in Georgia in the educational sphere. Since 2003, the government initiated reforms to change the entire system of education. Inclusive education has become mandatory for every public school in Georgia since 2012. Accessibility of education for children with disabilities has been prioritized by the Ministry of Education and Science Within the framework of “Inclusive Education Support Program”. The main goal of the direction is to support establishment of inclusive education in Georgia. The Ministry aims at making the education space more inclusive and adapted to receive persons with various disorders. The aims include developing the standard for Special Education Needs Teachers, supporting the increase in knowledge and skills of teachers at public schools about inclusive education, and supporting the establishment of public schools specializing in special needs education. However, According to several surveys and reports, there are many flaws in the implementation process. Although the results were not disappointing, there are some topics which need to be considered.

Although the Ministry of Education and Science has introduced inclusive education system in public schools since 2005, it has been prioritized in 2013. During this period several programs have been created:

In 2009 Inclusive Education Assistive Program was created by the Ministry of Education and Science, which considers realization of the following objectives:

- Identification and assessment of SEN children; Identification of their needs and abilities.
- Assessment of academic achievements of SEN children already enrolled into mainstream schools;
- Development of the National Model of Education of SEN children;
- Piloting of the tools (tests) for assessment and identification of educational needs of SEN children;
- Development of recommendations for university curricula of special education and related specialties;
- Financing of activities for provision of full participation of SEN children in educational environment: special education teachers, equipment of the resource rooms, transport facility for 2 schools (mini-bus, driver).

In parallel to all above said, the program considers sophistication of the policy on special education and development of recommendations for changes in legislative base.

Another program run by the Ministry of Education and Science is 'Development of Inclusive Education in 9 Regional Public Schools'. Project was implemented in accordance with State Strategy and Action Plan on Education of Children with Special Educational Needs,⁴⁷ aiming at introduction of inclusive education throughout Georgia and reinforcement of existed inclusive education practice. Presented project is 3 years project (2009 -2011), being implemented with assistance of Norwegian Ministry of Education and research.

The aim of the project is development/introduction of inclusive education in 9 regional public schools and creation of sustainable system supporting future development of inclusive education.

To achieve the goal, project envisages realization of the following activities:

- Preparation of local educational authorities and their involvement in project implementation;
- Selection of target schools and adaptation of physical environment;
- Identification, Assessment of SEN children and development of IEP-s;
- Training of school teachers, administration and professionals (psychologist, speech therapist);

⁴⁷ Action Plan on Education of Children with Special Educational Needs, (2009 -2011).

- Formation and training of inclusive education supporting teams for targeted regions: regional coordinator, multidisciplinary team members;
- Public awareness rising;
- Foundation of the Summer School at University base.

Project objectives

- Enrollment of SEN children in regional public schools;
- Improvement of special education teaching in higher education system;
- Rising of public awareness and creation of inclusive education friendly environment.

In 2012 Georgia hosted its first international conference on inclusive education; the aim of the conference was to discuss inclusive education issues and to provide a forum for sharing international practices. In April 2015 the conference was held for the second time.

From February 2013, The Ministry of Education and Science of Georgia has launched the introduction of inclusive education model at vocational education level. 10 VET centers with 51 students with special educational needs participated in piloting of inclusive education at this stage of educational system.

There are also several programs currently running for financing integrated classes in public schools, teacher trainings, building infrastructure and supporting multidisciplinary team for inclusive education.

In 2013 the survey was prepared by Ilia State University within the Project “Implementation of Inclusive Education in Vocational Education and Training System of Georgia“.⁴⁸ The questionnaire and methodology of the wide-scale survey, “Pathway to Inclusion – Barometer of Inclusive Education”⁴⁹ conducted in the European countries in 2009-2011 has been used as one of the tools in the survey. The questionnaire “Pathway to Inclusion – Barometer” defines the process of inclusive education implementation in several categories: legal, practice and future development.

The goal of the project was to assess inclusive education reform in Georgia. Therefore, the goal of the survey was to study the considerations of the field experts and different groups of the stakeholders (administration of the public schools and Vocational Education and Training (VET) centers, teachers, pupils/students with special educational needs (SEN) and their parents, pupils/students with typical development and their parents)

⁴⁸ Inclusive Education Indicators in Georgia, Survey Report 2013, Tinatin Tchintcharauli – Associate Professor at Ilia State University PhD Nino Javakhishvili- Full Professor at Ilia State University PhD

⁴⁹ Pathway to Inclusion (P2i) (2012): European Project

It can be said, that as a whole, inclusive education is not at the frozen point that is proved by the comparative analyzes of situation with other countries. In 2011, the amendment was made to the Law on General Education, in 2013 activity was started for making amendment to the Law on Vocational Education. Georgia has signed the Salamanca Statement and by the end of 2013, ⁵⁰ the ratification of the EU Convention on the Rights of Persons with Disabilities is planned. In 2009-2012 significant changes were made in the procedures and tools applied in the assessment of special educational needs. The national model of the education of persons with special educational needs stresses the advantage of considering of the individual needs and inclusive education over the other models. It can be said, that in this regard Georgia has the same picture as in most European countries.

The questionnaire “Pathway to Inclusion – Barometer” has revealed that changes in legislation and important spheres of practical implementation are required for further development of inclusive education in Georgia.

Conclusions and recommendations of the survey, summary

First of all, it is necessary to develop inclusive education monitoring system, contributing to timely identification of the problems, enabling the decision makers to make the step-by-step development scheme more visible.

Consideration of inclusive education model in the laws on higher and vocational education is necessary at the legal level, enhancing the responsibility of the institutions providing these levels of education toward the individual with special educational needs and/or disabilities.

As for the consideration of the parties directly involved in realization of inclusive education model, the respondents report on quite positive situation in terms of inclusive education system, considering the lack of the financial resources as insufficiently developed.

In terms of the financial resources, the situation is not favorable. Therefore, additional funding is needed for the improvement of conditions in schools and VET centers. State funding should not be considered as the only source, as the private donation should be also considered. It will be beneficial for the administration of schools and VET centers to get trainings for the development of fundraising skills.

The attitude among the students is still not on a desired level. The relevant recommendation for this will be realization of special measures directed at teachers’ awareness rising in schools. It can be conversations of school administration and teachers with parents; invitation of the field expert

⁵⁰ Salamanca Statement; Source „Learning Together. Inclusive Education“, 2008.

to the meetings with parents or conducting of the lesson/lessons on topics of “human diversity”.

There are some challenges in strategic approach to inclusion e.g. according to the majority of respondents (about 80%), there is no clear vision on how the society, local communities, external services can support the schools and VET centers. This data shows that the information related to the issue is not clear and accessible for everyone and that the part of the population, especially those having no direct interest in it, has wrong information. The recommendation for the improvement of situation is organization of the training for the staff of Schools and VET centers on topics: participatory democratic principles, collegiality in the decision making, team working and strategic planning. The schools and VET centers are less adapted to the needs of pupils/students with special educational needs and that is clearly visible for those, having direct interest - parents of the students with special needs. It appeared, that VET centers have better position than schools in terms of the materials and moral conditions: better infrastructure, more help provided to students in coping with a new environment, but at the same time, in terms of the attitudes, the situation is much better in schools: the teachers are more aware of their responsibilities in assisting children with special educational needs and are more careful in treating them; acknowledge the diversity of their interest, knowledge and competence. The survey results show that trainings on inclusive education topics are needed for the educational professionals of VET centers as well. (Inclusive Education Indicators in Georgia, Survey Report 2013, pp.51-52; 71-71).

Society and SEN Children

As for judging from the perspective of the people involved in inclusive education system, situation is not favorable, as there have been many flaws during implementation of programs supporting inclusive education. The topic is still controversial in society and it is no wonder that there have already appeared conflicts in public schools between the parents of SEN children and the rest of the parents. The disagreement between parents in schools drew the attention of the media and several articles were published describing the arguments. The reaction of society was sometimes harsh, especially for the parents of SEN children, but there was also a wave of support for them and as the current situation shows, it has showed slight positive results. Conflicts seem to arise when parents try to use their right to choose any public school that is nearby and demand a special teacher for their children. It appeared, that there is not enough number of teachers provided for schools. This results in the fact that when there is more than one child with special needs, special teacher cannot sit individually with them

during the lesson and then the teacher cannot always control that the studying process is not interfered by a child with special needs. Although class teachers are also being trained, they cannot replace special teachers who should be sitting with SEN children individually and sometimes parents have to sit themselves or hire a therapist, which is quite expensive and not everyone can afford it. As one of the parents says during the interview with the portal www.17maisi.org it is rather stressful for a parent having to sit next to their children and it is not very effective for a child too. According to her, parents still struggle to demand more trained staff to schools and they hope for public support as it is rather important that society gets used to treating people with disabilities with respect. Some of the parents even joined NGOs to get support in overcoming various challenges while dealing with different institutions.

As for the parents of children who do not need special education, it needs to be mentioned, that majority of conflicts arise due to lack of awareness in issues connected with disabilities in general and their rights in society. Considering the views of both sides, it is worth mentioning, that giving them the right information about the subject would help a lot. Moreover, it may prevent arising new conflicts and support their further relationship. Moreover, as the studies and several surveys showed, it may be even beneficial that each class has SEN children, as diversity in class can play a crucial role in their further integration in society. It is interesting that some studies proved that Students who provided peer supports for students with disabilities in general education classrooms demonstrated positive academic outcomes, such as increased academic achievement, assignment completion, and classroom participation. (Cushing & Kennedy, 1997) In a meta-analysis of research conducted by Kalambouka, Farrell, & Dyson (2007), 81% of the outcomes reported showed including students with disabilities resulted in either positive or neutral effects for students without disabilities. Students with intellectual disabilities that were fully included in general education classrooms made more progress in literacy skills when compared to students served in special schools (Dessemontet, Bless, & Morin, 2012).

Conclusion

Although there are still many challenges to overcome for people involved in inclusive education system, situation is slightly better than in previous years which means that the progress is ongoing. It is very important that there is collaboration between all the parties involved, as it prevents from further conflict. Rising public awareness is vital, as more people are aware of the rights of people with various disabilities, the easier it gets to defend them. The most important fact to be considered while promoting the

rising of public awareness in society seems to be spreading more information regarding studies and surveys conducted in the field of inclusive education that are favorable for parents of children with or without disabilities.

References:

- Law on Vocational Education - (24.03.14) Retrieved from http://mes.gov.ge/publicInfo/?page_id=171
- Inclusive Education Assistive Program - Retrieved from <http://www.mes.gov.ge/content.php?id=539&lang=eng>
- Inclusive Education Indicators in Georgia, Survey Report 2013, Tinatin Tchintcharauli – Associate Professor at Ilia State University PhD Nino Javakhishvili - Full Professor at Ilia State University PhD.
- Pathway to Inclusion (P2i) (2012): European Project.
- Salamanca Statement; Source “Learning Together. Inclusive Education“, 2008.
- Action Plan on Education of Children with Special Educational Needs, (2009-2011).
- Kalambouka, A., Farrell, P., & Dyson, A. (2007). The impact of placing pupils with special educational needs in mainstream schools on the achievement of their peers. *Educational Research*, 49(4), 365-382.
- Cushing, L. S., & Kennedy, C. H. (1997). Academic effects of providing peer support in general education classrooms on students without disabilities. *Journal of Applied Behavior Analysis*, 30(1), 139-151.
- State of Inclusion in Georgia - Retrieved from <http://www.caucasuschildren.net/georgia-cncmember>
- Limited learning environment for children with special needs - 2015/09/20 - Retrieved from <http://17maisi.org/2015/09/20/autism-5/>

ACTUAL ISSUES OF GUARDIANSHIP AND TUITION

Nino Mindiashvili, PhD student
Grigol Robakidze University, Tbilisi, Georgia

Abstract

Collision issues are discussed in family law such as conditions of marriage, results of marriage, annulment of marriage, duty of maintenance, relations between parents and children, relations related to child's origin, conditions of adopting, guardianship and tuition. I discuss issues of guardianship and tuition in mentioned work, which I think is very interesting and actual.

Keywords: Guardianship; Tuition; Social service agency

Introduction

For protection of interests and constitutional rights of children left without care of parents, family law foresees existence of guardianship and tuition institution, timely detection and registration of children left without parents is its obligation.

Relevant education and take care of a child is the main duty of parent. Both parents are imposed equal rights on educating children. Consequently family law foresees deprivation of parental right in case of mistreat to child from the side of parent. Child left without care of parent will be prescribed form such as guardianship and tuition.

Guardianship and tuition is a law complex institute, which includes norms of civil, family and administrative law.⁵¹ One group of scientists deems, that it is a family legal institute and foresees protection of rights and obligations of those citizens, who especially need it.⁵² Part of scientists do not agree with this opinion.

Who can be set guardianship and tuition is discussed in detail in Georgian Civil Code. In 1275 Article of Civil Code is discussed who can be set guardianship and tuition: Underage children, who are left without care of parents, because of death of parents, confession of death, deprivation,

⁵¹ Sh. Chikvashvili. Publisher "Meridian". City of Tbilisi, 2000. P. 403.

⁵² Ershova N.M. Family issues in Civil Law. 1977, p. 67.

suspension or limitation of parental right, disability of parents, considered as missing or child considered as abandoned, are set up guardianship and tuition in case of their education, protection of personal and property rights and interests. In case if child has relationship with one of parents family legal relationship, he/she must not be set guardian or tutor, because it is considered that one parent can protect his/her personal and property rights.⁵³ According to 1276 Article of Civil Code: “Guardianship is set on child, who has not reached the age of seven or on a person, who is considered as a person with disability by the court, because of unsound mind or imbecility”, in 1277 Article is represented: “Guardianship on underage person is set from the age of seven to eighteen. Also guardianship can be set on underage capable person if he/she asks, if he/she cannot independently implement his/her rights and perform his/her duties because of health condition”. Also Civil Code determine, that tuition can be set on adult by the court, which abuses alcohol and drugs and because of this puts family in bad material situation. He/she has the right to make arrangement about disbursing of property, also to disburse salary, pension or other type of income only in case of tutor, instead of making meticulous arrangement. His/her personal characteristics, ability of fulfillment of taken obligations, relationship between guardian/tutor person, interests of guardian/tutor person, also directions of parents or testator will be taken into account during selecting of guardian or tutor.

Central and local bodies of guardianship and tuition are: Plenipotentiary institution-agency which is in the system of the Ministry of Labor, Health and Social Protection and its territorial bodies. Rules of working of guardianship and tuition bodies are determined by the Ministry of Labor, Health and Social Protection. LEPL Social Service Agency of the Ministry of Labor, Health and Social Protection, as “a central body of guardianship for social rehabilitation”, authorized by resolution of 14 April, implements state program 2014 #29 of Georgian Government about care of child, whose aim is improvement of physical and social conditions and integration in society of persons with disability (including children), elderly devoid of family care, socially unprotected, homeless and children who are in risk of desert. Also urgent help of families with children being in crisis situation.

According to carried out researches, based on database of 2014, in three educational institution 87 foster children are left, whose rating is finished and probabilistic form of tuition is planned. Tbilisi Children Crisis Distribution closed in May 2014. Senaki shelter was closed in December. Guardianship was set on 34 children and tuition on 176 children.

⁵³ R. Shengelia, E. Shengelia. Tbilisi, publisher “Meridian” 2013. P. 348.

Guardianship was set on persons with disability – on 565 beneficiaries. Tuition was set on 82 persons up to 18 age. As a result of done activities, the agency received access on electronic database of Notary Chamber in 2014, which includes data about persons with disability/limited ability recognized by the court.

The body of guardianship and tuition must set guardian or tutor no later than one month from the time, when the necessity of guardianship and tuition will be known. Set of guardianship and tuition can be set on a child in case if: a) The court will inform body of guardianship and tuition about limitation or deprivation of parental rights and duties of both parents of child; b) Rights and duties of parent are inhibited; c) Both parents of child are dead; d) Guardian set on child is dead or functions of guardian are impounded; e) The court considers child as abandoned; f) The parent is declared as incapable or missing . The court that made decision about consideration of person with disability, is obliged no later than three days after coming in force, to inform body of guardianship and tuition about it according to location of that person, who need a guardian because of disability. It is mentioned in law, that guardian or tutor must be set with their consent. Selecting tutor for capable adult, who cannot protect his/her rights and perform his/her duties because of health condition, is possible only with the consent of guardian. Selecting of tutor for capable adult, who cannot protect his/her rights and perform his/her duties because of health condition, is possible only with the consent of guardian.

According to 1283 Article of Civil Code, person cannot be set as a guardian or tutor, who has not reached the age of eighteen; a person, who is considered as a person with disability by the court; a person, who has deprivation of prenatal rights because of obviation for performance of prenatal rights and duties; a person, who is waived from duty of guardian or tutor because he/she did not duly perform these duties.

I think that the following provisions must be added to mentioned provisions: 1. A person cannot be a tutor, who leads immoral life; 2. A person, whose interests opposites interests of the person being under care; 3. Persons, who are declared as insolvent and case administration to them has not finished; 4. Persons, whose care was forbidden by alive parents.⁵⁴ 5. Persons, who cannot duly educate children, because of health condition.

Guardian or tutor can be set by the direction of died parents with notarization or if notary is not accessible based on document (testament) notarized by local administrative body. Guardian or tutor is obliged to take care of person being under care, to protect their rights at court. The guardian

⁵⁴ Pezeshkian N. Family psychotherapy through Russian Law, family as a therapist, 2003, p. 332.

do not have the right to make agreement in the name of tutorial person and tutorial person do not have the right to agree making on agreement in the name of tutor, which is related to alienation of property, hypothecate, rent more than for ten years, lend or issuance of other debt obligations, deny bill or rights of guardian or tutorial person, to become partner of entrepreneurial company, to take a debt, to divide a property or make such agreement which may reduce property.

Body of guardianship and tuition will liberate guardian or tutor in case of improper behavior from imputed obligations, also during recovery of parental rights. Guardianship will be terminated: a) If guardian have died; b) If underage tutorial person has received the age of seven, instead cases, when he/she is considered as a person with disability according to law; c) If a parent of underage tutorial person, who has not reached the age of seven, has recovered parental rights and duties; d) If a tutorial person with disability is declared as a person with capacity by the court. If underage tutorial person has reached the age of seven, in such case guardianship is terminated and guardian becomes tutor without special decision of body of guardianship and tuition. Tuition will be terminated: a) If tutorial person dies b) If underage tutorial person has reached the full age; c) If underage tutorial person has get married.

Decision of body of guardianship and tuition about appointment, deprivation and emancipation of guardian (tutor), also every interested person can appeal all issues about guardianship and tuition at the court.

Conclusion

Institute of guardianship and tuition has an important legal meaning. As we have mentioned, prescription of guardianship and tuition is a protection of property and personal rights of those people, who cannot protect their rights and perform civil legal duties independently. Body of guardianship and tuition has an important role in development of state and society. More promotion is necessary to bodies of guardianship and tuition, in order to perform imputed functions timely and quickly.

References:

- Georgian Civil Code, 1997.
- Comments of the Civil Code.
- Government resolution N291 \
- “Social rehabilitation and child care”, 2014.
- www.parliament.ge
- Chikvashvili Sh. “Family Law”, Tbilisi, “Meridiani”, 2000.
- Shengelia E., Shengelia R. “Family Law” Tbilisi, “Meridiani”, 2013.
- Ershova N.M. “Family Law in civil Law”. 1977.

LEGAL CULTURE AND LEGAL CONSCIOUSNESS IN TERMS OF SET AND ATTITUDE

Vakhtang Nadareishvili, PhD in Psychology, LLM
Tinatin Chkheidze, PhD in Psychology
Grigol Robakidze University, Tbilisi, Georgia

Abstract

Effective functioning of the legal system is a precondition for the state's and society's sustainable democratic development and requires a highly developed legal culture. Legal consciousness which is a constituent of legal culture comprises a system of expectations and attitudes. Set psychology presents different terms and interpretations of the phenomenon of set (Attitude, Predisposition, Set, Dispositional Set, Value Orientation, etc.) which is caused by the existence of numerous forms of set as well as inappropriate accentuation of its specific individual manifestations at the expense of others. This creates an obstacle for the formation of the relevant understanding of set as the individual's integrate psycho-physical state of readiness for action. Variety of terms denoting set makes it difficult to consolidate the data of the theoretical and experimental research applying different concepts of expectation and set and, therefore, prevents us from increasing the descriptive and explanatory potential of set approach. The given article aims to differentiate the concept of set on the basis of extended version of Uznadze model and describe the continues process of set formation and change from Set to Atitude which will prove the organic relationship between different types of set. We assume that despite the existing versatility, all manifestations of set have the same roots, and therefore, represent stages in the formation and development of the same initial mental entity, as a whole, rather than different and opposing mental phenomena. Accumulation of the content of the above concepts in a common context enables us to develop a unified methodological approach, and, therefore, increases the possibility of applying set theory to psycho-legal studies, namely to the exploration of the factors determining the effectiveness of the regulatory function of the legal system.

Keywords: Legal Culture, Legal Consciousness, Attitude, Set, Disposition

Introduction

The term legal culture is used for „lining up a range of phenomena into one very general category“[2:33; 8625]. This phenomenon is understood as „ideas, values, expectations, and attitudes toward law and legal institutions“[2:34; 8625], pertinent to a group or society. According to L. Friedman [1975:15], these are “those parts of general culture – customs, opinions, ways of doing and thinking – that bend social forces toward or away from the law”.

As for legal consciousness it is related to the micro social level and involves specific people: “...the study of legal consciousness traces the ways in which law is experienced and interpreted by specific individuals...” [IES&BS.p.8626]. It, specifically, implies people’s beliefs, attitudes and values. The following components could be singled out within the structure of individual legal consciousness: 1) legal knowledge; 2) emotions and attitudes; and 3) readiness for lawful behaviour (actual behaviour). [4:16-20].

Although, differently from legal culture, legal consciousness places less emphasis on general activity, that is specific, ready patterns of culture related legal behavior, both concepts necessarily imply the system of attitudes and expectations. The people possessing these systems put law into action. The development level of these systems determines the effectiveness of law. That is why we consider important to explore the regularities of the formation, extinction and change of the attitudes and expectations that are mostly marked with a low level of consciousness and underly legal culture. We find it equally important to determine relationship between such attitudes/expectations and the conscious, voluntary regulation of behavior.

It is thought that lawfulness is a necessary component of democracy. One of the principles of lawfulness is the existence of legal culture. An indicator of a highly developed legal culture is the prevalence of social integration over social regulation within a single social control system. Social integration implies the existence of a set⁵⁵ system ensuring the self-regulation and self-activity of social subjects when it becomes necessary to perform normative behavior. The type of activity involved in social integration is ensured by the synergism of conscious and unconscious forms

⁵⁵ “In set theory the stimulus that activates a living being is in each and every case a need, but the nature of the activity is determined by the actual situation. The combination of these two factors induces in a living being a general change that is expressed in a readiness to take appropriate action. This state of readiness mobilizes all the subject’s capabilities for meeting the challenge before him or her and anticipates the development of a process of activity. This is the set. For D.Uznadze, the set is a reality that is far removed from any opposition between the subjective and the objective. Uznadze’s set mediated the relationship not only between the physical and the psychological but also between psychological processes”[5:687].

of behavior regulation [8:534-539]. The given text focuses on the inducing and regulatory functions of unconscious set.

According to D. Uznadze set theory, set, as the state of psychophysical readiness for adaptive activity, creates a basis for any level of regulatory activity[10:239]. One of its forms is primary or situational set which stops existence as soon as its constituting factors (need and situation) lose importance. Another form of set is represented by mental formations – fixed sets, the fixation of which takes place in the course of past experience [7:26].

The self-regulatory function cannot be performed by any kind of fixed set. Only specific form of set possess this kind of ability. Adaptive activity running on the personality level (or the level of normative activities) implies the existence of a specific form of fixed set - dispositional set [7:29].

In the given context, the term dispositional set is used in an arbitrary way, since disposition implies either inclination or readiness [3: 89-105; 6:325]. Any set, as a basis of activity, implies readiness to carry out activity which is the stage preceding activity where activity exists in the form of possibility rather than reality. Given such an understanding, if we label only one of the types of set as dispositional, other types of set will be deprived of their indispensable characteristic. In other words, situational set is also a disposition to behave in a certain way and differs from other forms of set by the shortness of time period preceding its actualization. As for the situational set which is actualized with some delays, the prolongation of the named time period does not at all imply that in this case we deal with the fixed set because fixedness or the ability to repeatedly actualize itself and reproduce the corresponding behavior does not represent its attributive characteristic.

According to our approach, dispositional set has the following specific attributes: 1. existence in permanently active state; 2 ability to self-actualize (relative independence from external stimulation); 3. ability to affect a wide range of events; 4. ability of being actualized by a wide range of events; 5. dispositional set is social value oriented; 6. is characterized by a high level of stability. Such sets are permanently supplied with energy because they are not dependent on the satisfaction of individual needs. They are based on internalized social values that are incorporated into set structure and, for this reason, their ‘satisfaction’ can be understood as a permanent process of the realization of sets through the activity aimed at the realization of values. Therefore, dispositional sets are never fully actualized or never reach the state of balance understood as stagnation. The balanced state for like sets implies their continual dynamic existence, continual actualization [7:26].

High level of adaptation and normativity of activity cannot be ensured only by the systems of dispositional sets fixed through past

experience. To modify fixed dispositional sets and adjust them to changeable environment it becomes necessary to form new situational sets. Formation of new primary sets for the realization of fixed dispositional sets requires conscious resources, since the named sets have to take into consideration current and future social requirements, and the social value of expected results [7:29].

To make the above reasoning better understandable, it is necessary to clarify some terms related to the concept of set.

1. Only those states that are stable and fixed through experience, i.e. the fixed mental states or their underlying entities existing in the form of potential for the corresponding activity, can be called dispositions. According to S. Chkhartishvili it is the static unconscious [1:179] which is different from the dynamic unconscious, like the situational set through which a general potential of activity is actualized in a specific behavior. [9:233].

2. According to Uznadze differentiation is the process through which less differentiated diffuse mental entities are transformed into more prominent mental entities. In other words, initial un-differentiated state of readiness becomes more prominent, definite and develops into the state of readiness for a specific activity [10:165]. This differentiated state is a stage in the formation of initial situational set. We do not think that differentiation is completed with the formation of situational set. In certain cases this process goes on and the initial form of set is transformed into the further forms. Therefore, a stage of set is the basis for the formation of the set of the next stage.

Set formation involves the following stages or phases a) relatively neutral unmodified mental state, absence of set modification; b) initial modification (roughly corresponds to 0-V set expositions in Uznadze classical experiment⁵⁶), that is formation of diffuse set; c) specification of

⁵⁶ Uznadze's original method based on the artificial inducing of sets provides the opportunity for accurate, objective experimental research on the unconscious state and for study of the set through its role in the process of illusory (erroneous) perception that accompanies its apparition and extinction. The basic method for research on sets introduced by Uznadze is as follows: a need is engendered in the subject to perform a given task. For example, the subject may be asked to compare two balls placed simultaneously in his or her hand and say which is the larger. The balls are presented several (ten to fifteen) times so that the set or disposition (to identify the big one and the small one) induced on each occasion becomes sufficiently well reinforced (these are set-inducing tests), after which 'say the sixteenth time' the original balls of different sizes are replaced by two of identical size, although the subject is still asked to compare their sizes. This test usually reveals that the subject has acquired a fixed set corresponding to the previous tests and now judges one of the two equal-sized balls to be 'larger' or 'smaller'. The set-inducing tests have created a state producing the illusionary perception that equal-sized balls are of different sizes. In

modification – occurrence of differentiated set (roughly corresponds to V-X set expositions); d) fixation of modification– formation of fixed set (X-XV set exposition). This is followed by differentiation stages of fixed set per se: e) occurrence and initial differentiation of components; e) differentiated components; f) compatibility of components. A high level of differentiation along with consistency and maximum effectiveness of behavior, compatibility ensures repeated actualization of the whole set even when only one of the components is affected, and, therefore, reproduction of behavior.

Only fully differentiated set characterized by an adequate level of readiness is able to ensure both necessary components of legal culture – legal consciousness and legal behavior.

As already mentioned dispositional set is characterized by a high differentiation level of its components. High level of differentiation is related to a high quality of components (e.g. knowledge in the cognitive component corresponds to reality, is comprehensive, precise and complete).

When there is a need to adjust to new environmental challenges and dispositional set has not enough resources for self-actualization or direct initiation of behavior [6:86], situational set is formed on the basis of dispositional set which is done through the unconscious activity proceeding on the set level and conscious voluntary activity. Components of dispositional set are used as factors for situational set. The more differentiated and compatible the components of dispositional set are, the easier it is for situational set to form itself.

Therefore, activity is initiated and regulated through the combination of different kinds of set – dispositional set which involves past experience and situational set reflecting the present and formed on the basis of dispositional set. In addition to combining past and present resources, the two sets jointly combine the following: 1) psychic phenomena of ‘mental’ character (opinions, beliefs, attitudes, value orientations) - dispositional sets (e.g. attitude as a concrete type of dispositional set) and, 2) dynamic psychic entities - situational set, with its dominant aspect – readiness for behavior.

Conclusion

The phenomenon of set which is well known from psychological sources is described with different terms. However, the content of these terms reflects different aspects of the same mental reality. Existence of different terms and concepts is caused by different stages of set formation and different types of sets corresponding to these stages.

Uznadze’s view this state is nothing other than a disposition towards a specific activity [5: 687–701].

According to the extended model of the differentiation process, set develops from diffuse set into fixed dispositional set and then, again, into situational set.

The given approach which uses the data obtained by the Georgian school of psychology could be applicable to the challenging attitude behavior relationship problem formulated in the following way: 1. Is relatively 'mental' cognitive-affective entity able to induce behavior? 2) To what extent do attitude and behavior correspond to each other? [3:136]. According to our approach, every activity carried out at the personality level is determined by combination of different kinds of set; also, the possibility of inducing specific actual behavior as well as the character of this behavior are determined by the specificity of set which is actualized and dominant at the moment.

It can be said in conclusion that 1) dispositional set is a mental entity involving law related knowledge, attitude and ready behavioral patterns fixed through experience; 2) situational set formed on the basis of the above is a dynamic mental entity which is the immediate basis _ for the actualization of readiness for the behavior in specific and real legal activity. This means that the combined model of the interrelatedness and interchangeability of different forms of set ensures: 1) existence of all the components - legal knowledge, emotions, attitudes and readiness for lawful behavior (dispositional set) of legal consciousness, and 2) realization of the readiness for behavior in specific activities (situational set). Existence of the above two constituents – 'mental' and behavioral (according to Malko A.V. 2009, the person's legal culture involves the knowledge of law and its awareness as well as the corresponding behavior) determines a high level of legal culture which is necessary for the performance of normative activity and the prevention of deviation.

References:

- Chkhartishvili Sh. Set and Consciousness. (in Georgian), Tbilisi, 1975.
- Friedman L. The Legal System: A Social Science Perspective. 1975. International Encyclopedia of the Social & Behavioral Sciences 2001.
- Iadov V.A. Dispositional regulation of individual's social activity. M.1975.
- Kaugia S. Structure of Legal Consciousness. Juridica International. Law Review, 1996.
- Kechkhuashvili G. Dimitry Uznadze (1886–1950). PROSPECTS: the quarterly review of comparative education (UNESCO), vol. 24, no.3/4, 1994.
- Nadareishvili V. Set and Volition in the Individual's Activity. Journal of Georgian Psychology. International edition. Tbilisi, 2013.
- Nadareishvili V. Sustainable Development of Personality In Terms of The Balance Of Dispositional Sets. Yerevan. 2011.

Nadareishvili V. Chkheidze T. Normative and Deviant Behavior in Terms of D. Uznadze Set Theory Based Strain Model. European Scientific Journal. Vol.2. 2013.

Nadirashvili Sh. The Psychology of Set (in Georgian), v. 2, Tbilisi, 1985.

Uznadze D. The Psychology of Set, New York, 1966.

THE RIGHTS OF THE INTERESTED PERSONS ACCORDING TO “THE LAW OF GEORGIA ON ENFORCEMENT PROCEEDINGS”

Gocha Abuseridze, PhD student
Grigol Robaqidze University, Tbilisi, Georgia

Abstract

The Administrative Law is a part of public law, as it is depended on the subordinate principle. It aims to realize public interest. On the other hand, Enforcement Law is part of administrative space, which regulates the rules and procedures of the enforcement process for different court's decisions as well as other acts. As administrating effects our everyday lives, it is a public interest that this process should be kept in the legal borders. This is exactly what the Administrative Law is all about. It regulates the social relations in which were government and other administrative bodies play a major role. It is true that Enforcement Law provides us with the norms, rules and procedures of the legal administration, but it is still court's responsibility to assess the legal quality of it. This is why we need effective justice, to have the competent court ruling practice and to enforce them properly.

Keywords: Enforcement laws, bailiff, creditors, debtors, “other persons”

Introduction

Main principles of the Enforcement Law

As we have already mentioned, Enforcement Law is a part of public law, as it aims to enforce court's decisions and other acts not depending on the creditor's request, but rather depending on the state's authority. Therefore in the presence of legal preconditions, it is state's responsibility to satisfy creditor's request through the legal limitations of the debtor's rights. This is the way the state demonstrates its enforcing competence.

Thus, it is clear that just as state's other actions, the actions of the enforcement bodies must be in conformity with the Constitution. The rights of all those who are involved in the process should be properly protected. This is the aim, which is stated in the Law of enforcement proceedings of Georgia, in particular in the 17th article, paragraph 7. According this paragraph bailiff is obliged to take all legal measures to ensure prompt and

effective enforcement of the court's decision, to explain to the parties their rights and obligations as well as the content of certain enforcement types and possibilities and to help them in protecting their rights and legal interests.

Since enforcement cannot be conducted without interference with the rights it is necessary to have effective judicial control starting from the beginning of the proceedings to its every step. It is also required by Article 13 of the "Convention for the Protection of Human Rights and Fundamental Freedoms" According to this article Anyone whose protected rights have been violated must hold an effective remedy of legal protection from their national state. Even if this violation was conducted by someone while using official authority.

It is worth mentioning that legal ways used in the enforcement process should ensure on the one hand not to drag time of the process and to satisfy creditor's requests as quickly and fully as possible. On the other hand a debtor or other interested persons should have the opportunity to protect themselves from illegal interference. This right is guaranteed by the Constitution of Georgia. 42th article's 1 paragraph states that everyone has the right to address the court to protect their rights. There is no doubt that enforcement bodies need to keep balance between creditor's claim and the interest of protecting debtor's as well as other persons rights.

The circle of the parties in the enforcement proceeding

Enforcing the court decisions is regulated by the law of "Enforcement proceedings" as well as by the order of the Minister of Justice of Georgia. In particular we use the order #21, which was issued on 31th of January 2011 and is about the forms and procedures of the auction, According to the law there are several participants: involved in the enforcement proceedings: 1) a creditor and a debtor (the parties to the enforcement proceedings, 2) a bailiff, 3) private bailiff, 4) and other persons participating in the enforcement proceedings (article 15).

Generally, a party is a person or company, whose rights is influenced or will be influenced directly by the act or action from the Administrative authority and cause damages. It is obvious that interested parties have the responsibility to prove several facts: firstly the fact of violation of their rights, the fact of existing legal interest and the fact that the violation has in fact been the result of administrative authority. Parties' any right or interest must be legally protected which means that we should also have vivid and direct damages on the rights or interests caused by the actions or acts of administrative authority. It is also worth mentioning that when we say "interest" we mean factual interest and not any chance of theoretical ones.

According to the 18(3)th article of Georgian „law on enforcement proceedings” „The party to an enforcement proceeding or an interested person whose legitimate interests are directly and proximately affected by a bailiff’s act may file, on a one-off basis with the chairperson of the National Bureau of Enforcement an appeal against the bailiff’s act within 15 calendar days after the performance of such act.

According to the 19th article of the same law “The party to enforcement proceedings may consult and obtain copies of materials of the enforcement proceedings other than the documents containing commercial (tax and bank) secrets and other confidential documents and their copies”

In the situation where the auction is held online it is very important that the law contains detailed explanation about the possibility for other interested persons (apart from the creditor and debtor) who are interested perhaps in the property that is being sold to be considered as parties as well.

To protect the rights of the interested persons it is important this issue to be solved until the enforcement starts. Enough reason to support this idea would be to state that according to the abovementioned order of the Minister, only the persons whose property rights are registered will be informed about the auction. As for the second auction (repeated auction) parties are obliged to get an information themselves through the web site of the National Enforcement Bureau. It is noteworthy the Law on Enforcement proceedings does not provide protections for the persons who are interested in the attached immovable property. According to the 63’ article 1 paragraph of the law on Enforcement Proceedings it is bailiff who has the authority of disposal on the property. On the other hand the owner of the property is prohibited to dispose it in any way. Moreover according to the order by the Minister of Justice on “Approval of instructions on a public register” (article 14 paragraph 19 “v” 01.15.2010) attachment on the property which was disposed through auction will be removed.

In order to find out if someone in whose favor the property was attached by the decision of the court is considered as „other persons” by the legislator, we need to assess the institute of claim assurance.

Generally, the reason of the claim assurance is to protect creditors’ interest from the debtor’s bad faith and to make sure that court’s decision will not be a formality and will have real results. It is worth mentioning that while filing the lawsuit the plaintiff has effective protection right, as well as preventive protection right. Effective protection means getting the claimed request itself. On the other hand during preventive protection, the plaintiff must be sure that until getting the claimed right, it will not be cancelled. Therefore in the situation when a debtor does not have other property besides the one being sold through the auction when interested persons are not

informed about the auction, it will danger the realization of the legitimate claim and leave them without preventive protection.

According to the 21th article of the Constitution (paragraph1) „, The right to own and inherit property shall be recognized and inviolable” According to the case law of the European Human Rights Court the right to demand confirmed by court’s enacted decision is considered to be a property right. Moreover the concept of property is autonomous for the convention.

Therefore it is obvious that interested person who has the court proven claim, in whose favor is the property attached to guarantee the realization of claimed right has the right to be informed about the enforcement proceedings from the very beginning of it, as well as every step of the way. This will enable the interested persons to use appropriate legal actions to protect their rights in the enforcement process.

Conclusion

To sum it all up, we have discussed the importance of having concrete circle of parties generally in the Enforcement Law, as well as in enforcement process in particular. We also looked at the flaws of the current law. I do think that perfecting enforcement laws in order to make them cover discussed subject better, as well as making them mirror European standards will guarantee the Rule of law in the Georgian court system.

References:

The court ruling of the Administrative chamber at The Supreme Court on the case №B-821-805(K-12). 25.07.2013.

The court ruling of the Administrative chamber at The Supreme Court on the case №B-251-245(K-08). 10.08.2008.

“The Law of Enforcement proceedings”. Tbilisi, 1999.

The order of the Minister of Justice on the rules, forms and procedures of the auction. (31.01.2011) Tbilisi.

Case Law of European Human right Court.

Administrative Law. Tbilisi, 2005.

LEGITIMATE TYPES OF THE COURT ACCESSIBILITY RESTRICTION ACCORDING TO CIVIL PROCEDURE CODE OF GEORGIA

Irine Rokva, PhD student

Grigol Robakidze University, Tbilisi, Georgia

Abstract

For the welfare of modern society and any state`s correct function it is very important to have straightened working court system and to ensure every person`s court accessibility. Each step of court case management is detailed in civil procedure code. The legislation of civil procedure of Georgia foresees some mechanisms and opportunities of the restriction of court accessibility, which must be studied. The meaning of this study is stipulated by huge importance of court accessibility itself and by need of due caution during its restricting. The access to the court right is reserved not only by national, but also by international law, as evidenced by Article 42 of the Constitution [1], ``The UN Convention for Protection of Human Rights and Fundamental Freedoms`` Article 6 [3]. As any study issue, this one also needs scientific, systemic approach. For fully demonstrating the issue it is advised to classify and define court accessibility restriction mechanisms. Here presented work is about this matter.

Keywords: Court access; classification; restriction of the right; limitation of the right

Introduction

The right of court accessibility as well as other human rights, may be framed within the legal limits. Obviously, this case refers to the restriction of this right in the context of Civil Procedure Code.

The aim of such restriction is not the violation of human rights. Legal analysis of Civil Procedure Code norms confirms that the civil proceedings are accomplished in the interests of each contending party and taking into account their way of consideration. In some cases, spreading one person`s undefined legal interests may inflict harm to another person`s legitimate interests. Thus, it is necessary to establish certain rules of conduct, which will determine the balance between implementation and limitation of the rights of the parties.

Discussing the ways of limitation of protection of one's legitimate interests in court, it is important to be thoroughly investigated any legal preconditions of such binding during which the research will contribute to the issues of classification, grouping certain legal characteristics.

The restriction of the right of access to the civil procedure law can be grouped into two main types - temporarily, for a certain period or permanently, for all types of restrictions.

Interest will not be deprived of such a general characterization of the types mentioned above, which is available in this study.

The temporary restriction of the right is characterized with a favorable legal situation for the person to whom this right is restricted, in particular, when the obstacles are eliminated, the person still has the right to apply to the court.

Practical examples of the temporarily restriction of accessibility to a court is denial of the claim registration. In this case the claim of refusal may be caused by the formal procedural defect, such as unpaid state tax; fixed material failure of the annexes referred to appeal documents or other statutory deficiencies, but the party is always able to repair the defect and re-apply to the court for the same demands.

Similarly, the party has the right to re-apply to the court, even when the claim's substantial compliance with the law is checked by the judge and it is believed that it should stay without consideration. For example, when in the divorce and alimony lawsuits is not indicated that the defendant refuses to divorce and make child support payment.

The above-mentioned statutory mechanism of temporarily limiting Court access is innovative in the civil procedural code.

From January 1, 2012 the change became effective in the Civil Procedure Code and on the basis of Article 183 was established regulation, according to which a formal complaint with the law compliance checks not the court, but the statutory officer of the Court Chancellery. The legal assessment of the issue needs to be discussed in the aspect, undermines the mentioned rule the court accessibility or not. [2]

Civil proceedings are based on the Civil Procedure Law's one of the most important principle-the principle of disposition, according to which a party may, by his own will start court dispute to defend his legal rights, for which he will appeal to the court. Thus, the first step is to file a complaint in court proceedings and acceptance of the court (of course, meant the beginning of legal proceedings and not to the physical delivery of the court).

An action takes place in the court by filing the lawsuit which is a petition of an interested person's subjective rights and interests protection. [4, p. 304] On the basis of the above-mentioned changes, the beginning of the

judicial proceedings is not the Court itself, but at this stage justice is carried out by an official of the State Chancellery.

In addition, the party is lacked of important procedural privilege, he can not complain about his refusal to accept his claim or to get it in writing.

Consequently, the Court of First Instance was replaced by the possibility of lodging in case of similar violations (eg non payment of state taxes, etc.) to identify the gaps and give the applicant a reasonable period of time to eradicate. In this case the plaintiff was entitled to remedy the defect, after that the court accepted the appeal. When according to the above-mentioned manner, the defect identified in terms of the abandonment of the claim, the plaintiff may have violated legal limitation period. Moreover, when such a limitation period for some disputes (eg labor dispute dismissed from the limitation period of one month) is quite small.

The changes are based on the English model of the Code of Civil Procedure, but his removal to Georgia, worsened because of the reasons discussed in this study. To take in consideration our country's socio-economic and educational problems (severe economic situation, the impossibility of making a lawyer's services, lack of awareness of legal education, etc.), we can say that introduction Georgian jurisdiction to such innovations is too early.

Thus, on the one hand, this kind of change serves to avoid the delay of judicial formalities, but the goal of civil proceedings is not to unload the work of judges. It is focused on the protection of interests of the parties. Access to the court is meant, that the party will appeal to the court proceedings of a highly qualified evaluation stage, which in this case could not be reached.

Temporarily restrict access to the court, unlike the sad side of the legal consequences of such a permanent limitation, in which case the proceedings are completed without any kind of renewal prospects. The very simple and banal example is to leave cassation appeal without consideration because of the missed procedural deadline (despite the existence of a valid reason for running procedural deadline), unpaid state tax within the deadline set by he court without a good reason, moreover, non submitted bill of paid state tax to the court on time.

On the basis of Civil legislation preemptory norms (Article 369, Article 396 of the Code), the party which has not fulfilled the above-mentioned proceedings, as the legal sanction, is deprived the right to make an application in the court dispute, and as a result he loses the dispute [2].

Talking about non-payment of state duty and its consequences must be noticed, that the amount of the duty and payment terms are regulated by the Civil Procedure Code, and the Georgian law "On State duty".

According to the content of Article 38 of the Civil Procedure Code, a party is obliged to pay the state duty at every stage of the proceedings. [2]

The provision of the law clearly shows that the amount of state taxes, according to the economical environment of Georgian society is quite high and, in some cases it is up to a few thousand Lari. Each instance of the passage the amount increases.

Thus, the impossibility of paying fee is often an insurmountable obstacle for parties.

Civil Procedure Code and the Law "On State Duty" stipulate some kind of incentives on a particular group of people, for example, the handicapped. Disputes developed by the legislator, whose proceedings are exempt from paying state tax suitors, such as the payment of alimony disputes, injury or other bodily defects, and more. A number of benefits are listed in the 5th paragraph of the law "On State Duty".

Civil Procedure Code empowers the court to grant state tax payment of benefits as well, as reflected in the Code of Civil Procedure 47th-48th paragraphs. [2]

It is interesting that, in parallel of State tax payment by the legislation instructions, the German Civil Procedure Law provides certain benefits to civil cases paid the fee, in particular, the Civil Procedure Code Article 114 by virtue of which his personal and economic circumstances, can not compensate for the production costs, the ability to cover the costs partially or allot their payments for a certain period.

It is also possible to separate the request of special cash assistance to cover the costs of the court in case of a dispute between the petitioner and the position will be considered a prospective party to be in good faith in connection with its insolvency. [5, 44]

Conclusion

Thus, in the legal field one of the most protected and the fundamental right of access to court is not absolute and is subject to the restrictions of other rights, selling and ensuring the fulfillment of the law provision. The process will undoubtedly require study and analysis.

Although the detailed discussion and accounting of restrictions are going beyond the scope of this study, however, the classification of the legal preconditions of court accessibility restriction is a step forward on the way of imposition the mentioned restrictions and the need to examine the legality, what will promote easing the ways to study them.

References:

The Constitution. Georgian Parliamentary Gazette, 1995. №31-33.
Code of Civil Procedure. 1997. Parliamentary Bulletin №47-48.

Rome. 1950. Convention on Human Rights and Fundamental Freedoms.
Authors collective. Civil Process of foreign countries. Publishing House
``prospecti``. 2008.
V. Bergman. 2006. The arrangement of the German Civil Procedure.
Moscow. Walters Kluwer.

ASPECTS OF THE CURRENT FOCUS OF TENSION IN THE EUROPEAN UNION

Michaela Ševčková, PhD

University of Economics, Faculty of Economics, Prague, Czech Republic

Abstract

The main purpose of this paper is to explore the current status of the European Union and Eurozone, focusing on economic and political aspects and in the context of decisions made quite recently. The contemporary crises have shown that especially the common monetary policy of the ECB and single interest rate are inadequate for all euro area members and caused deterioration in the economic situation of some peripheral countries. The paper elaborates on the main flaws of the EU and Eurozone, highlights and draws attention to a vacuum of European law in the case of the option to leave the Eurozone. The paper critically analyses decision-making carried out at European level by the political class where the reality of European specifics and the continent's historic development was ignored.

Keywords: European Union, euro, monetary policy, convergence, crisis

Introduction

The European Union is experiencing one of the biggest challenges in its history following the summer of this year. The refugee crisis hit some member states to an unprecedented extent and revealed other faults in common European political decisions. The opportunity was missed to concentrate on the necessary structural reforms and enhance the functioning of the internal market; elites in Brussels will have to make a huge effort to deal with this overarching issue affecting the future composition of the European continent in the coming decades. This problem relegated other areas of tension within the European Union to the background. In particular, further development in some Eurozone countries, which are contending - for their economy - with a strong euro, lower competitiveness and economic growth. Attention directed towards important issues such as high public debt and unemployment rate in some countries; consolidating positions of protest parties and movements; the matter of Brexit; Greece; escalating use of unconventional policy by ECB; absence of fiscal transfers within the monetary union, and the ageing European population could well be

downgraded. This paper analyses some of the basic inadequacies of the European integration process which undermine the theory of its operation. It discusses fundamental issues that especially make the Eurozone situation so complicated and outlines why the European Union will struggle with both its organisational and institutional architecture as well as future development.

Ignorance of theoretical prerequisites in the economic field and unconventional policy

European integration has been evolving through various developmental stages since its inception. The first of these stages included notions of federalism and functionalism; the sixties and seventies argued on behalf of the concept of an intergovernmental approach. The next two decades were influenced and characterized by many aspects such as multi-level governance, social constructivism, new institutionalism and a liberal intergovernmental approach (Rosamond 2000; Schneider&Aspinwall 2001).

The new form of the European Union arising in the nineties was based on two important pillars: Monetary Union and the Schengen system. Both possess an unflattering status these days. The idea of monetary union among European countries has existed for decades. Some theoretical and practical benefits of single currency and free movement are indisputable. However, the EU's founding fathers and European officials completely omitted certain vital aspects; they made unrealistic and wrong assumptions, respectively. They didn't take into consideration different functioning and specific processes occurring between northern countries and the less competitive southern periphery bound by common monetary policy with the single interest rate set for all by the European Central Bank. It's a matter of fact that the single interest rate does not suit all euro area members.

The Taylor rule (despite some of its limitations) applied to core and periphery countries between 1999 and 2013 confirmed the inappropriateness of the "one size fits all" concept. Moreover, calculations for the pre-crisis period have demonstrated that some of the peripheral countries should have had their interest rates around twice as high as the core countries (Ševčíková, 2015, p. 133).

The Creators of European Economic and Monetary Union also proceeded from the wrong assumption of the theory of endogeneity (described in Frankel & Rose, 1998) that common currency will be the main engine for the mutual convergence of the union's economies. It basically means that the convergence among its members will occur ex-post.

The statistical testing of real economic convergence based on the method of β -convergence between the core and peripheral countries over the whole period 2003-2012 confirmed much less than convergence but on the contrary their divergence (Ševčíková, 2015). In practice, this entails that

economies with higher incomes (core countries) grew faster than most of those who are characterized by lower gross domestic product per capita (peripheral countries). On the other hand, the theory of convergence is applicable to old and new member states and to periphery countries and new member states in 2003 - 2012 and the pre-crisis period (Ševčíková, 2015). Since 2008, the catching-up effect has almost stopped. Some euro area countries, especially Greece, Ireland, Spain, Cyprus and others experienced a significant fall in their standard of living measured in GDP per capita in PPS. Currently, with the exception of three countries, all EU states have become more indebted since 2004.

Being verified from many aspects and by various authors (Kadarmo 2008; Eichengreen 1991; Artis 2003), it remains true that the current members of the euro zone cannot be considered an optimum currency area (OCA). The neglect of essential theoretical prerequisites of OCA by EU authorities (notably heterogeneity of economies, weak mobility of production factors, low flexibility of prices and wages, absence of extensive fiscal transfers towards the weaker members) emphasise the less than successful operating of euro in some countries. Moreover, as M. Feldstein (1997, p. 41) states: "Uniform monetary policy and inflexible exchange rates will create conflicts whenever cyclical conditions differ among the member countries". This does not mean that common currency would not work well in select current euro area countries.

Recent development in European and global economy has shown that theoretical postulates valid for decades do not apply to the current global setting. However, the conditions of the theory of OCA are still relevant as can be seen in the example of euro area. It would not be correct to argue that common currency is the only cause of the poor state of some Eurozone members. First of all, the main culprits are the member states themselves along with the erroneous politico-economic activities of their governing classes. That being said, legitimate criticism must be directed to all who essentially concentrated on nominal Maastricht criteria and probably neglected the more important criteria of real convergence.

The current period is characterized by the very active or, to put it better, activist role of the European Central Bank. ECB is flexing its muscles and has launched a new program of European quantitative easing in the form of the public sector purchase programme (ECB, 2015) as a part of the expanded asset purchase programme in spring this year. The era of pumping money into economies continues, the spill over effect into real economy is very uncertain. According to the latest estimates of Eurostat from September 2015, the euro area struggled with deflation of -0.1%, well below the ECB's inflation target, which is set at close to 2%. Likewise, real economic growth in the European Union lags behind its largest trading partners, the USA and

China, over an extended period. Additional money from the world's central banks can alleviate tension in the short term but would provoke and give rise to other speculative bubbles in the medium or long term period. In 2014, for the first time in history, such a bank of the size and magnitude of the ECB determined a negative interest rate for the deposit facility, currently amounting to -0.2%. If this approach further expands, it could be viewed as an attack on conventional and traditional banking. Finally, we witness the era of employing unconventional and non-standard instruments as the European Central Bank performs its activities and operations on the brink of the framework of European law or in some controversial cases (e.g. Securities Market Programme, proposed Outright Monetary Transaction, Emergency liquidity assistance for Greece), probably even beyond its mandate outlined in the Protocol on the Statute of the European system of central banks and of the European Central Bank.

The last European financial and economic crisis also unveiled strong connectedness and interdependence between central banks, commercial banks and governments. Talk of a vicious circle was even heard in Brussels, where central banks were supplying liquidity to commercial bank and in return these banks were purchasing government bonds.

Legal vacuum and other fundamental inadequacies in the process of European integration

In the late nineties, the euro area was considered an elite club by many leaders, representatives and authorities. A club which nobody would ever want to leave. The European Union obtained legal personality with the adoption of The Treaty of Lisbon (until then it had only European Community). According to that same Treaty, Article 50 allows for voluntary withdrawal from the EU. This eventuality comes more than a half-century after the establishment of the European Economic Community. This issue is more complicated with "membership" in the euro area, because it is still legally impossible to leave the euro zone. The reason is simple, no such thing as a euro zone in terms of an international institution with legal personality exists in European law. Eurozone is only some kind of politic and economic entity.

What does this mean for euro area countries in practice? If a country would like to abandon the single currency without breaking the *acquis communautaire*, the only option is to withdraw from the European Union. Even if it would be more advantageous for a country to reintroduce domestic currency, no mechanism can currently provide for it. One of the consequences of this basic legal drawback could be discerned as the current cheerless status in Greece.

Greece is a prime example of a country that has ridden the wave of the initial success of euro and is now paying high relative costs for the mistakes of its political elites, who have alternated in power since the mid-seventies. Greece as the Cradle of Western Civilization faced the ignominy of being the first modern liberal EU democracy to go bankrupt after World War II. It de facto happened in 2012 when private creditors were forced to write off more than 70% of their real bond's value within PSI (Private Sector involvement). Solely in the case of Greece, the European Union violated one of its rules: the no-bailout clause, which is a condition dictating that countries do not take responsibility for each other's debt. This clause is laid down in the Maastricht Treaty (1993, Art. 104 Sec 1). The Establishment of European Stability Mechanism (wherein Greece is currently one of the recipients of financial assistance, alongside Cyprus) required changing a primary law.

Representatives in the EU - alternatively it applies to some national politics - take the path of ad hoc solutions (e.g. the network of rescue and bailout funds) rather than concentrating on and addressing the causes. The sticking point of the decision-making process in European integration is a clash of national and European (central) view. The European Union has huge potential in mutual economic cooperation, though most likely it was a wrong decision to introduce single currency among heterogeneous members before the appointed time, as recent developments somewhat confirm. Some European authorities and elites are trying to push the current status of the EU more towards political union. The latest Five Presidents' (European Commission, Euro Summit, Euro group, European Central Bank, European Parliament) Report from June 2015 has presented an ambitious concept to further deepen Economic and monetary Union by 2015. An effort is made to strengthen the common fiscal system. One of the barriers hindering the progress of transforming into a political union is just a weakness of European fiscal transfers. Only around 1% of EU GDP is still redistributed throughout the European budget.

Generally, as can be seen from the history of European integration, a large number of measures proposed at European level can be difficult to implement for many various reasons. To name a few: European interest (if there is such a thing) can be in conflict with national interests of individual countries; absence of a combined European nation and patriotism for the European Union culminating in a shared European identity; transferring part of national sovereignty as a symbol of national state to supranational level weakens European countries. The current status of the Union is somewhat unusual and could be described as a community of "sovereign" states with some federal fundamentals. The European Union and its institutional representatives try to achieve a form which it hasn't grown into yet.

Considering European history, questions remain if this transformation will ever happen.

Conclusion

The adopting of the Maastricht Treaty in the early nineties has changed the European integration process. Important economic factors and assumptions took a back seat at the expense of prevailing political reasons. Subsequent ignoring of fundamental theoretical and other aspects (Optimum Currency Area, theory of convergence, etc.) had negative implications for some Eurozone members. In particular, the common monetary policy of ECB and its monopoly on setting the interest rate were unsuitable for the group of periphery countries. The diverse economic features, performance and competitiveness of the EU's members will create further tensions considering the absence of appropriate fiscal transfer correcting e.g. the unequal development of asymmetric shocks. Greece is an example of a state, which became a victim of the poor governance of its domestic elites and of the premature introduction of the euro. The country and the currency proved a disservice to each other.

The violations and manoeuvring on the edge of rules and law from the side of European Union leaders and institutions send wrong signals to its citizens. It's rather incredible that European law, encompassing such a great amount of details in our everyday life, does not remember the possible condition of cancelling membership of the euro area, a state giving up single currency and reintroducing its own currency.

The European Union is unfortunately very often lacking comprehensive and real strategies, particularly exit ones. Increasingly, it seems clearer that the efforts to unite Europe in the near and distant future from the central supranational level will be nigh on impossible and unsuccessful for the reasons mentioned and analysed in this paper.

References:

Artis, M. Is there a European Business Cycle? CESifo Working Paper, No. 1053, 2003.

European Commission. Five Presidents' Report sets out plan for strengthening Europe's Economic and Monetary Union as of 1 July 2015. Press Release, 22 June 2015. Available at: http://europa.eu/rapid/press-release_IP-15-5240_en.htm

ECB. ECB announces expanded asset purchase programme. Press Release, 22 January 2015. Available at:

https://www.ecb.europa.eu/press/pr/date/2015/html/pr150122_1.en.html

Eichengreen, B. Is Europe an Optimum Currency Area? National Bureau of Economic Research, Working Paper, No. 3579, 1991.

- Eurostat. Newsrelease euroindicator 168/2015, 2015. Available at: <http://ec.europa.eu/eurostat/documents/2995521/7012731/2-30092015-BP-EN.pdf/df6fa82d-08e9-4470-a730-9491dbcc5646>
- Feldstein, M. The Political Economy of the European Economic and Monetary Union: Political sources of an Economic Liability. *Journal of Economic Perspectives*, vol. 11, n. 4, 1997, p. 23–42.
- Frankel, J., Rose, A. K. Endogeneity of the Optimum Currency Criteria. *Economic Journal*, 108,1998, p. 1009–1025.
- Kadarmo, Y. Is the Euro Zone an Optimum Currency Area? University of Indonesia, 2008.
- Rosamond, B. *Theories of European Integration*. Basingstoke: Macmillan, 2000.
- Schneider, G., Aspinwall, M. *The rules of integration – Institutionalist approaches to the study of Europe*. Manchester University Press, European Policy Research Unit Series, Manchester, 2001.
- Ševčíková, M. *Five Crises of the European Integration Process*. *Oeconomica*, 2015.

GENEOLOGY OF AUTHORITY AND THE PUZZLE OF SOVEREIGNTY

Lasha Matiashvili, Lecturer

Grigol Robakidze University, Tbilisi, Georgia

Abstract

In the following article on the basis of Agamben's and Arendt's philosophical tradition the idea of authority will be examined and interpreted in the light of the Agamben's most provocative and crucial concept-idea of Homo Sacer. Genuine understanding of the concept will be attempted by using genealogical and hermeneutical method. Despite the historical and philosophical richness and depth of material, Arendt's investigation lacks precise definition of the term and also nothing is said about the place and function of authority in modern social and political context. Arendt confines herself with historical elucidation and negative representation of authority. She tells more about what was not its meaning, rather defining it in positive terms. However, opposite can be said on Giorgio Agamben. Methodological resemblance of authors is evident, both chose archeological and historical form of inquiry, but as Agamben characterized his attitude, his aim was to develop the problematic thought and to say what remains unsaid and concealed in other's writings without any ambition of fulfilling it. Therefore, we can interpret the notions of authority and power, as they are mixed with each other in the sovereign's figure of indifference.

Keywords: Agamben, Arendt, Authority, State of Exception, Homo Sacer

Introduction

For the Greek mythological and philosophical tradition the rejection or killing of the father was not so strange and unconceivable theoretical event. It will be enough to recall Oedipus and Plato's "Sophist", in which Parmenides represents symbolic image of father, who then becomes the object of murder and overcoming. In political organizational structure and everyday life of Roman Empire metaphorical figure of father as legislator was founded by sacral perception of tradition and past. What links the concepts of domination and authority with the name of the father? Father was deemed as a head of household and a person who gave a command, also he is a subject who bears culturally accumulated form of oppressive power.

How is it possible and relevant to associate the pre-political domination and power of the father with the notion of “authority”, which according to Hannah Arendt is effaced from the modern political and social context? In the fundamental reflections on nature of political and on the forms of domination, Max Weber had already emphasized that without mutual expectations and recognition, power of the ruler would not have been a legitimate. Binary opposition of domination and obedience thus have some correlation with each other. This twofold structure reveals itself not only in the political modus of the human being, rather in the microstructure of family life, in which the recognition of “father“ returns us in the inauthentic infantilism of pre-enlightenment period. By this chronological and temporal threshold one can easily identify the Kantian definition of enlightenment, as man’s emergence from self-imposed immaturity, in which the subject is unable to use its own reason and understanding and is guided by external force.

The power of the father in family is not conditioned by the legal right, rather as one of the most politically organized people in history called it, by the “authority”. The “supreme” figure of the father is constructed and nourished by both, personal and impersonal aspects of authority. What differentiates authority and legal power from each other? Or both are incorporated and interconnected in sovereign’s figure, which can be described in terms of Carl Schmitt, as he who makes the decision on the state of exception (*Ausnahmestand*).⁵⁷ Concerning this first sentence from the “political theology” written by Carl Schmitt, one can say that both archeology and eschatology, or the beginning and the end, as an ultimate definition of sovereignty is already given in a very opening words. Sovereign at the same time is outside and inside of law. By declaring the state of exception, sovereign’s decision temporally suspends the legal order, which endows and provides the sovereign with such a right and instrument. Therefore legal order contains in itself self-destructive, or self-suspended possibility. Law can generate from itself its own double, or more precisely its own opposite. In this context, paradoxically sovereign’s figure is an embodiment of zero point of indifference, in which legal order or the system of norms and decision are mixed and linked together.

Hannah Arendt on authority

Hannah Arendt’s text “What is authority” begins with preliminary consideration of what is not an authority and to which one should not identify it. “Since authority always demands obedience, it is commonly

⁵⁷ See on this Schmitt Carl. *Politische Theologie: Vier kapitel zur Lehre von der Souveränität*. Berlin. Duncker & Humblot. 2009.

mistaken for some form of power or violence. Yet authority precludes the use of external means of coercion where force is used, authority itself has failed! Authority, on the other hand, is incompatible with persuasion, which presupposes equality and works through a process of argumentation. (Where arguments are used, authority is left in abeyance. Against the egalitarian order of persuasion stands the authoritarian order, which is always hierarchical”. [H. Arendt 2000: 463]. How is it possible and in what way should authority be defined, which is not characterized by using of physical force and also it is not based on the implicit desire of obedience by the construction of persuasive logical arguments. Hannah Arendt in her works also criticizes at that time relatively new functionalist approach. The specific sign of functionalist way of thinking is possibility of replacement of one element for another within the given system or structure. In this case we should recall Walter Benjamin’s essay “Capitalism as a new religion”, in which capitalistic economic and political system represents profaned or secularized version of religious belief. And Arendt’s own example, which is intended for refusing of functionalist understanding of authority; “The same argument is frequently used with respect to authority: if violence fulfills the same function as authority-namely, makes people obey-then violence is authority”. [H. Arendt 2000:471]. Following Arendt’s critical reception of functionalism, one can easily conclude, that equalization of communism or capitalism with worldly religious experience, is an instrument for the construction of surrogate forms of ritual and believe practices. Which by the force of analogue express the nature and necessity of religion itself, rather pointing out on its profane double. Beyond Arendtian critique of functionalism emerges the need of localization and desire of naming the all subjects. This theoretical gesture is opposed to poststructuralist interpretation of derivative, polyvalent and multiple sign. Fragmented and differentiated picture of social reality and being in general is constructed by the metaphor of itinerary tourist, who does not have any fixed ultimate dwelling place or living house.⁵⁸ In the postmodern condition according to Zygmunt Bauman nothing is solid and unchanged, moreover everything has fluctuating liquid feature, which can take any desired form and then deformed, transgressed itself.

Greeks had a rich political experience, but they did not have the notion and specific word describing what Romans understood by the term of authority. In ancient Greece sharp demarcation line was drawn between public and private spaces. The word οἰκονομία designated the private dimension of the household, which was ruled by δεσπότης. It is a very

⁵⁸ See on this Zygmunt Bauman, *Globalization: The Human Consequences*. Columbia University Press, 1998.

similar to Hegelian master-slave dialectic, the master possessing coercive “power” on other family members and slaves could not be considered as free man. “And the master, according to Greek common opinion (which was still blissfully unaware of Hegelian dialectics), was not free when he moved among his slaves; his freedom consisted in his ability to leave the sphere of the household altogether and to move among his equals, freemen. Hence, neither the despot nor the tyrant, the one moving among slaves, the other among subjects, could be called a free man.” [H. Arendt 2000: 473-474]. Therefore according to Arendt one already knows that authority should not be compared to the forms of coercion and persuasion. Thus despot, who was a head of the family, did not possess an authority, which is still undefined and stays in obscurity.

Auctoritas and the state of exception

Giorgio Agamben in his book “State of exception” making genealogical analysis of authority (*auctoritas*) and power (*potestas*) unequivocally refers to the Arendt’s above mentioned text. Both, in their writings cited the words of ancient Roman historian Dio Cassius⁵⁹, who indicated on the impossibility of the simple translation of the Latin word *auctoritas* into Greek language.⁶⁰ According to Agamben’s interpretation, Dio did not intend to demonstrate specific Roman character and origin of *auctoritas*, rather its linguistic application and complexity of translation, impossibility of reduction on the one meaning.

Etymological and hermeneutical analysis of the concept will unfold new horizons of meaning and decipher original root of *auctoritas*. Both philosophers in their investigations stated that, *auctoritas* is derived from the Latin word “*augere*”, which means “to augment”, “to increase”. Agamben also cited the statement from Benveniste, to whom “*augeo*” also implies the creative act or production.⁶¹ Presumably the words such as “author”, “actor”, “authorizations” have been derived from this common linguistic element. But, what connects genealogy of *auctoritas* with the state of exception and with the sovereign decision? In order to uncover the secret meaning of authority and its connection to the state of exception, some preliminary

⁵⁹ It should be emphasized that Arendt quotes these words from Theodor Mommsen’s book “*Romisches Staatsrecht*”.

⁶⁰ “*Hellenisai auto kathapax adunaton esti*”. According to Agamben by these words Dio did not want to say that the word *auctoritas* could not be rendered in Greek at all. Agamben thinks that, *auctoritas* due the semantic richness should be translated differently, according to the context. See the page 75. Agamben G. *State of Exception*. Chicago. The University of Chicago Press. 2005.

⁶¹ See on this Agamben G. *State of Exception*. Chicago. The University of Chicago Press. 2005.

historical remarks in needed. The remote structural analogue and prefiguration of the state of exception is Roman juridical and legal notion of “*iustitium*”. For the contemporary citizen of constitutional-legal state this word would not be the vague and obscure due to its direct connection to the modern notion of justice. However, initial meaning and usage of the concept would not be so usual and common. The notion of “*iustitium*” played a significant role and had a special function in the political life of Romans. Original denotation of “*iustitium*” was the temporal suspension of law and interruption of all legal procedures and social affairs. This extreme decision has been made by senate or magistrates on the basis of external threat or social disorder. Senate taking into account existed political and social constellation, declared the so called “*Senatus Consultum Ultimum*” or the final decree of the senate. This formula provided consuls with specific rights for the sake of the protection of the state. Senate’s announcement can be considered as transgression of the legal order, which creates extra juridical space. In this paradoxical situation Senate’s final decision can be counted as identical to law, or more precisely it has the same force of law without being legal element. However, following Agamben we also have to pose the questions on the source of the right of senate’s decision. Who or what bestowed senate with such a powerful weapon? Senates function and privilege position in Rome is not described in terms of *imperium* or *potestas*, rather they were called as “*auctoritas patrum*”. According to Agamben, in the Roman family structure *auctoritas* was counted as an exclusive right of the father of the family (*pater familias*). Asymmetrical and hierarchical attitude of family members towards the father indicated on their limited civil rights and dependence on the legally self-sufficient figure of the father. “In the sphere of private law, *auctoritas* is the property of the auctor, that is, the person *Sui iuris* (the *pater familias*) who intervenes—pronouncing the technical formula *auctor fio* [I am made auctor]—in order to confer legal validity on the act of a subject who cannot independently bring a legally valid act into being. Thus, the *auctoritas* of the tutor makes valid the act of one who lacks this capacity, and the *auctoritas* of the father “authorizes”—that is, makes valid—the marriage of the son in *potestate*.” [G. Agamben 2005: 76].

Genuine instrumental function of the state of exception is the construction of legal void and zero degree of order in general. In which meta-juridical status of the sovereign is revealed. Moreover, if one make the step further we will be able to conclude, that sovereign has an intention of producing docile bio-political bodies and as Michel Foucault would expressed it, decide on their live and death.

For Carl Schmitt, the source of legitimation of sovereign is the transcendent Christian God. In “Political Theology” paradox of sovereignty

will remain unresolved by using secular and legal categories, because founding and constituting power of sovereignty is metaphysical in itself. Sovereign at the same time is excluded from and included in the legal system. For Carl Schmitt “The rule proves nothing; the exception proves everything”,⁶² [C. Schmitt. 2009: 21]. Or exception is a perfect example or model through which one can measure and examine the law. Exemplary character of the sovereign would be clearly seen if we recall another crucial text of Agamben, in which he wrote that, “One concept that escapes the antinomy of the universal and the particular has long been familiar to us: the example”. [G. Agamben 1993; 9].

Therefore, structural asymmetry and tension between *auctoritas* and *potestas* is clear. Senate possessed *auctoritas*, or something, which can be associated with virtue. By having at the disposal this status, one could without any impediment temporally suspend the functioning of legal power (*potestas*). As Theodor Mommsen described it, *auctoritas* is “less than an order and more than a counsel”. [G. Agamben 2005: 78].

However, this binary opposition is conflated in the figure of the sovereign, who creates the state of exception and cancels the deliberative and obligatory force of law. By declaring the state of exception, sovereign represents the zone of indifference, in which *auctoritas* and *potestas* are intertwined.

In this context we should introduce the concept of “*homo sacer*”, which was the obscure figure of archaic Roman law and was actualized and reinvented by Giorgio Agamben, according to whom, *homo sacer* was banned and excluded from the legal system, therefore his very existence have been reduced to bare life⁶³. *Homo sacer* could be killed without punishment and his involvement in sacrificial rituals was also prohibited. This form of life is characterized as an absence of legal system and specific rights of human. However as Agamben stated, by exclusion from legal order, *homo sacer* is included in it. It is something like exclusive inclusion through which sovereign maintains the connection or control over him. Agamben cited the words of Pompeus Festus according to which “The sacred man is the one whom the people have judged on account of a crime. It is not permitted to sacrifice this man, yet he who kills him will not be condemned for homicide; in the first tribunitian law, in fact, it is noted that “if someone kills the one who is sacred according to the plebiscite, it will not be considered homicide.” This is why it is customary for a bad or impure man to be called

⁶² “Die Ausnahme ist interessanter als der Normalfall. Das Normale beweist nichts, die Ausnahme beweist alles.”

⁶³ Bare life is crucial concept for Agamben, which corresponds to Greek term of “*Zoe*” or common life for all in general and not to “*bios*” which means politically qualified life of human being. Agamben himself took the term from Walter Benjamin’s essay on violence.

sacred.“ [G. Agamben 1998: 47]. Homo sacer was a biopolitical body, whose life after excommunication was thrown into the state of exception, or in the dimension of indifference. Symbolic bodies of homo sacer and the sovereign structurally and functionally are very similar, if not identical at all. The figure of the sovereign is a substance representing the ultimate point of indifference. In its symbolical embodiment difference between legal power (potestas) and authority (auctoritas) disappears. As Agamben demonstrates it by recalling the case of Augustus⁶⁴, who shared the power with other magistrates, but at the same time exceeded them due to the possession of auctoritas⁶⁵. The bare life of homo sacer and the sovereign is paradoxically tied together. For the sovereign all human beings potentially are homo sacers and vice versa, for the later, all other humans are potential sovereigns, which can decide on their life and death. However, despite this analogue the question concerning the essence of authority remains unanswered and open for further interrogation and exploration. Therefore one should pose another problematic aspect about paradoxical similarity of these figures. If sovereign represents no difference between authority (auctoritas) and power (potestas), how potential enemies of homo sacer have to be treated and defined. Do they have at their disposal legal power as well as authority? The answer is negative due to the fact that it is very complicated to check and verify on whom we are speaking, who wants to harm or kill the homo sacer? Is he a person from acknowledged legal or social system or he is also an inhabitant of the space of indifference, of bare life, of the state of exception? Only after knowing this, one could guess, this potential sovereign for homo sacer has potestas or auctoritas, or has only bare need and desire of violence.

Conclusion

Giorgio Agamben's diagnosis of modern political life is extremely radical, however it can be said that his reflections serves for unmasking and deciphering hidden foundations of modern political power. He claimed that we live under the undeclared but constant state of exception, which he is considering as ruling paradigm and as a new nomos of political life. Giorgio Agamben's critique of modernity stands very close to Arendt's own description of its crisis. Arendt's thesis concerning the disappearance of authority from modern world is linked to her another theoretical intuition, that the modern world is characterized by the "rise of the social" and declining of political sphere. From this perspective we can conclude that the

⁶⁴ It can be clearly seen that Augustus and auctoritas, both are derived from same etymological root, "augere"

⁶⁵ See on this Agamben G. State of Exception. Chicago. The University of Chicago Press. 2005.

core idea of authority is possible and feasible only in the public political realm of intersubjective discursive practices. It would be clearer if we recall the distinction between household and public life in polis in which in contrast to former, freedom can be attained by the citizens. Giorgio Agamben did not suggest his own view on current position of authority. However, relying on his theoretical reflections, it will be legitimate to suppose that he shares Arendt's theory. In conclusion one remark should be made, that we are facing not a destruction but deconstruction of authority, which is reinvented and transformed again and again without completion.

References:

- Agamben, Giorgio. *Homo Sacer: Sovereign Power and Bare Life*. Stanford California. Stanford University Press. 1998.
- Agamben Giorgio. *State of Exception*. Chicago. The University of Chicago Press. 2005.
- Agamben Giorgio. *The coming community*. University Of Minnesota Press. 1993.
- Arendt Hannah. *The Portable Hannah Arendt*. New York. PENGUIN BOOKS. 2000.
- Bauman Zygmunt, *Globalization: The Human Consequences*. Columbia University Press, 1998.
- Schmitt Carl. *Politische Theologie: Vier kapitel zur Lehre von der Souveränität*. Berlin. Duncker & Humblot. 2009.

Dictatorship and Theory (Varlam Cherkezishvili's Critic of Social-Democratic Movement)

Mikheil Gogatishvili, Professor
Grigol Robakidze University, Tbilisi, Georgia

Abstract

The central question on which Varlam Cherkezishvili focuses attention is authoritarian character philosophy of Marx and Engels. This theory in the name of emancipation of person creates most radical totalitarian theory. Varlam Cherkezishvili is one of the founder of the methodological anarchism. The methodological anarchism directed against totalitarian presumptions Marxist ideology. Later anarchist thinkers such as Paul Feyerabend (epistemological anarchism) and Murray Bookchin (social anarchism) based their thoughts on the principles methodological of anarchism.

Keywords: Anarchism, Theory, Dictatorship, Emancipation, Freedom

Introduction

Prince Varlam Cherkezishvili legendary person (1846–1925). He was a Georgian politician and journalist, involved in anarchist communist movement, and later in the Georgian national liberation movement. He was also known as Warlaam Tcherkesoff or Varlam Cherkezov in Russian manner.

He was born into the family of the Georgian Prince Aslan Cherkezishvili in Tbilisi, Georgia (then part of Imperial Russia). He was sent to be educated in Russia in the 1850s. He joined the Russian socialist movement at its very beginnings, and was arrested twice between 1866 and 1869. Following a trial in the summer of 1871, he was imprisoned at the Peter and Paul Fortress, and then exiled in Tomsk in 1874. Two years later, he escaped to Western Europe, where he worked with the press in the circles of Russian emigration and fellow anarchists. He was also prominent in his criticism of Marxist ideas. His main work, Pages of Social History, was translated into nine languages. Actively involved in the Georgian national liberation movement, he helped to found the Georgian Socialist-Federalist

Party. He wrote for the Times a series of articles in 1877 to bring to the attention of an English speaking audience the situation in Georgia.

He returned to Tiflis, Georgia, with the break-up of the Russian Revolution of 1905, but its failure and the repression in Georgia compelled Cherkezishvili to return to Europe (1907). With Kropotkin, Rudolf Rocker and Alexander Schapiro he participated in the foundation of the Anarchist Red Cross. Back in London, he rallied Kropotkin's position in defense of the Allies in World War I, and signed in 1916 the so-called Manifesto of the Sixteen. With the October Revolution of 1917 he returned to Petrograd, and when Georgia obtained its independence in May 1918, he obtained a seat in the Constituent Assembly of the Democratic Republic of Georgia. The Soviet occupation forced him into exile in March 1921. He returned to London where he would continue to fight again for Georgia's independence, until his death in 1925.

The well-known work of Varlam Cherkezishvili *-Pages or Socialist History .Teaching and Acts of Social Democracy* - was published in 1896 in Russian language and 1902 in English language. The main thesis of this work has been criticism of the dictatorial position of Marx and Engels theory. The above mentioned work is considered a classic of anarchist thought. Nowadays, a modern anarchist pays great attention to hereditary Varlam Cherkezishvili (W. Tcherkesoff).

Varlam Crekezishvili together with Kropotkin and Bakunin is one of important person in anarchistic movement. We can say that he is one of the founders of methodological anarchism. In this context anarchism don't means apology of chaos. In contrary, it means emancipation and defense of person's autonomy and its freedom in the civil space. Varlam Cherkezishvili criticizes Marx and Engels according the principles of social and methodological anarchism. Especially, this criticism concerns to social analysis as it understood by Marx and Engels. Cherkezishvili on the basis of factual material shows that prophecy of Marx was not held. One of the major theses of Marx that by overgrowth capitalization of society capitalism will become more predatory - factually not held⁶⁶. On the contrary, Cherkezishvili mentions that in the footsteps of technological development of society will increase the demand for skilled workers. So this means that the growth of skilled workers will not result their proletarianization, but increasing their participation in the process of capitalization. Varlam Cherkezishvili on the basis of factual material shows how changes the social class of European society. We can say that, for the first time Varlam Cherkezishvili focuses on technology, its liberating role in the development

⁶⁶ W.Tcherkesoff . Pages or Socialist History .Teaching and Acts of Social Democracy. Cooper. New York 1902 pp.27-28.

of society. Varlam Cherkezishvili together with Pierre-Joseph Proudhon and Kropotkin thinks, even Marxian Surplus value⁶⁷ theory was not held. This theory suggested capital accumulation in one center (especially in industrial cities) and not its division in other areas. He shows how distributes capital in all level society and arise middle class.⁶⁸ From this argument follows the idea of Cherkezishvili according to which the society is a step by step goes towards decentralization of capital and the deployment of society. Also from this follows, anarchistic thesis, as much as possible must be destroyed parasitic creature of society – power; the power must be annihilated and transit in to small groups of society. For the emancipation person to economic decentralization should follow the federalization of The Society.

The central question on which Cherkezishvili focuses attention is authoritarian character philosophy of Marx and Engels. This theory in the name of emancipation of person creates most radical totalitarian theory. According to Cherkezishvili, metaphysical character of Marx-Engels theory implied in itself peril to convert in absolute power. The main reason for this confusion was wrong scientific methodology: “The so-called science of those who aspire to universal dictatorship”⁶⁹. Marx and Engels, instead of the inductive method of research they base their investigation on the metaphysical method, which makes the authoritarian nature of the theory. These methods of economic analysis, which develops Engels actually rejects the new economic realities. This theory from metaphysical precondition of the fetishes economic relations makes conclusion on reality.⁷⁰ Thus, in accordance with Cherkezishvili, social-democratic movement, which was based on the teachings of Marx and Engels, they drew all his forces to seize the state. For this reason this so called social-democratic movement became part of hierarchical system, centralization, oppression and violence. Addition to this for Marxian is characterized venerate of economy and replacement ethical revolutionary movement with economic reformism. “For this reason, all its efforts appealed to obtain power through parliamentary election.”⁷¹ in the social democratic movement is not self-organization of people take first place, but state reforms, the struggle against the power replaced by the struggle for power, the ethical evaluation of the circumstances changed by quietism, fatalism and doctrinaire. Therefore, accordance to Cherkezishvili, "concentration of capital and class struggle is the basis tactics and ethics for

⁶⁷ This theory Cherkezishvili considered as plagiarism

⁶⁸ *ibid.* 24-25

⁶⁹ ⁶⁹ W.Tcherkesoff . Pages or Socialist History .Teaching and Acts of Social Democracy. Cooper. New York 1902 pp. 22

⁷⁰ *ibid.* 45

⁷¹ Cherkezov Varlam .The Forerunner of International. Doctrine of Marxism. Russian edition. Moscow, 1919, pp. 188-189.

Marxists. This position give them muslim-fatalistic belief that capitalists will be exterminated by each other⁷². Accordance to Cherkezishvili, apology of industrialism, the worship of the development of productive forces and the belief that by the use of force is possible to realize socialism led Marxists to authoritarianism, fatalism and inhumanity. Apology of the industrialism and state necessarily puts on the first place the urban lifestyle and subordinate to them the agricultural lifestyle. Such circumstances necessary will be led Marxists, on one side, to the idea industrialization of agricultural lifestyle and struggle against peasants and on the other side, to seize power by peaceful methods and to the practice of state slavery, casern and oppression. This prophecy was made in 1870th by Bakunin⁷³, but by Cherkezishvili in detail has been proved and developed this idea. Cherkezishvili notes that "the Marxists in the concentration of capital brought fatalism and prophecy, and instead of freedom, brotherhood and autonomy - they developed the idea of human obedience, discipline, all-embracing and powerful Hegelian state."⁷⁴

How ironic it was not, Ioseb Jughashvili (Stalin) was this person who recognized strength of arguments Cherkezishvili and attempted abolish arguments. How ironic it was not, Ioseb Jughashvili (Stalin) was this person who recognized strength of arguments Cherkezishvili and attempted abolish arguments. In 1906 in Tbilisi he published his work "Anarchism or socialism". But at the beginning of his work he made mistakes, through which justified the assumption Cherkezishvili. In accordance Dzhugashvili (Stalin) :: "Marxism and anarchism is built on different principles although both came to the battlefield with the flag of socialism, the cornerstone of anarchism is the person, whose emancipation is the main condition for the liberation of the masses. According to anarchism, emancipation of mass impossible without emancipation person. For this reason its major slogan is "all for person". In accordance of Marxism, emancipation of person impossible without emancipation mass. For this reason its major slogan is "all for mass". That is the metaphysical assumption of the totality troubled Cherkezishvili which annihilates any personal."⁷⁵

Conclusion

Thus Varlam Cherkezishvili is one of the founder of the methodological anarchism. The methodological anarchism directed against

⁷² *ibid.* 170.

⁷³ See. Bakunin Mikhail. Statehood and Anarchy. Russian edition. Moscow, 1989.

⁷⁴ Cherkezov Varlam .The Forerunner of International. Doctrine of Marxism. Russian edition. Moscow, 1919 pp. 118.

⁷⁵ Jughashvili Ioseb (Stalin). Anarchism or Socialism. Tbilisi 1951. Georgian edition. Tbilisi, 1951.

totalitarian presumptions Marxist ideology. Later anarchist thinkers such as Paul Feyerabend (epistemological anarchism) and Murray Bookchin (social anarchism) based their thoughts on the principles methodological of anarchism. This two kinds anarchism has one background. Political anarchism tries to abolish authoritarian principles of social arrangement and epistemological anarchism authoritarian way of thinking. The doctrine of epistemological anarchism is starting from the view that a universal scientific method does not exist, Feyerabend goes on to argue that science therefore does not deserve its privileged status in western society. Since scientific points of view do not arise from using a universal method which guarantees high-quality conclusions, there is no justification for valuing scientific claims over claims by other ideologies like religion. In Feyerabend's view, science can be a repressing ideology in society instead of a liberating movement; he thought that a pluralistic society should be protected from being influenced too much by science, just as it is protected from other ideologies.⁷⁶

References:

- Tcherkesoff Warlam. Pages or Socialist History .Teaching and Acts of Social Democracy. Cooper. New York,1902.
- Cherkezov Varlam. The Forerunner of International. Doctrine of Marxism. Russian edition. Moscow, 1919.
- Bakunin Mikhail. Statehood and Anarchy. Russian edition. Moscow, 1989.
- Jughashvili Ioseb (Stalin). Anarchism or Socialism. Tbilisi 1951.Georgian edition. Tbilisi, 1951.
- Feyerabend. Paul *Against method*. First published London: New Left Books, 1975. 3rd Edition published. Verso, 1993.

⁷⁶ Paul Feyerabend. *Against method*. First published London : New Left Books, 1975. 3rd Edition published . Verso 1993.

ANALYSIS OF EMPLOYMENT AND UNEMPLOYMENT IN MUNICIPALITIES OF GEORGIA

(Target municipalities: Lentekhi, Oni, Ambrolauri, Tskaltubo, Samtredia, Tsageri)⁷⁷

Murtaz Kvirkvaia, Professor

Grigol Robakidze University, Tbilisi, Georgia

Abstract

The article includes detailed employment and unemployment analysis in each municipality. In the analysis we use results from household survey conducted by the National Statistics Service. More specific information about the labour market at the municipal level was collected through cooperation with local municipalities. For the analysis we used information from municipalities' web pages, telephone conversations with stakeholders, personal meetings with experts and so on. It should also be noted that a certain part of the data obtained from municipalities and from administrative territorial units have an approximate nature, but based on these information it is possible to gain some valuable conclusions and make assumptions. Terms and reality of employment analysis is carried out not only at the level of the municipality but on the country and regional ones as well.

Keywords: Labor market; Unemployment; Employment analysis; local municipalities; Economically Active population; Self-employed; Integrated household survey

Introduction

The target municipalities (Lentekhi, Oni, Ambrolauri, Tskaltubo, Samtredia, Tsageri) are located in specific regions of Georgia. For example, a municipality of Samtredia and Tskaltubo are in Imereti region, and the other four target municipalities are in Racha-Lechkhumi and Kvemo Svaneti region. For the evaluation of the general situation we consider the labor statistics on the country and regional level. Originally a brief analysis of the

⁷⁷ This analysis was done under the UNDP/AF project. Project Title: Developing Climate Resilient Flood and Flash Flood Management Practices to Protect Vulnerable Communities of Georgia. The targeted municipalities under the project were: Lentekhi, Oni, Ambrolauri, Tskaltubo, Samtredia, Tsageri.

labour statistics of the country level and then of the regional level was accomplished.

Unemployment and employment in the country and regional levels

Table 1 depicts the structure of the economically active population, 2005-2013. According to the data of National Statistics Office of Georgia, in 2013 the number of economically active population⁷⁸ consisted of 2029.1 thousand people. Among them, 1712.1 thousand was employed and 291.8 thousand was unemployed. In 2005-2007 the level of unemployment in Georgia was decreased whilst in 2008-2009 it increased considerably (over 3%); in 2010-2013 there was a tendency of a certain minor decline. The number of economically active population in Georgia is a rather variable index. That is why the unemployment decline in percentage might not imply the decrease of the number in absolute data. For example, in 2012 the unemployment level reduced by 0.1%, but the number of unemployed went up to 10.0 thousand people.

Table 1 Employment and Unemployment in Georgia (2005-2013)⁷⁹

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Active population (labor force), thousand persons	2023.9	2021.8	1965.3	1917.8	1991.8	1944.9	1959.3	2029.1	2003.9
Employed thousand persons	1744.6	1747.3	1704.3	1601.9	1656.1	1628.1	1664.2	1724.0	1712.1
Unemployed, thousand persons	279.3	274.5	261.0	315.8	335.6	316.9	295.1	305.1	291.8
Unemployment rate, percentage	13.8	13.6	13.3	16.5	16.9	16.3	15.1	15.0	14.6
Active population (labor force), thousand persons	2023.9	2021.8	1965.3	1917.8	1991.8	1944.9	1959.3	2029.1	2003.9

In the period under review (2005-2013) the highest level of unemployment (16.9%) was noticed in 2009 followed by lower unemployment index in 2008 presumably owing to the military conflict between Russian Federation and Georgia. Experts' opinion claims the

⁷⁸ **Economically Active** – is a person at the age of 15 or above who works or offers his/her labor for production of the services or products, that fall within the frame of domestic product as determined in the national accounts system of United Nations (UN).

⁷⁹ <http://www.geostat.ge/>

number of unemployed people is much more than what official statistics indicates. The low incomes of the majority of population considered to be employed serve to prove this since the employed population is not provided by normal social conditions.

Table 2

Distribution of population age of 15 and older by economic status and regions. 2013 Thousand persons									
	Kakheti	Tbilisi	Shida Kartli	Kvemo Kartli	Adjara A/R	Samegrelo and Zemo Svaneti	Imereti*	The remaining regions:**	Georgia
Active population (labour force), total	196,4	444,7	152,8	194,6	190,7	216,0	387,7	220,9	2003,9
Employed	183,9	315,3	137,8	179,1	156,1	181,9	351,7	206,1	1712,1
Hired	47,2	247,5	35,5	59,5	64,7	50,4	103,9	49,5	658,2
Self-employed	136,6	67,5	102,0	119,4	91,4	128,3	242,4	156,2	1043,8
Not-identified worker	0,1	0,4	0,3	0,2	0,0	3,3	5,3	0,4	10,0
Unemployed	12,5	129,3	15,0	15,5	34,6	34,1	36,1	14,8	291,8
Population outside labor force	73,4	358,9	58,6	104,9	84,2	91,5	167,0	83,8	1022,3
Unemployment rate (percentage)	6,4	29,1	9,8	8,0	18,1	15,8	9,3	6,7	14,6
Employment rate (percentage)	68,2	39,2	65,2	59,8	56,8	59,1	63,4	67,7	56,6
Source: National Statistic Office of Georgia.									
*Include Racha-Lechkhumi and Kvemo-Svaneti. ** Samtskhe-Javakheti, Guria, Mtskheta-Mtianeti									

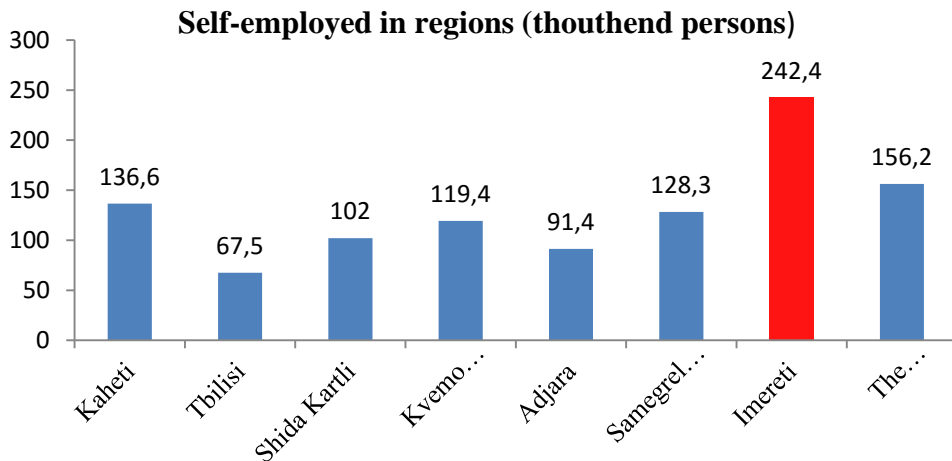
Sorting of the population over 15 years old of age according to their economic status and regions (Table 2) provides us with an interesting picture. In 2013 year, 22.2 % of economically active population was accumulated in the Georgian capital and 19.3 % was accumulated in Imereti⁸⁰ region which is obviously a rather big indexes pointing to the fact that within the country scales economically active population is not redistributed equally. The table displays the highest unemployment index in Tbilisi (127.3 thousand people) approximately 29.1% which is 44.3% out of the existing unemployment data of the year 2013 according to the official statistics. The lowest unemployment index would come on Kakheti region (13.1 thousand people) 6.5% which is 4.3% of the total unemployment.

⁸⁰ Include Racha-Lechkhumi and Kvemo-Svaneti

Table 2 analysis conveys the lowest indicator of employment is in Tbilisi (39.2%) and the highest one is in the regions of Kakheti and Imereti.

The category of the population having a status of hired⁸¹ and self-employed⁸² is of interest and consideration. In 2013 out of the total employed 1712.1 thousand people, 658,2 thousand were hired by employers (38.4% in total) and 1043,8 thousand are self-employed which is 61.0% of total number of employed people. Additionally, the majority of hired (37.6%) is in Tbilisi and an absolute majority of self-employed (93.5%) is in regions, basically in agriculture and farming. For example in target region Imereti (Include the second target region Racha-Lechkhumi and Kvemo-Svaneti) 242.4 thousand people were self-employed, which is 23.2% of the total self-employed population of the country. In the Imereti region we observed the highest rate of self-employment among the other regions. (See figure 1).

Figure 1



Based on the fact that the vast majority of cases are associated with very low payments of self-employed persons in agriculture, it should be assumed that, in the Imereti region and also in other regions a very important part of the self-employed population is not actually employed and the majority of them are looking for work.

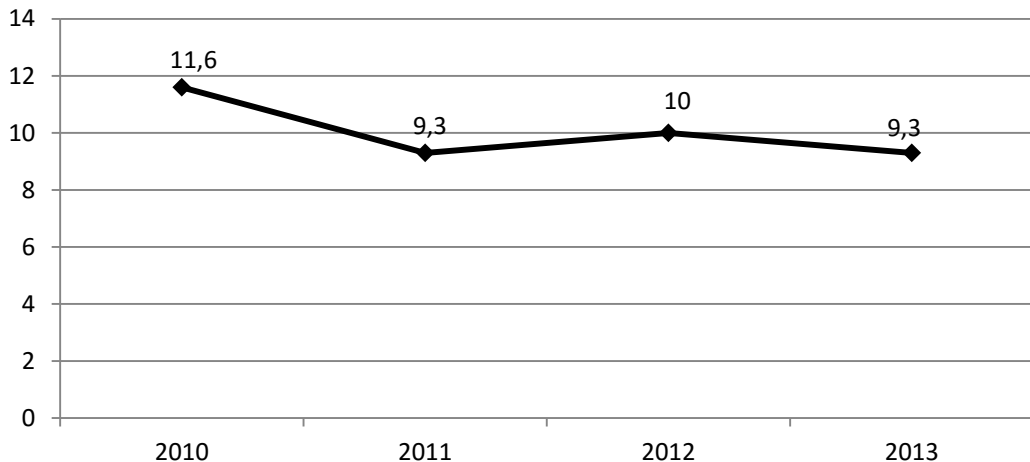
⁸¹ **Hired** – is a person at the age of 15 or above who performed certain type of work during the accounting period in order to generate income or other compensation in cash or in kind. Also, a person who has a job but is temporarily released from the job due to leave, sickness, temporary suspension of working process of the employer, temporary suspension of labor activities of the employee or other similar reasons

⁸² **Self-employed** – an owner of personal enterprise during the accounting period, in order to generate profit or family income (cash or in kind) or a person working for free in family enterprise/holding.

Since the majority of the economically active population is included in the composition of self-employed category, the percentage of unemployment in the Imereti (Include the second target region Racha-Lechkhumi and Kvemo-Svaneti) region is one of the lowest compared to other regions (see figure 2).

Figure 2

**Unemployment rate in Imereti Region
(percentage) 2010-2013**



As it can be seen, in recent years in Imereti, Racha Lechkhumi and Kvemo Svaneti the rates of unemployment ranges between 9-10 percent. The unemployment rate is not expected to be unrealistic. The official unemployment statistics are unlikely because of too large number of population outside the labor force. For example, in 2013 in Imereti, Racha Lechkhumi and Kvemo Svaneti the number of population outside of labor force was 167.0 thousand people, which is about half of the economically active population in these regions. We must assume that a significant portion of the population outside of the labor force is unemployed, but, the research methodology which are used by the National Statistics Service does not consider them as the unemployed category.

Based on the analysis of labor market in the regions it can be concluded, that Imereti (Including the second target region of Racha-Lechkhumi and Kvemo-Svaneti) according to the employment situation is one of the problematic regions of the country. Real unemployment figure is likely to be much higher than official statistics show. In our opinion, an important part of the self-employed because of their low incomes should not be accounted in the employed category of population. Also, a significant part of the population outside the labor force actually are unemployed. If we take into account these factors, the unemployment rate will be much higher than

official statistics display. This opinions are confirmed in the analysis of employment and unemployment in the target municipalities.

Unemployment and employment in targeted municipalities

Detailed analysis of the employment and unemployment situation is critical for the economic development at the local level and for solving local economic and social problems. But, there is no official statistical information necessary for the analysis on the municipal level. We tried to obtain information from representatives of targeted municipalities. For this purpose, we developed a special questionnaire from where it was possible to obtain some information about the state of employment and unemployment. In addition, through the use of various means of communication and in the meetings with representatives of the municipality we tried to adopt a real precise data for analysis. It should also be noted that due to the unavailability of accurate data in the analysis we used approximate numbers and expert evaluations (represented below), but the results of analysis generally show the real situation in the target municipalities.

The number of population and economic activity of population in the target municipalities have significant meanings for the detailed analysis of employment and unemployment situation (see table 3).

Table 3 Economic activity in the target municipalities

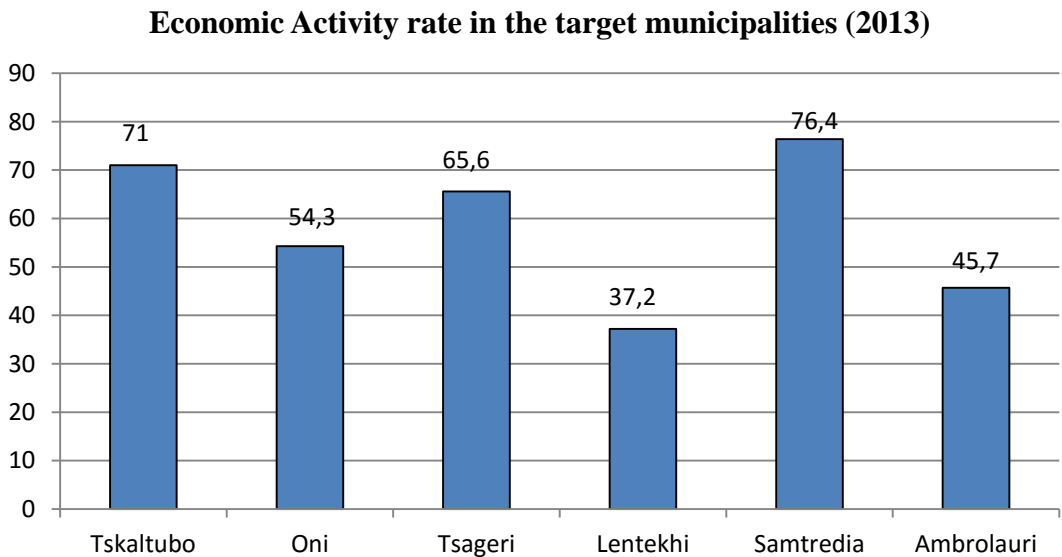
	Tskaltubo		Oni		Tsageri		Lentekhi		Samtredia		Ambrolauri	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Number of population (Thousand persons)	-	70,716	-	7,723	-	14,343	-	8,476	-	60,258	14,030	-
Economically Active population (labour force), (Thousand persons)	49,049	50,145	4,034	4,197	10,219	9412	3,149	3,149	45797	46,045	6422	-
Economically Active population (labour force), (percentage)	-	71,0	-	54,3	-	65,6	-	37,2	-	76,4	45,7	-

The most number of the people among the targeted municipalities live in Tskaltubo. (70,716 thousand persons) and in Samtredia Municipality

(60,258 thousand persons). The smallest number of population lives in the Oni municipality (7,723 thousand persons) and in Lentekhi Municipality (8,476 thousand persons). Targeted municipalities differ significantly according to economic activity of population (see figure 3).

According to the data obtained from the municipalities, the more economic active population lives in Samtredia, Lentekhi and Tskaltubo municipalities. The smallest economic activity compared to the other target municipality is in Ambrolauri⁸³. In Oni municipality we observed a relatively low level of economic activity of population. The difference between the two extreme values of economic activities (Samtredia and Ambrolauri) is more than 20 percent. It can be caused by several factors: Municipalities' difference in geographical location and natural climate conditions; or inaccurate information about the economic activities of population in municipalities.

Figure 3



Interesting data for analysis is the distribution of the economically active population by economic status in the target municipalities (see table 4).

⁸³ The data of economic activity in Ambrolauri Municipality is used for 2012. We must assume that in 2013, economic activity has not changed significantly.

Table 4 Distribution of the economically active population by economic status (2012-2013)

	Hired thousand persons		Self-employed thousand persons		Unemployed thousand persons	
	2012	2013	2012	2013	2012	2013
Tskaltubo	3,547	3,515	18,528	18,528	26,974	28,102
Oni	0,985	0,792	2,081	1,048	0,968	2,357
Tsageri	1,782	1,678	5,879	4,931	2,558	2,803
Lentekhi	0,814	0,814	0,170	0,170	2,165	2,165
Samtredia	3,752	3,247	20,455	20,958	21,590	21,840
Ambrolauri	1,301	-	3,618	-	1,503	-

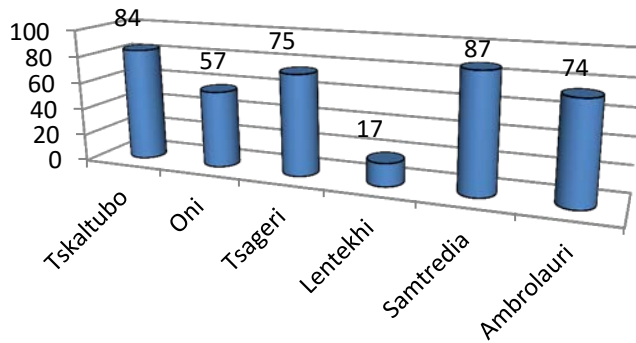
The data in the table 4 shows that in the majority of the targeted municipalities in 2013 compared to 2012, according to economic status, there are no significant changes in the distribution of population. The exception is the Oni municipality, where the number of the employees is significantly reduced, while the number of unemployed persons increased by almost the same amount. Considering the fact that in the Oni municipality substantial economic changes did not take place, we have to assume that a significant difference between the 2012 and 2013 data is due to the determination of categories of employed and unemployed (Supposedly the different approaches⁸⁴ are used).

Common characteristic for all the municipalities is that the majority of employees are self-employed, while the share of hired is small (see figure 4). For example, in the Samtredia municipality only 13 percent of employees are hired, while 87 percent are self-employed. A similar situation is in Tskaltubo, where only 16 percent are hired workers, while 84 percent are self-employed. High rates of self-employment are also in Tskaltubo and Ambrolauri municipalities. The analysis of the employment situation reveals another important specification. Namely, in the small amount of hired category of employees, the number of hired by private sector is very small, it indicates a very low level of private sector development in targeted municipalities. It should be noted that the private sector must play a decisive role in solving the problem of employment in the targeted municipalities and thus in any project special attention should be paid to the implementation of private sector development opportunities.

⁸⁴ There is no special methodology for estimation of employment and unemployment in the municipalities. The data is based on expert estimations.

Figure 4

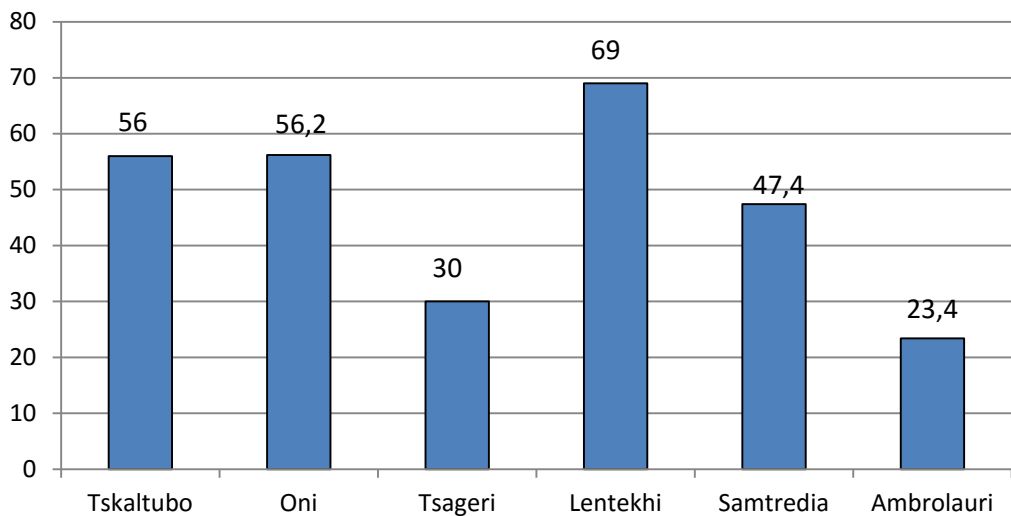
**Share of self-employed population in total number of employees
(percentage)**



According to the share of self-employed in the total number of employees, the only exception is Lentekhi municipality, where the self-employed comprise only of 17 percent of the total number of employees in 2013. The reason for this difference is again in the definition of employment and unemployment. Apparently, quite obviously, in Lentekhi municipality an important part of self-employed population is considered as unemployed and the unemployment rate in this municipality is different. Lentekhi unemployment rate is the highest among the target municipalities and amounts 69 percent (see figure 5).

Figure 5

Unemployment rate (percentage)



The data analysis shows that the lowest unemployment rates among target municipalities were observed in the Ambrolauri municipality - 23.4 percent and in the Tsageri municipality - 30 percent. The unemployment rate is much higher in the rest of the target municipalities. It can be said that, in all the municipalities the unemployment rate is much higher than in official statistics and the unemployment rate is several times higher than the entire country. For example, if we assume that the average level of unemployment in Georgia is 15 percent, then the figure 5 shows that the unemployment rate is 4.6 times higher in Lentekhi than in entire Georgia. A big difference is between the unemployment rates across the country and in Tskaltubo, Samtredia and in the Oni municipalities where the unemployment rate is almost 4 times higher than the average level of unemployment in Georgia. The difference between the levels of unemployment is even higher if we compare the regional and municipal level unemployment figures. For instance, in Lentekhi, Tskaltubo, Oni and in Samtredia unemployment rate is 6 times and more higher than the rate of unemployment in the Imereti region (an average of 10 percent). Such a significant differences in unemployment rate (country, region and municipality) level confirms that it is necessary to separate municipality level of labor statistics.

Conclusion and Recommendations

Based on the employment situation analysis the following recommendations and conclusions can be stated:

➤ Integrated household survey of the National Statistics Service does not provide statistics on the labor force at the municipal level. Why the National Statistics Office does not publish data of the workforce on the municipal level is the separate matter. However, it can be assumed that the number of surveyed households are not enough for complete information on the municipal level;

➤ Since the official statistical data about municipalities is not available, the approximate numbers of employment and expert evaluations are used in the analysis. Despite this the current real situation in the target municipalities are reflected in the analysis;

➤ Based on the analysis of labor market in the regions we can conclude, that Imereti (Including the second target region of Racha-Lechkhumi and Kvemo-Svaneti) according to the employment situation is one of the problematic regions of the country. Real unemployment figure is likely to be much higher than official statistics show. In our opinion, an important part of the self-employed because of their low incomes should not be accounted in the employed category of population. Also, a significant part of the population outside the labor force actually are unemployed. If we take

into account these factors, the unemployment rate will be much higher than official statistics convey;

➤ According to the data obtained from the municipalities, the more economic active population lives in Samtredia, Lentekhi and Tskaltubo municipalities. The smallest economic activity compared to the other target municipality is in Ambrolauri. In Oni municipality the level of economic activity of population is also relatively low;

➤ In all the municipalities the unemployment rate is much higher than the in official statistics and the unemployment rate is several times higher than in the entire country. Such significant differences in unemployment rates (country, region and municipality) level confirms that it is necessary to separate municipality level of labor statistics.

➤ Common characteristic for all the municipalities is that the majority of employees are self-employed, while the share of hired is small;

➤ In the analysis of the employment situation another important specification emerges, namely, in the small amount of hired category of employees, the number of hired by private sector is very small. It indicates a very low level of private sector development in targeted municipalities.

➤ It should be noted that the private sector must play a decisive role in solving the problem of employment in the targeted municipalities and thus in any project special attention should be paid to the implementation of private sector development opportunities;

➤ Creation of the mechanism for obtaining information about labor force in the administrative and territorial units is urgent. This should be carried out by the National Statistics Office or local municipalities, or may be implemented as a result of their coordinated activities;

➤ For the complex socio-economic analysis, in addition to the employment study in the municipalities, the following activities should be carried out: the household income analysis; skills and professional analysis of employed and unemployed population; education level analysis; training needs analysis, etc.

References:

Chakrabarti Saumya. A Comparative Study of some of the Employment Guarantee Schemes across the Developing Countries. UGC SAP (DRS-I). Department of Economics and Politics. Working Paper Series: No. 2. 2012-2013.

Aleksynska Mariya. Deregulating labour markets: How robust is the analysis of recent IMF working papers? International Labour Office, Geneva. Copyright © International Labour Organization 2014.

McConnell C.R., Brue S.L., Flynn S.M. Microeconomics. Principles, Problems, and policies. McGraw-Hill. Irwin. 2009.

- Zimmermann Laura. Why Guarantee Employment? Evidence from a Large Indian Public-Works Program. University of Michigan. October 2013.
- McPherson, M. and Ignatowski C., Workforce Assessment in Georgia (draft), USAID, Bureau for Economic Growth, Agriculture and Trade, EGAT/Education, 28 March 2007.
- Mathis R.L., Jackson J.H., Hunan Resource Management. Thirteenth edition. 2012.
- McCord A. The Anatomy of Public Works: An exploration of the social protection function of public works programmes in contexts of chronic poverty. Cape Town: University of Cape Town. 2009.
- Timm C., Economic Regulation and State Interventions. Georgia's Move from Neoliberalism to State Managed Capitalism. PFH Private Hochschule Gottingen. Research Papers. #.2013/03.
- Devereux Stephen and Solomon Colette. Employment creation programmes: The international experience. Issues in Employment and Poverty Discussion Paper 24. Economic and Labour Market Analysis Department, International Labour Office, Geneva. August 2006.
- Document of the World Bank. Georgia Skills Mismatch and Unemployment Labor Market Challenges. Report No. 72824- GE. March 2013.
- MED (Ministry of Economic Development) Department for Statistics, Unemployment rate declined in Georgia in 2007, Tbilisi, 2 July 2008.
- IOM (International Organization for Migration). A survey on employer demand for workforce in Georgia, Geneva, July 2007.
- Labor Market in Georgia. The US Agency for International Development (USAID). International Organization for Migration (IOM). Report on June-July 2010 Survey.
- Overseas Development Institute. Systematic Review Summary. The impact of employment guarantee schemes and cash transfers on the poor. June 2011.
- GTZ. Matching Vocational Education in Georgia with Labour Market Needs, Tbilisi, 2010.
- USAID and IOM. Supplying Workforce to the Georgian Labor Market, Tbilisi, 2011.
- <http://www.geostat.ge/>
- <http://www.moh.gov.ge/>
- <http://www.mrdi.gov.ge>
- <http://moe.gov.ge/>
- <http://www.economy.ge/>
- <http://ambrolauri.ge/>

HOW TO ARCHITECT THE RURAL REGIONS INTO SMART SOCIETY

Munadil Khaleel Faaeq Al-Sammarraie

Department of Banking and Financial Science, College of Administrative and
Financial Sciences, Cihan University Erbil, Iraq

Alaa K. Faieq

Baghdad College of Economic Sciences University, Baghdad, Iraq

Sinan A. Harjan

Department of Banking and Financial Science, College of Administrative and
Financial Sciences, Cihan University Erbil, Iraq

Mohammad Maher Rasheed

Scientific Info and Tech Transfer Centre, Ministry of Science and Technology

Abstract

This research explains semantic publishing of information technology awareness in rural areas among electronic government readiness in Republic of Iraq. However, this paper will attempt at reviewing the literature that pertain to this topic in general. At the same time an attempt at reviewing three countries models in India, Brazil, and Taiwan will be made. This is so because, these countries are trying to develop and enhance Electronic Government (EG) project through a publish information system in rural areas of their various countries. This study explains and attempt at proposing a new project in Iraq. The proposal is towards publishing Information Technology (IT) over all governorates in the whole of Iraq. Its main objective is to publish IT in Iraq as a whole. Finally, it aims at decreasing the challenges and issues in different countries with regard to the aforementioned topic. This study will also benefits Iraq by getting to share experiences from other countries. The experiences acquired will help in overcoming the anticipated problems or barriers that may be encountered in the process of applying IT kiosks project in Iraq or any country. At present most developing countries around the world are not using IT kiosk in most of the rural areas, therefore this study is timely.

Keywords: Information Technology (IT), Semantic, Electronic Government (EG), IT kiosks, and Electronic Service (E-S)

Introduction

Information Technology kiosk mean a small physical structure (often including a computer and a display screen) that displays information for people walking by. Kiosks are commonly place near the entrances of shopping malls in North America where they provide shoppers with directions. Kiosks are also used at trade shows and professional conferences [20].

Anyway, There are many studies that studied information kiosks or internet kiosks [15][16][17]. In 2001 there is a study that explained the development of EG project and it was identified as one of the ways of improving the growth of electronic service at public sector in more than 185 nations around the world [8]. Most developing nations were getting rears sets at the global EG ranking. The reason of that status is because those nations were providing very limited services to their citizens. Currently, some of these nations work towards supporting their Electronic Services (E-Services) and standing at information technology and government infrastructure to create or increase their E-Services activity to the citizens any time anywhere. EG project is a giant project which need to have many requirements as IT, financial, and management support to reach at the probably position. One side of it is to satisfy the citizen through E-Service and electronic information whenever the citizens need them anywhere [1]. Currently, EG mean in general way as the use of information communication technology in the public agencies to enhance its process and improve the delivery of services. Some researchers have mentioned the role of EG in improving and increasing the efficiency and effectiveness of public administration action. Furthermore, there are other positive points for EG; it is an important tool in the improvement of transparency in management, and reduces corruption in most public offices. It also helps in decreasing information cost, as well as decrees human resorts capital [4].

EG is a new opportunity to make public agencies in various countries around the world to face the challenges and in the electronic information and communication technology generation [2].

Literature Review

Many studies have been conducted to explore factors influencing Information System usage in various countries around the world [3-7] [8]. Specifically, on EG services, there are relatively few studies that concenter on the impacts of these services on the public agencies or the citizens themselves, especially in developing nations [2]. There are scarcity of the researches that concenter on long term sustainability of EG project [2].

In Iraq there are a few studies that related to electronic system (E-S) [9] and EG readiness[8].

However, in the literature review section there are many studies related to same field [2] one study in India it carry out the EG project in rural area, them approval that the service was high, usage the information tools over time was low, and the poorest level of people were not using the services and the information system tools. Furthermore, missing of renew a content and interactivity led to the letdown of a community based EG project in South Africa within 12 months, despite its primary success. Heeks (2002) has mentioned of many cases of total or partial failure of Information technology initiatives in developing nations [19]. Researchers have discussed that most of these projects not succeed either totally or partially upon 'design-actuality' or 'design-reality' gaps, long-term sustainability troubles or weakness of commitment on the branch of political leadership and also public managers [2]. However, there are many theories have been sophisticated to help and support the understand these failures at EG project in developing nations. There are a small number of data-driven studies focused on the publishing IT awareness in rural areas among electronic government readiness [2] in developing nations.

India: Kiosk-based EG for rural India.

Drishtee Project:

In India there is a unique program called Drishtee the duty of this program is to publish the information technology in rural ears, however this program is the solution for many problems of poverty and help those isolated by distance and scarcity of resources [15].

Gyandoot Project

There is another study related to Gyandoot. Gyandoot emphasized the technology tools used to accomplish it includes an intranet published in 20 towns internet kiosks. The portal is run to support all Internet services and information. The cost of Gyandoot computed about US\$57,000. This project (information kiosk) is successfully achieved. The Legislature decided to publish information kiosks overall the area [18]. The privet sector and the public sector worked together and integrated the effort to bring the IT to the rural ears and the remote villages. The citizen how live at that area can get the benefit from these kiosks to let the opportunity available to the rural citizens to dealing with IT and make the live more easily by internet kiosks. The process is as following it uses the laptop to access to internet during wireless modems. The gandoot project import the IT to the poorest citizens in Madhya Pradesh in India. During this project, the internet Kodiaks allowing the citizens to access to information and services , furthermore ,during this internet kiosks the citizen can achieve the transaction via internet, and No need to travel for a days from their far

villages to government office to achieve it [15].

Brazil

Bahia Province project

Citizen Service Centers in Bahia Province. Providing service kiosks in convenient locations like shopping centers, allowing the public to transact government business [15].

Project Rede Govereno.

Allows citizens to use ATM-style kiosks to access government online portals and services [15].

Taiwan

Information kiosk-model

Similarly, this study also in Taiwan. There is same project regarding to information kiosk-model and at each kiosk computer can access to the internet as a public phone in general.

The process to use this computer in the public kiosk the citizen should to get IC card from the Manager .the information technology used in that kiosk was free until the end of 2001.

The needs to help from the local citizen to taking care of the equipment furthermore, the mangers of this kiosks provided space, power and workers the government in that time archived about 20 kiosks included: "community service centers, libraries, schools, civil organizations, tourist centers, district halls, and national parks" [17]. The information kioske implementation among EG was discussed in previous studies. Any ways in currently day there are many governments concentrated and discussed the implement of information kiosks in different countries around the word. Previous study suggest that the citizen may be he or she will not use this kiosks (internet kiosks) even it is available to public use but the successful of impalement and usage of this project is depend on the citizen itself and about the awareness of IT the citizens in the villages. Therefore, it was used theory named Unified Theory of Acceptance and Use of Technology (UTAUT), to determinants of citizen use behavior regarding information kiosks and the moderating effects of age and gender differences on the relationships between the determinants and behavioral intention use in other hand. Data collected among internet kiosks in Taiwan and used 244 respondents any way it used the Structural Equation Modeling (SEM) techniques were examined and tested model of study furthermore, the results in some measure support the applicability of the UTAUT among information kiosks. Finally, the finding of this study provides many pointes for practice, adoption, development, and implementation for information kiosk. "Additional

research efforts should be conducted to validate the proposed model and findings in other settings” [16].

Types of services EG services

There are four types of the services deliver during EG as follow:

Government to Citizen

In this type the government allowed a lot of electronic services it can do it online to her citizen if them inside or outside the country: like renew the license or birth/death –marriage certificate, etc.

Government to Business

The government works with the Business sector (privet sector) and some of the electronic services supplying from privet sector.

This type allowed from small and middle enterprise to growth up and the services are allowed from this type in this applications form registering for new business searching for opportunity to work. Employer in this case there are data sharing, the government allowed to foreign trade companies like banks to work and the government give this facilitate to the business side [10].

Government to Employee

During this type the government allowed services only for here employees and the serves like training and developing them skills [10].

Government to Government

According to this type the government have two levels for services the first one (first level) between the government as a center and local government and in this second level between Governments it's self [10].

Background of Iraq

Iraq land hosted one of the oldest cultures in the world. In Iraq, there are many committees can be found like Arabs, Kurds, Assyran, Turkmen and many other minorities [8]. Erbil is the center station of Kurdistan Iraq [8]. Furthermore, Baghdad is the capital city of Iraq, the total area about (437,072) sq km and the population about 28,221,180 [8].

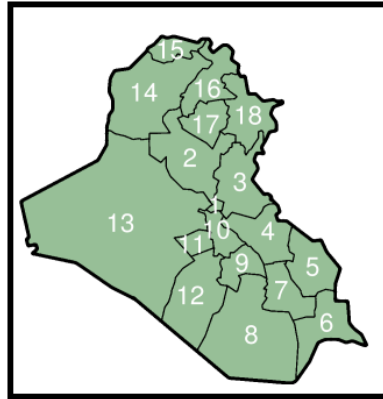


Figure 1: the governorates in Iraq.

EG readiness in Iraq

Ministry Of Science and Technology (MOST) and (ICCI) Commission for Computers and Informatics worked together to linking the ten public administration agencies with WBBN Wireless network which situate as the backbone to integrated electronic government and MIS [8]. EG is still at a primary stage in Iraq. Government agencies still waiting for a main investment to secure the administration, reengineering, licensed soft copy and training of the planned EG project. There are many benefits of implementing and use EG in Iraq: EG will aid boost good governance, transparency and accountability amid the agencies. This labor would help to construct the trust among the citizens in Iraq. The EG will reduce cost and save time; that will be efficient on government budget. Furthermore, the business sector will enhance and tenacious communication with all levels of Government and Society as well [8].furthermore, there are four online applications in Iraq as following: E-government, E-business, E-education, and E-employment as shows in figure 2.

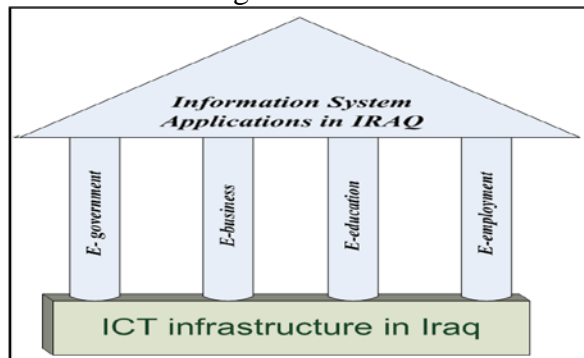


Figure2: Information System in Iraq [8].

The implementation of EG will help the citizen to access to government services web on a ubiquitous basis. Iraq EG readiness was ranked at number 103 in 2004. In 2005, the ranking coming down to number 118. The ranking goes further down in 2008 to number 151[8] as shows in figure 3.

Table 1: Iraq's EG READINESS ranking in the world [8].

year	Iraq E-G readiness ranking in the world
2004	103
2005	118
2006	-
2007	-
2008	151

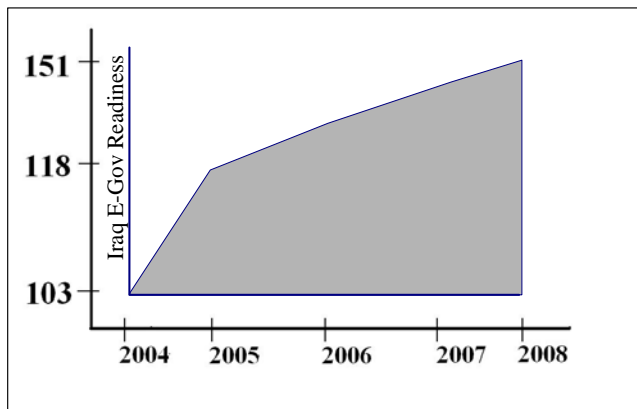


Figure 3: Iraq's E-G readiness ranking in the world [8].

Distributed strategy of information kiosks in Iraq

In this study we suppose a new way to publish IT awareness manage EG readiness in Iraq as a sample of developing countries. This project proposes to enhance rural live by provide the citizen information and communication service by usage the computer and internet kiosks in all over Iraq. Any way we recommended to distribute and keep the kiosks in the schools building for 3 reasons the first one is to keep the body of kiosk and equipments safely, second reasons is to knows many people's at the rural area and non rural area the currently place of kiosk and they can go to it directly. Third the managers of the kiosk will be the teachers from those schools; in this case we will reduce the kiosk project cost. This study assume to distribute the internet kiosks for each one governorate, however in same internet kiosks, this kiosks provide many service as; primary computer skills, IT awareness course to the public, and also the employee has experience to fixed any problem in citizen's computer in that ears. Furthermore, in our internet kiosks we use a satellite communication technology to provide

internet connectivity to that kiosk. Initially, we propose to distribute the kiosks equally overall Iraq as 2 kiosks for each governorate.

Iraq = 18 Governorates.

$2 \times 18 = 36$ kiosks in wholly Iraq.

Upon the up algorithm we have to distributing 36 kiosks around all governorates in Iraq. In this study we focus on semantic application of information technology to arrange the environment and increase the IT awareness for citizen anywhere in Iraq among EG readiness.

Finding

Kiosk provides the security, efficiency, and fewer efforts to the citizen how life in rural area and non rural area.

This research will construct and develop (Government to Citizen) services regarding to EG project in Iraq, and developing countries as well. The purpose of this IT kiosk is to help the citizen to get the benefit from currently technology in the world. And we can assume that this step is the first step to aid the citizen to get the awareness of technology and EG in Iraq. Furthermore by using these IT kiosks the citizen will save the time because by this kiosks will avoid the citizen to go to the office. There is another more benefit from this kiosks; it will save the life of the citizen: for example if the citizens want to achieve formal transaction, he or she has to go to the center of city and hand the entire document and so on. But if the government used this proposal and do it will save the time and money to the citizen and comeback again. Using the internet and web application will help to decrease the traffic in Iraq.

Future work

For future work, Iraq and any country attempt to enhance information system specially EG project in one hand and publishing IT awareness in rural area in other hand. Iraq's society waiting for more applications to be applied. Currently, strongly recommend launching Electronic-Census and publish information kiosks specifically in Iraq and in general in developing countries (how did not lunched Internet kiosk) for many reason like security issue for the citizen and also this application will decrees the effort, corruption, time and money to the employees in first hand and citizen from anther hand.

Conclusion

As shows earlier in literature review section that providing EG services and IT awareness during information kiosks in rural area in the world and governorates in Iraq it will help to publish the E-service and also E-information in all the parts overall of Iraq, A carefully designed semantic delivery during the internet kiosks may also be helpful the citizen to keep

them near thus houses and everyone knows about the security issue in Iraq also, saving money, time, and effort, improving citizen computer skills and IT awareness. Increase the transparency. In same time it this internet kiosks will reduce the frailer of EG project and it will setup the citizen overall Iraq to initially use EG application by easy way.

More benefits it will reducing the corruption chance in government offices by using this internet kiosks to get the information and services.

References:

C. Wagner, K. Cheung, F. Lee, and R. Ip, "Enhancing E-government in Developing Countries: Managing Knowledge through Virtual Communities " *Enhancing E-government in Developing Countries* vol. 14, pp. 1-20, 2003.

R. Kumar and M. L. Best, "Impact and Sustainability of E-Government Services in Developing Countries: Lessons Learned from Tamil Nadu, India," *The Information Society*, vol. 22, pp. 1-12, 2006.

D. J. Sandy BehrensKieren Jamieson, Mary Cranston, "Predicting System Success using the Technology Acceptance Model: A Case Study," 2005.

Al-Gahtani SS, "The applicability of TAM model outside North America: an empirical test in the Arab world," *Proceedings of the BIT World conference*, 4-6 June 2001a.

H. Almutairi, "Is the 'Technology Acceptance Model' Universally Applicable?: The Case of the Kuwaiti Ministries," *Global Information Technology Management*, pp. 57-80, 2007.

S. Behrens, K. Jamieson, D. Jones, M. Cranston, and C. Q. University, "Predicting System Success using the Technology Acceptance Model: A Case Study," in *16th Australasian Conference on Information Systems* Sydney, 2005.

S. S. Al-Gahtani, "The applicability of TAM model outside North America: an empirical test in the Arab world," in *Proceedings of the BIT World conference*, Cairo, 2001a, pp. 4-6

M. K.Faaeq, N. A. Ismail, W. R. S. Osman, A. K. Faieq, and M. Aleqab, "Application of TAM in the readiness for E-Government services," in *12th IBIMA conference on Creating Global Economies through Innovation and Knowledge Management* Kuala Lumpur, Malaysia, 2009.

A. K. Faieq, M. K.Faaeq, and H. A. Hambali, "A requirement model for Baghdad University's E-magazine System for Scientific Research " in *EEE'09 - The 2009 International Conference on e-Learning, e-Business, Enterprise Information Systems, and e-Government* Las Vegas, USA, 2009.

P. J.Pascual, "e-Governmnet " May 2003.

H. Bader, "E-government plan, Our Vision (IRAQ & Italy)," *I. Technology*, Ed., 2009, pp. 1-12.

J. Satyanarayana, *e-Government :The science of the possible*. Hyderabad: Asoke K. Ghosh, 2006.

J. satyanayana, *e-Governmnet :The science of the possible*. New Delhi, 2006.

United Nations/ American Society for Public Administration (UN/ ASPA) (2001) 'Benchmarking E-Government: A Global Perspective, Assessing the Progress of the UN Member States', [Electronic], Available: [http://www.unpan.org/E Government/Benchmarking%20E-gov%202001.pdf](http://www.unpan.org/E%20Government/Benchmarking%20E-gov%202001.pdf) [20 Aug 2005].

The e-government handbook for developing countries: november 2002:p 10

Yi-Shun Wang, Ying-Wei Shih," Why do people use information kiosks? A validation of the Unified Theory of Acceptance and Use of Technology," Government Information Quarterly, Volume 26, Issue 1.

[M. Y. Lin," Digital Divide and Telecenter Development in Taiwan", November 2005.

W, K. Cheung, F Lee, and R Ip "Enhancing E- government in Developing Countries: Managing Knowledge through Virtual Communities," EJISDC (2003) 14, 4, 1-20.

R. Heeks, "Information Systems and Developing Countries: Failure, Success, and Local Improvisations," The Information Society, vol. 18, pp. 101–112, 2002.

(2011). Computer Dictionary Available:

http://whatis.techtarget.com/definition/0,,sid9_gci212445,00.html

Appendix A. Web sites related to information used in Iraq at public sectors.

www.iraqipresidency.net	Iraqi Presidency.
www.na-iraqi.com	Iraqi Nation Assembly.
www.iptraffic.org	Iraqi Traffic Police.
www.moediraq.com	Ministry of Education.
www.uruklink.net/iqlaw/	Iraqi Official Gazette.
www.iraqi-justice.org	Ministry of Justice.
www.iraqelectric.org	Ministry of Electricity.
www.iraqi-mwr.org/payv/	Ministry of Water Resources.
www.moiiraq.com	Ministry of Interior.
www.cultureiraq.org	Ministry of Culture.
www.iraqmofoa.net/	Ministry of Foreign Affairs.
www.uruklink.net/oil/	Ministry of Oil.
www.motiraq.org	Ministry of Trade.
www.healthiraq.org	Ministry of Health.
www.iraqimoc.net	Ministry of Communications.
www.cbiraq.org/cb1.htm	Central Bank of Iraq.

PRACTICAL IMPEDIMENTS TO CONVERGENCE OF U.S. GAAP AND IFRS

Krista Gray

Angela Spencer, PhD

Lela Pumphrey, PhD

Oklahoma State University, Stillwater, OK, USA

Abstract

The purpose of this paper is to examine one very important area in which convergence between accounting standards in the United States (U.S), which are referred to in the U.S. as generally accepted accounting principles (GAAP), and international financial reporting standards (IFRS) has not been achieved. We will try to explain the underlying reasons the U.S. has been unable to converge their accounting standards related to inventory valuation to international accounting standards and to examine the financial impact of a change in those standards on U.S.-domiciled companies. The paper will examine the issues from the U.S. perspective. We will describe some of the differences between GAAP and IFRS on issues related to inventory. The disallowance of the LIFO cost assumption under IFRS, as well as the “lower of cost or net realizable value” rule used to determine the carrying value of inventory under IFRS rather than the “lower of cost or market” rule that is used under GAAP, are two major differences between the two sets of accounting standards related to inventory.

Keywords: Convergence, IFRS, Accounting Standards, Financing Reporting

Introduction

Since World War II, economic entities have expanded the markets for their products and for the sources of the raw materials for their products. Business entities, both large and small, are now operating in global markets. Simultaneously, capital markets have become more international. No longer are U.S.-domiciled companies seeking capital only in the U.S. capital markets. Foreign-domiciled companies also are seeking capital in the U.S. capital markets. As economic entities became more global so does the need for uniformity in financial reporting. In the 1950s the need for uniformity in financial reporting was based on the notion of *harmonization*—trying to achieve uniformity in the financial reporting standards established by the

various sovereign accounting and reporting standards bodies. The goal was to reduce the differences among the accounting principles/standards (these terms shall be used interchangeably throughout this paper) used in financial reporting, but to still recognize and maintain the sovereignty of the standard setters in each individual country. By the 1990s the notion of harmonization was replaced by a concept of *convergence*—the development of a unified set of high-quality international accounting standards that would be used in, at least, all major capital markets.

The International Accounting Standards Committee (IASC) was formed in 1973, the same year that the Financial Accounting Standards Board (FASB), operating under the Financial Accounting Foundation (FAF), was formed in the United States. The IASC was the first international standards-setting body. It was reorganized in 2001 and became an independent international standard setter. It was also renamed the International Accounting Standards Board (IASB). Since then, the use of international standards has progressed. As of 2013, the European Union (EU) and more than 100 other countries either require or permit the use of international financial reporting standards (IFRSs) issued by the IASB or a local variant of them.

The FASB and the IASB have been working together since 2002 to improve and converge U.S. generally accepted accounting principles (GAAP) and IFRS. Historically, the U.S. capital markets have been the dominant source of capital for expanding business organizations so their adoption of international standards would be important. As of 2013, Japan and China were also working to converge their standards with IFRSs. The U. S. Securities and Exchange Commission (SEC) consistently has supported convergence of global accounting standards. However, the SEC has not yet decided whether to incorporate IFRS into the U.S. financial reporting system. The SEC staff issued its final report on the issue in July 2012 without making a recommendation.

September 2002, the FASB and the IASB met jointly and agreed to work together to improve and converge U.S. GAAP and IFRS. That partnership is described in “The Norwalk Agreement,” issued after that joint meeting. The Norwalk Agreement set out the shared goal of developing compatible, high-quality accounting standards that could be used for both domestic and cross-border financial reporting. It also established broad tactics to achieve their goal: develop standards jointly, eliminate narrow differences whenever possible, and, once converged, stay converged. Even with the Norwalk Agreement, the path to full convergence of GAAP to IFRS has not been smooth.

The standards that were very similar, or at least similar enough that the differences were not controversial, were addressed first and as of this

date many of these standards have been converged (meaning that GAAP and IFRS do not differ). Remember that convergence does not mean that the U.S., or any other country, would not have its own accounting standards—it means that the standards of any sovereign standard setter will not differ significantly from IFRS. There remain, however, many accounting standards on which there has not yet been an agreement between FASB and IASB.

The purpose of this paper is to examine one area in which convergence has not been achieved. We will try to explain the underlying reasons the U.S. has been unable to converge their standards and to examine the financial impact of those standards on U.S.-domiciled companies. The paper will examine the issues from the U.S. perspective. We will describe some of the differences between GAAP and IFRS on issues related to inventory—inventory cost flow assumptions, carrying value of inventory, cost of goods sold. The disallowance of the LIFO cost assumption under IFRS, as well as the “lower of cost or net realizable value” rule used to determine the carrying value of inventory under IFRS rather than the “lower of cost or market” rule that is used under GAAP, are two major differences between the two sets of accounting standards related to inventory.

LIFO Cost Flow Assumption

The valuation of inventory can have a significant impact on a company’s financial statements. For many companies, inventory represents a significant percentage of current assets. The costs assigned to inventory can significantly the companies’ current ratio. In addition the costs assigned to inventory have a direct effect on cost of goods sold and can, therefore, impact operating profits. Inventory write-downs can significantly impact the reported profits of a company.

Data for firm filings for fiscal year 2013 (FY 2013) from the COMPUSTAT database are used to provide a real-world perspective on accounting for inventories. The research seeks to determine if U.S. firms actually use the accounting cost flow assumption that is believed to be most advantageous to business entities (LIFO). The primary difference between GAAP and IFRS in inventory valuation begins with choosing an inventory cost flow assumption. Under GAAP, the last-in-first-out (LIFO) assumption is a permissible option⁸⁵; however, under IFRS, LIFO is not permitted⁸⁶. The IASB does not permit the use of LIFO as a cost flow assumption because, in its opinion, LIFO does not accurately represent the actual flow of inventory and its related costs. The Board’s *Basis for Conclusions on IAS 2 Inventories*

⁸⁵ FASB ASC 330-10-30-9.

⁸⁶ IFRS Foundation, *A Guide through IFRS* (London: IFRS Foundation Publications Department, 2010), A383 (*IAS 2-25*).

states LIFO's primary shortcoming as a "lack of representational faithfulness of inventory flows."⁸⁷ When a company uses LIFO, it often does so because it is attempting to minimize its tax liability. In an environment of rising inventory prices, using LIFO would generate a higher cost of goods sold expense than other cost flow assumptions such as FIFO or even average cost. Higher expenses lead to lower taxable income, which in turn leads to a lower tax liability. However, in the United States, the LIFO conformity rule requires that, when LIFO is used for tax purposes, a company must use the same cost flow assumption for the financial statements. Because using LIFO may make the company's net income on the financial statements lower, and therefore less desirable, than using another cost flow assumption such as FIFO, companies are generally motivated to use LIFO more for tax benefits than for improving operating profits. The IASB finds tax benefits to be insufficient justification for the use of a method that, in its opinion, does not appropriately represent inventory flows.⁸⁸

Certain companies and industries where LIFO is frequently used have good reason to be concerned about the possibility of someday having to switch to another cost flow assumption, especially if inventory costs in their industry have been rising rapidly. Companies using the LIFO cost flow assumption must report the difference between the cost of inventory under LIFO and the cost of inventory under another acceptable costing method (usually FIFO) on their financial statements.⁸⁹ This amount is called the LIFO reserve,⁹⁰ and is an indication of how much a company's cost of goods sold would decrease and its net income would increase if it were to switch from LIFO to FIFO. Because the LIFO conformity rule would require these companies to report the increased net income for tax purposes as well as financial reporting purposes, companies with large LIFO reserves could see large increases in the amount of taxes that they pay due to a switch in cost flow assumptions.

Table 1 shows the industries that had the highest cumulative LIFO reserves in FY 2013. The data were collected from FY 2013 company filings on the COMPUSTAT database, sorted by four-digit SIC code, and aggregated by SIC code. During the data analysis process, 353 observations

⁸⁷ Id., B711 (*Basis for Conclusions on IAS 2 Inventories*, BC 19).

⁸⁸ IFRS Foundation, *A Guide through IFRS*, B711 (*Basis for Conclusions on IAS 2 Inventories*, BC 20).

⁸⁹ FASB ASC 210-10-S99-1, 6(c).

⁹⁰ Task Force on LIFO Inventory Problems, Accounting Standards Division, American Institute of Certified Public Accountants, "Issues Paper: Identification and Discussion of Certain Financial Accounting and Reporting Issues Concerning LIFO Inventories" (1984): 18, accessed May 2, 2014, <http://clio.lib.olemiss.edu/cdm/compoundobject/collection/aicpa/id/10905/show/10796>.

were eliminated from consideration here and in any other subsequent analysis because reported total assets were either zero or blank---a phenomenon which obviously cannot realistically occur, since every firm has to have some assets in order to exist. Since the data from these observations was therefore inconclusive, they were eliminated from consideration in the data analysis. The sample size in the data analysis was therefore reduced to 3,256 observations.

Table 1: Total LIFO Reserves Reported in 2013 (by Industry) (Source: COMPUSTAT)

Industry	SIC Code	No. Obs.	Total LIFO Reserve (in millions)
Petroleum Refining	2911	5	\$ 39,758.98
Construction Machinery and Equipment	3531	1	2,504.00
Drug Stores and Proprietary Stores	5912	1	2,100.00
Farm Machinery and Equipment	3523	3	1,600.84
Plastics Materials and Synthetic Resins, Synthetic	2820	3	1,248.00
Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	3312	2	1,222.40
Motor Vehicles and Passenger Car Bodies	3711	3	1,211.70
Cigarettes	2111	3	1,170.00

The small sample sizes in this table make it somewhat risky to draw any definitive conclusions, but the sheer magnitude of the cumulative LIFO reserve of the petroleum refining firms, \$40 billion, is staggering. Clearly, the petroleum refining industry has a much larger LIFO reserve than any other industry. This figure can probably be attributed to the rapid and drastic increases in oil prices over the past several decades.⁹¹ Large LIFO reserves also indicate that these companies have had a strong incentive to oppose disallowance of LIFO. LIFO remains a highly controversial topic in convergence issues.

In the Accounting Standards Codification (ASC) and preceding standards (of U.S. GAAP), the FASB comments neither on the representational faithfulness of LIFO nor on its reasoning for allowing LIFO as an acceptable costing method. However, there are justifiable reasons for using LIFO to expense inventory.⁹² The goal of the matching principle is to match the revenues from one period with the expenses incurred to generate

⁹¹ Given the rather sharp decline in oil prices over the past two years, an updated study on LIFO reserves would be appropriate.

⁹² Raymond Hoffman, *Inventories* (New York: Ronald Press, 1962), 197: <http://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=2608&context=mulr>, (April 19, 2014)

those revenues as closely as possible.⁹³ In the case of inventory, the matching principle (which was, but is longer, a basic principle of U.S. GAAP) is fulfilled by matching inventory sales with inventory purchases. One of the primary uses of financial information is to estimate the value of future cash flows from a business⁹⁴, and the nature of LIFO is conducive to providing information for this purpose. LIFO matches the most recent inventory purchases with the most recent inventory sales, which makes it a better predictor of future costs (and associated income) than other cost flow assumptions (since the most recent purchase price is likely to be a good indicator of the future cost of the inventory).

Table 2: LIFO Analysis by Industry (Source: COMPUSTAT)

Industry	SIC Code	No. Obs.	Mean LIFO Reserve (in millions)	Mean Total Assets (in millions)	Mean Inventories to Assets
Agriculture, Forestry, and Fishing	0-999	1	169	20,664.00	0.1426
Mining & Construction	1000-1999	5	72.23	41,483.11	0.0387
Manufacturing (food, textiles, apparel, lumber, furniture, fixtures, printing/publishing, chemicals, petroleum refining)	2000-2999	46	992.67	27,443.96	0.1181
Manufacturing (rubber, leather, stone, clay, glass, concrete, primary metal, fabricated metal, industrial and commercial machinery and computer equipment, electronics, transportation equipment, miscellaneous)	3000-3999	55	181.12	13,886.35	0.1539
Transportation, Communications, Electric, Gas, and Sanitary Services	4000-4999	0	N/A	N/A	N/A
Wholesale Trade & Retail Trade	5000-5999	15	293.59	9,224.97	0.2506

⁹³ Raymond Hoffman, *Inventories*, 197: <http://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=2608&context=mulr>, (April 19, 2014)

⁹⁴ Financial Accounting Standards Board, *Statement of Financial Accounting Concepts No. 8, Conceptual Framework for Financial Reporting* (Norwalk: Financial Accounting Foundation, 2010), OB2, OB3, and OB5, http://www.fasb.org/cs/BlobServer?blobkey=id&blobnocache=true&blobwhere=1175822892635&blobheader=application%2Fpdf&blobheadername2=Content-Length&blobheadername1=Content-Disposition&blobheadervalue2=210323&blobheadervalue1=filename%3DConcepts_Statement_No_8.pdf&blobcol=urldata&blobtable=MungoBlobs, (April 6, 2014)

Finance, Insurance, and Real Estate	6000-6999	0	N/A	N/A	N/A
Services (hotels, personal services, business services, auto repair, miscellaneous repair, motion pictures, amusement and recreation services)	7000-7999	0	N/A	N/A	N/A
Services (health, legal, educational, social, museums, art galleries, botanical/zoological gardens, membership organizations, engineering/accounting/research/management/related services, private households, miscellaneous services)	8000-8999	0	N/A	N/A	N/A
Public Administration	9000-9999	0	N/A	N/A	N/A

Tables 2 and 3 show the results of more analysis of data acquired from the COMPUSTAT database for FY 2013 firm filings. The only companies reported in this particular set of analyses are ones that reported LIFO reserves in their 2013 filings. For these Tables, the information is aggregated based on the overarching SIC code categories---for SIC codes 0 through 999, 1000 through 1999, 2000 through 2999, and so forth, through 9999. Each category is listed in the tables in numerical order; that is, SIC codes 0 through 999 cover the agriculture industry, SIC codes 1000 through 1999 cover the mining and construction industries, and so forth.

The information has its limitations---such as the skewing effect of any outliers (especially in groups with smaller numbers of observations) as well as limited availability of information for certain industry categories. For example, it is likely that immaterial LIFO reserves were not reported. Although it is possible that there are five industries in which no company used LIFO and therefore would not be included in this data, it seems far more likely that companies in these industries do use LIFO and, for whatever reason, their information simply has not been reported in this database. Table 2 shows that LIFO treatment of inventory probably has the most impact on the manufacturing and wholesale/retail industries, since inventory comprises 11 to 25 percent of total assets of the average company in these industries (inventory to assets is computed by dividing a company's total inventories by its total assets). It appears that these companies tend to be quite large, since the average total assets of a company in these industries is in the billions; however, this estimate could be skewed by one or two extremely large companies being averaged with many smaller companies. Although companies like Chevron and ExxonMobil do have much higher total assets than most other companies in their SIC industry group, there appears to be a healthy balance of large, medium-sized, and small companies

in this set of data. At first glance, the data from the agriculture industry appears to place it in the same category with the manufacturing and wholesale/retail industries; however, it is probably unwise to draw conclusions from data that includes only one observation of LIFO usage in this industry.

Table 3: Effects of Full Convergence (Source: COMPUSTAT)

Industry	SIC Code	No. Obs.	Mean Change to COGS	Mean Change to Net Income	Mean Change to Inventories	Mean Change to ROA
Agriculture, Forestry, and Fishing	0-999	1	2.56 %	6.81 %	5.74%	- 0.0999
Mining & Construction	1000-1999	5	9.68	7.19	10.83	- 0.4664
Manufacturing (food, textiles, apparel, lumber, furniture, fixtures, printing/publishing, chemicals, petroleum refining)	2000-2999	46	3.09	62.68	28.35	- 0.3329
Manufacturing (rubber, leather, stone, clay, glass, concrete, primary metal, fabricated metal, industrial and commercial machinery and computer equipment, electronics, transportation equipment, miscellaneous)	3000-3999	55	3.64	- 302.38	16.01	- 0.1898
Transportation, Communications, Electric, Gas, and Sanitary Services	4000-4999	0	N/A	N/A	N/A	N/A
Wholesale Trade & Retail Trade	5000-5999	15	2.75	37.85	19.69	- 0.2098
Finance, Insurance, and Real Estate	6000-6999	0	N/A	N/A	N/A	N/A
Services (hotels, personal services, business services, auto repair, miscellaneous repair, motion pictures, amusement and recreation services)	7000-7999	0	N/A	N/A	N/A	N/A
Services (health, legal, educational, social, museums, art galleries, botanical/zoological gardens, membership organizations, engineering/accounting/research/management/related services, private households, miscellaneous services)	8000-8999	0	N/A	N/A	N/A	N/A
Public Administration	9000-9999	0	N/A	N/A	N/A	N/A

Table 3 lists the average monetary impacts of full convergence from U.S. GAAP to IFRS on inventory cost flow assumptions (that is, the elimination of LIFO). The changes to cost of goods sold, net income, and inventories are listed in millions of dollars. Eliminating a LIFO reserve would cause a company's cost of goods sold to increase by the amount of the eliminated LIFO reserve; consequently, its net income would decrease by the same amount. Because eliminating a LIFO reserve assumes that the first inventory purchased by the company was the first inventory sold, and that any inventory remaining at the end of the period was the last inventory purchased, eliminating a LIFO reserve increases the amount of inventory by the amount of the LIFO reserve (in an environment of rising inventory prices). These dollar amounts provide an interesting perspective on the magnitude of the dollar amounts in question here. Of course, the value of these figures is limited in that their relative value to the size of the company is not reflected in these aggregations---and in that any skew in the figures due to outliers is unaccounted for in this analysis.

The change in return on assets is more meaningful and better able to express the relative financial impact of convergence than the three dollar amounts. To compute the change in return on assets, the company's net income with the LIFO reserve is divided by the company's total assets. The resulting amount is subtracted from the amount calculated when the company's net income without the LIFO reserve is divided by the company's total assets. Again, the data indicate that the manufacturing and wholesale/retail industries would be deeply impacted by convergence, with ROA dropping by 18 to 34 percentage points. However, the mining and construction industry would register a drop of 46 percentage points---a performance-measure plummet unequaled by any other industry. This decline can be at least partly explained by the fact that the large oil companies are classified as mining and construction companies for the purposes of this analysis. As aforementioned, the rapid upward trend in oil prices over the past several decades causes oil companies to have very large LIFO reserves. This analysis demonstrates one of the measures of financial performance that would be drastically altered if LIFO were to be eliminated.

LIFO remains one of the topics on which the FASB and the IASB cannot agree.

Determining the Carrying Value of Inventory

Besides their opposing stances on LIFO as an acceptable costing method, GAAP and IFRS also differ on the measurement of the carrying amount of inventory---that is, the dollar value of the inventory on the balance sheet. Under both systems, inventory is generally carried at historical cost; however, when carrying the inventory at cost is no longer appropriate due to

a decrease in the value of the inventory, GAAP and IFRS prescribe different methods of determining the carrying amount.

Under IFRS, the carrying amount of inventory at cost is periodically compared to the carrying amount of inventory *at net realizable value*. Net realizable value is the amount remaining when the costs required to complete the sale of the inventory are subtracted from the revenues expected to be received from the sale of the inventory. If historical cost is lower than net realizable value, the carrying amount remains at cost. However, if net realizable value is lower than cost, the carrying amount is adjusted to net realizable value.⁹⁵

Under GAAP, the carrying amount of inventory at historical cost is periodically compared to the carrying amount of inventory *at market value*. Market value is generally defined as the current replacement cost of the inventory---within certain parameters. The market value cannot be higher than the net realizable value, but it cannot be lower than the net realizable value decreased by a normal sales margin. If the current replacement cost is higher than the net realizable value, the net realizable value is used as the market value. Conversely, if the current replacement cost is lower than the net realizable value less a normal sales margin, the latter amount is used as the market value. The number that is selected as the market value is compared to the historical cost amount on the books.⁹⁶ If the market value is lower than the historical cost, the carrying amount of the inventory is adjusted to market value. This principle is known as the “lower of cost or market rule.”⁹⁷

Adjusting the carrying amount of inventory is intended to reflect the benefits that the entity expects to receive from the inventory. Conservative accounting does not allow the value of inventory to be written up to market value; but if the expected benefits of the inventory drop below the costs incurred to obtain the inventory (that is, the historical costs that are established as the initial carrying value), the carrying value of the inventory should be adjusted to the amount that best represents its current utility. Although GAAP and IFRS have different methods of deciding what amount to use for the measurement of the inventory’s current benefits, the general idea is the same: inventory should be carried at cost, unless market conditions indicate that the benefits expected to be received from the inventory are lower than cost. In the latter situation, the carrying amount of

⁹⁵ IFRS Foundation, *A Guide through IFRS*, A384 (IAS 2-28, 2-30).

⁹⁶ Raymond Hoffman, *Inventories*, 195: <http://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=2608&context=mulr>, (April 19, 2014)

⁹⁷ FASB ASC 335-10-35-2, 335-10-35-3, 335-10-35-4.

the inventory should be adjusted to the amount of expected benefits indicated by the market conditions.

When the carrying amount of inventory is adjusted to market value, the difference between historical cost and the new carrying value is recorded as an impairment loss. The carrying value subsequent to the impairment loss leads to yet another difference between GAAP and IFRS. Under IFRS, the impairment loss can later be reversed if the inventory's net realizable value increases above the net realizable value from the previous period of measurement (which became the new carrying value after the impairment loss). However, the inventory cannot be written up by an amount larger than the impairment loss; that is, the carrying value cannot be increased above the original historical cost basis.⁹⁸ Under GAAP, on the other hand, impairment losses cannot be reversed. Recording the impairment loss establishes a new cost basis that cannot be written back up to the original cost basis, even if the inventory appreciates to the original cost basis after the impairment loss is recognized. This interpretation of the FASB rules was confirmed in a Staff Accounting Bulletin prepared for SEC Staff Guidance.⁹⁹

Conclusion

As business becomes more global in scope, a single set of accounting standards becomes more important—whether this is accomplished through harmonization or acceptance of a sole accounting standard setter such as IASB. Although U.S. GAAP and IFRS have converged considerably over the past several decades, there are still significant differences between the two sets of standards on issues such as inventory valuation. Many of these differences are likely to exist well into the foreseeable future. Since the global economy makes interaction between GAAP and IFRS filers more likely than ever before, and because the accounting treatment of the issues presented in this paper can have significant impact on a company's financial statements, users of financial statements must understand the differences in treatment of these, and many other, financial statement items.

⁹⁸ IFRS Foundation, *A Guide through IFRS*, A385 (IAS 2-33).

⁹⁹ FASB ASC 335-10-S99.

MANAGEMENT OF ART CENTRES IN GEORGIA

Tamar Tavkheldze, MA

Grigol Robakidze University, Tbilisi, Georgia

Abstract

This article aims to show the problems which we have in art management. What is management? And what is deferent between managing art centers and usual companies?! What skills needs manager to make influence on staff?! This article is about management functions and leadership. Why do we need good leader to be successful institution?! We live in modern world and we have to keep pace with new future challenges. The most important thing that we must not forget is that we have to know differences between ordinary and extraordinary people - differences between singers, actors and people who share other professions. Management market includes communication and relationships. This is also very important to be a good leader. Unfortunately when we see companies we see that we have problem of communication. As I admitted we live in modern world and problem of communication must be determined, but in spite of this, we have great results in this case. Your success means your staff's success.

Keywords: Management, art, goals, institutions, leader, leadership

Introduction

What is management?! Management is the process of reaching organizational goals by working and through people and other organizational resources. Management's primary function is to get people to work together for the attainment of an organization's goals and objectives.

As we know management functions are: Planning, organizing, influencing, controlling. Every manager knows it and uses it daily. Manager's purpose is to convince people in there truth.

Also every manager knows that successful leadership is impossible without profound knowledge and practice. Management is similar to words like rule, govern, but they are not synonyms, because governing is wider and global word.

In the process of managing is important to be person who can make influence on the people.

If you are not self-confidence and often change your decision, if you are not a leader, if your words are not convincing people you cannot rule the organization. It can be no leaders without followers.

Now let see differences between leader and manager: Managers focus on the present, maintain status quo and stability, implement policies and procedures, maintain the existing structure, and use position power. Leaders: focus on the future, create a culture based on shares values, establish an emotional link, and use personal power.

This is a small overview about management of companies or other centers.

But what about institutions whose main goal is to create art? Mainly people think about to get more money, to make companies successful, to take place on international market.

In case of art centers these kind of approach is not right.

In this situation the manager has relationship with extraordinary people. Their thoughts, opinions, sense are different from ordinary people.

What is ordinary and extraordinary? Ordinary I call people who work from morning till night for money to eat, drink, buy something for their children whose purpose is to have high salary and good position. Extraordinary people are those who do not worry about how to get good job or have big salary. Sometimes, they do not think about their families; their main idea of life is art; their main goal is to satisfy their spiritual needs. It is very difficult to rule such kind of people and it is not similar with managing ordinary people - lawyers, economists, doctors and so on.

During two days I was watching the behavior of actresses and actors on rehearsal and after theatre and of those people who work at one of the universities. I found a lot of differences. For example, when actors work on roles, basically their emotional condition is unstable. Some of them are in motion doing the same things many times. If you ask something about other issues, they become aggressive or do not pay attention. If the director makes remarks which they consider unfair, they do not play well out of spite. Or if they think that their idea about the role is more important than the director's, they can spend the whole rehearsal to prove their truth. So, what I found out is that they are very difficult people. After rehearsal their main topic is their roles. In this period when they are working on roles they are not thinking about money about appearance. Sometimes, you can meet an actor and you may think that he is a homeless man. Now let us see how people work at the university. Mainly, they have tasks or assignments which they have to do at some period of time. They are sitting in their offices and doing their work. They are calmer during the work. If there is a tense situation on work, they are able to keep Calm.

Nowadays, we see many problems in art. For that reason we are undertaking the first steps in developing art management. It is relatively easy to manage companies than art centers.

As the recent researches show, people do not go to the theatre, opera, and conservatory. We often talk about these problems, but unfortunately, cannot find the way to solve it.

For one year I was meeting managers of theatres mainly they are directors or actors. It is very rare when we meet a real manager in the art centers. I discover that there were performances which had audience and performances which do not have.

How can we solve the problems about managing art centers? First of all, every manager has to be experienced in every field of art. If you are a manager of the Opera House, you have to know soul of this institution, character of actresses and actors. The same can be said about theatre and other institutions. Secondly, you have to keep pace with contemporary art, find ways to go on international market which is not easy. Thirdly, if you are the art director and you have no experience in management, you may lose half of your work.

Conclusion

Management is a wide concept and we have to make narrow direction like art management. In Europe, people work in this field and they have good experience; we have to follow this experience. In Georgia, we have only one university where students can study art management but unfortunately, it is not enough for solving the problem. The quality of education is not enough.

Why can a good actor be a good director?! Because he knows every detail and the way which the actor/actress passes during creating his/her role. The same can be said about the manager of art centers.

If we want to have changes in this case, we have to make “revolution” in art. In other way we will not be able to achieve the goal.

References:

- Khomeriki T. Basics of Management. Tbilisi, 2008.
- Nahavandi A. The Art and Science of Leadership. Seventh edition.
- Mederith J. R., Samuel J. Mantel, Jr. Project Management. A Managerial Approach. John Wiley & Sons, Inc.

R1A SUBCLADES AND BRONZE AGE MIGRATIONS ON THE EURASIAN STEPPES

Csaba Barnabas Horvath, PhD

Pátmány Péter Catholic University, Budapest, Hungary

Abstract

Until recently, our knowledge of the prehistoric world has been blur in many aspects. It was unclear, whether if migrations, conquest, or merely cultural diffusion led from one culture to the other. By the beginning of the 20th century, the introduction of genetics into the study of ancient history gave opportunity for a deeper insight to the prehistoric world. As more and more genetic traces are explored, it becomes more and more possible to identify the routes and time of prehistoric migrations. If we can decode the information hidden in genetic data, a turbulent picture of migrations and conquest between certain prehistoric cultures emerges in front of our eyes. This paper attempts to identify prehistoric migrations in Eastern Europe and Central Asia from the Neolithic to the Bronze Age, based on statistical data of genetic samples.

Keywords: Prehistory, migrations, genetics, archeology, Eurasia

Introduction

This paper aims to identify prehistoric migrations in Eastern Europe and Central Asia from the Neolithic till the Bronze Age, based on genetic material. For this purpose, the paper mainly uses statistical samples of human Y-chromosome haplogroups. The reason why human Y-chromosome haplogroups can be useful for such research is that they are distinct by the non-recombining parts of Y-chromosome DNA, and this draws a patrilineal phylogenetic tree, and also the age of certain mutations is identifiable. This way their statistical presence in certain human populations can provide indications on origins and migrational backgrounds of certain human populations. The aim of the paper is to analyze apparent spatial and chronological coincidences between Y-DNA haplogroups and certain prehistoric cultures in Western Eurasia, in an attempt to identify prehistoric migrations in the analyzed area. The analysis makes an attempt to attach certain prehistoric cultures to certain YDNA haplogroups, thus identifying prehistoric migration routes. For this purpose, now the present paper

analyzes the geographic spread of subclades of haplogroup R1a1a, a haplogroup widely present in Northern Europe, Eastern Europe, and Central Asia. The paper attempts to test a main hypothesis that based on certain matches in three different factors:

- present day geographic distribution of Y-DNA haplogroups including the geographic distribution of microsatellite variance within distinct haplogroups and subclades that suggests the geographic origin of the group in question,
- the age of distinct Y-DNA haplogroups and subclades, that has already been determined by biologists specialized on the issue
- the age and geographic spread of certain prehistoric cultures in the region

A fourth scale where we should also see matches is ancient DNA, ie. DNA samples taken from sites of prehistoric cultures. This fourth factor however is problematic in a sense that as of now, ancient DNA is still sporadic, with only few, sporadic available samples from some cultures, and no samples at all from some other cultures, where in many cases even the samples that are available are characterized by uneven geographic, chronologic and demographic distribution. Therefore, hitherto aDNA samples were not available regarding most prehistoric cultures in an abundance and representative distribution enough to draw a clear picture, and often the sporadic data of different cultures seem to contradict each other in some cases, that will certainly be clarified as soon as data will be abundant, but what is still the case as of now. In the second part of my paper I will still attempt to test the hypothesis in scope of ancient DNA, and take a view on alternate scenarios as well.

Migrations unveiled? – Hypothesis

As described in the introduction, the main hypothesis of the paper tries to identify geographical and chronological matches between the age and present geographic distribution of certain haplogroups and subclades, and the geographic range of certain prehistoric cultures. The earliest split in the spread of R1a1a in Europe seems to be the split between the subclade marked by the SNP L664, and the rest of the group. This split between L664 the rest of R1a1a-M417 around 5000BC¹⁰⁰ matches in time with the emergence of the Rössen and Cucuteni cultures around 4600 BC and 4800 BC. Also the present day geographical distribution of L664 in Central Europe largely coincides with the range of the Rössen culture along the Danube river. Subclades of non-L664 R1a1a-M417 are much younger west

¹⁰⁰ R1a1a & Subclades – Y SNP & STR Classification System and project Sections, Family Tree DNA 2014 <http://www.familytreedna.com/public/R1a>

of the line between Rössen and Cucuteni, and are related to older R1a1a subclades of Eastern Europe. Also, as we will see later in this paper, both the range and age of those matches with the Corded Ware Culture, that appeared at this part of Europe much later than the estimated time of the L664-nonL664 split. This geographical and chronological match would indicate a common ancestor for the Rössen and Cucuteni cultures. This seems to suggest some location on the northern periphery of the Balkans, and the western periphery of the Eurasian steppes, somewhere around present day Hungary, Romania and Serbia, but this part is hard to specify.

The next match in chronological order is the split between R-Z282 and R-Z93, that around 4000 BC¹⁰¹ matches both in space and in time with the emergence of the Eastern European Yamna and the Central Asian Afanasevo cultures, as both emerged around 3500 BC. The geographical match is also apparent, with the core area of R-Z282 being in Eastern Europe, as that of Yamna, and the core area of R-Z93 being in Central Asia, same as that of Afanasevo. In the latter case, present day microsatellite variance within the geographical distribution of Z93 even specifically suggests a region as the very origin of the subclade that is at the same time the core area of Afanasevo findings.¹⁰²

The third phase of matches is the split of R-Z282 into younger subclades. Most of this coincides with the spread of the Corded Ware Culture, which is also confirmed by recent findings of ancient YDNA from that culture, with most of the samples being R1a1.¹⁰³

So if we put these pieces of the puzzle together, all this suggests a prehistoric migration, dominated by Haplogroup R1a1a-M417 that seemingly originated from prehistoric Balkans. The hypothetic prehistoric migration suggested by these facts seems to be the following: At first, a population carrying M417 would have spread and built up its' demographic momentum somewhere on the borderlands between the northern edge of the Balkans, and the southwestern edge of the Pontic Steppe. Then, around 4800-4600 BC, two flanks of migration would have started from this area, one westwards, along the Danube river, dominated by R1a1a-L664, establishing the Rössen culture, and an other one eastwards, establishing the Cucuteni culture. After an other one thousand years, two more eastwards waves of migration seems to have spread from the Cucuteni area: One to Central Asia,

¹⁰¹ R1a1a & Subclades – Y SNP & STR Classification System and project Sections, Family Tree DNA 2014 <http://www.familytreedna.com/public/R1a>

¹⁰² Underhill, Peter A., et al. "The phylogenetic and geographic structure of Y-chromosome haplogroup R1a." *European Journal of Human Genetics* (2014).

¹⁰³ <http://www.nature.com/nature/journal/v522/n7555/full/nature14507.html>

marked by Z93,¹⁰⁴ and establishing the Afanasevo culture, and an other one to the Pontic Steppe of present day Ukraine and Southern Russia, dominated by Z282,¹⁰⁵ and establishing the Yamna culture. The next possible phase may have been a migration northwards from Yamna, covering most of Europe north of the Carpathians and east of the Rhine, forming the Corded Ware Culture.

One more interesting issue in this aspect is the case of the Andronovo culture. Although most of the area covered by the Andronovo culture are regions where Z93 is predominant within R1a, the historical core area from where Andronovo spread, was in the Ural-Idel region, ie. closer to Yamna and Corded Ware territory than to Afanasevo, and in a region, where Z282 make up the vast majority of indigenous R1a today. This would suggest a Z282 superstrate and a Z93 substrate forming Andronovo. Among later subclades, the geographical range of the Volga-Carpathian subclade suggests an origin linked not to the Corded Ware culture, but to the Scythian cultures originating from Andronovo, as it is spread along the Pontic steppes, in Southern Russia, Ukraine, Hungary, and Poland. At the same time, the Volga-Carpathian subclade, as a subclade of Z282, suggests Z282 presence in the Scythian population thus, in the Andronovo culture as well.

Problematic issues, and alternate scenarios

The age, and present day geographic range of certain subclades of R1a seem to clearly support the hypothesis presented in this paper, ie. a prehistoric migration, starting from the Northern Balkans, then splitting to Rössen and Cucuteni, then from Cucuteni splitting to Yamna and Afanasevo, and from Yamna, splitting to Corded Ware and Andronovo. Yet, as stated in the introduction, one more important criteria to verify the hypothesis is ancient DNA, ie. DNA from archeological sites of the named prehistoric cultures. Once ancient DNA from these cultures will be abundant, that will give the final word to decide this question once and for all. Yet, as of now, ancient Y-DNA samples are still sparse and sporadic and fragmental from some of the cultures in question (Yamna, Corded Ware, Andronovo) and almost entirely absent from the rest (Vinča, Rössen, Cucuteni, Afanasevo).

The main issue that causes the problem here is that aDNA data regarding the origins of R1a1a in Europe is so fragmental, that it makes it difficult to interpret. Ancient samples do match present day distribution as

¹⁰⁴ R1a1a & Subclades – Y SNP & STR Classification System and project Sections, Family Tree DNA 2014 <http://www.familytreedna.com/public/R1a>

¹⁰⁵ R1a1a & Subclades – Y SNP & STR Classification System and project Sections, Family Tree DNA 2014 <http://www.familytreedna.com/public/R1a>

far back in time, as the Corded Ware¹⁰⁶¹⁰⁷ and Andronovo¹⁰⁸ cultures, with ancient DNA in both of these cultures matching the distribution of R1a subclades. Before that however, the picture becomes unclear.

Issue starts to become complicated with Yamna, as among the ancient YDNA samples from this culture, there is not a single R1a1a.¹⁰⁹ At first look, we could conclude that this would put into doubt the entire hypothesis of this paper. If we take a closer look however, the case of Yamna is not that clear at all. First, most of these samples are of a limited number, and all from a single location near Samara, in Russia, what was the eastern geographic periphery of the Yamna culture, and no samples are available so far from the core area of the culture, what was in present day Ukraine. Second, ancient autosomal DNA analysis do show clear descent of the Corded Ware population from Yamna.¹¹⁰ So although not by YDNA but by autosomal DNA, the Yamna-piece of the puzzle also clearly matches the rest of the pieces, at least in a sense that the R1a dominated population of Corded Ware clearly originates from Yamna.

Where the issue really becomes unclear, is the issue of cultures before Yamna. Basically, there are no more, than four R1a samples altogether from cultures before the era of Yamna, ie. before 3500 BC, in a distribution that puts the geographical origins of European R1a1a in question. These are samples from the subclade R1a1 from Mesolithic Russia, with one sample from Karelia, from the Kunda culture from between 5500-5000 BC,¹¹¹ and three samples from the Narva culture from a location near Serteya, along the Western Dvina river (not to be confused with the Northern Dvina), one of them from 4000 BC, and the other two from 2500 BC.¹¹²

¹⁰⁶ Allentoft, Morten E., et al. "Population genomics of Bronze Age Eurasia." *Nature* 522.7555 (2015): 167-172.

¹⁰⁷ Haak, Wolfgang, et al. "Ancient DNA, Strontium isotopes, and osteological analyses shed light on social and kinship organization of the Later Stone Age." *Proceedings of the National Academy of Sciences* 105.47 (2008): 18226-18231.

¹⁰⁸ Hollard, Clémence, et al. "Strong genetic admixture in the Altai at the Middle Bronze Age revealed by uniparental and ancestry informative markers." *Forensic Science International: Genetics* 12 (2014): 199-207.

¹⁰⁹ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

¹¹⁰ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

¹¹¹ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

¹¹² Chekunova E.M., Yarceva N.V., Chekunov M.K., Mazurkevich A.N.: Te first results of genetic typing of local population and ancient humans in Upper Dvina region, in: THE state hermitage museumrussian academy of sciencesinstitute for the history of material cultureherzen state universityumr 8215 cnrs. Trajectoires archaeologyof lake settlementsiv–ii mill. Bc: chronology of cultures,environmentand palaeoclimatic rhythms materials of

These samples represent R1a1, the parent subclade of R1a1a, the R1a subclade most common in Europe, but are not part of R1a1a itself. There is one more single sample that could still be R1a. This fifth sample is an R1 sample from thousands of kilometers away of these, from the Funnelbeaker-related Baalberge culture, from a site near Esperstedt in Germany, from between 3887-3797 BC.¹¹³ The sample is of the haplogroup R1, the parent group of both R1a and R1b. This sample has already been tested for the SNP M515 with a negative result, therefore it is not part of R1a1a. It hasn't been tested for the SNP M420 yet, therefore it could still be R1a. What is interesting about this sample, that it is the earliest R1 sample from Central Europe, and no other R1 sample, neither R1b nor R1a has been found from before a 1000 year later than this sample. With the absence of any R1a or R1b sample from within 1000 kilometers and 1000 years, it is hard to predict, how this single sample of R1 connects to the history of R1 and R1b in Europe.

Four or five samples of course, don't really mean anything on their own, since uncharacteristic haplogroups in small numbers are commonly present in human populations, and early diverged small subclades often drifted away geographically from their parent haplogroup. Therefore, the presence of both the R1a1 samples from the Narva and Kunda Cultures and the R1 sample from the Baalberge Culture could have very well been the result of such phenomena. The problem is the hitherto absence of R1a even in samples from prehistoric cultures where data is relatively abundant, and where its' present day microsatellite variance would suggest its' origins. Present day microsatellite variance would suggest the origin of European R1a somewhere around present day Turkey and Iran.¹¹⁴ This, according to its' present distribution in Europe, with higher microsatellite variance in Central Europe than in Eastern Europe or Central Asia, would clearly suggest a route through Anatolia and the Balkans. However among ancient YNDA data gained from 26 samples of the Anatolian Neolithic, R1a (as well as R1b) is entirely absent,¹¹⁵ and it is also absent from Neolithic cultures of the Balkans, such as the Stračevo,¹¹⁶ Vinča,¹¹⁷ and Lengyel^{118,119} cultures.

international conference dedicated the semi-centennial anniversary of the researches of lake dwellings in north-western Russia, Saint-Petersburg, 13–15 November 2014

¹¹³ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

¹¹⁴ Underhill, Peter A., et al. "The phylogenetic and geographic structure of Y-chromosome haplogroup R1a." *European Journal of Human Genetics* (2014).

¹¹⁵ Mathieson, Iain, et al. "Eight thousand years of natural selection in Europe." *bioRxiv* (2015): 016477.

¹¹⁶ Szécsényi-Nagy, Anna, et al. "Tracing the genetic origin of Europe's first farmers reveals insights into their social organization." *Proceedings of the Royal Society of London B: Biological Sciences* 282.1805 (2015): 20150339.

Even if the number of samples is relatively few from these cultures, the fact that R1a is missing from all of them seems to be too much for a mere coincidence. The only other possible geographic route could be through Central Asia and Eastern Europe, a scenario of which the presence of the four R1a1 samples from the Kunda and Narva cultures may be signs. This scenario is however also contradicted by some ancient DNA data, as the Comb Ware Culture seems to have been dominated by haplogroup N1c, that likely arrived from Siberia or Central Asia the same time when that culture appeared in the region,¹²⁰ and autosomal DNA data also defines the population of Corded Ware originating from Yamna,¹²¹ and not from Comb Ware. Although R1a1 samples from the Narva and Kunda cultures suggest R1a1 presence in the region from before the arrival of N1c, it seems that by the height of Comb Ware Culture, N1c was already predominant in the region, and therefore, Comb Ware Culture seems to be a highly unlikely candidate to be the source of R1a1a predominance in the Corded Ware and Andronovo Cultures. R1a is also absent from the Funnelbeaker culture,^{122,123} that geographically was the direct predecessor of the Corded Ware in its' own region, so not only Comb Ware, but also Funnelbeaker seems to be an unlikely candidate for that role.

Since R1a is not only absent from Neolithic Balkan cultures, but it is also absent from all cultures in Central Europe before Rössen, and Cucuteni ie. before 4800 BC, (most notably from western LBK^{124,125}) little space seem to remain in Early Neolithic Europe for the role of the original homeland of

¹¹⁷ Szécsényi-Nagy, Anna. *Molecular genetic investigation of the Neolithic population history in the western Carpathian Basin*. Diss. Mainz, Univ., Diss., 2015, 2015.

¹¹⁸ <https://genetiker.wordpress.com/2015/08/23/y-snp-calls-for-another-neolithic-hungarian-genome/>

¹¹⁹ Szécsényi-Nagy, Anna. *Molecular genetic investigation of the Neolithic population history in the western Carpathian Basin*. Diss. Mainz, Univ., Diss., 2015, 2015.

¹²⁰ Reconstructing Genetic History of Siberian and Northeastern European Populations; Anton Valouev, Emily

HM Wong, Andrey Khrunin, Larissa Nichols, dmitrypushkarev, Denis Khokhrin, Dmitry Verbenko, Oleg Evgrafov, James Knowles, John Novembre, Svetlana Limborska
 biorxiv doi: <http://dx.doi.org/10.1101/029421>

¹²¹ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

¹²² Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

¹²³ <https://genetiker.wordpress.com/2015/08/23/y-snp-calls-for-another-neolithic-hungarian-genome/>

¹²⁴ Ancient, D. N. A. "Ancient DNA from European early neolithic farmers reveals their near eastern affinities." (2010).

¹²⁵ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

R1a1a. So while R1a1a is predominant in ancient DNA samples from the Corded Ware and Andronovo cultures, in accordance to its' present day geographical distribution, it seems to have been almost entirely absent from everywhere from before that. To put it sharply, it seems to have arrived from nowhere, to dominate Bronze Age Eastern Europe and Central Asia.

If our approach is to find cultures with R1a abundance, the only space that remains for R1a are cultures from which ancient YDNA samples are as of now unavailable, and that are at the same time the direct predecessors of the Corded Ware and Andronovo cultures, where R1a1a is already proven to have been predominant. Cultures fulfilling these criteria are the Rössen, the Cucuteni, the Dnieper-Donets cultures. Those neighbors of theirs, where ancient YDNA is available (Vinča, Comb Ware) seem to be dominated by different haplogroups than R1a, and so are their direct predecessors, from where data is available (LBK¹²⁶¹²⁷ for Rössen) and at the same time they are already followed by cultures marked by R1a predominance. Therefore Rössen, Cucuteni and Dnieper Donets cultures seem to be the only possible candidates for the origins of R1a abundance in Europe.

Out of the Rössen, Cucuteni, and Dnieper Donets Cultures, Rössen can be interesting only in the context of the subclade R1a-L664. As described in the hypothesis, both the age and present day geographic distribution of L664 matches with Rössen culture. Regarding this issue, we have two questions: One is whether if really Rössen is the most likely candidate for L664, and the other one is on what route did it take before arriving to its' present location.

First, let us have a look of the scenario, if L664 spread via Rössen. What is problematic with this scenario is that if the split between L664 and the rest of haplogroup R1a1a was the split between Rössen and Cucuteni, then there should be a common source for Cucuteni. However, Vinča culture, that seems to be the most likely possible candidate for that, lacks R1a from its' ancient YDNA samples.¹²⁸ According to its' geographic location one more possible candidate for that role could be the Eastern Linear Pottery Culture from present day Hungary and Romania. No ancient YDNA is available yet from this culture, so R1a predominance is still possible for it.

This however, seems to be a weak form of evidence, since no data is available from this cultures yet, and the lack of R1a from Vinča samples

¹²⁶ Ancient, D. N. A. "Ancient DNA from European early neolithic farmers reveals their near eastern affinities." (2010).

¹²⁷ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

¹²⁸ Szécsényi-Nagy, Anna. *Molecular genetic investigation of the Neolithic population history in the western Carpathian Basin*. Diss. Mainz, Univ., Diss., 2015, 2015.

seem to put the option of Rössen being R1a rather unlikely. So we should also take a view on the scenario of L664 not being from Rössen. Since already relatively large numbers of ancient YDNA samples are available from LBK proper, and Funnelbeaker Cultures, and R1a seem to be almost entirely absent from both (except for the described R1 sample from the Baalberge Culture, but since Baalberge is geographically the southwestern periphery of the Funnelbeaker Culture, adjacent to Rössen, so that sample can rather indicate R1 presence in Rössen, as R1 is entirely absent from all other regions of the Funnelbeaker horizon.) but at the same time, aDNA samples from Corded Ware already shows the present day distribution of R1a1a, then in case if L664 did not come with Rössen, it could have only arrived with Corded Ware. What is against this scenario however is that in this case, L664 should be at least sporadically present in Eastern Europe, along the route of the Yamna and Corded Ware migrations. If L664 had spread from Yamna through the migration that formed the Corded Ware culture, then it should be present among the Corded Ware ancient YDNA samples as well. The fact that it is not present, suggests that it had to split from the rest of R1a1a, and migrated to Central Europe before the Corded Ware culture had emerged. One more option for the spread of L664 could be a bottleneck, ie. small number of people carrying L664 moving as a tiny minority within Corded Ware, and then going through a demographic boom after arriving to present day Germany. In this case however, this should be visible in the microsatellite variance of L664 today in a way, that most of its' subclades should originate from a boom that happened in the age of the Corded Ware, and at the same time, its' microsatellite variance should be significantly higher in present day Poland, Belarus and Ukraine, than in present day Germany and Western Europe. This is however, not the case, as we know today.

This suggests that even despite all the other problematic issues, based on all the data that is available to us as of now, the option of L664 having spread with Rössen is still most likely scenario.

We must note, that due to the low and thus unrepresentative number of samples, aDNA in many cases can be misleading, therefore present day geographic patterns can not be left out of consideration. One apparent example for that is the case of the Urnfield culture. The Urnfield Culture covered much of present day Germany and France, a region where subclades of haplogroup R1b are predominant today. Among the 14 pieces of ancient YDNA samples from that culture however, the vast majority is from haplogroup I2a2b, and only one single sample is R1b.¹²⁹ This could make us

¹²⁹ Schilz, Felix. "Molekulargenetische Verwandtschaftsanalysen am prähistorischen Skelettkollektiv der Lichtensteinhöhle." (2006).

to draw a conclusion that the population of the Urnfield Culture, ie. the population of South Germany and Eastern France was not yet dominated by R1b yet at that time, and that abundance of R1b originates from some mass migration that arrived to the region only after the Urnfield era. Such a conclusion would however be clearly wrong, since more numerous and diverse aDNA samples from the Bell Beaker Culture, that dominated the very same region before Urnfield, already shows the clear predominance of R1b, same as it is in the human population of the region today.¹³⁰¹³¹¹³² This means that R1b already became predominant in the region by the era of the Bell Beaker Culture, exactly how it is suggested by the age and present day geographic distribution, as well as microsatellite variance of R1b subclades in the region, and the aDNA samples from the Urnfield Culture were misleading due to their low, thus unrepresentative number and geographical diversity. In our case, the fact, that only as few as six samples are available from the Vinča culture,¹³³¹³⁴ (what would be the most likely candidate for a common origin of L664 and the rest of R1a according to the present day geographic distribution and microsatellite variance of these groups) but none of those are R1a. However the fact that R1a is absent not only from Vinča, but from samples from all those cultures that preceded it on the Balkans, still make the Balkan route for R1a arriving to Europe in the Neolithic unlikely, at least according to data that we have now. An other possible source of confusion could be the bottleneck phenomenon, when people carrying a certain SNP, represents only a tiny fraction of a certain population, but in a certain phase of the migration of that population of a part of it, their number suddenly explodes, and becomes dominant. In our case Yamna culture of present day Ukraine and southern Russia seem to have been proven to be such. Ancient DNA samples from the Yamna culture, as well as from cultures following it on the Pontic Steppe seem to largely lack R1a until as far as as the Srubnaya Culture, that appeared only around 1900BC, almost one millennium after the end of Yamna.¹³⁵ On the other hand however, autosomal DNA analysis showed the population of Corded Ware Culture, the

¹³⁰ Allentoft, Morten E., et al. "Population genomics of Bronze Age Eurasia." *Nature* 522.7555 (2015): 167-172.

¹³¹ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

¹³² Lee, Esther J., et al. "Emerging genetic patterns of the European Neolithic: perspectives from a late Neolithic Bell Beaker burial site in Germany." *American journal of physical anthropology* 148.4 (2012): 571-579.

¹³³ Szécsényi-Nagy, Anna. *Molecular genetic investigation of the Neolithic population history in the western Carpathian Basin*. Diss. Mainz, Univ., Diss., 2015, 2015.

¹³⁴ <http://www.y-str.org/p/ancient-dna.html>

¹³⁵ Mathieson, Iain, et al. "Eight thousand years of natural selection in Europe." *bioRxiv* (2015): 016477.

largest source of R1a dominance in Europe to clearly originate from Yamna.¹³⁶ This suggests a bottleneck for R1a in the Yamna population, after which it went through a demographic explosion during the Corded Ware migrations. Such scenarios are still possible for R1a in other regions as well, such as the Cultures of the Balkans, since a large portion of the Yamna population is also proven by autosomal analysis to originate from the Middle East,¹³⁷ and Neolithic techniques from that region most likely arrived to the Yamna area via the Balkans. The presence of some R1a1 samples in the Kunda and Narva cultures could also suggest such an R1a bottleneck in the otherwise likely N1c dominated Comb Ware culture, but since autosomal analysis shows the Corded Ware population originating from Yamna, and not from Comb Ware, this scenario for the origins of R1a in present day Poland and Germany seems to be unlikely, except for a scenario where an early migration from Central Asia acts as the common source of R1a in all the Comb Ware, Yamna, Dniepr-Donets, and Eastern LBK Cultures, then submerging into a bottleneck there.

Conclusion

As a conclusion to this paper, we can state that the present geographic range of different R1a haplogroups strongly suggests the prehistoric migration described in the hypothesis of this paper, and even in the scope of ancient DNA samples, it still seems to be the most likely, or at least the least unlikely scenario of those presented. This suggests a prehistoric migration most likely starting from the Eastern LBK culture of present day Hungary and Romania. Then in the next step, splitting into a western and an eastern flank around 5000-4500 BC, with the western flank marked by the L664 subclade of R1a1a, and founding the Neolithic Rössen culture (4600-4300 BC) along the Danube river as far west as Germany, and an eastern flank marked by non-L664 R1a1a, founding the Chalcolithic Cucuteni culture (4800-3000 BC) in present day Romania, Moldova and Ukraine. Then in the third phase, a new wave of migration starting from Cucuteni, and spreading throughout the Eurasian steppes, establishing the early Bronze Age Yamna and Afanasevo cultures on the pontic steppe, and in Central Asia during the 4th millennium BC, supposedly marked by the Z282 and Z93 subclades of R1a1a. In the fourth phase, two flanks of Bronze Age migration seem to have spread out from Yamna culture during the 3rd millennium BC: the Corded Ware culture Northwards, into the temperate forest belt of Northern and Eastern Europe, and the Andronovo culture

¹³⁶ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

¹³⁷ Haak, Wolfgang, et al. "Massive migration from the steppe was a source for Indo-European languages in Europe." *Nature* (2015).

eastwards, shading over the Afanasevo culture in Central Asia. available evidence strongly suggest the occurrence of this complex and large scale chain-migration, but final word can only be said when ancient YDNA will be abundant from all these prehistoric cultures, but such conditions for research are still to be achieved. Of course, if such a migration did occur, that raises questions regarding the linguistic identity of the certain waves of this migration, to identify of which present day language family, were these waves the ancestors. Many would suggest the ancestors of the Indo-European language family, but certain facts suggest that the Uralic family could have also played a major role in early R1a migrations.¹³⁸ This however, could be the topic of an other paper.

¹³⁸ Horváth, csaba barnabás. "the story of two northward migrationsorigins of finno-permic and balto-slavic languages in northeast europe, based on human y-chromosome haplogroups337." *european scientific journal* 10.10 (2014).

THE THEORETICAL BASICS OF THE POST-SOVIET MEDIA

Nino Shoshitashvili, Professor

Grigol Robakidze University, Tbilisi, Georgia

Abstract

Media plays a huge role in a political life of society; it has an impact on a political agenda of society, it has significantly contributed to building of the pluralistic society and a state. Today, on the agenda of ongoing reforms in Georgia are governance ensurance that is based on the democratic principle, and this is why mass media means represent one of most important social institutions, which should support the state development in this direction. Media, as an important instrument of political processes, gains especially great importance when it merges with political sphere. It's important, that in modern politology mass communication means are characterized by such a superior "titles" like "The great arbitrator", "fourth power", etc. Belief in the omnipotence of television is so great that the political figures believe - who controls the media controls the whole country. And indeed, the modern politics is impossible without the mass media. Media creates monitoring of political processes, confrontation of the political positions and ensuring their public relations space. It is natural that it takes an important part in the development of the Georgian statehood, especially in The Post-Soviet period. Because of such a significant role of the media in public and political life, the research of the mass information means is a subject of the constant discussion and consideration among scientists, as well as experts and journalists themselves.

Keywords: Mass media; Mass communication; Propaganda; Indefendent media; People; Media research

Introduction

According to the conclusion of international organization "Reporters without Borders" in 2015 Georgia holds 69th position among 180 countries. While in 2014 it held 84th and 100th in year 2013. (According to the report of the following organization, Finland, Norway, Denmark, Netherlands and Sweden are holding top five positions by freedom of press).

Also, the annual report of the International Human Rights Organization “Freedom House” states that despite the negative worldwide tendency of freedom of press, position of Georgia has improved (In 2014 global rating of press freedom has decreased to its lowest of the last decade). More specifically, the research shows that the country has moved up to 7 points in 2010-2014.

According to “Freedom House” research of press freedom, Georgia holds the first place among Eurasian countries.

Regardless of the improvement, Georgia is still among the states with partial freedom of press. Furthermore, Georgia and Moldova are the only countries in Eurasia with partial freedom, rest of the states are categorized as countries with no media freedom.

But the fact that Georgia is a leader in region gives us no reason to be proud. Leading position of the country is evident when it is compared to authoritarian states where corruption and human rights are the most essential problems and people are imprisoned for criticism of government.

Citizens are often making their statements on politicization of media:

“There has been no apparent changes. It is in same condition as it was in previous years. Media is not independent.”

“In any time, it was depended on its owner – the one who owns the press. The problem is that journalists themselves are useless.”

“Compared to last government, it’s free, but still influenced by the people who fund it.”

Well-informed and politically active society is the base of state democracy. Georgian society has always been politically responsible throughout the political life of country. And the most significant achievement of the following society is free press, towards which our citizens always were particularly sensitive.

It is impossible to establish democracy without free and competitive media. This is the cause of posed questions about ongoing media processes. Within short before the commencement of new political season and parliament elections, number of broadcast companies refuse hosting socio-political shows. While the growth of ratings (which should be main task for independent media) is depended on similar programs.

Georgian press is progressing, but yet experiencing serious business and economic problems. Development of media as a business, is vital to create independent and free space for press. Meanwhile, I would like to make clear that there is tangible lack of qualification and professionalism among the journalists.

At the first sight, there are large amount of TV broadcast companies, newspapers, radios and journals (not to mention online news) for such small market. However, very little number of them works as business. Vast

majority of TV broadcast companies (regardless to their statements) are depended on ones who give funding, or are involved in politics. Which impedes them to develop as free business. Evidently this does not concern Georgian Public Broadcaster, but its problems and permanent stagnation is different issue to discuss. Same problem occurs with print media, showing their palpable political motives (excluding little quantity of yellow, and grant-orientated press)

If one wishes to create media, which is objective, ethical and has its professional standards, one should acquire international funding, or struggle to survive. But the meaning of survival is not well understood by majority of media-owners. They have no knowledge of transforming media into business, while keeping qualified, professional and interesting contents and attracting more people. In other words, to “coax” the people, who tend to rely more on popular press. This can be achieved by proper marketing, which is quite rare in Georgia.

From all the problems listed above, economic issues are also apparent, and as a result we receive politically engaged media.

Regional televisions experience way complicated issues, as the market there is very small and often the only way to survive is to support political interests of influential one.

While getting acquainted with media theories, quite a fair question arises: How do the media theories correspond to Georgian media reality? Moreover, these theories are mainly based on stable Western society and formed by the universal understanding. As for the young democracy, totally different approaches might be needed.

According to one of the standpoints, western social scientist possess a higher symbolic status. They have a special activity to adapt their theories to different, less developed, "non-Western" countries. It is therefore not surprising that the Western media institutional analysis has become the main direction of media studies of the Post-Soviet countries.

According to media structural analyses, mass media independence in the Post-Soviet space, is closely linked to the political and economic factors. Issues considering media ownership, media legislation, formal control of the state and technological innovations are arisen in a variety of studies. By studying those issues we can make some conclusions about the independence of the media.

There is another point of view as well, according to which, the Western Media theories do not attribute universal status, but in this case are based on the modernization theory. The main determinant of the concept development is - people, country and culture is going through the same development path. Different cases are seen as deviant.

In this context, the role of the media is evaluated according to how effectively it contributes to the country development in the right way. This means that there is a constant expectation towards media that it will be independent of the "undesirable" forms of control (political, economic or other type of control) and will be subjected to the "desirable" legal control of public opinion. It is not hard to consider that such an approach is normative itself. It is widely used around the world, including China, Malaysia, Africa and Latin America.

Next to the structural analysis, that approach quickly became the second dominant direction of the Post-Soviet media research during which researchers basically consider mass communication mainstream theories of 60-70s and leave beyond attention relatively new tendencies, the use of which would make media-researches diverse. I believe that Michel De Sarto stimulated new views of sociological researches and not only in the sphere of mass communication. Especially should be marked his definition of tactics and strategy. Agenda strategy is a dominant, imposing established rules upon others, which are determined by political or economic powers. Subordinated people become subordinated to the rules, but they also have an opportunity to replace the established agenda (existing) by the other one. De Sarto calls such an opportunity – "tactics"; it is always temporal and determined on short term results. That is why it is never stable. But this absolutely does not mean that mass communication means are universal and they can totally determine important or less important social problems. The whole pathos of De Sarto is that his ideas lead towards recognition of "weak agents", estimated improperly by other researchers

It should be mentioned that De Sarto's ideas conditioned emerging of other similar theories. I consider H. Martin-Barbero's paper is especially interesting the importance of which is growing day by day. M. Barbero cast doubts in the works of the western researchers, in accordance to whom society is divided in dichotomic way: on the one hand "people's will", expressed by means of democratic procedures and on the other hand "will of people having no right". He has underlined that the decisions, made by "empowered people" are not the results of their independent will, it includes itself interests of "people having no right" as well. At the end, Martin-Barbero placed mass-media in this oppositional forces center.

Media resources, as an expressive means of oligarch owners' interests, are represented in L. Altschull's papers). According to "Elite Theories" of V. Mosco, there is connection between media elites and the rest political, economic and cultural elites, also between the processes, by which the leading classes participate in creation and regulation of policy.

N. Chomsky develops the idea and represents "propagandistic media model" according to which, media along with the government creates ability

of preserving governing party. According to L. Altschull “Content of press is in direct correlation with the interests of press sponsors”.

Thereby, media gives special character to some information or occasion by selecting certain themes and issues, neglecting others and putting into frames media coverage which usually expresses their owners’ political beliefs and interests. For ten years, V. Adorno, G. Deborah, P. Golding, D. Kelner, D. Shiller and others were concerned about media and government problems. N. Chomsky and E. Herman say that “political economy of mass informational means gives us a critical analysis of the large corporative mass sources and that media space functions being influenced by political and economic power functions”, “money and power contribute to the ruler and dominant commercial interests – to provide the desired information for the auditorium.

Historically, in media researches of the Anglo-Saxon world, the greatest attention was dedicated to ownership and media economical control relationship issues. Media-researchers were analyzing micro-economical processes and political-economic perspectives, trying to explain how it will affect the balance of power in society; mass media in economic relations, therefore, the activities of the media companies on media market. In such manner were created the mass information means of political-economic theory. Political-Economics is the science of humans’ economic relations and laws that govern the development of socio-economic formations.

Regarding media we can talk about what kind of influence does the wielders of power relations have on the media industry resources usage and distribution. It is important to highlight that while mass media researching, the political economy and economics are getting closer to each other which is a natural phenomena considering mass information means role and media market bilateral nature in society.

According to political economists, “ideology and power of media organizations is determined by economic base”.

Media-means express their owners’ interests which, as a rule, are representatives of dominant parties or oligarchs. Thereby, there are connections between media-elites and the rest political, economical and cultural elites, also between the processes, by which the leading classes participate in creation and regulation of policy. According to above mentioned point of view the media, in cooperation with the government, creates the ability of preservation dominant party. According to L. Altschull, “Content of press is in direct correlation with the interests of press sponsors”. Thereby, media gives special character to some information or occasion by selecting a certain themes and issues, neglecting others and putting into frames media coverage, which usually express their owners’ political beliefs and interests.

As the media is closely linked to dominant structure with its owner's help, it would be interesting to describe what kind of communicational strategies uses media while drawing up an informational program (news). Liberals often claim that, elite media contacts other authorized elites, including the government. Although many media claims that it is independent of the external pressure, this is not often true.

“It is not necessary to advise them how to write, because in any matter they will say it in a right way” says Chomsky. In the words “they will say it in a right way” is meant the “truth” that is media owners and editors think is right. Media resources are selling their auditorium to other corporations. As larger auditorium they “recruit”, more success they will gain. Auditorium does not “participate” in this purchase-selling process; it is just in a role of “supervisor.” Money and power contribute to the ruler and dominant commercial interests to provide the desired information for the auditorium.

In modern democratic countries media is practically independent from political power, but is constantly under the pressure in economical terms. To be more precise, political power influences media using economical factors. Media space mainly functions under the influence of political and economic power. The owners of large corporations, after purchasing mass informational means, ensure high degree of control on informational groups. Frequently, various mass communicational means (television, radio, newspaper) are gathered in one unity and all of them are directed towards promotion of the idea.

Kolin Spark is also talking about influences of political and economic factors – in any system, media independency degree depends on how an power is distributed in a society, especially when it deals with economic and political separation.

Conclusion

Commercial mass-media is much more pluralistic in western countries, because pluralistic society means decentralization of authority, but “market” model of mass informational resources in the third type countries perfectly co-exists with dictatorship. According to Eastern Europe and Asia countries media traditions, ruling political powers retain important role in subsidizing mass information. One of the reasons is that particular media organizations cannot gain financial benefit. Integrated political-economic “elite” puts forward political task to media companies; instead it guarantees its economic activity. Accordingly, mass-media owners, high rank managers are less concerned about attaining financial independence and consciously serve to their sponsors. In post-soviet space and in The Middle Eastern countries media organizations, owned by oligarchs, are partially financed by

state structures. Such secret funding is the fee of direct or indirect political loyalty.

References:

- Chang, Won Ho. *Mass Media in China: The History and the Future*. Ames: Iowa State University Press, 1989.
- Certeau, Michel de. *The Practice of Everyday Life*. Berkeley, Los Angeles, and London: University of California Press, 1984.
- Martín-Barbero, Jesús. *Communication, Culture and Hegemony. From Media to Mediations*. London, Newbury Park, New Delhi: Sage, 1993.
- Altschull, J . h. (1984) *Agents of Power: The Role of The News Media in Human Affairs* . New York: Longman.
- Vincent Mosco, *The Political Economy of Communication: Rethinking and Renewal*. London: Sage, 1996.
- Herman E. S., Chomsky N. *Manufacturing consent: the political economy of mass media*. N.Y., 1988.
- Altschull, J, H .& Reese , C., D, (1991)*Mediating the Message* . White plains: Longman, p. 254 .
- Herman E., Chomsky N. *Manufacturing Consent. The Political Economy of the Mass Media*. London: Vintage, 1994. P. 2.
- Picard R. *Media Economics. Concepts and Issues*. London, Sage, 1989. P.18– 21.
- Murdock and Golding. (1977) “Capitalism, Communication and class relation”, in Curran, J., In Gurevitch.
- Danelia N. “Media independency and Means of Media Control”, Tbilisi, 2008.
- Sparks C., Reading A. *Communism, Capitalism and the Mass Media*. London- Thousand Oaks-New Delhi, SAGE Publications. 1998, p.. 21-38.

SIGNIFICANT FACTORS FOR THE SUSTAINABLE DEVELOPMENT OF TOURISM IN GEORGIA

Maka Piranashvili, Associate Professor
Nodar Grdzelishvili, Associate Professor
Ketevan Maisuradze, Assistant
Grigol Robakidze University, Tbilisi, Georgia

Abstract

In the XXI century all the efforts of mankind are directed towards the inculcation of principles of sustainable development in all the spheres. Population growth, rapid economic development and a high level of globalization caused environmental pollution, emission of dangerous gases, climate change, loss of diversity of nature, etc. It is a well-known fact that the consumption of resources during sustainable development of tourism is implemented in two ways to meet economic, social and esthetic demands and to maintain the country's cultural originality, essential biological diversity of the environmental and substantial vital systems. Principle of sustainability and correspondent approach is urgent for tourism since the promotion of the sector mostly depends on sightseeing and activities derived from natural environment, historical and cultural heritage of a certain region. Encroachment and damage of the resources, let alone their destruction, will by and large end all the talks about tourism. It is also remarkable that maintenance and rescue of a certain part of the resources is possible by tourism uniquely.

Keywords: Tourism, cultural heritage; sustainable development; tourist product; regional development

Introduction

The apparent awakening started in the 60-ies when symptoms of the planet degradation and the first signs of ecological crisis became visible. Scientists concluded the current state of the planet to be a consequence of limitations of the resources and overpopulation, as well as, political, social and economic inequality. The difference between riches and poor in analogy

to the one between industrial and developing countries, has reached colossal scales.

In 1987 the UN General Assembly reviewed the report “Our Common Future” revealing precise concrete ways to explore and solve the issues mentioned above. It also reflects a unified concept of the so called sustainable development: “Sustainable development is an economic and social road paved on the steady sustainability of the environment. The road should meet the demands of contemporary society at the same time considering the prospects of the development of future generations”.

In 1992 Rio de Janeiro held an international conference on the issues of environment and development. It refined the concept of sustainable development and posed new initiatives to make it true. It also declared a historical document – “agenda” of the XXI century (Program 21).

The first nongovernmental organizations such as “The friends of the earth” (1969) and “Greenpeace” taking care of the environment were found in order to increase global awareness in population (Geoffrey 2001). Publications by Rachel Carson – “Silent Spring” and “Growth Limit” - about the outcomes of aggressive economy became extremely popular.

For this reason, the concept of sustainable development was created and integrated in all the spheres of human activity and in tourism as well in 1992. A new ideological platform for tourism sector was generated from the roots of sustainable development.

Notwithstanding the fact that the term sustainable development is basically associated with environmental protection, it does not comprise only the latter. Social and economic dimensions are equally important here. It also reflects current standards of social and political liabilities recognized to be the leading principles by international organizations such as the United Nations (UN), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Tourism Organization (UNWTO).

Sustainable development is a continuous process of changes and alterations in the frames of which the implementation of current resources, investments, technical progress, institutional updates altogether correspond to modern and future requirements.

We think sustainable tourism development should be based on the economic model aiming at:

- Security of pleasant travel for tourists;
- Maintenance of the state of environment directly influencing tourists and local population;
- Increase of the living standard of local population.

Achievements in sustainable development stipulate the existing conceptions of tourism promotion in many developed countries. It implies application, conservation and protection of natural, cultural and other tourist

resources. Tourism based on sustainable development is special since most of the volume of activity is related to attraction and the types of actions linked to the preservation of nature, historical heritage and cultural identity of an appropriate territory. If the resources get deteriorated or destroyed tourist regions will not attract tourists and tourism will not be successful. Tourists appeal to natural, clean and less packed places.

A number of principles are crucial for sustainable development and the essential one is to create conditions that would enable:

- Efficient implementation of resources, elimination of wastes and recycling;
- Restriction of pollution so that eco systems do not get damaged;
- Recognition and protection of the diversity of nature;
- Arrangement and solution of local needs according to the possibilities on a domestic level;
- Adequate food, water, shelter and fuel equally available in a reasonable price;
- Health care through creating safe, clean and pleasant environment and services focusing on illness prevention and care of patients;
- People not to fear any assaults or punishment because of their race, gender or faith;
- All the layers of society to have the right to participate in decision making;
- Availability for all the layers of society to participate in cultural, entertaining and leisure opportunities.

Sustainable development of tourism implies the possible growth on the expenses of efficient realization of the existing factor recourses because a significant aspect of sustainable development conception is fostering the tourism that is built upon domestic natural, material and labor resources. This way we enable development of the types of tourism which can bring maximal benefit to local population (for example, eco tourism). In this case population perceives the meaning and importance of tourism much better and actively encourages maintenance of domestic tourist resources as well as their complex or consistent operation.

Tourism is a rather complicated branch of business directly related to different sectors of society and economy. Without correct and accurate planning tourism may cause undesirable negative impacts on ecology, social-economic processes and protection of cultural heritage. Strategic planning on national and regional levels should cover policy of tourism development, structural plan, standard of sites, institutional factors and all the other elements necessary for the further promotion and management. In general, the frames of strategic planning should elaborate detailed plans for tourist attractions, resorts and other fields of tourism.

One of the benefits of tourism is conveyed in the idea that if it develops appropriately on the basis of sustainable development conception it can significantly subsidize the saving of natural and cultural resources of a correspondent region. One of the main methods of the security of sustainable development is the conception of ecological planning. It regards monitoring and analysis of all the elements of the environment which should be considered in the process of constructing tourist sites or infrastructure.

Benefits gained from tourism are profitable for the whole country: local population acts regarding the national interest, provides national policy of the field development and is actively involved in the maintenance of the environment and of cultural heritage through participation.

The concept of quality tourism is closely linked to sustainable development. It does not necessarily mean expensive or having a high cost, it is more related to the ratio of optimal prices and quality of tourist attractions, sites and services. Such an approach will also work with the type of tourists who are very well aware of local customs and traditions, nature, etc.

Sustainable development is a continuous chain of changes and the application of local resources, investments, technical progress and institutional updates within its frames match the requirements of current and future generations. The World Union of Conservation of Nature declares: "Sustainable development is a process in the frames of which the process of development goes on without damaging or destroying resources".

We assume the principles of sustainable tourism development in Georgia can be formulated the following way:

- Natural, historical, cultural and other resources for tourism need to be protected for the continuous implementation in the future and for bringing the benefits for society;
- Tourism development should be planned in the way to avoid serious ecological and social-cultural problems in the region;
- The entire ecological condition of the region and its quality is urgent to be preserved and improved where required;
- Quality of tourist services should be secured so that tourist sites retain competitiveness and popularity;
- Revenues gained through tourism have to be spread on a maximally wide circle of population.

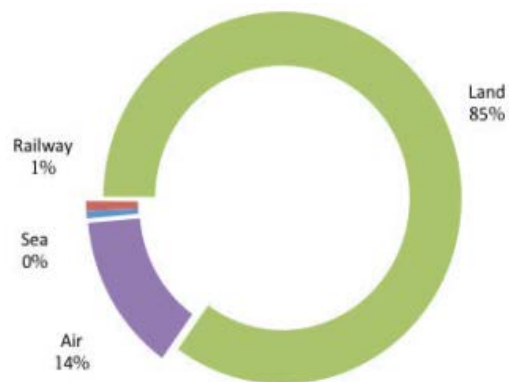
A suitable level of cultural traditions and ethnic diversity (uniqueness) is an important element of saving local cultural heritage. In addition, tourist resource maintenance assists local population to study and protect this heritage in a better way.

Border Crossing Statistics

- In the 2nd quarter 2015, 85% (1 141 466) arrived in Georgia by land transport, followed by air transport, 184 412. The first 6 month figure was 2 002 103 arrivals by land, followed by air transport with 292 033 arrivals.
- The busiest border was Sarpi (Turkish border), which saw 336 665 crossings in the 2nd quarter 2015, and 583 222 crossings in the first 6 months.

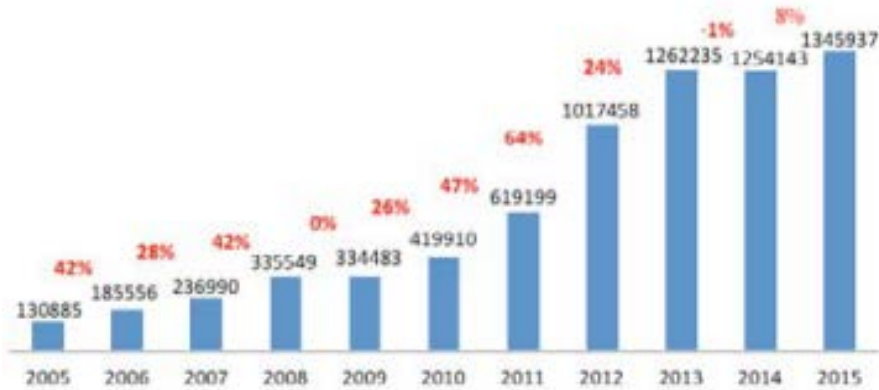
Border name	Border with	2014: II q	2015: II q	Change %
Sarpi	Turkey	367 407	336 665	-8%
Sadakhlo	Armenia	208 388	248 191	19%
Tsiteli Khidi	Azerbaijan	207 563	222 152	7%
Kazbegi	Russia	124 632	202 254	62%
Airport Tbilisi		130 166	153 323	18%
Tsodna	Azerbaijan	54 546	48 773	-11%
Ninotsminda	Armenia	45 401	40 645	-10%
Vale	Turkey	26 736	24 161	-10%
Airport Kutaisi		25 864	16 614	-36%
Airport Batumi		14 310	14 475	1%
Vakhtangisi	Armenia	11 505	12 538	9%
Railway Gardabani		6 777	7 156	6%
Guguti	Armenia	6 049	5 933	-2%
Airport Batumi		5 437	5 120	-6%
Railway Sadakhlo		4 643	3 693	-20%
Port Poti		3 785	3 312	-12%
Port Kulevi		527	778	48%
Samtatskharo	Azerbaijan	84	85	1%
Sarpi	Armenia	0	69	

Georgia International Arrivals by Borders 2015: II quarter

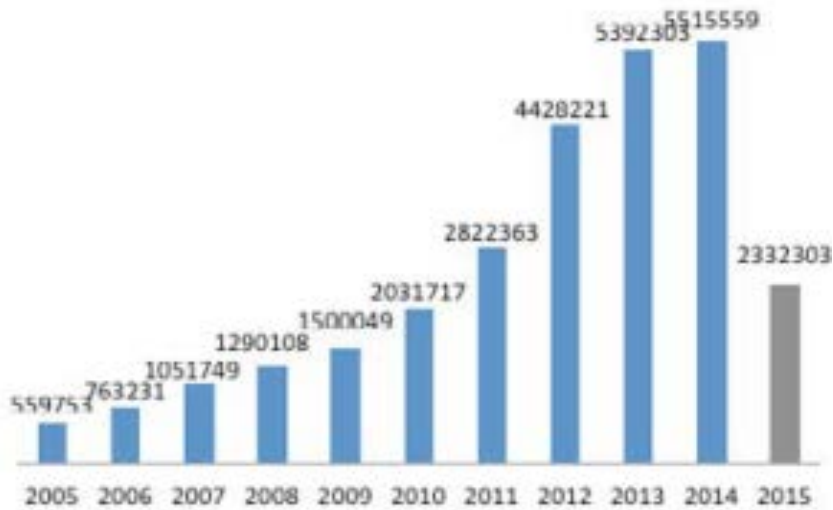


Control of massive international tourism is substantial for Georgia. We should not aim at steady growth of tourists. It would be better if streets and sidewalks were not crowded. We think it would be better to improve the quality in Georgian tourism industry; to offer an exclusive tourist product, increase prices and attract a higher class educated visitors.

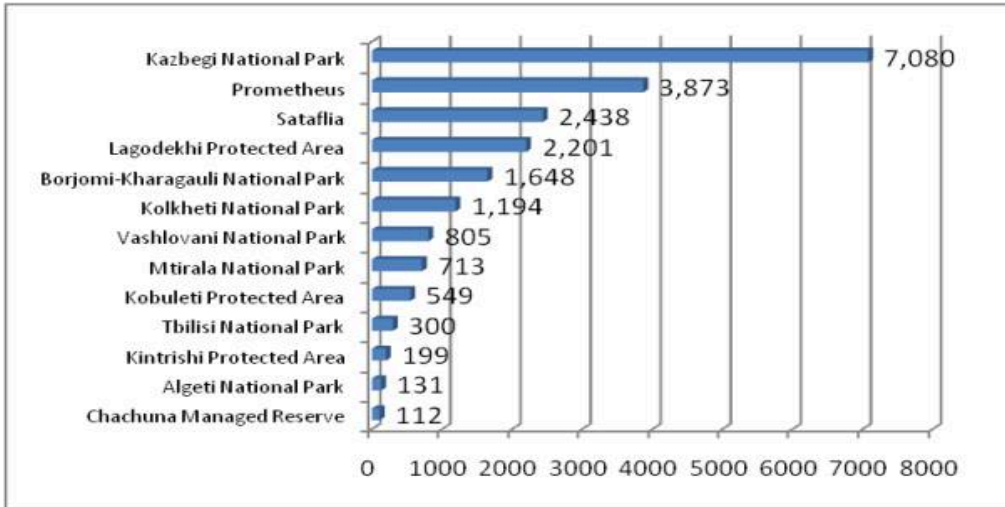
International Arrivals I I quarter (2005-2015)



International arrivals by years



Out of the factors having the impact on the realization of tourist product, the political state of the country and current legislation are utterly important. Tourism sphere in Georgia is regulated by Georgian laws on “tourism and resorts” and “resorts and zones of sanitary preservation of resort venues”.



Visitor Statistics by Protected Areas 2014

The listed laws cannot be complete since they have no stimulating factors; they also do not regulate business relations of the parties participating in tourism and they do not promote the development of the field.

Conclusion

We assume, initially it is urgent to pass stimulating legislation bills since the existing basis – Georgian law on “tourism and resorts” covers only the definition of primary concepts and terms. Some inessential amendments were made several years ago and yet they are related to concepts and terms. Such lawmaking (drafting) leaving a wide spectrum of problems aside, cannot enrich the field any way. In this regard, we consider the law on the development of highlands (high mountainous regions) of Georgia to be a step forward notwithstanding some minor implications. It can freely serve as a solid background for tourism sustainable development in the high mountainous region, for the employment of population, their social protection and also for attracting new investments.

We also think it is necessary to urgently form a group of practitioner and highly qualified specialists of academic circles (those whose trust gained in society is flawless) in order to finally set forth and approve strategic plan of tourism development to eventually foster and promote development of sustainable tourism in Georgia.

References:

Piranashvili M., Grzelishvili N. Social-Economic Aspects of Promoting International Tourism in Georgia, 13 th International scientific conference “Human Resources Management: Current Trends, Challenges,

Inspirations`, Alexander Dubcek University of Trencin, Faculty of Social and Economic Relations, 2015.

Grdzlishvili N, Grdzlishvili R. "The Role of Branding in the Formation of Region Tourist Attraction", Georgian Academy of Business Sciences, Internationally Reviewed Practical Journal "Moambe". Pp. 83-85.

Grdzlishvili N. Prospects of Developing Trans-boundary Regional Tourism in Georgia, V International Scientific Practical Conference "Tourism: Economy and Business", Batumi Shota Rustaveli State University. Adjara Department of Tourism and Resorts. Batumi, 2014.

Grdzlishvili N. Aspects of Managing Investment Processes in the Sphere of Tourism, International Scientific Conference dedicated to the 20th Anniversary of the School of Law and Social Sciences and the 80th anniversary of Akaki Tsereteli State University, 2013.

Drake S. P. Local participation in ecotourism projects, in Whelan, T. (ed.) Nature Tourism, 1991.

www.gnta.ge

www.unwto.org

www.apa.gov.ge

www.moe.gov.ge

<http://www.panda.org>

<http://www.iucn.org>

THE IMPORTANCE OF THE ROLE OF LOCAL FOOD IN GEORGIAN TOURISM

Maia Meladze, Associate Professor
Grigol Robakidze University, Tbilisi, Georgia

Abstract

The top three activities undertaken in Georgia by international travelers are: rest and relaxation (36%), tasting Georgian dishes (35%), exploring Georgian nature/landscape (35%), etc. Gastronomy has become one of the most important parts of a tourism market. Georgia is a unique country – as a homeland of wine and a country which is distinctive for its plenty of ethnographic regions. Each historical-ethnographic region had its own natural and agricultural specificity, which led to the peculiarity of the ethnic group feeding. A great Majority of foreign tourists, who tries Georgian traditional dish for the first time, declares about its best taste and scent at once. Georgia's traditional winemaking method of fermenting grapes in earthenware, egg-shaped vessels has been added to the world heritage list of the UNESCO. Georgian gastronomic diversity is a great resource for tourism development in the country. Friendliness and goodwill of a tourist greatly depends on the dishes and beverages they are offered.

Keywords: Georgia, Tourism, Gastronomy, Food, Traditional dishes

Introduction

For many of the world's billions of tourists to enjoy tried and tested recipes, cuisine, gastronomy has become a central part of the tourism experience. In addition, tasting local foods has become an important way to enjoy the local culture. Local food at a destination can bring tourists physical, cultural, social and prestige experience. Food and its related tourist activities have been described into a new category of tourism called food tourism in which the motivation for traveling is to obtain special experiences from food.

In recent years, Food Tourism has grown considerably and has become one of the most dynamic and creative segments of tourism. Both destinations and tourism companies are aware of the importance of gastronomy in order to diversify tourism and stimulate local, regional and national economic development. Furthermore, Food Tourism includes in its

discourse ethical and sustainable values based on the territory, the landscape, the sea, local culture, local products, authenticity, which is something it has in common with current trends of cultural consumption.

As the era of mass production eased in early in the 20th century, it became more and more difficult to cater to the needs of individual customers. The explosion in the demand for goods after the Second World War further reduced the importance of customer service¹³⁹.

The performance of the tourism industry in Georgia in last can be characterized as a period of further growth. International arrivals to Georgia have been growing rapidly over recent years. In 2014, these reached the record number of 5,515,559, representing annual growth of 2%. The highest growth rate to date was registered in 2012, when the number of international arrivals increased by 57%. In 2013 the number of international arrivals grew by 22%, overstepping the five million mark for the first time¹⁴⁰. According to “Rough Guides” Georgia ranks 5th among the top ten countries to visit in 2014, coming behind Brazil and Turkey. The top three activities undertaken in Georgia are: rest and relaxation (36%), tasting Georgian dishes (35%), exploring Georgian nature/landscape (35%), etc.

One research of tourists’ segmentation revealed three types: the culinary tourist, the experiential tourist, and the general tourist (see Figure 1). The culinary tourist was identified as the tourist who, at the destination, frequently dines and purchases local food, consumes local beverages, dines at restaurants, and rarely eats at franchisee restaurants. In addition, the culinary tourist segment was more educated, earned higher income than the other two segments, and was characterized by its variety-seeking tendency towards food.

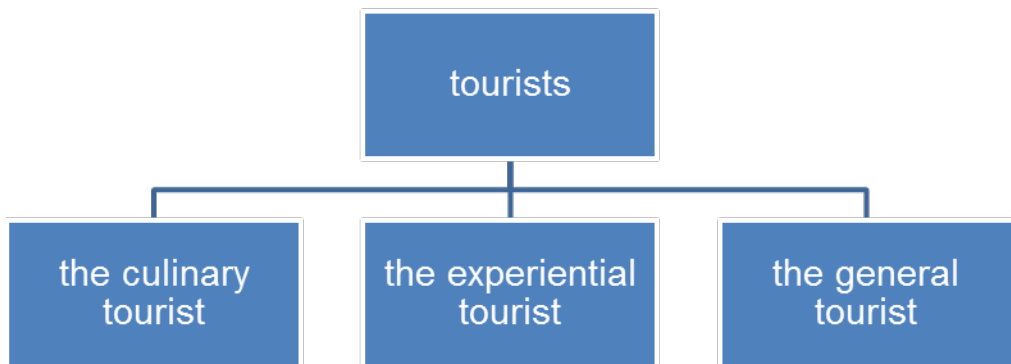


Figure 1. Tourists’ segmentation

¹³⁹ Simon Hudson, Louise Hudson *Customer Service in Tourism and Hospitality*, 2012

¹⁴⁰ Georgian National Tourism Administration:
<http://georgia.travel/uploads/angarishiweli/eng.pdf>

According to the above mentioned gastronomy has become one of the most important parts of Georgian tourism market as a facility used for attracting them. Gastronomy is a vital tool for place marketing and a strategic element for a brand image for tourist destination.

One of the significant trends is the connection of local products consumption to their place of origin – the idea that a specific food or wine can be fully enjoyed and “understood” only if it is prepared on the territory of its origin, by people from that community, using local ingredients. Also the tasting of wine should take place in the same area of production, at the same time it provides a possibility to deepen the knowledge of the technology used for the production and preparation (Sidali, Spiller, Schulze 2011:15). In addition, variety of Ethnography creates a unique cuisine. Georgia is a unique country in both priority directions – as a homeland of wine and a country which is distinctive for its plenty of ethnographic regions. Historically, the authenticity of each region was expressed by dressing style, architecture and gastronomy, but nowadays the most preserved is gastronomy. The unique geography of the land, which includes both alpine and subtropical zones, has created an enviable culinary tradition. Feature of the Georgian cuisine is the use of certain products distributed in the Caucasus, and therefore the presence of certain foods, the popularity of which has worldwide fame.

Georgian cuisine is an obvious manifestation of the oldest and richest culture of the country. Each region had its own natural and agricultural specificity, which led to the peculiarity of the ethnic group feeding (food type, cooking procedure, eating frequency). A great Georgian historian and scientist Ivane Javakhishvili used to say that Georgians created diversity of food and drink on the basis of natural variety, so that they protect their health as well as satisfy their feeding needs. Majority of foreign tourists, who tries Georgian traditional dish for the first time, declares about its best taste and scent at once.

Georgian cuisine at its compilation of recipes and dishes of ideology is based on the contrast of spicy and hot. Vegetables widely used in separate dishes and as a complement to meat dishes. Continued existence of the Georgian nation at the crossroads of many cultures and influences led to the fact that, none of the types of meat has no the predominant value in Georgian cuisine. Georgian meat dishes can be made from pork, lamb, beef, poultry, etc.

Georgia's traditional winemaking method of fermenting grapes in earthenware, egg-shaped vessels has been added to the world heritage list of the UNESCO. Georgia's ancient qvevri winemaking method is part of the Intangible Heritage of Humanity. The large earthenware vessels traditionally used to ferment grapes in Georgia are called qvevri and

archaeological evidence of their use goes back 8,000 years. They are typically buried in the floor of the cellar or Marani, a semi-sacred place to most Georgians and found in almost every house. The practice has recently spread to other countries, such as Slovenia, Italy, Armenia, Croatia and even the US, alongside current interest in natural and orange wines. UNESCO said, 'the tradition plays a vital role in everyday life and celebrations, and forms an inseparable part of the cultural identity of Georgian communities, with wine and vines frequently evoked in Georgian oral traditions and songs.'

In Georgia the main regions of wine tourism spreading are: Kakheti, Kartli, Racha, Imereti, Adjara, etc. By its special location, the historical past and wine culture the town of Signakhi is considered to be the center for wine tourism in Kakheti.

The materials on grape found in Georgia are dated by VII-VI centuries BC which is confirmed by wine kernels discovered in Shulaveri and Sukhumi archeological excavations. According to the researches and historical sources it has been established that long before "Dionys" and "Bakhus" there was the godhead of vine and wine called "Badagoni" in Georgia. As far back as in the earliest period the wine sort "Badaghi" produced from pink grapes was spread on the territory of Guria-Adjara.

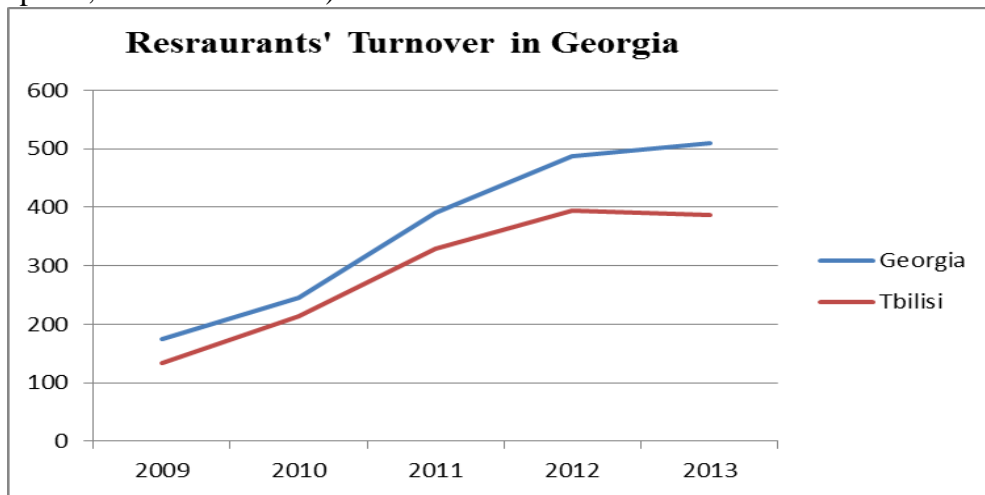
The statue of bronze man (height 7.5 cm) was found in Vani region (Georgia) excavation. It is a man sitting in the arm-chair with a drinking-horn in his right hand. One has the impression that he is proposing a toast. The period of this statue's origin is considered to be VII-VI centuries BC. In the opinion of the scientists the word "wine" itself ("vin", "wine", "vine", etc.) is of Georgian origin. Out of the 2000 famous grape sorts 500 sorts are Georgian.

There were primitive wine factories in Georgian churches and monasteries where the wine cellars and presses are still met. The wine cellar dated for IV century and the remains of wine factories existing in Ikalto monastery complex were found in Nekresi. On the territory of Alaverdi Cathedral Complex the oldest wine cellars consisting of 40 large wine jugs were discovered. The tradition of monastery wine preparing is going on nowadays. There is the unique wine reservoir in Kvareli region. It is situated in the tunnel made in the rocks. The length of this tunnel is 13.5 km. This reservoir maintains a permanent temperature in all the seasons (14-16°C). It is an ideal condition for wine ageing. Till today the Georgian fine wines are subjected to the process of ageing.

Georgian sweets are also included in the list of specific national cuisine. Moreover, "Churchkhela is made from pure grape juice. "Churchkhela" and "Gozinaki" is a phenomena representing Georgia's gastronomic culture As well.

Hotels, Catering and Tourism (HCT) is one the fastest-growing economic sectors in countries around the world. The trends are reflected in Georgia. Figure 2 shows, that restaurants' turnover has been growing rapidly in Tbilisi and in Georgia total.

Tourists try not only familiar dishes in well-known touristic places but millions of them travel in order to discover new and unique culinary sensations. Nowadays a lot of tourism destinations set their marketing strategy based on gastronomy tourism. Majority of experts believe that touristic places can be significantly advanced within the borders of an international market with the help of wine places and national cuisine (Sidali, Spiller, Schulze 2011: 15).



Source: National Statistic Office of Georgia

<http://www.geostat.ge/index.php?action=wnews&npid=274&lang=eng>

Figure 2. Restaurants' Turnover in Georgia

Georgian cuisine is probably the most important attraction of the country. Wine, beer, bread, cheese, honey festivals are often held in Georgia. Some of them are not yet developed. The reason of this is a lack of experience not a lack of interest.

Every autumn wine festivals are held in Kakheti where guests are treated to wine and immediately cooked food. It should be noted that most of them are thoroughly fixed into annual events of the country as well as of the certain regions. Today, many Georgian and foreign visitors are attracted by wine tours and other events held at the "Chateau Mukhrani".

A number of projects contribute to the promotion of the country. The projects are created in favour of the revival of old Georgian gastronomic traditions. As soon as you enter the Bread House, you will find yourself in the Satone (hall with Georgian bakery). Long Kakhetian Shoti and round thin Madauri will be baked in front of you. For instance, any interested person

will have an opportunity to gain the experience of baking in “Bread House”- in the Satone (hall with Georgian bakery – see Figure 6). Another restaurant “the Shadow of Metekhi” – this is mostly a museum-restaurant with its ethnographic interior and retro contents.

Project “Treasure of Georgian Feast” – The tradition well preserved in the cuisine of Georgia, which is a historical flavor brought back to Georgian feast as a result of a search expedition conducted by M/Group. Treasure of Georgian Feast will be served in a special manner – original décor with national ornaments or the table laid in a Georgian manner – all these serve to help you arrange a unique cookery tour in time, taste the most native and simultaneously the most exotic dishes, feel previously unknown, piquant taste of Georgian cuisine and discover a new, interesting country.

Conclusion

Many people think running a restaurant is simple: Offer good food at a fair price and everything else takes care of itself. Profitable restaurants know that guests patronize them – or get angry and leave – for a variety of reasons other than food quality and value. Managing the total dining experience is a much bigger job than merely executing a good recipe. Guestology involves systematically determining what those factors are, modeling them study, measuring their impact on the guest experience, testing various strategies that might improve the quality of that experience, and then providing the combination of factors or elements that attracts guests and keeps them coming back.

Georgian gastronomic diversity is a great resource for tourism development in the country. Friendliness and goodwill of a tourist greatly depends on the dishes and beverages they are offered.

References:

Meladze Maia, Koblianidze Tamar, Piranashvili Maka. Gastronomy Heritage as an Opportunity for Georgian Tourism Industry. 3rd International Congress UNESCO Chair UNITWIN Network "Culture, Tourism, Development" - TOURISM AND GASTRONOMY HERITAGE. FOODSCAPES, GASTROREGIONS AND GASTRONOMY TOURISM, Barcelona, June 16-20, 2014.

Sidali Katia Laura, Spiller Achim, Schulze Birgit. 2011 Food, Agri-Culture and Tourism (Linking local gastronomy and rural tourism: interdisciplinary perspectives) Springer.

Sordia Kakha. Georgian Cuisine <http://ggdavid.tripod.com/georgia/cuisine/>
Georgian National Tourism Administration: <http://georgia.travel/eng.pdf>
National Statistic Office of Georgia.

<http://www.geostat.ge/index.php?action=wnews&npid=274&lang=eng>

MAIN TRENDS OF DEVELOPING MEDICAL TOURISM IN GEORGIA

Otar Gerzmava, Professor

Ana Tegetashvili, PhD student

Grigol Robakidze University, Tbilisi, Georgia

Abstract

Medical tourism is becoming increasingly popular. This phenomenon is driven by marketplace forces and occurs outside of the view and control of the organized healthcare system. Medical tourism presents important concerns and challenges as well as potential opportunities. In the recent past, a trend known as medical tourism has emerged wherein citizens of highly developed countries choose to medical care offered in their own communities and travel to less developed areas of the world to receive a wide variety of medical services. This trend will have increasing impact on the healthcare landscape in industrialized and developing countries around the world. Medical tourism in Georgia is developed unequally. Along with Turkey the recognised leader of Medical tourism, who remain the world's top destinations for medical tourists and foreign investors, in Georgia this direction only starts to develop. At the same time in the country there are all conditions for development of this branch:

- Internationally recognized quality standards.
- Extensive diagnostic and therapeutic resources.
- Modern healthcare facilities - the infrastructure and the healthcare facilities available in South Caucasian countries conform to the world standards.
- Highly efficient medical staff - one can find a large number of medical professionals
- The cost of getting the treatment can be done at less than half the cost and the patient gets the best possible treatment available.

Keywords: Medical tourism, internationally recognized quality standards, Health Care system

Introduction

Certainly, development of the tourist industry, and the more so, such it complicated for direction development, as medical tourism well for enough

limited number of the countries. It is obvious that in case of absence of political and economic stability with the country, presence of the conditions providing safe stay of foreign citizens, presence of enough developed infrastructure, sanitary-and-hygienic and climate-geographical conditions, qualified personnel, transport, communication etc. At the same time, it is necessary to underline that a competition in the international market of tourism including medical tourism becomes more and more rigid that demands acceptance of urgent and effective decisions.

Although there are no verifiable statistics regarding the magnitude of medical tourism, the available information suggests that a substantial number of patients travel to developing nations for healthcare. In 2012 more of the 1.5 million patients traveled to India, more of the 1,6 million in Turkey, 1.1 million – in Israel, 1.0 million medical tourists traveled to Thailand etc It is estimated that medical tourism to Asia could generate as much as \$6.5 billion by 2018, with approximately half of this revenue going to India, Turkey and Israel. It has been estimated that the global medical tourism industry currently generates annual revenues up to \$50 billion.

But in Georgia Medical tourism developed unequally. Along with Turkey the recognised leader of medical tourism, who remain the world's top destinations for patients and foreign investors, this direction only starts to develop. At the same time in the country there are all conditions for development of this branch:

- Internationally recognized quality standards.
- Extensive diagnostic and therapeutic resources.
- Modern healthcare facilities - the infrastructure and the healthcare facilities available in South Caucasian countries conform to the world standards.
- Highly efficient medical staff - one can find a large number of medical professionals
- The cost of getting the treatment can be done at less than half the cost and the patient gets the best possible treatment available.

The presented work is one of the first attempts to estimate the market of the medical services given in Georgia from the point of view of its active inclusion in the international sphere of the organization of medical tourism. It is obvious that in prospective it will allow not only to involve additional means in sphere of public health services of Georgia but that isn't less important, will impulse to more active introduction of modern medical technologies in treatment-and-prophylactic establishments of the country.

It is necessary to notice that now in Georgia variety of medical institutions, with good equipment, qualified personnel, laboratory supply, treatments don't concede to leading western samples. Along with it there are

many polyclinic and hospitals establishments of the medical services providing certain kinds also seriously claimed abroad.

The part of such establishments demands improvements of conditions of stay of patients; however, it is obvious that in case of increase in their profitability at the expense of attraction of additional incomes these problems are quite removable. The spent expert estimation allows concluding that for today in Georgia granting at high enough level of medical services, which sharply abroad is possible. Ranging is spent taking into account such indicators, as presence of two and more centers which can carry out the given service, tool and laboratory maintenance, presence more than 3 and highly more skilled doctors on the given specialty, etc. (see table 1)

Table 1 The list of some services which can be given Georgia in the international market of medical services:

Complex diagnostics			
Complex treatment			
		Granting of separate services	
		(including carrying out of operations)	
Heart surgery	+	+	+
Oncology	+	+	
Neurosurgery	+	+	+
General surgery	+	+	
Urology	+	+	
Plastic surgery	+	+	
Dental services			
(Including surgery)	+	+	+
Prosthetics of teeth	+	+	+
Ophthalmology	+	+	+
Gynecology	+	+	+
Neurology	+	+	+
Pediatrics	+	+	+
Otolaryngology	+		+
Reproductology	+	+	+

It is necessary to underline that fact that on it is necessary to underline that fact that by approximate calculations in medical institutions of the country (mainly in big cities), besides the foreign citizens living in

Georgia, addresses for reception of medical aid to 6 thousand inhabitants of Azerbaijan, Armenia, Turkey, Ukraine, of some the western countries (mainly for the purpose of carrying out of clinic-tool inspection, surgical treatment, prosthetics of teeth, etc.). At the same time, in the country there are enough ample opportunities for attraction of patients from the

Arabian countries, Central Asia, Ukraine for the purpose of reception of necessary medical services.

Certainly, active connection of Georgia to number of the countries developing medical tourism, demands realization of variety of the state actions directed not only on increase of standards of medical services, rendered to the population, but also signing of some the international agreements, membership in the international organizations, etc.

For some decades of existence of medical tourism has arisen about ten international organizations which have united professionals in the given line of activity. And every year their quantity constantly there are regional associations and the organizations in separate medical directions.

Conclusion

Medical tourism is the movement of patients through a global network of health services. Medical tourists seek affordable healthcare on a timely basis in a variety of destination nations. The expansion of global medical services has sparked immense economic growth in developing nations and has created a new market for advertising access to care. Beyond offering a unique untapped market of services, medical tourism has invited a host of liability, malpractice and ethical concerns. The explosion of off-shore “mini-surgical” vacations will surely incite global unification and increased access, quality and affordability of care.

Medical tourism is a dynamic subset of global health care that incorporates a variety of services, procedures and venues of care. Health insurance coverage, the impact on domestic and global markets, and the use of international standards of care will be examined in combination with quality, access and cost parameters. The global nature of medical tourism invites a variety of legal and ethical issues and calls for an organizational body to monitor this new phenomenon. Finally, the future implications of the globalization of health services and systems will be discussed.

References:

- International Standards Organizations (ISO). (2009). Retrieved November 15, 2009, from www.iso.org
- Joint Commission International (JCI). (2009) Retrieved November 15, 2009, from <http://www.jointcommissioninternational.org/>
- Keckley, P., Underwood, H. (2007). Medical Tourism: Consumers In Search of Value. Washington, DC: Deloitte Center for Health Solutions.
- Kelley, E., Hurst, J. (March 2006). Health Care Quality Indicators Project Conceptual Framework Paper. OCED. Retrieved November 15, 2009, from <http://www.oecd.org/dataoec>

- Memorial Sloan Kettering. (2009). International Patients. Memorial Sloan Kettering. Retrieved 2/1/10.
- Schroth, L., Khawaja, R. (2007). Globalization of Healthcare. *Frontiers of Health Services Management*, 24 (2), 19-30.
- Turner, L. (2007). 'First World Health Care at Third World Prices': Globalization, Bioethics and Medical Tourism. *Biosocieties*, 2, 303-325.
- United Healthcare. (2009). Retrieved November 15, 2009, from <http://www.uhc.com/>
- The World Bank. (2009). Data-Country Classification. The World Bank. Retrieved November 15, 2009, from [http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0, content MDK:PK:64133156](http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,contentMDK:PK:64133156)
- World Health Organization (WHO). (2009). Retrieved November 15, 2009, from <http://www.who.int/en/>.
- World Medical Association (WMA). (2009). Retrieved November 15, 2009, from <http://www.wma.net/en/10home/index.html>.

EVALUATION OF EDENTULISM, INFLUENCE OF SOCIO-ECONOMIC, BEHAVIOURAL FACTORS AND GENERAL HEALTH ON PROSTHETIC STATUS OF ADULT POPULATION OF GEORGIA

Galaktion Makhviladze, PhD student

Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia

Lela Tsitaishvili, PhD

Caucasus International University, Tbilisi, Georgia

Vladimer Margvelashvili, Professor

Manana Kalandadze, Associate Professor

Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia

Abstract

Background: Georgia is a country with a Human Development Index (HDI) score of 0.744. There has not been an epidemiological survey evaluating the edentulism and prosthetic status among the adult population of Georgia since the 1990s. The aim of the study was to identify the level of edentulism from different age and gender groups of the adult population of Georgia, to assess the influence of family income, education level, and general health on people's prosthodontics status.

Methods: The cluster- stratified method with multistage sampling design was used for sampling. Investigated population included 2370 adults-1289 women and 1081 men from nine regions of Georgia and the capital, Tbilisi, distributed in four age groups I- (20-34), II-(35-44), III-(45-64), IV- (65-74).

Results: Partial (13.2%) and complete dentures (20.4%) were prevalent in elders, while implant retained prosthesis were observed in only 0.1% of the investigated population. Fixed prosthesis were more noticed in younger population due to partial edentulism. Metal-ceramic (12.4%) and metal crowns (6.3%) were more commonly detected than zirconia ceramic crowns (0.1%). Tooth loss and prosthetic status of the population as well as crown choice was significantly associated with socio-economic, medical (general health) and behavioral factors.

Conclusion: Edentulism is a serious public problem in Georgia. Inadequate Dental prosthetic care, less access to high quality zirconia ceramic crowns and implant retained prosthetic appliances indicates less

access to expensive dental procedures in Georgia and is related to low socio-economic, medical and behavioral factors.

Keywords: Edentulous, Prosthesis, Georgia

Introduction

Edentulism is the important problem throughout the world population. As irreversible condition it can lead to functional impairment, physical, psychological, and social disability. Dental diseases (especially dental caries and periodontal diseases) play an important role in tooth loss in the adult population throughout the world due to their high prevalence. At the age of 65-74[1] 30% of the world population experiences edentulous. Tooth loss has been associated with several socio-demographic, behavioral, or medical factors [2].

In elderly people, socioeconomic factors such as low income, low education level, and limited social support are closely associated with wearing complete dentures (CD) or removable partial dentures (RPD) and with having poor oral health [3]. Edentulism can also be the main concern of younger people and may be associated with cultural, individual access to care, and socioeconomic factors. These factors impact the distribution and prevalence of complete and partial edentulism between developed and less-developed countries [4].

Satisfaction with one's teeth increases self-confidence and self-esteem [5]. In contrast, tooth loss due to untreated caries or periodontal diseases leads to functional and aesthetic disruptions and significantly influences oral health-related quality of life [6].

Georgia, a country with a Human Development Index (HDI) score of 0.744 [7] has approximately 4.5 million people, 53% of which live in urban areas [8]. Due to a significant deterioration in socioeconomic conditions in the 1990s, the health status of the population changed significantly, including oral health [9].

Financial disparities due to political and economic changes in the country reduced access to oral and common health care leading to edentulism, though epidemiological studies of oral health care are scarce in Georgia. There are only a few reports providing information about the prevalence of dental diseases [10] and there have been no reports about the prosthetic status since 1990s [11].

The aim of the study was to identify the level of edentulism from different age and gender groups of the adult population of Georgia, to assess the influence of family income, education level, and general health on the population prosthodontics status.

Methods

Our research was carried out based on the stratified -cluster probability sampling technique. According to the National Center for Disease Control and Public Health(NCDC) of Georgia, the age distribution of the adult population ranges from 20 to 85 +. The sample was distributed into four age groups – 20-34, 35-44, 45-64, 65-74 and two gender groups –male and female. Two index age groups (35-44and 65-74) were allocated according the recommendations of the WHO for teeth and periodontal status and dental morbidity assessment [12]. Two other age groups (20-34, 45-64) were studied due to their significant size in the adult population of Georgia: 33.6% (20-34) and 36% (45-64) compared to 19.5% (35-44) and 10.9% (65-74) [13]. The sampling design was multistage [10]. Clusters were chosen first consisted of ten geographical units and included nine regions (from north-west, south, central, east and south-east) and the capital, Tbilisi. Clusters were internally stratified. The strata were formed based on index age groups derived by WHO, age groups as defined above, and gender. The country was divided into six strata comprising ten geographical units. According to the WHO, “Sampling adult subjects is often difficult and can be drawn from organized groups, such as offices or factory workers” [12]. As such, the second–level clusters were formed by randomized selection of organizations, institutions and households. In the third-level clusters, adults were randomly chosen. The studied individuals had different socio-economic and education levels and employment statuses as well as different levels of oral disease and/or intervention needs. Dental clinic patients were not selected to avoid obvious selection bias.

The sample size within each stratum was calculated taking into account the proportion of the population in the particular stratum in order to form an equal probability sample. According to Georgian demographic data [13] different age groups make up different shares of the population. Based on their proportionality within strata, the volume (number) of elements was chosen. The total sample size was 2370[10].

The study was conducted from January 2013 to May 2014 by experienced examiners- a dentist and a prosthodontist, assisted by four invited postgraduate students from the stomatological faculty. Data were obtained by structured questionnaires and clinical examinations. The administrations of the organizations the research was held in were contacted and informed about the study goals in advance. They assisted in enhancing involvement in the study.

Data on socio-economic, demographic, behavioral (related to oral hygiene practices and dental activity) and medical characteristics were

collected through application of questionnaires administered by a specially trained staff with five dentists.

Education level was classified into two groups: low (completing elementary school, secondary [high] school or technical college or having no formal professional education), and high (holding a bachelor's degree or any university degree).

Family financial status was categorized into low, medium and high self-reported income level. Generally, unemployed people or people with state pension or state social aid as an income source considered their income low. People working in different public or private facilities with a salary in the 500-600GEL per month range (mean income in Georgia is 597.6 GEL)[7] thought their income medium. Material status was reported as high only by individuals having jobs as well as other sources of income (e. g a business)

Investigation of the oral cavity was performed in medical cabinets of the organizations according to WHO recommendations. The examiners were equipped with sterile instruments for single use to control the infection transmission and performed examination under natural lighting conditions using a dental mirror and an explorer and a periodontal index (CPI) probe for measurements of periodontal pocket depth [12]. The clinical examination included a full-mouth recording of 32 teeth; tooth status was recorded using DMFT index. A tooth was recorded as missing due to caries (M-caries) if there was a history of a cavity and as missing due to periodontitis (M-periodontitis) if there was a history of tooth mobility prior to extraction.

Criteria for the assessment of "teeth-lost" conditions were based on the concept of the shortened dental arch proposed by Kayser and Witter [14]. They suggested that "a minimum of 20 teeth is sufficient to meet oral functional demands". The extent of tooth loss due to any reason was recorded as loss of 0 tooth, loss of 1-20 teeth, loss of ≥ 21 teeth.

In addition to dental status, periodontal health was assessed and prosthetic status was established according to the WHO criteria[12]. Prosthetic status was recorded as follows: no prosthesis, fixed prosthesis (a bridge, more than one bridge), a partial removable prosthesis or a denture, both bridge(s) and partial denture(s), both bridge(s) and complete denture(s) and complete denture(s).

Statistical analysis was performed using the Statistical Package for Social Sciences 21. Descriptive statistical methods (mean, standard deviation) were used for the evaluation of the data. Non-parametric data were compared using the chi-squared test to correlate the prosthetic status and edentulism with socio-economic factors and general health of

different age groups of the population and values of $p < .01$ were considered significant.

Results

A total of 2370 adults underwent oral examinations. **Table 1** represents the socio-demographic characteristics of study population. 30.1% of investigated people were current smokers, 36.3% former smokers or irregular smokers and 33.6% had never smoked. 32.1% of the investigated people were dentulous and 67.9% partial or complete edentulous. Caries and periodontitis were the most common causes of tooth loss in 97.4% of surveyed people and the prevalence of tooth loss due to other reason was 2.6% (congenitally missing teeth, trauma, orthodontic extractions).

6.9% of the adults showed some degree of wear of their anterior teeth involving at least some dentine due to partial edentulism. In this study, the DMFT was 11.53 ± 7.69 . The mean number of filled teeth showed the value of 1.71 ± 2.51 . Untreated decayed teeth were present in 99% of the participants. The mean number of missing teeth due to caries (M-caries) was 4.46 ± 5.953 , and the mean number of missing teeth due to periodontitis (M-periodontitis) was 2.59 ± 7.697 . In addition, the loss of one tooth due to caries was observed in 11% of the population, while the loss of all teeth (28-32) for the same reason was found in only 0.1-1% of the surveyed group. Periodontal pockets of different depth were observed in the 44% of the population. Periodontal pocketing of ≥ 4 mm was noted in 6% of the participants, shallow pocketing- in 38%. The loss of one tooth due to periodontitis was observed in 0.1% of each cohort and of all teeth (28-32) in 0.3-3%. Edentulism due to caries was more prevalent than M-periodontitis and was characterized by a greater quantity of teeth lost (from two to 16 teeth). Statistical analysis showed significant differences by age and gender. Complete edentulism was observed mainly in the 3rd and 4th age groups: M-caries 1.1% and 6%; M-periodontitis 4.1% and 14% respectively. The 1st and 2nd age groups were distinguished by an absence of complete tooth loss (0.0%). There were not statistically reliable differences found according to tooth loss by gender groups, though most women had artificial crowns.

Prosthetic status was estimated by the presence of different types of prosthesis and artificial crowns. Prosthesis were not observed in 72.8% of the population and the distribution of different prosthetic appliances was as follows: one bridge in 8.3% of the surveyed contingent, more than one bridge- in 7.6%, partial denture –in 3.2%, bridge and partial denture- in 1.2%, complete denture in 4.7%, partial and complete dentures in 1.2%,

bridge and complete denture in 0.7%, implant retained prosthesis in 0.1% of the investigated population.

Five groups were allocated according to crown types, though crowns were observed in 28% of the whole studied population. Metal-ceramic crowns were found -in 12.4%, metal crowns-in 11.3%, combination of different types of crowns-in 4.2%, zirconia ceramic crowns-in 0.1%.

Statistically reliable differences were seen between gender and age groups according to prosthetic status (**Table 2**).

Financial disparity often predicts the low level of medical activity of the population including dental restorative and/or prosthetic care that leads to high values of lost teeth. Therefore the extent of tooth loss was assessed according to family income. The results showed statistically reliable differences ($p=0.00$) (**Table 3**).

Effect of socioeconomic class and education level on the prosthetic status was also assessed to find the correlation between these variables among the Georgian population. Statistically reliable differences were found ($P=0.00$). (**Table 4**)

General disease such as endocrine system disorders (thyroid gland disfunctions and diabetes) often represent the common cause for tooth loss as they impact the development of caries and periodontal diseases), so the study aimed the influence of health status on the tooth loss of Georgian adult population to be studied. Endocrine pathologies were observed ($p=0.00$) in 11.5% of investigated sample. 8.6% of the surveyed people had thyroid gland disfunction, 2.5% mentioned the existence of diabetes in questionnaires and diabetes and thyroid gland disfunctions together were only in 9 people (0.4%) presented. Statistically reliable differences were not seen in people with endocrine system disorders in case of teeth loss due to caries ($p=0.846$, $p>0.01$) whilst the relation to M-periodontitis was statistically reliable. As the results showed, complete and partial dentures due to complete/partial edentulism in diabetic cohorts were more prevalent- 16.9% and 8.5% respectively, more than one bridges was observed in 13.6% of diabetics.

Assessment of dental activity of the population according to education level and family income showed the following distribution: 20.1-44.2% according to education level and 33.0-48.3% according to material income. Significant differences were found in respect of dental activity of the population and prosthetic status ($p=0.00$) more prosthetic appliances were found in people with more dental activity. It must be noted that lack of dental services were mostly related to shortage of money or negative attitudes towards dental care (95.8% took dental care

only in case of pain and discomfort and ignored preventive check-ups) [9].

Discussion

Statistical analysis showed that tooth loss was expressed to different extents and due to different reasons in the population. Complete edentulism mainly observed in the 3rd (45-64 years) and 4th (65-74 years) age groups could be related to more prevalent chronic forms of periodontitis (with more periodontal pockets of 0-3 mm depth, and less pockets of 4-5mm depth or more) 1st and 2nd age groups were distinguished by a greater quantity of up to five teeth lost for different reasons and replaced with fixed dental prosthesis (crowns, bridges).

Increases in age caused a decrease in the absence of prosthesis, and the IV age group was characterized by a greater frequency of partial and complete dentures. Higher prevalence of fixed prosthesis were belonging to age group 45–64 years (III group) compared to any other age group. Felt need or demand for natural-looking artificial crowns was expressed most in the 1st age group. Statistically reliable differences in various types of crowns found when comparing age groups by this variable support this finding. Metal-ceramic crowns were most common in the 1st age group indicating a greater concern among young people related to their appearance.

Almost all kinds of prosthesis and crowns were more frequent among women. This indicates more positive attitudes among women towards prosthetic treatment and a healthy and beautiful smile.

The results showed a direct influence of education and family income on the prosthetic status of the population. There were slight differences found by education level, but material welfare dictated attitudes towards prosthetic dental care and choice of crown types. Metal-ceramic crowns were more common in people with medium and high family income. High income defined the existence of zirconia ceramic crowns and implants, though bridges and removable dentures were more common than implant retained dental prosthesis throughout the population indicating less access to expensive dental procedures in Georgia. Differences in types of prosthesis and crowns might be related not only to sex, age and individual peculiarities, but also to the dental activity of the population and general health that also impacted the prosthetic status. As it is proven, diabetes is one of the main risk factors for periodontitis and eventual tooth loss. In our research removable prosthesis were more seen in diabetic people. The study showed that dental activity defined the prosthetic status of the population, though different types of prosthesis and crowns were mostly related to material

welfare. Potentially, people understand non-aesthetic disorders because of lack of teeth, but they do not realize the consequences of the functional changes in the tempo-mandibular joint (TMJ) and other results of developing pathological tooth wear due to tooth loss and mastication problems. They postpone making prostheses for single lost tooth for extended periods, leading to remaining teeth disfunction, extraction and eventual edentulism. On the other hand, material disparity represents the main obstacle to prosthetic procedures. As a result, the breakdown of alveolar processes takes place and requires implants for retaining the removable dentures, but implants are too expensive and shortages of money define the lack of access to them. This is proven by the fact that implants were the least common in the population and essentially were seen in people with high material well-being ($p < 0.01$).

Conclusion

The study found that edentulism is a serious public problem in Georgia, not only among the elderly, where money shortages define low access to dental services but also in younger people. Fixed prosthesis were more noticed due to partial edentulism in younger population, elders were characterized by a greater frequency of partial and complete dentures.

Inadequate dental activity due to low medical education background and negative attitudes towards dental services as well as general health influence on edentulism and prosthetic status of the adult population of Georgia, though dental prosthetic care, less access to high quality zirconia ceramic crowns and implant retained prosthetic appliances is related to low socio-economic status. Therefore, public health centers and insurance companies should take care of edentulous people by implementing protocol models for eradication of edentulism.

Acknowledgments

The authors gratefully acknowledge Lili Khechuashvili for statistical analysis and Tamar Zurabishvili (Center for Social Sciences, Georgia) for her help with sampling methods. The authors declare that there is no conflict of interests.

References:

- Petersen PE., Bourgeois D., Ogawa H., Estupinan-Day S., Ndiaye C. (2005). The global burden of oral diseases and risks to oral health. *Bull World Health Organ*, 83(9):661–669.
- Krall EA, Garvey AJ, Garcia RI (1999). Alveolar bone loss and tooth loss in male cigar and pipe smokers. *J Am Dent Assoc*, 130: 57-64.

- Mack F., Mundt T., Budtz-Jørgensen E., Mojon P., DMD, Schwahn C., Bernhardt O., Gesch D., John U., Reiner Biffar R. (2003). Prosthodontic Status Among Old Adults in Pomerania, Related to Income, Education Level, and General Health (Results of the Study of Health in Pomerania, SHIP) *Int J Prosthodont*, 13(3):313-8.
- Vrinda R. Shah, Darshana N. Shah, Chaitanya H. Parmar. (2012). Prosthetic Status and Prosthetic Need Among the Patients Attending Various Dental Institutes of Ahmedabad and Gandhinagar District, Gujarat *J Indian Prosthodont Soc*, 12(3): 161–167.
- Xiao-Ting L., Tang Y., Huang XL, Wan H., Chen YX. (2010). Factors Influencing Subjective Orthodontic Treatment Need and Culture-related Differences among Chinese Natives and Foreign Inhabitants. *Int J Oral Sci*, 2 (3): 149–157.
- Khalifa N., Allen PF, Abu-bak NH, Abdel-Rahman ME. (2012). Factors associated with tooth loss and prosthodontic status among Sudanese adults. *Journal of Oral Science*, 54(4): 303-12.
- Geostat. (2012-2013). Human Development Report. Available from www.ge.undp.org
- Gamkrelidze A., Keresekidze M., Tsinsadze M., Gambashidze K., Shakhnazarova M., Tsetskhladze N. et al Grdzeldze N., Tsertsvadze L., Kocharova I., Shakhbudagian S., Gognadze N., Khuchua L. (2011) NCDC-National Center for Disease Control and Public Health . Health Care Statistical Yearbook 2011 Georgia, p. 34.
- Tsitaishvili L., Kalandadze M., Margvelashvili V. (2014). Assessment of Caries Prevalence and Related Risk Factors among the Adult Population of Georgia by Age and Gender. *Dent. Med. Probl*, 51 (3): 299–307.
- Tsitaishvili L., Kalandadze M., Margvelashvili V. (2015). Periodontal diseases among adult population of Georgia and impact of socio-behavioral factors on their prevalence. *Iran. J. Pub. Health*, 44 (2): 194-202.
- Margvelashvili V. The Assessment of Dental Prosthodontic Treatment Needs and the Way of Improvement Their Efficiency among the Adult Population of Georgia [PhD thesis]. Moscow; 1991.
- World Health Organization. (2013). Design of an oral health survey in: *Oral health surveys basic methods*. 5th edition. France, pp: 13-21
- Gamkrelidze A., Keresekidze M., Tsinsadze M., Gambashidze K., Shakhnazarova M, Tsetskhladze N. (2012). Health Care Statistical Yearbook 2012. NCDC-National Center for Disease Control and Public Health, Georgia. Available from www.google.com
- Witter DJ, van Palenstein Helderma WH, Creugers NH, Käyser AF. (1999). The shortened dental arch concept and its implications for oral health care. *Community Dent Oral Epidemiol*, 27(4):249-58.

Tables:

Studied population		frequency	%
Age group(years)	20-34	797	33.6
	35-44	469	19.8
	45-64	854	36.0
	65-74	250	10.5
Gender	Female	1289	45.6
	Male	1081	54.4
Education level	Low	601	25.4
	Middle	208	8.8
	High	1561	65.9
Family income	Low	699	29.5
	Medium	1642	69.3
	High	29	1.2

Table 1. Socio-Demographic characteristics of study population ($n = 2370$)

Prosthetic status	Age groups				Gender	
	20-34 (%)	35-44 (%)	45-64 (%)	65-74 (%)	Males (%)	Females (%)
No prosthesis	97.4	80.2	56.8	35.6	77	69.4
Bridge	1.9	10	13.7	7.2	7	9.4
More than one bridge	0.6	7	12.9	12.8	5.9	9
Partial removable denture	0.1	1.1	4.9	13.2	3.3	3.6
Bridge and partial removable denture	0	0.4	1.6	4.8	1.1	1.2
Complete denture	0	0.6	6.7	20.4	4.5	4.8
Partial and complete dentures	0	0	2.1	4	0.6	1.7
Bridge and complete denture	0	0.2	1.2	2	0.6	0.7
Implant retained prosthesis	0	0.4	0.1	0	0	0.2
P=0.00						
No crowns	4.5	23	16.4	17.8	27.4	8.9
Metal -Ceramic crowns	68.2	48	31.9	16.9	29.3	42.8
Plastic cast	9.1	9	16.9	20.3	14.2	15.3
Metal crowns	13.6	12	19	30.5	18.6	18.5
Different types of crowns	4.5	7.5	15.5	14.4	10.4	14.1
Zirconia ceramic crowns	0	0.5	0.2	0	0	0.5
P=0.00						

Table 2: Prosthetic status according to gender and age group

Family income	M-caries			M-periodontitis		
	0 tooth (%)	1-20 teeth (%)	≥ 21 teeth (%)	0 tooth (%)	1-20 teeth (%)	≥ 21 teeth (%)
Low	30.5	63.6	5.9	79	7.5	13.5
Medium	32.6	65.1	2.3	91.2	3.8	5
High	37.9	60.7	1.4	100	0	0
P=0.00						

Table 3: extent of tooth loss according to family income

Prosthetic status	Education level		Family income		
	Low (%)	High (%)	Low (%)	Medium (%)	High (%)
No prosthesis	73	72.7	68.8	74.4	79.3
Bridge	8.2	8.4	8.3	8.3	10.3
More than one bridge	5.4	8.7	6.3	8.2	6.9
Partial denture	4.2	3.0	4.0	3.2	0
Bridge and partial denture	1.4	1.1	1.4	1.1	0
Complete denture	6.4	3.8	8.7	3	0
Partial and complete dentures	1	1.3	1.7	1	0
Bridge and complete denture	0.4	0.8	0.7	0.7	0
Implant retained prosthesis	0	0.2	0	0.1	3.4
	<i>p=0.03</i>		<i>p=0.00</i>		
No crowns	19.7	16.2	18.3	16.5	35.7
Metal -Ceramic crowns	23.2	42.9	21.6	41.9	50
Plastic cast	18.5	13.1	22.5	12.3	0
Metal crowns	29.1	13.6	23.9	16.8	7.1
Different types of crowns	9.4	13.8	13.6	12.3	0
Zirconia ceramic crowns	0	0.4	0	0.2	7.1
	<i>P=0.00</i>		<i>p=0.00</i>		

Table 4: Prosthetic status of the population according to education level and family income

MUSIC THERAPY

Marina Shakarashvili, Associate Professor

Mania Arabuli, Associate Professor

Grigol Robakidze University, Tbilisi, Georgia

Abstract

Scientific and technological progress gives a human being unprecedented capability, but creates challenges too. Numerous new diseases and syndromes are emerging as a result of technological advancements and stress. Art therapy is becoming one of the popular treatment strategies for those conditions. This includes music therapy, as one of the forms of art therapy.

Music therapy is interdisciplinary field on the nexus of psychology, neurophysiology, music science, pedagogy and other disciplines. Spectrum of conditions where music therapy can be effectively used is practically unlimited. It has no contradictions and can be used at any age. Clinical studies provide evidence that music can be used effectively during the treatment of different conditions. Those include conditions of nervous system, mental health problems, hypertension, disorders of microcirculatory and hemodynamic systems, cardiovascular conditions, dysfunction of vegetative, digestive and respiratory systems, reduced adaptation capabilities and resistance, pain and autism. This therapy can be beneficial for rehabilitation. Music is also beneficial for elderly patients as it improves mood, increases social contacts and length of life. Effectiveness of music therapy called for the need to create academic professional training programs in this field. Georgia does not have professionals in this field. Only few psychotherapy centers practice art therapy. It is important to train specialist in this field, as art therapy has number of advantages compared to other treatment strategies. It does not involve pharmaceuticals, does not cause addiction and can be applied to the large spectrum of issues. Furthermore, therapy is not associated with large financial expenditures.

Keywords: Music therapy, art therapy, music therapist

Introduction

Scientific and technological progress gives a human being unprecedented capabilities, as well as challenges and problems. Many

diseases that were incurable become treatable, while new diseases and syndromes emerged. These include conditions that are mostly caused by the technological progress and stress. Therefore, it became very important to study psychological, social and ecological factors that are underlying cause of reduced ability of human organism to adapt [7].

In order to identify causes of reduced adaptation capacity of human organism, core medical concept should be revisited, standard treatment improved and effective methods applied – all this to ensure improvement of adaptive capacity of human organism [4, 5]. Medicalization of treatment process that includes high utilization of medical equipment and pharmaceutical products, alternative treatment strategies become increasingly important. Art therapy and music therapy, as one of the forms of art therapy, is being provided by increasing number of healthcare centers [1, 8]. Music therapy is application of music for treatment. Music has influence not only on humans, but also on any living creature (animals and plants).

Music therapy involves exposition to sounds of specific frequency and strength what has had an impact on human organism. This treatment has two types of action – psychological and physiological. Music is perceived by the part of the brain that is responsible for perception. Music therapy, as a method for psychometric regulation can be applied to practically unlimited spectrum of conditions. It was no contradictions and can be used at any age. Different type of music can cause different type of reaction among patients due to their differential physical and mental status of the patient. Environment, age, religion and social status of the patient also play a significant role.

Music has been used for medical purposes from antique times, including by Hippocrates, Theophrastus, Celsius, Galen and others [18]. French psychiatrist Esquirol started application of European music for treatment in XIX century in a psychiatric hospital. The first manuscripts that observe and study impact of music on human being were published at the end of XIX and beginning of XX centuries. Those works describe positive effect of music on central nervous system, as well as respiratory and cardiovascular systems. Music therapy as a term that we used with contemporary meaning was coined during World War II. Influx of patients in military hospitals became a trigger for the development of new forms of treatment. National Association of Music Therapy (NAMT) was established in 1950, and the treatment was used for rehabilitation of war veterans. In 1998 US association – American Music Therapy Association was created. The aim of this organization was to popularize this treatment strategy and develop special academic and training programs for professionals.

Starting from the mid XX century, music therapy is widely used in many European countries. It developed as an interdisciplinary field that joins

knowledge and achievements of psychology, neurophysiology, music science, pedagogy and others.

It has been also researched that during the exposition to music, part of the brain responsible for positive emotions overrides negative and pathological process and reduces the harm to the organism.

Effect of music depends not only on the qualities of music itself, but also on the instrument on which the melody is performed [6]. Tempo, rhythm and dynamics of the melody also pay an important role. The impact of music can be understood as a dynamic factor of sanogenesis regulations. Variation of physiological responses in the body is determined by the complex mechanisms of reception that influences psycho-emotional condition, intensity of respiratory, cardiovascular and metabolic processes in the human body and cause changes in hormonal and biochemical processes. Pleasant music causes increase in heart rate, blood vessel expansions, normalization of blood pressure. Listening of symphonic music normalizes acidity level in the digestive tract, while unpleasant music causes the opposite reaction. Music affects muscular system and changes hormonal level that impact emotional status [9, 17].

Clinical studies confirm that music can be used during the treatment of different conditions [3, 16]. For example, at the University Clinic of Munich application of music therapy improved patients' general condition, healing process of wounds and cuts became faster, colorectal functioning improved among patient. Music can be used to reveal stress and posttraumatic symptoms among patients. It also helps to develop self-identification and creativity. In the National Institute of France, music is played during the surgery based on the individual qualities of a disease and a patient. Doctors use music therapy during the treatment of somatic conditions, in the fields of psychiatry and neurology. Music is also used in intensive therapy wards as it fosters improvement in communication and rehabilitation process (when there is a physical damage to the nervous system), relaxation, correction of emotional field and pain management [11;12;14;15].

After the music therapy was acknowledged as an effective method for treatment, academic and training programs for professional training for music therapists started to emerge. Music therapy should be used by the professionals— music therapists. The first program was established in London in 1961 and in 1975, the music therapy center was established. In Germany music therapists started working from 1978. In 1985 music therapy institute was created at the medical department of Medical University. Music therapy has been widely used in USA, where it was introduced as a treatment method of emotional stress in World War II veterans. Currently, there are 2500 music therapists registered in USA and their number is growing every year.

There are at least 100 programs that provide postgraduate training in music therapy at baccalaureate, masters and doctoral levels.

Music therapy is also widely used in psychiatric and neurological wards as a treatment strategy in Australia, Japan, New Zealand, South American countries, Italy, France (St. Madlen Hospital) and other countries.

Music therapy can be effectively used for the treatment of conditions of nervous system – neurosis, neurasthenia, insomnia da fatigue; mental health problems – psychopathy, schizophrenia; hypertensions, disorders of microcirculatory and hemodynamic systems, cardiovascular conditions, ischemic heart diseases, dysfunction of vegetative, digestive (including gastritis, colic, and ulcer) and respiratory systems (including bronchial asthma and chronic bronchitis), reduced adaptation capabilities and resistance, pain and autism. This therapy can be beneficial for rehabilitation of patients with mental and somatic problems [2; 10; 13]. Music is also beneficial for elderly patients as it improves mood, increases social contacts and length of life.

Contraindications for music therapy are limited number of severe clinical conditions of unknown etiology, abnormal reactions, aneurism, post-laparotomy conditions and hernia. It should be noted that music therapy could be used in combination with other treatment or prevention strategies.

Conclusion

Georgia does not have professionals in the field of music therapy. Only a few psychotherapy centers use art therapy during the treatment. Training of specialists in this field is very important, as this treatment strategy had number of advantages. This includes that it does not involve pharmaceuticals, neither does it cause addiction. It can be used for treatment of broad spectrum of conditions and the treatment itself is not associated with high financial expenditures.

References:

- Blavo R. (2003) Healing by music. St. Petersburg, 192 p.
- Gorshunova N. K. (2006) Medical and labor rehabilitation of children with disabilities. - Kursk: Kursk State Medical University, 100 p.
- Klyuev A.S. (2010) Music therapy: esthetic-psychological and clinical aspects. St. Petersburg, 35 p.
- Ленів З. (2008) Концептуальні засади музикотерапії як засобу корекції тяжких порушень мовлення у дітей. Наук. часопис НПУ ім. М.П. Драгоманова, 19(9): 167–170.
- Samsonova G. O. (2009) Sound therapy. Music improving technologies. Design Board, Tula - Moscow, 248 p.

- Shushardzan S. V. (2005) Modern methods of music therapy and effects arising at influence by music and various acoustic signals on a human body. *Traditional medicine*, 2(7): 23–29.
- Shushardzan S. V., Shushardzan R. S. (1997) Computer analyzer of sound signals of SSH-1// Ecological and physiological problems of adaptation: Materials of the 8th All-Russian symposium. – Moscow, p. 172.
- Aldridge D. (2000) Music therapy research: a review of references in the medical literature. University Witten-Herdecke, 30 p.
- Butterton M. (2008) Listening to music in psychotherapy. Radcliffe Publishing, Oxford, 194 p.
- Engel J.N. (2009) Using the SCERTS model assessment tool to identify music therapy goals for clients with autism spectrum disorder. *J. Music There.* 46(3): 204–216.
- Fukui H., Toyoshima K. (2008) Music facilitate the neurogenesis, regeneration and repair of neurons. *Med. Hypotheses.*, 71(5): 765–769.
- Humpal M. (2007) Thoughts on neurological music therapy and early intervention. *Early Childhood Newsletter*, 13(6): 10–11.
- Krout R.E., (2007). Music listening to facilitate relaxation and promote wellness: integrated aspects of our neurophysiological responses to music. *The Arts in Psychotherapy*, 34(2): 134–141.
- Kuhn D. (2002). The effects of active and passive participation in musical activity on the immune system as measured by salivary immunoglobulin A (SIgA). *J. Music There.* 39(1): 30–39.
- Kwak E.E. (2007). Effect of rhythmic auditory stimulation on gait performance in children with spastic cerebral palsy. *J. Music There.* 44(3):
- Secic M., Davis B.A. (2007). Effects of music therapy on health-related outcomes in cardiac rehabilitation: a randomized controlled trial. *J. Music Ther.*, 44(3): 176–196.
- Tüpker R. (2008). Reader musiktherapie. Institut für Musikwissenschaft und Musikpädagogik Westfälische Wilhems-Universität, Münster, 174 s
<http://health2000.agava.ru/pole/arts/musikter.htm>

GHANA'S JUBILEE FIELDS OIL AND GAS EXTRACTION: ACCOUNTABILITY AND PROSPECTS

Dr. Collins Adu-Bempah Brobbey

Institute of African Studies, University of Ghana;
Ghana Institute of Journalism, Accra

Abstract

Ghana commenced the oil and gas extraction in commercial quantities in the year 2011 and hence the country was listed among oil and gas producing countries in the sub-Saharan Africa. Accordingly, Ghanaians' optimism widened because the oil and gas sectors were the change agent for social infrastructure and better living standards. Suddenly, however, Ghanaians' optimism started to dwindle due to the lack of accountability mechanism to protect their interest. This study explored the Ghanaians' misgivings regarding the accountability mechanism in the oil and gas sectors. Primary data for this study was collected from interviews and survey. Findings revealed that the majority of Ghanaians are pessimistic about the prospects of the oil and gas sectors for ensuring parity in national development. It concluded that Ghanaians have little information about the accountability mechanism to protect their interest and therefore recommended a policy action to strengthen the accountability and prevent the resource curse syndrome.

Keywords: Oil and Gas Extraction; Commercial Quantities; Oil and Gas Producing Countries; Optimism; Accountability Mechanism; Pessimism; Misgivings; Prospects

Introduction

Ghana emerged as a new oil and gas producing economy in 2011. Consequently, Ghana was listed among the oil-rich nations in sub-Saharan Africa when the country commenced the extraction of oil and gas products in commercial quantities in 2011 (Adam, 2012). Commercialization of Ghana's Jubilee Fields oil and gas extraction in 2011 led the government to initiate a consortium which consisted of researchers, policy-makers and media practitioners to address some of the perceived challenges in oil and gas extraction and petroleum producing industries such as the "resource curse"

syndrome (Mohammed, 2012). History has shown that commercialization of oil and gas extraction often comes with delicate legal, technical, economic, financial and environmental challenges and that maximizing the benefits from Ghana's Jubilee Fields' oil and gas extraction requires a constant balancing act between resource and oil companies (Amaechi, 2010). The risk of "resource curse" associated with the extractive industries is very critical and hence the redistribution of oil and gas resources should not be taken for granted (Brobbe, 2014).

Statement of Research Problem

The majority of Ghanaians lack access to information about the quantity or volume of oil and gas usually extracted from the Jubilee Fields and the accountability mechanism for protecting the interest of the citizens against unfair redistribution of oil and gas benefits (Bissie, 2011). Consequently, Ghanaians are wondering whether or not the "black gold" would provide socio-economic infrastructures (economic growth, jobs, improved living standards) or become a resource curse (threat to national development) (Adam, 2012). This study therefore argues that the revenues from Ghana's Jubilee Fields could facilitate national growth and development if it is well managed.

Ghanaians received the news about the discovery of oil and gas in Ghana's Jubilee Fields with great enthusiasm simply because most Ghanaians had anticipated a booming economy coupled with a fleet of jobs leading to better living standards. However, some months into the commencement of the oil and gas extraction, the euphoria with which Ghanaians welcomed the oil and gas discovery tidings through the varied media houses began to erode leaving many Ghanaians in the state of quandary and despair (Efam –Dovi, 2013).

There is a lack of an accountability mechanism at Ghana's Jubilee Fields' operations coalesced with pervasive patronage politics and hence revenues obtained have been misappropriated or mismanaged in favour of a few Ghanaians at the expense of the majority otherwise known as the 'resource curse' (Adam, 2012). For instance, the generally held views of many Ghanaians about lack of information reported by the varied media about the quantity of oil and gas produced and a lack of an accountability mechanism about the management of the revenues obtained from the industries have led many Ghanaians to become more agitated. Indeed, Ghanaians are wondering whether or not the "black gold" would ensure parity with regards to national development or to benefit just a few Ghanaians (Efam –Dovi, 2013).

Some scholars have reiterated that the management of the Jubilee Fields' revenues is characterized by patron-clientelist networks and that it is

preventing the hard fact regarding the total quantity of oil and gas and the revenues obtained from the extractive industries from coming into the public domain (Hogan and Goldsworthy, 2010). Other scholars such as Nakhle (2011) and Adam (2012) attribute the lack of accountability to the rapacious exploitation of the resources in the developing countries by Western capitalist companies. They argue that conflict can be inevitable if a natural resource like that in Ghana is not well managed. They claim that the way the international economic system is organized often makes resource rich countries not to benefit significantly from their resources. To Perkins (2005), clearly, under a capitalist regime, oil or gas or any natural resource is exploited by the multinational corporations. From exploration to exploitation and transformation to marketing of the product requires huge capital investments undertaken by those companies. To this end, the companies pay, but taxes to the state coffers and the state in turn is content because of job opportunities offered to the citizens. For a developing country like Ghana, owning a natural resource does not automatically transform the citizens and the country into fabulous riches. This is because the operations of those companies (multinational corporations) are never transparent and are backed by their powerful states, which no African state has had the effrontery to challenge, at least for now.

It is important to note that many scholars have ascribed the lack of accountability in Ghana's Jubilee Fields oil and gas extractive industries to widespread patron-clientelist networks (van de Walle, 2005). To them patron-client network does not only endanger vertical accountability (inability of subordinates to question the Big man for bending the rules because perhaps the former have received some favour from the latter and unable to do so for fear of being fired). But also, it endangers horizontal accountability (political leaders often fail to hold their Ministers and Chief Executives accountable to their actions or inactions due essentially to kick-backs). Indeed, these actions or inactions of the capitalists and political leaders often prevent the hard fact about the Jubilee Fields' revenues from coming into the public domain (van de Walle, 2005). And hence little is known about the accountability mechanism about the revenues from the Jubilee Fields.

Thus, this study argues that the accountability challenges in the Jubilee's oil and gas sector in Ghana are underlined by several practical questions such as: Would the international oil companies not take advantage of an inexperienced, emerging, oil-producing country such as Ghana in the petroleum contracts? Would Ghana's fiscal regime and neopatrimonial tendencies not pose a serious challenge to the oil industries? What is the efficacy and/or likely setbacks of the existing legal and regulatory framework? Are the institutions such as Parliaments, media and other

stakeholders making efforts to promote the rules and laws to sustain and to guide the emerging industry? How adequately, is the media informing and educating the public about this?

With regards to the questions above, this study broadly, explores the accountability challenges in Ghana's Jubilee Fields oil and gas extraction sector. Specifically, it examines the extent to which the international oil companies could take advantage of an inexperienced, emerging, oil-producing country such as Ghana in the petroleum contracts. It explores how Ghana's fiscal regime coupled with neopatrimonial tendencies could pose a serious challenge to the oil industries. It analyzes the efficacy and/or the setbacks if any, of the existing legal and regulatory framework. Moreover, it examines the efforts made by institutions such as Parliament, media and other stakeholders in promoting the rules and the laws to sustain and to guide the emerging industry. Finally, to analyze how adequately the media is informing and educating the public on oil and gas extraction issues.

Theoretical Framework/ Literature Review

Putting issues of accountability in Ghana's Jubilee Fields oil and gas extraction sector in the proper perspective would not be complete without a careful consideration of views expressed and theories propounded on oil and gas exploration, exploitation, transformation and marketing. It would, also, be particularly useful to examine the legality involved in the management of the Jubilee Fields' revenues, and the entire energy sector in Ghana and elsewhere. Beginnings of the oil and gas exploration and exploitation in the sub-Saharan Africa's oil economy would also be explored.

This study thus, analyzes the main contributions from different articles. Natural resource endowment has value to which the owner has a claim. When the owner is not the resource developer or producer, fiscal instruments are used to capture that value (Mummer, 2011).

Against the background of over a century of mining; Ghanaians are understandably uncertain and anxious about whether the value of the natural endowed resources often allocated to Ghana is fair. A difficult question to answer. Some scholars have asserted that Ghana's petroleum fiscal regime as of the year 2010, compares the key features of the regime with that of a peer group of oil-producing countries in Sub-Saharan Africa, and assesses the regime against five key features of importance to government and prospective investors: the degree of progressivity, stability, flexibility, neutrality and how the regime distributes the burden of risk between the resource owner and contractors (Amoako-Tuffuor and Owusu-Ayim, 2012). .

However, before proceeding to review the relevant studies on oil and gas exploration and exploitation, this study provides the theoretical

foundation upon which the understanding of how oil and gas economy facilitates national development or otherwise produces ‘resource curse.’

Theories abound on natural resources exploration and exploitation. Perhaps it is because natural endowed resources are one social-economic empowerment that is critical in most societies worldwide. According to Amoako-Tuffuor and Owusu-Ayim (2012), the most crucial of all human dependence finds expression in natural resources in this case oil and gas economy. Apart from ensuring economic development through redistribution of resources, it also attracts direct foreign investments as well as foreign earnings.

The discussion of whether or not the “black gold” would facilitate development and produce a resource curse is subsumed under two theoretical paradigms otherwise known as ‘Theories of natural resources exploration and exploitation propounded by Amoako-Tuffuor and Owusu-Ayim (2012). First is the ‘Theory of Oil-rich or Wealth Nations’ and second, is the ‘Theory of Resources Curse’ or the ‘Dutch Disease.’

The theory of ‘oil-rich or Wealth Nations’ states that countries with well-endowed oil and gas resources turn to develop at a faster pace but with high level of crimes.. The theory explains that oil and gas extractive industries usually have great opportunities to expand their economies through socio-economic infrastructural development such as job creation, provision of social amenities and better living standards. However, this often comes with a cost. When the resources are not properly handled this could lead to a high level of crimes and crime related phenomena. By extension, it means that any attempt by the state to misappropriate the revenues generated from the oil and gas extractive industries could lead to unfortunate circumstances such as disorders in the form of political instability, persistent pirating and resource curses.

Indeed, this theory is useful for this study in two ways. First, at least, it places Ghana in the context of oil-rich nations which the study found to be correct. Second, it advances the argument made earlier that oil wealthy economies are often manipulated by the capitalist economy. For example, under the capitalist regime, oil and gas or any natural resource is exploited by the multinational corporations from exploration to exploitation and from transformation to marketing of the product. The fact is that the exploration and exploitation of natural resources require huge capital investments and this is usually undertaken by those multilateral companies. To this end, for a developing country like Ghana, owning a natural resource does not automatically transform the citizens and the country into fabulous riches as the resource wealth or oil-rich nation’s theory projects. Besides, the roles played by the multinational corporations also undermine accountability since those companies are themselves not transparent.

In the meantime, on the surface, the theory sounds quite plausible, because rich oil nations, indeed, have the potency to become prosperous. Similarly, oil and gas revenues management has a legal backing, however, certainly those laws and regulations are often not sufficient to ensure accountability since those laws and regulations are often designed by the multinational corporations themselves. A major feature of the oil and gas industries is that its accountability mechanism is problematic and that could lead the future of oil and gas economy to a very critical situation or produce a resource curse. It is rare to find any oil-rich nation in sub-Saharan Africa operating a transparent and accountable oil and gas economy due to pervasive patronage politics and crony capitalism (networks involving placing cronies at vantage positions for mutually reciprocating benefits).

This study finds this theory to be inconsistent with the reality of oil and gas extraction economy. And therefore it argues that the theorist could have shown how oil-rich nations could also serve to benefit other economies and not seen as only facilitating doom. Oil and gas revenues could promote national development if media access to information about the sector is not facile and stakeholders do not lack insight into the operations, and government and oil and gas partners desist from patronage politics and excessive capitalism. This leads the study to examine the theory of the resource curse.

However, another theory worthy our attention as far as this study is concerned is the 'Resource Curse theory' which states that mismanagement of the revenues; and the crime associated with it is the "visible form of the invisible curse"(Amoako-Tuffuor and Owusu-Ayim, 2012). Evidence from media reportage attests to the position of this theory. Media reportage explains that wars and other related crime activities have become pervasive in most oil-rich nations not because oil and gas themselves are evil resources but rather, the mishandling of such black gold is tantamount to high level of crime and some level of obscenity.

To a large extent, the theory employed in this study explains how a lack of an accountability mechanism in oil and gas sectors could engender mismanagement and hence undermines its perspective or realities. It also reinforces what the Dutch disease makes in countries where corruption is rampant. It is important to note that oil and gas extractive industries lack accountability mechanism. They are characterized by pervasive patron-clientelist networks and crony capitalism. So, it sounds convincing to claim that the mismanagement of oil and gas revenues is predestined and conspicuous in all oil and gas rich nations. But, this study wonders how the theory would explain the nuanced re-distribution of national revenues among the advanced world? How have oil revenues issues in the advanced countries been explored? Is the advanced world also likely to suffer all the crime

related issues that are found in the ‘third world countries’? And if yes, how does the theory of resource curse explain this?

In view of this, this study hypothesizes that the revenues obtained from the oil and gas extractive industries would be a blessing or a curse depending upon the manner in which the revenues would be put to use. The majority of Ghanaians are pessimistic about whether or not the oil and gas sectors would focus on national development and not be a menace towards national security.

In what follows, the study reviews the relevant studies. This is a highly important research subject that has a potential for an innovative contribution in that there is a dearth of publications on Ghana’s emerging oil and gas economy- how it is structured, managed and efforts to avoid the resource curse syndrome that has ravaged many natural resource-rich African countries. First, this study unravels the accountability challenges bedeviling Ghana’s Jubilee Fields oil and gas sectors. Second, it plugs the knowledge gap and hence expands the frontiers of knowledge regarding the literature on accountability challenges in Ghana’s Jubilee Fields’ oil and gas extraction.

Here, this study takes issues with a number of articles about the discourse on accountability of oil and gas revenues management. This study begins with Adam’s (2012) assertion that it is a truism to say that good laws do not guarantee good application of laws. And this is exactly the case in Ghana’s application of the Petroleum Revenue Management Law (Act 815), which Tordo (2007) has claimed, variously, to be one of the best laws in the world. Tordo (2007) contends that the law provides a strong and transparent mechanism for monitoring oil receipts and more importantly for spending the revenues accrued to the state. The author did not provide adequate explanation about who designed the laws of the state and who enforces it and whose interest it serves or who benefits most especially, in a regime characterized by widespread patronage politics and crony capitalism.

Similarly, this study takes issues with aspects of the Supplementary Budget which deals with oil revenues; and concludes that there is both misapplication of the law and insufficient explanation for certain decisions. For instance, in Section 110 of the Supplementary Budget, the Government justified the rationale behind the budget by stating that ‘developments in the domestic economy have necessitated the revisions made to the fiscal framework as follows: passage and implementation of the Petroleum Revenue Management Act, 2011, Act 815, coupled with changes in world crude oil prices and revised oil production levels (Adam, 2012; Keen, and McPherson, 2011). However, in the case of petroleum revenues, this study contends that the government knew well the implications of such volatility but inadequately addressed them in the law.

To Adam (2012), what the incumbent government ought to have done with the Supplementary Budget was to have revised mid-year the reference crude oil price to \$100 per barrel and production levels to 84,737 barrels per day and by these new assumptions determined a higher Benchmark Revenue of GH¢1,250.8m (70% of GHC1,250.8 m and GHC875.56 m). However, this study also agrees to the assertion that in the language of the law, any revenues in excess of the first Annual Budget Funding Amount (ABFA) are classified as excess revenues, and therefore do not form part of ABFA. The allocation of excess revenues as part of benchmark revenues and the ABFA is therefore an open violation of the Act 815. Furthermore, the Supplementary Budget has created a second Benchmark Revenue and used it as the 'foundation benchmark', a practice inconsistent with the law.

The bone of contention in this study here is that, the first benchmark revenues were computed when Act 815 had not been passed and when oil production had not commenced. But this only means double standards as there was no need to allocate oil revenues for spending in the budget when oil production had not commenced. One wonders the legal basis for allocating oil revenues to the budget when the law was still pending in Parliament. Similarly, Tordo and Johnston, (2010) have argued that even if the arguments were valid, this would not have been the right time to determine benchmark revenues and ABFA as the Supplementary Budget has done. Tordo and Johnston (2010) further contend that predictably, government allocated petroleum revenues to the original budget because the plan was to pass the law before the budget was presented to parliament, which did not materialize, therefore the logical time after this failure was to be 1st September, 2011 for spending in the 2012 budget. And that this, however, could have also violated the law since there is provision in the law for the spending of oil revenues in 2011. This study posits that there is purely a technical problem here but no one is to be blamed.

This study therefore supports the assertion that there is lack of public knowledge about the collateralization of the ABFA. The fact is that it remains unclear why the ABFA is being used to finance non-oil-collateralized debts. Nakhle's (2011) earlier study corroborated this position. To Nakhle (2011), in addition, the allocation for capacity building including oil and gas needs to be clarified because government has already signed a loan of \$38 million with the World Bank for oil and gas capacity building, which the budget was very silent on. Furthermore, while oil and gas revenues management policy design elements are important, so are the means by which the revenues are allocated. Ghana's work program bidding by which oil and gas extraction contracts are awarded on the basis of competitive bids, has a major shortcoming of lack of transparency on what is judged to be

competitive. This study posits that, in the end what should become a competitive bid, in fact, becomes a negotiated package on oil and gas quantity as well as the revenues obtained.

To this end, it is abundantly clear that Ghana's Jubilee Fields oil and gas sectors are bedeviled with a number of challenges including an oversight system or accountability mechanism to hold both government and oil partners in check. As a result scant information regarding revenues and its disbursement is made public and sadly, the media, the watchdog for the state and the stakeholders has very little access to information.

All in all, there is a theoretical gap regarding a proper oversight mechanism for ensuring accountability confirmed by this study. This study is therefore original and valuable, because it fills the existing gap in research on Ghanaians' knowledge, attitudes and growing perceptions over the lack of proper accountable mechanism for the management of the oil and gas revenues from the extractive industries in the Jubilee fields.

Methodology

This study employed both quantitative and qualitative approaches. It was also descriptive and undertook a content analysis of relevant literature. Where statistical and primary data were used they were a derivative of secondary sources. With reference to related literature and debates, the researcher made use of studies on political economy, to help in making the argument. Epistemologically, it employed the neopatrimonial thesis, oil-rich nations or oil wealth and resource curse theories to provide the understanding of the dynamics and travails of lack of accountability in Ghana's Jubilee Fields oil and gas extraction sectors. Particularly, the survey (questionnaire) and in-depth interviews (productive dialogue) approaches respectively were employed for primary data and peer reviewed articles, newspapers and magazines were also used as secondary sources. This study explored and analyzed whether or not the revenues from Ghana's Jubilee Fields are advancing development of the entire Ghanaian economy or rather facing some disruptive potentialities that tends to threaten national security. A sample size of two hundred and fifty (250) respondents was selected from the Western and Central Regions of Ghana. The sample size consisted of two hundred (200) respondents for the survey and fifty (50) respondents for the face-to-face interviews. Purposive sampling technique was used and the selection of study areas was informed by convenience, representativeness and proximity to the oil and gas fields.

In the discussion section this study solicited and analyzed the opinions of Ghanaians on the criticalities of the mismanagement of revenues at Ghana's Jubilee Fields, whether or not patron-client networks serve as the disruptive potentialities to transparency in Ghana's Jubilee Fields' revenues

management and attempted at confirming whether or not the Jubilee Fields' revenues are ensuring development for all Ghanaians or for a few of them. This study encountered a number of methodological challenges, which were classified as technical and critical. The technical challenge had to do with accessibility, language barriers, respondents' unwillingness to participate and rescheduling of appointments. The critical challenge had to do with the reliability and accuracy of the translations by the hired translators. However, the researcher made sure that these challenges never compromised the findings of the study.

Findings and Discussions

This study revealed that the majority of the respondents were pessimistic about whether or not Ghana's Jubilee Fields' revenues would focus on national development or be a menace towards national security. The practical implication of the findings was demonstrated in the desire of an overwhelming majority of respondents, especially the civil society group to express freely their views about the management of the revenues.

Background of Respondents

A sample of 250 Ghanaians was interviewed. It was made up of 200 respondents for the survey and 50 respondents were selected for the elite interview. The sample of 200 respondents selected from academics, NGOs specialized in governance issues, the media and the masses. The sex distribution of the respondents was as follows. 57.5% of the respondents were male whereas female respondents constituted 40.5%. Some 2.0% of the respondents failed to indicate their sex status. This means that the sex distribution was fairly balanced. There was also a regional balance as table 1 indicates.

Table 1 (What is your region of origin?)

		Frequency	Percent	Valid percent	Cumulative Percent
Valid	Non-response	8	4.0	4.0	4.0
	Central	98	49.0	49.0	53.0
	Western	94	47.0	47.0	100.0
	Total	200	100.0	100.0	

Source: Survey Questionnaire

Incidentally, the survey conducted in the Central Region understandably had a majority of 49.0% of the respondents. The age distribution was also somewhat balanced with respondents coming from all the age groups as table 2 below shows, even though majority of the respondents came from the 36-45 (29.0%) and 46-55 (26.5%) age groups,

however, only a few respondents 4.0% failed to mention a particular age group within which they belong.

Table 2 (Age group you belong to)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non-response	9	1.5	4.0	4.0
	18-25	63	10.5	10.5	14.5
	26-35	159	26.5	26.5	41.0
	36-45	174	29.0	29.0	70.0
	46-55	69	11.5	11.5	81.5
	56-65	99	16.5	16.5	98.0
	66 and above	27	3.5	2.0	100.0
	Total	600	100.0	100.0	

Source: Survey Questionnaire

With regards to selected areas, 49.0% of the respondents were residents of Takoradi, Sekondi and Tarkwa. Moreover, 47.0%, of the respondents were also residents of Cape Coast, Elmina and Salt pond, indeed, this indicating that all the two regions namely, Central and Western were duly covered in the survey.

With regard to the employment status, 71.0% of the respondents indicated they were employed, 28.0% of them stated they were unemployed whilst only a small minority of 1.0% did not respond to the question on their employment status.

Table 3. (Employment Status)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non-responses	2	1.0	1.0	1.0
	Employed	142	71.0	71.0	72.0
	Unemployed	56	28.0	28.0	100.0
	Total	200	100.0	100.0	

Source: Survey Questionnaire.

Regarding monthly incomes in Ghana Cedis, 36.0% of the 71.0% of the respondents with employable status indicated they earn a monthly income of about GH¢ 1,700. 00 and above. Meanwhile, 14.0% of the respondents indicated they earn about GH¢1, 500.00 to below GH¢1,700.00. 8.0% of those employed earn about GH¢1, 300.00 to below GH¢1,500.00, while 4.0% earn about GH¢1, 100.00 to below GH¢1,300.00 per month. Moreover, 3.0% earn about GH¢900 to below GH¢1,100.00 per month and 5.0% earn GH¢700.00 to below GH¢900.00 monthly. Furthermore, about 30.0% said they receive GH¢500.00 to below GH¢300.00 monthly.

Table 4. (Monthly Income Bracket)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	GH¢ 1,700.00 and above	72	36.0	36.0	36.0
	GH¢1,500.00 to below GH¢1,700.00	28	14.0	14.0	50.0
	GH¢1,300.00 to below GH¢1,500.00	16	8.0	8.0	58.0
	GH¢1,100.00 to below GH¢1,300.00	8	4.0	4.0	62.0
	GH¢900 to below GH¢1,100.00	6	3.0	3.0	65.0
	GH¢700.00 to below GH¢900.00	10	5.0	5.0	70.0
	GH¢100.00 to below GH¢700.00	60	30.0	30.0	100.0
	Total	200	100.0	100.0	

Source: Survey Questionnaire

The respondents indicated that “there are growing perceptions of Ghanaians over the lack of proper accountable mechanism for the management of the sector and the revenues from the extractive industries in the Jubilee fields.” Thus, the data analysis confirmed that an overwhelming majority of about 78.0% of the respondents were aware that oil and gas revenues were mismanaged because there is lack of proper accountability mechanism in the oil and gas extractive industries. A small minority of 17.0% of the respondents did not think that the revenues were being mismanaged and 5.0% were ignorant about the oil and gas extractive industries. The practical manifestation of the oil and gas mismanagement is revealed in table 4.4 below where 60.5% of the respondents stated that they often heard that oil and gas revenues are channeled towards political gains, whilst 36.0% said they very often heard with only 1.0% who had never heard of how oil and gas revenues were managed.

Table 5. (Mismanagement of Oil and Gas revenues)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	1.0	1.0	1.0
	Often	121	60.5	60.5	61.5
	Very often	72	36.0	36.0	97.5
	Don't know	5	2.5	2.5	100.0
	Total	200	100.0	100.0	

Source: Survey Questionnaire.

The lack of an accountability mechanism resulting from crony capitalist's activities and pervasive patronage politics negatively affects national development in various ways. As table 4.5 below shows, 32.5% of the respondents claimed that lack of an accountability mechanism coupled with pervasive patronage politics was likely to produce resource curse, whilst 27.5% said it slowed down development and about 5.5% of the respondents said they had no idea.

For a country that has joined the Heavily Indebted Poor Country group and is struggling to get out of economic underdevelopment, such a lack of an accountability mechanism coupled with widespread patron-clientelist networks render the prospects of economic take-off not hopeful.

Table 6 (C2 the implications of the lack of transparency and proper accountability mechanism)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nonresponse	2	1.0	1.0	1.0
	It slows down development	55	27.5	27.5	28.5
	Fuels partisan politics	11	5.5	5.5	34.0
	No idea	2	1.0	1.0	35.0
	Produce resource curse	65	32.5	32.5	67.5
	Increase corruption	65	32.5	32.5	100.0
	Total	200	100.0	100.0	

Source: Survey Questionnaire.

To the question; 'how would you rank the contribution of the oil and gas towards national development in Ghana?', almost a third of the respondents (47.0%) graded the contribution as poor, whilst 7.5% ranked the contribution as very poor. Some 43.5% and 2.0% ranked the contribution as fairly good and very good respectively.

Table 7. (Ranking of Contribution of the oil and gas towards National Development)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	94	47.0	47.0	47.0
	Very Poor	15	7.5	7.5	54.5
	Fairly Good	121	43.5	36.0	98.0
	Good	4	2.0	2.0	100.0
	Total	200	100.0	100.0	

Source: Survey Questionnaire.

However, in spite of the generally poor contribution rendered, most respondents thought that the right transparency and accountability in oil and gas extractive industries in Ghana was crucial, compared to some 40.5% who

thought that partisan politics was widespread in the sector. When respondents said there was partisan politics in the oil and gas sector in Ghana, they meant different things. Whereas a greater amount of the revenues were used to support party members, it also meant that recruitment in the oil and gas extractive industries were conducted on a partisan basis.

While 52.5% of the respondents attributed the lack of transparency and proper accountability mechanism to governmental or political interference, 26.0%, 11.05%, and 9.5% ascribed the lack of proper accountability to ineffective law enforcement agency and patronage politics respectively. The implication here is that any increases in general tariffs unaccompanied by political or governmental disengagement will only be a cosmetic solution. The interview conducted revealed that “there is a high measure of pessimism among the respondents as to whether a permanent solution to the mismanagement is possible in the foreseeable future. Findings from the interviews showed that many Ghanaians have given up any hope of a future solution to the oil and gas revenues contribution towards national development, and this is understandably so, for Ghanaians have had to live in poverty for a long time and it appears all previous attempts to solve the poverty problems have failed. The findings revealed that some 36.0% of the respondents do not foresee any solution to the oil and gas challenge in the future, whilst 54.0% of the respondents are optimistic that a solution may be found in the future.

Among the possible solutions offered by the respondents were: civil society should back up and strengthen agitations and demand their fair share of the oil and gas revenue (23% of respondents), efficient management and more funds (23.5% of respondents), checking corruption (1.0% of respondents), checking partisan and patronage politics (9.0% of respondents), use oil and gas revenues profitably (2.0% of respondents), public education (2.0% of respondents), definitive oil and gas revenue policy (14.5% of respondents), publish what is produced (1.0% of respondents) and then put in place proper checks and balances (15.5% of respondents).

Of all these, the single most important factor in solving the challenges in the oil and gas sectors, according to some 59.5% of the respondents, is efficient management. Some 20.0%, 9.0% and 9.0% think proper accountability mechanism, minimal state intervention, in that order, are critical to solving the oil and gas sector revenue management problems. Overall, in the opinion of an overwhelming majority of respondents (73.5%), the mismanagement was attributable to the lack of adequate oil and gas operating policy. This is an indictment of the state, since it is traditionally responsible for state policies including oil and gas revenue management policy. Table 4.7 throws further light on the correlation between state policy and the oil and gas revenues mismanagement.

Table 8 (E2 Governmental interference in oil and gas revenues policy in Ghana)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nonresponse	1	.5	.5	.5
	Yes	65	32.5	32.5	33.0
	No	132	66.0	66.0	99.0
	Don't know	2	.5	.5	100.0
	Total	200	100.0	100.0	

Source: Survey Questionnaire.

Here we notice that 66.0% of the respondents think that the oil and gas revenues management policies pursued by governments in Ghana have not been insulated from political interference. In other words, statist control and political interference are contributory factors to the mismanagement of oil and gas revenues. One of the most striking findings of the survey was that in spite of the negative impact of political or governmental interference on oil and gas extractive sector, most respondents (53.0%) do not see depoliticization as a panacea to the mismanagement. Only 46.0% of the respondents think that checking corruption is a solution to the challenges. As a further solution to the oil and gas sector predicament, most Ghanaians (about 55.5% of the respondents) think that Ghana should discontinue with the total sale of ownership of asset to her foreign development partners. Only 44.05 of the respondents favour a continuation of the engagement trade between Ghana and her development partners. Finally, findings concerning the provision of broad energy laws and policies to protect Ghanaians were as follow; 26.5% suggested the setting up of independent body that deals with energy, 11.05% proposed a policy to depoliticize the oil and gas sector, 16.00% recommended the need to provide transparent and proper accountability mechanism, 7.5% recommended the need for the foreigners to pay economic rates to Ghana, 5.5% recommended the need for efficient management, 11.4% the need to ensure equity and finally, 14.0 recommended publish all that is produced.

Generally, the majority of Ghanaians have demonstrated overwhelmingly through their negative expressions, their disappointment in the lack of an accountability mechanism. As the media reportage, government's report as well as the reports by oil and gas dealers to Ghanaians have shown, there is no clarity about the exact quantity of oils and gas and total revenues (Johnston, 2007). The originality and value of this study reflects the fact that it contributes to filling the existing gap in research on Ghanaians' knowledge, attitudes and growing perceptions about the lack of accountability mechanism coupled with pervasive cronyism (whom you know or who knows you) and nepotism (favouritism) regarding the management of the Jubilee Fields oil and gas revenues.

Accountability Mechanism in Ghana's Jubilee Fields Oil and Gas Sectors

In diagnosing the level of accountability in Ghana's Jubilee oil and gas sectors for the period 2010 to now, the study concerned itself with exploring whether or not the oil and gas sectors could bring about national development or result in the 'resource curse.' This was against the backdrop that accountability in the sector gives the impression of a façade and hence this could be a menace in disguise.

To attribute the challenges such as lack of a proper accountability mechanism in Ghana's Jubilee Fields oil and gas sectors to a particular factor is rather perilous for the reason that it cannot be done with a high degree of exactitude. Notwithstanding the evidence or facts at hand, there will be a certain degree of error in the prognosis. It must be pointed out, however, that the conclusions arrived at in this study are based on hard data and should be useful to journalists, students, stakeholders, policy-makers and the civil society group in Ghana as a whole.

Meanwhile, the primary objective of the survey, as in any scientific research, was to gather data that would enable us to verify our basic assumption. Here, this study discusses the findings to see whether the findings support or oppose the basic argument. A glance at the data analysis provides some useful insights into the accountability mechanism in the oil and gas extractive industries. It demonstrates a lack of an accountability mechanism coupled with widespread patronage politics, its impact and the general perceptions of policy-makers and ordinary people as to how revenues from oil and gas sectors are to be put to use or managed. To restate the basic assumption: The revenues obtained from the oil and gas extractive industries would tend to be a blessing or a curse depending upon the manner in which the revenues would be put to use or managed.

As already indicated, the findings revealed that majority of the respondents were pessimistic about the likelihood of the Jubilee Fields revenues being a guarantee to equity in national development. Or on the other hand probably a menace to national security.

The practical implication of the findings is demonstrated in the desire of an overwhelming majority of respondents, especially the civil society group to express freely their views about the management of the oil and gas revenues. This study is thus, original and valuable, because it fills the existing gap in research on people's growing perceptions over the lack of an accountability mechanism coupled with pervasive patronage politics for the management of the Jubilee Fields' oil and gas sectors.

Conclusion

This study is by no means exhaustive. It provides partial answers and lays the groundwork for further inquiry. It draws attention to institutional design challenges, the ways and means by which Ghana could ensure accountability in oil and gas sectors, and the implications of the institutional design for better performance of the industry, to enhance transparency as well as to ensure the maximization of the benefits to the citizenry. It makes some significant contributions to the existing literature on oil and gas extraction in Ghana.

This study established that natural resource endowment has value to which the owner has a claim. When the owner is not the resource developer or producer, fiscal instruments are used to capture that value. This study reviewed Ghana's oil and gas accountability mechanism as of the year 2010 and compared the key features of the regime with that of a peer group of oil-producing countries in Sub-Saharan Africa, and assessed the regime against five key features of importance to government and prospective investors: The degree of progressivity, stability, flexibility, neutrality and how the regime distributes the burden of risk between the resource owner and contractors.

Clearly, Ghana's Supplementary Budget exposed the obsession for spending by Governments of resource producing countries. They do not know 'breaks' even if it means violating the legal frameworks or interpreting them to suit their interests. The transparency demonstrated in the budget is commendable because it has brought to the fore the potential to abuse the oil and gas sectors' accountability and has therefore laid the foundation for public scrutiny in the management of expected large inflows of capital from oil and gas exploitation as Ghana becomes a major oil producer in the near future.

Ghanaians and development partners have the right to question the government on matters regarding mismanagement and misapplication of the country's oil wealth which is known to be non-renewable. By this way it could bring about public accountability and sustainable development.

Ghanaians are still wondering how to prevent or break the "curse" that has often marked Africa's oil and mining industries. This study has elucidated examples of oil and gas problems that are very close to home for instance, such as that which is found in Nigeria and other neighbouring countries. It also provides information about the continent's largest crude producer and reveals how successive governments have depleted the earnings from crude oil sales since the 1970s. Besides, Ghana's own record in managing mineral revenues after a hundred years of gold mining was highlighted.

This study has also attempted at explaining the seemingly new dawn which has broken and to offer civil society the platform on oil and gas as

well as the coalition of civil society groups that promote transparent and accountable management of oil and mineral wealth to air their views on Africa Renewal including Ghana's attempt to create a right path and a law that governs how the oil revenue should be collected and managed. In view of the need for dealing with critical issues of accountability, crony capitalism and nepotism therefore, this study explored the challenges encountered by the sector in ensuring a proper accountability mechanism and also to minimize cronyism and nepotism bedeviling the Jubilee Fields.

This study posits that through media reportage and other stakeholder watchdog activities, the transparency and issues of crony capitalism and nepotism characterizing the management of Jubilee Fields' oil and gas revenues could not only be brought to public attention but also be minimized to promote national development as opposed to the perceived 'resource curse'. In addition, this study unearthed the background to oil and gas discovery in Ghana, investigated the accountability mechanism and patronage politics in the oil and gas extractive industries and finally, analyzed the development prospects for Ghanaians by focusing mainly on the construction and maintenance of an effective accountability mechanism in the oil and gas sectors.

The expectation has been that patronage politics and crony capitalism which has since the commencement of oil and gas extraction been obscuring accountability in Ghana's Jubilee Fields oil be well- investigated and media's sensitization of public on matters of Jubilee Fields' oil and gas sectors will be promoted. Also to bring into the limelight such a policy regarding revenue re-distribution intended to accelerate national development. It also sought to elucidate how the lack of accountability in oil and gas sectors could serve as a menace to national security in Ghana.

Finally, oil and gas constitute a national asset and that the oil and gas proceeds obtained from the extractive industries and the use and management of oil and gas revenues must be guided by law to provide development for the entire citizenry.

Recommendations

This study makes a number of recommendations based on the conclusions. On the theoretical level, judging from the kind of data collected, it would be of interest to a prospective researcher to delve more into why transparency and a proper accountability mechanism are becoming a more dominant issue or phenomenon in the oil and gas sectors.

There is a world of choice open to the design of oil and gas revenues management regime, and hence the media should be well-equipped to be able to access information regarding accountability to hold government and oil and gas partners in check.

Policy makers should note that one step towards reversing the paradox labeled ‘resource curse’ lies in the effective management of oil and gas revenues, ensure adequate information flow and provision of training for media activists in order to provide an informed analysis on the sector in their reportage. There should be a synergy between government, the private sector and the media to ensure that the activities that will help attract investments in to the country are publicized.

Parliament should expedite action to pass the Right to Information Bill to empower the media in particular and Ghanaians in general to have access to information pertaining to oil and gas production and revenues. Policy makers should adopt the US Dodd-Frank Act, i.e. Publish What You Pay law and apply it to the later.

In the light of the aforementioned issues, it is recommended that the synergy between the oil and gas industry and the rest of the economy becomes important to ensure that Ghana achieves a broad-based development and that the exploration of its natural resources meets the needs and aspirations of its citizens. Furthermore, it is recommended that Revenue Transparency should collaborate with Transparency International (TI) and the Revenue Watch Institute (RWI) in making oil and gas revenues more beneficial to the society by ensuring information flow to the public domain. It is also, recommended that decisions over the type of fiscal regime, the state’s needs for revenue for the extraction of its resources, the incentives system, the monitoring and cost verifications, and equitable risk-sharing become important considerations within the context of the geological uncertainties in oil and gas extractive industries.

Since the current oil and gas extraction regime does not provide for standardization of the terms governing oil and gas contracts, it is recommended that the Petroleum Income Tax Law (PNDCL 188) promulgated in 1987 which contains some fundamental flaws should be fully reviewed. Such revision should reflect current industry best practices with the view to guard against open ended exemptions, allowances, and withholding taxes, transfer pricing and cost containment.

However, a superficial revision that does not respond adequately to the concerns but betrays the trust of citizens in the state’s capacity to realize the full benefit of resource extraction for the public interests should be discouraged. A better option might be to repeal the Public Interest and Accountability Committee (PIAC) and incorporate all its essential features into the Internal Revenue Act (IRA) to ensure consistency of the treatment of chargeable income and with greater clarity on “cost stop” elements for all extractive industries.

Finally, there should be institutional incentives to check or minimize widespread patron-client networks and to insulate the oil and gas sectors

from the vagaries of patronage politics and crony capitalism. Widespread crony capitalism and pervasive patron-client politics which reinforces the paradox labeled the ‘resource curse’ would however be reversed provided successive governments construct and maintain a credible and effective accountability mechanism in Ghana’s Jubilee Fields oil and gas sectors

References:

- Adam, A. M. (2012) “Slippery steps in Oil Revenues Management: A Case of Ghana’s supplementary budget” Asempa Publisher, Accra
- Amaechi, D. (2010.). “Supplementary Budget.” *Oil and Gas Law: Is there a legal and functional value for the stabilisation clause in international petroleum agreements?* Retrieved November 2012, from www.dundee.ac.uk/cepmlp/car/html/car8_article27.pdf.
- Amoako-Tuffuor and Owusu-Ayim (2012) “Principles, Problems and Practice in oil and gas exploration economy New York: Routledge. (pp. 89-121).
- Bello, N. (2010). “The Nigerian Oil and Gas Fiscal Systems: Issues and Challenges”, presentation to IMF’s Conference on Petroleum Taxation in Sub-Saharan Africa, Kampala, Uganda, June 29.
- Bonsu, M. . K. and Mensah, C. (1997) “Petroleum Income Tax Law,” *Income tax Law, 1987 (PNDCL 188); and 1984 (PNDCL 84)*. The Ghana Policy Journal 2010. Volume 4. Number 8 p 10-25
- Brobbe, C. A-B. (2014) “The Politics of Managing Oil and Gas Revenues: A Case of Ghana’s Jubilee Fields.” *Africa Peace and Conflict Journal (APCJ)* (Pending Publication)
- Efam- Dovi, (2013) “Ghana’s ‘new path’ for handling oil revenues” Seeking to avoid the ill effects of Africa’s resource “curse” *From Africa Renewal: January 2013* , page 12-32 Commonwealth Secretariat Report (2003). “Petroleum Exploration and Production in Ghana:” A Review of the Regulatory Regime Exploration and Exploitation Agreements: legal, Economic & Policy Aspects, Barrows Company Inc., New York.
- Hogan, L., and Goldsworthy, B. (2010). *International Mineral Taxation: Experience and Issues*. The Energy and Resources Institute (TERI), India P. 23-36
- Johnston, D. (2007). “How to Evaluate the Fiscal terms of Oil Contracts,” in *Escaping the Resource Curse*, in M. Humphreys, J. Sachs, and J. Stieglitz (eds.) Columbia University Press, pp. 51-88.
- Johnston, D. (2011). *International Petroleum Fiscal Systems and Production Sharing Contracts*, Penwell Books, Tulsa, Oklahoma
- Keen, D. M. and McPherson, C. (2011) “*The Taxation of Petroleum and Minerals: Principles, Problems and Practice* (pp. 122-162). New York: Routledge.

- McPherson, C. and Goldsworthy, G., (2009). "Fiscal Regimes and Revenue Management for the Petroleum and Mining Sectors," IMF Fiscal Affairs Department, August 2009.
- Mummer, B. (2011). "Fiscal Regimes and Oil Revenues in the UK, Alaska and Venezuela", Oxford University Press p 15-28.
- Nakhle, C. (2011) "Petroleum Fiscal Regimes: Evolution and challenges." Institute for Energy Studies, WPM 27, June P.4-65
- Perkins, John (2005), "The Confession of An Economic Hit man: the shocking inside story of how America REALLY took over the world." Boston University College of Business. Boston University Press. P 115-134.
- Tordo, S. (2007) "Fiscal Systems for Hydrocarbons: Design Issues", The World Bank Working Study # 123, Washington D.C.
- Tordo, S. and Johnston, D. (2010). "Petroleum Exploration and Production Rights: Issues of Allocation Strategies and Design." World Bank Working Study, # 179.
- Van de Walle, N., (2005) "Patronage politics and policy reforms failures in Africa" Journal of Governance International and Global Area Studies. Volume 3 Number 6,p16- 33

STUDING RADIOECOLOGICAL PROBLEMS IN THE CASPIAN REGION

Otar Gerzmava, Professor

Grigol Robakidze University, Tbilisi, Georgia

Rukhsara Alieva, Professor

Niazy Hajizade, Professor

Azerbaijan State Medical University, Baku, Azerbaijan

Abstract

In the present article there is given analysis of materials about study of the natural and anthropogenic radio nuclides in the Caspian region for the creation of a monitoring network and the assessment of radiological hazards with determinations of compliance to international health and safety standards. Radionuclides are come across in different districts of the Caspian territory and their radiation give way to the realization of the ionizing radiation. Also there have been shown ways of nature protection on the ecological and legal base to prevent water pollution. In the Caspian districts where more than 3 million people live, the investigations carried out about the radiation levels do not draw a clear picture about the environmental pollution.

Keywords: Caspian region, radiation radio – spectrometric analysis, radionuclide

PROPOSAL: To study the natural and anthropogenic radio nuclides in the Caspian region for the creation of a monitoring network and the assessment of radiological hazards with determinations of compliance to international health and safety standards.

OBJECTIVES: Determination and monitoring of radiation levels in water, air soil, food products, and biota.

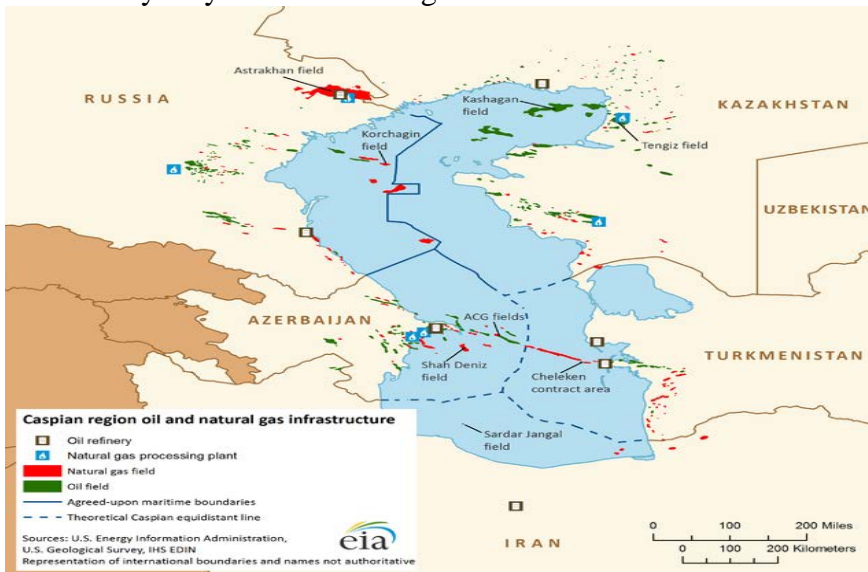
Introduction

It is a fact that the ever-growing development of the petrochemical industries dominates other industries in importance and growth in the Caspian Region. Subsequently, throughout the 20th century and into the new millennium, the petrochemical industries have been responsible for the greatest environmental impact throughout the Caspian region.

Radio-isotopes (radio nuclides), derived from stable isotopes, have ionizing radiation penetrating into all living organisms, that can result in undesirable anomalies and even in lethal outcome.

A consequence of this growth and continued activity is the increase of background radiation in the region. For example the process of drilling for oil releases naturally occurring radionuclides from deep in the earth and bring them to the surface in concentrations not usually seen in the environment. The drilling itself does not produce radioactive elements, but can concentrate these naturally produced radioactive elements in such a fashion that they are hazardous to the environment, workers, and the general population. The hazards of these radioisotopes are well documented.

Natural radioactivity (NR), in other words background radiation, is basically the consequence of naturally occurring radiation that is tolerated by living organisms and it reaches 10 mR/h in different regions of the Caspian territory. Uranium-238, Radium-226, actinium-thorium-232 of which uranium and thorium are the most abundant ones are the major sources of natural radiation. They undergo spontaneous decay, forming different sets of radio-elements and isotopes with various half-life periods (HLP). Radon is a unique natural element. It is a noble gas, and radioactive in all of its isotopes. Radon isotopes are born by the decay of radium and they exist in soil and underground water sources. Radioisotopes such as Rubidium-87 and Indium-115 emit insignificant amount of natural radiation and they are comparatively rarely found. NR basically depends on the contents in the substratum of uranium, thorium, radium and carbon that are regarded as long-life isotopes with long HLP (in the order of 104–1010 years). In the process of decay they emit betas and gammas.



Many reasons could cause artificial radioactivity (AR): they include nuclear or thermonuclear reactions, nuclear wastes and accidents in nuclear power plants (NPP) as in the case of Chernobyl. Following a nuclear reaction radio elements and isotopes such as Sr-90, Cs-137, Ce-144 are formed, which are not among the NR elements, and their HLP may range from a fraction of a second to many years. Radioactive clouds that formed in the atmosphere as a result of a nuclear explosion penetrate into the troposphere, and moreover ultra fine particles and gases reach up to the stratosphere causing global pollution. Elements causing AR fall out from the atmosphere, dissolve in water and eventually penetrate the upper 3 to 5 cm layer of soil and slowly migrate through the soil structure.

Radionuclides are come across in different districts of the Caspian territory and their radiation give way to the realization of the ionizing radiation.

In the Caspian districts where more than 3 million people live, the investigations carried out about the radiation levels do not draw a clear picture about the environmental pollution.

In an oil field, oil itself may not be the greatest treat in terms of radionuclides. During oil production activities, another substance extracted together with crude oil is water. Water associated with crude oil is either due to connate water or aquifer water or both. That water contains more radionuclides such as Radium-226 and Radium-228 compared to the crude oil (Gadjiev B.A., et.al. Oil of Azerbaijan. Book, Baku, 1988). On the other hand, all stages involving oil production and handling activities such as storage tanks, pipelines, containers could potentially pose an environmental hazard concerning radioactivity.

Furthermore, Azerbaijan has iodine plants, where coal, with radioactive contents, being used in Surakhani district hence nearby districts – Amirjan and et - are contaminated by the radioisotopes. The level of radiation ranges from 300 up to 2000 mR/h in the plant itself.

The above reasons cause alarming interest on the specialist to carefully investigate the detection of legitimacy regarding the migration and localization of radio isotopes that relate to environmental impacts on living organisms.

The pollution of the Caspian districts is not limited only by radioactive radium. It is known that products of oil, petrochemical and chemical industries are associated with radioactive radon, uranium, thorium, iodine and many other isotopes of radio elements. For example, modern iodine-brome industry is the major source of radioactive I-129 isotope around the Caspian districts – Sumgayit and et. Next is the chemical industry in the city of Sumgait, which is located not far from the Caspian Sea, that releases at the least C-14 isotope which should also be subject to research.

Oil polluted soil in petroliferous regions located in the Caspian territory draws a rather different picture regarding universal radioactive pollutants. For example, radium and thorium contents in the uppermost layer of soil exceed the Clarke's Standards 2.5 and 1.2 times respectively. According to the Clarke's Standards Radium, Thorium and Uranium contents in the uppermost layer of soil should not exceed 5.20×10^{-4} , 6.98×10^{-4} and 1.95×10^{-4} % respectively.

Undesirable conditions created by different sources in the Caspian territory, in fact, urge the necessity to organize a monitoring service for the determination of the basic radio nuclides in the environment. This monitoring network will provide indispensable data about the Caspian territory thus helping environmental control over the pollutants to decrease the radioactivity to the best measures preserving the genetic structure in the region in the long term.

Experiment

In our investigation we will measure radiation levels in water, air soil, food products, and biota around the Caspian region using a thermoluminescent dosimeter device such as DTY-01. Measurements carried out so far showed that radiation level values fluctuated within the range of $\pm 30\%$ around the average value.

Discussions

Radiological problems of the Caspian See are constantly on the agenda as an actual problem. They have been repeatedly discussed in various platforms and scientific meetings. We constantly examine the methodology and results of scientific studies carried out on the subject in various aspects

There have been shown sources of pollution of the Caspian Sea environment. These sources endanger ecological safety of the Caspian Sea. There has been offered the regime of sea safeguarding made on the base of ecological risk which was established both by world experience of the fight with oil pollution and by the principles of ecological and legal rationing maximal concentrations of pollutants. There has been made analysis of ecological danger that has much in common with ecological disaster during oil production in the Caspian Sea and its consequences for environmental safety of the Sea. The environmental safety of the Caspian Sea was stipulated by fluctuations of its level that leads to the flooding deserted oil fields in the eastern shores of the Caspian Sea on the territory of Republic of Kazakhstan..

Conclusion

The necessity of the petrochemical industries is the most important aspect of economic development in the Caspian region. This development must occur with due regard to the assessment of the radiological impact to accepted international standards.

References:

ЕкоLogos, № 14, 2001.

“Radiation-ecological problems of the Caspian region”, Conference , 23-25 October, 2003, Baku (Azerbaijan)

The significance of weakening of influence of emergence situations in stable development of the country. Conference, 26-28 November, Baku 2002.

Kadyrzhanov K.K., Solodukhin V.P., Lukashenko S.N. (2003) Radioecological Investigation at the Radiation Hazardous Objects, Facilities and Territories of Kazakhstan. *The Fifth International Conference "Modern Problems of Nuclear Physics"*, Samarkand, 331-332.

Logachev V.A., Logacheva L.A. (2000) Estimation of Radiation Consequences of Nuclear Explosions, Carried out on the Poligons of the World. *International Conference "Radioactivity After Nuclear Explosions and Accidents"*, Sankt-Petersburg, Hydrometeoizdat, Vol. 1, 218-230 (in Russian).

Tsitskishvili M.S., et al. (1982-2002), *Radiational Investigations*, VI, VII, VIII, IX, X, XI, Tbilisi, Publ. House of Georgian Academy of Sciences.

Tsitskishvili M.S., et al. (1988-2003), *Problem of Ecology*, I, II, III, Tbilisi, Publ. House of Georgian Academy of Sciences, ISSN 1512-1976.

"Proceedings of the NATO Advanced Research Workshop on Radiation Safety Problems in the Caspian Region, Baku, Azerbaijan, 11-14 September 2003."

SMART AUDIO AMPLIFIER

*Josue Zarate V,
Enrique Muñoz C,
Ruben Diaz C.*

School of Mechanical and Electrical Engineering
University San Luis Gonzaga, Peru

Abstract

This project focuses on the control of audio power amplifiers. Is the development and implementation of a system of controlled cooling and optimizing the power consumption and temperature generated, using an advanced control algorithm. The approach is based on the configurations of integrated circuits (IC) audio amplifiers allowing us to obtain data energy consumption and parameters of temperature gradient, generally with the required parameters will be processed by a microcontroller (uC) to pass to run programmed by a control algorithm(PID) instructions. The design of the electronic circuit is composed of passive and active electronic devices essentially controlled by protocol (I2C / TWI), Class-T Digital Audio Amplifier, sensors, microcontrollers working on master and slave protocol using UART mode. Configurations and analysis by module (ADC), including a turning on system and automatic shutdown and peripherals, the frequency at which works is 20Hz to 20kHz with 75dB decibel maximum. Finally both analysis and theoretical control simulation showed that the use of a good control configuration based on energy regulation and switching amplifiers allows the temperature was controlling with excellent accuracy and reduces wear on stage of electronic circuit.

Keywords: IC, PID, UART, ADC

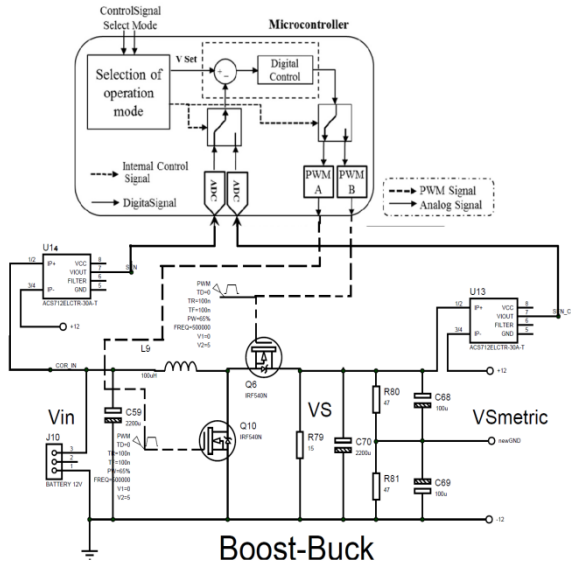
Introduction

Currently in the audio amplifiers be perceived the need an efficient moderate sound control and good cooling system, either in various configurations amplification circuits. Often used this ventilation system. Focused on generating gain and amplifying the incoming signal to be then sent to the output load, thereby leaving out the cooling control system, and especially the required consumption of each stage. Thereby causing severe problems in integrated circuit devices and power because the temperature

generated by them. Therefore it is possible to control said temperature generated and directly proportional current consumption. Thus, it becomes absolutely necessary to have an automated system that monitors each stage, from the detection to amplification stage. Using data obtained mainly from the sensors and integrated circuits. It is therefore necessary to be able to identify parameters of possible short circuits and wrong power settings, these walls will be able to isolate the supply of each stage. Therefore, to accomplish this task control and identification is essential to have an algorithm that this widespread with each stage of the design is done through a hardware that has the necessary pattern recognition algorithms. Also, in other words this project focuses on minimizing consumption and optimize control by providing an alternative solution for easy access.

Methodolog

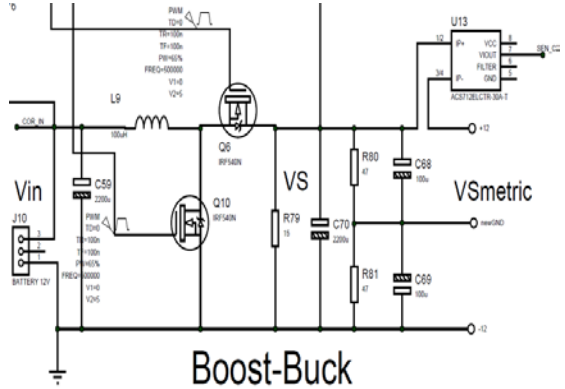
The realization of this project involved the development of different stages from incoming detection and sensor signals to implementation of pattern recognition algorithm in the microcontroller, with their respective tests and as a result the power amplification. It should be clarified that for the development of this project, some steps were implemented in Software Matlab / Simulink, while others using the C ++ Programming Language. As for the simulation was performed by proteus (Isis) and finally Tera term. The Matlab / Simulink was used because this software offers versatility for programming and also a practical management for implementation and training power circuits. The Proteus was used to perform the simulation of our electronic circuit design, this software performs simulations 300MHz to this simulation with the frequency set with real time simulation. The first step is the configuration and gain power for the entire electronic circuit, the second stage was responsible for the pre-amplified signal, then the third stage dealt with the implementation of the algorithm in the microcontroller, and the last is devoted itself power amplification. It is clear that each has a purpose estapa that interacts with the microcontroller via sensors and ADC ports that are responsible for obtaining the parameters required by the algorithm. In this way we can also implement a communication and interaction with the computer through the serial port. The following outlines each of the steps implemented for the development of this development Project:



1.-Power: configuration and control. It is known that in audio stages is counted as the preamplifier, that is required for positive and negative intentions worth highlighting the need for symmetric source. Therefore. Speaking about the power configuration is referable to use an elevator retention. That in this section discuss it. Thus, to generate an appropriate retention for stage, it is appropriate input power as prime 12V, sombre this intention is implemented in hardware a DC / DC converter to take care of delivering the power and intention necessary for the pre-amplification circuit, also the amplification circuit average power, it a 5 volt supply is regulated by the regulator built 7805, it will be necessary to power the control circuit.

1.1.-Boost-Buck converter in closed loop

Figure shows the bidirectional boost-buck converter used to increase the



voltage from input V_{in} , to the DC bus voltage level V_S . Such a converter also supports the inverse power flow in buck operation mode from V_S (DC

bus or regenerative load) to V_{in} (auxiliary storage device). The MOSFET used in the converter was a N-channel IRF540N from International Rectifier. It is noted that Q10 and Q6 MOSFETs activation are complementary to avoid fuel cell short-circuits: in boost mode the Q10 MOSFET is the independent one and Q6 is activated by a complementary signal, while in buck mode the Q6 MOSFET is the independent one and Q10 is activated by a complementary signal. The bidirectional converter is controlled by means of a 500 kHz and 65% PWM a(Pulse Width Modulation), and its control structure is depicted in **Figure**, depending on the required power flow direction, the microcontroller drives Q10 and Q6 MOSFETs by means of a PID controller. In addition, the converter passive elements were calculated to fulfill the fuel cell small current ripple requirement considering a DC bus voltage equal to 24 V with 3A, and fuel cell and auxiliary storage voltages within the range [5,5-11,5] V. The nominal power of the converter is then 50 W, and its inductor design ensures a continuous conduction mode (CCM) for the adopted operating conditions. The converter parameters are: $L9 = 100 \mu\text{H}$, $C59 = 2200 \mu\text{F}$, $C70 = 2200 \mu\text{F}$ and $R79 = 15 \Omega$.

The converter was controlled by using an ATmega32 microcontroller (Atmel Corporation), where the input and output port voltages are measured to calculate the control signal as in (1),(2). In such equations e represents the error signal used to process the PID controller, V_{ref} represents the desired voltage, and V_{me} represents the measured voltage: DC bus or load voltage for the boost mode, and auxiliary storage or fuel cell voltage for the buck mode. The error signal is calculated in each duty cycle period, as well as the control command that defines the converter duty cycle generated by the PID structure given in (2), where K_p is the proportional constant, K_i the integral constant and K_d the derivative constant.

$$e = V_{ref} - V_{me} \quad 1)$$

$$C(t) = K_p * e(t) + K_i * \int_0^t e(t) * dt + K_d * \frac{de(t)}{dt} \quad 2)$$

Since the ATmega32 microcontroller process only digital equations, the analogue controller given in (2) has been digitalized in difference equations as given in (3), where $T_i = 1/K_i$ represents the integral time constant, $T_d = K_d$ the derivative time constant, and T_s the sampling time.

$$C(n) = K_p * e(n) + \frac{T_s}{T_i} * \sum_0^N e(n) + \frac{T_d}{T_s} * [e(n) - e(n-1)] \quad (3)$$

The controller parameters were designed by means of the root-locus placement technique by using the small signal models of both boost and buck circuits. In this way, the small-signal model of the boost converter is:

$$\begin{bmatrix} \hat{x}_1(s) \\ \hat{x}_2(s) \end{bmatrix} = \begin{bmatrix} s + \frac{1}{RoC2} & -\frac{(1-D)}{L} \\ \frac{(1-D)}{C2} & s \end{bmatrix} * \begin{bmatrix} \frac{1}{L} & 0 \\ 0 & \frac{1}{C2} \end{bmatrix} * \begin{bmatrix} \hat{u}_1(s) \\ \hat{u}_2(s) \end{bmatrix} + \begin{bmatrix} \frac{X_{20}}{L} \\ -\frac{X_{10}}{C2} \end{bmatrix} * \begin{bmatrix} \hat{d}(s) \end{bmatrix} \quad (4)$$

Where x_1 represents the inductor current, x_2 the $C2$ capacitor voltage, u_1 the input voltage (main or auxiliary power source), u_2 models the load perturbations, d and D represents the converter small-signal and steady-state duty cycle values, respectively. In such a model the capital letters denote steady-state values, and the small-signal single input-single output transfer function between the output voltage \hat{x}_2 and the duty cycle \hat{d} is:

$$\frac{\hat{x}_2(s)}{\hat{d}(s)} = \frac{(1-D)*X_{20} - s*\frac{X_{10}}{C2}}{s^2 + \frac{s}{RoC2} + \frac{(1-D)^2}{LC2}} \quad (5)$$

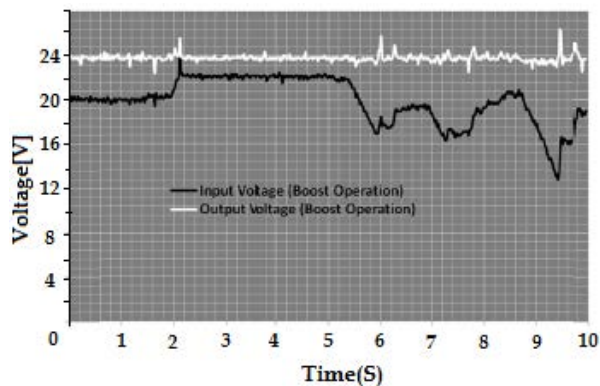
The controller designed for this operating mode has the following parameters: $Kp = 0,3$; $Ki = 0,001$; $Kd = 0$; this with a $Ts = 2ms$. In a similar way, the small-signal model of the buck converter is given by (6), where x_1 represents the inductor current, x_2 the $C1$ capacitor voltage, and u_1 the input voltage. Equation 7 gives the small-signal single input-single output transfer function between the output voltage \hat{x}_2 and the duty \hat{d} cycle used to design the following controller parameters: $Kp = 0,25$; $Ki = 0,0001$; $Kd = 0$; $Ts = 2ms$.

$$\begin{bmatrix} \hat{x}_1(s) \\ \hat{x}_2(s) \end{bmatrix} = \begin{bmatrix} s + \frac{1}{RoC1} & -\frac{1}{L} \\ \frac{1}{C1} & s \end{bmatrix} * \begin{bmatrix} \frac{D}{L} \\ 0 \end{bmatrix} * \begin{bmatrix} \hat{u}_1(s) \\ \hat{u}_2(s) \end{bmatrix} + \begin{bmatrix} \frac{U_{10}}{L} \\ 0 \end{bmatrix} * \begin{bmatrix} \hat{d}(s) \end{bmatrix} \quad (6)$$

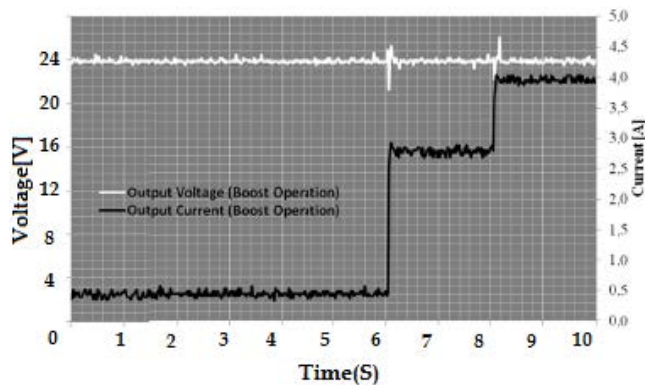
$$\frac{\hat{x}_2(s)}{\hat{d}(s)} = \frac{\frac{U_{10}}{LC1}}{s^2 + \frac{s}{RoC1} + \frac{1}{LC1}} \quad (7)$$

The closed loop bidirectional DC/DC converter has been experimentally tested in both boost and buck modes. The boost mode was evaluated by defining a regulated 24 VDC bus voltage, where perturbations on the DC bus current and power source voltage, i.e. fuel cell or auxiliary

storage device, were applied. The test defines a DC bus impedance equal to 15Ω , and low frequency variations between 11,5 V and 5,5 V were applied to the input port voltage, which are typical on fuel cells and high capacitive storage devices. In such conditions the system behavior is satisfactory as reported in figure 6a, where the DC bus voltage is accurately regulated in presence of the input voltage perturbations. An additional experiment was performed in boost mode by defining a constant input port voltage equal to 9V and applying perturbations to the DC bus impedance: it starts at 15Ω , then it is decreased to $4,52\Omega$, and finally it is further reduced to $3,11\Omega$. This test evaluates the performance of the converter and its controller in load perturbations. The experimental results are depicted in figure 6b, where it is observed the satisfactory response of the closed loop converter in the DC bus voltage regulation.



(6a)



(6b)

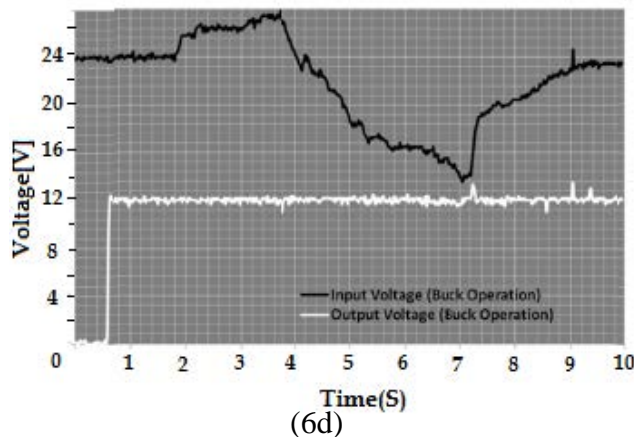
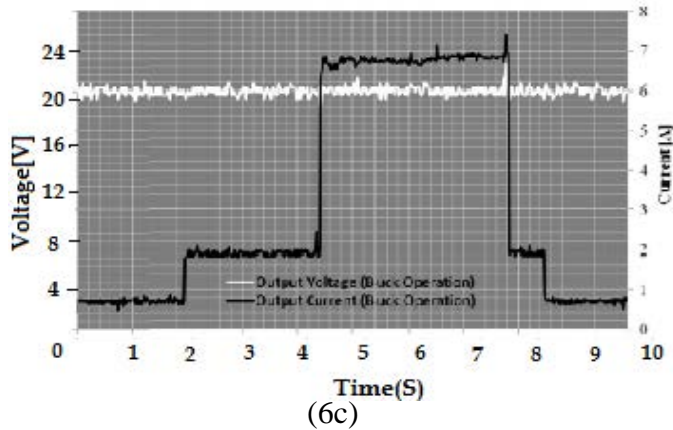


Figure 6

Experimental dynamic response of the closed loop bidirectional converter: a) boost mode with input voltage transient; b) boost mode with load current transient; c) buck mode with input voltage transient; d) buck mode with load current transient. Finally, it is noted that in the boost operating Mode the steady-state voltage error is lower than 0,8 %, while in buck mode it is lower than 0,3 %. Such experimental results illustrate the accurate regulation of the device.

2. Signal Preamplifier. Preamplifier circuit is developed based on the use of high-speed operational amplifiers and sensitivity, it should be noted that these characteristics is essential for audio signals. Since it will take as input a range of 10mV to 100mV, be necessary to design this circuit.

2.1.-Preamplifier Circuit with TL072. The JFET-input operational amplifiers in the TL072 with low input bias and offset currents and fast

slew rate. The low harmonic distortion and low noise make the TL072 series ideally suited for high-fidelity and audio preamplifier applications. Each amplifier features JFET inputs (for high input impedance) coupled with bipolar output stages integrated on a single monolithic chip. The C-suffix devices are characterized for operation of High Input Impedance: JFET Input Stage and High Slew Rate.

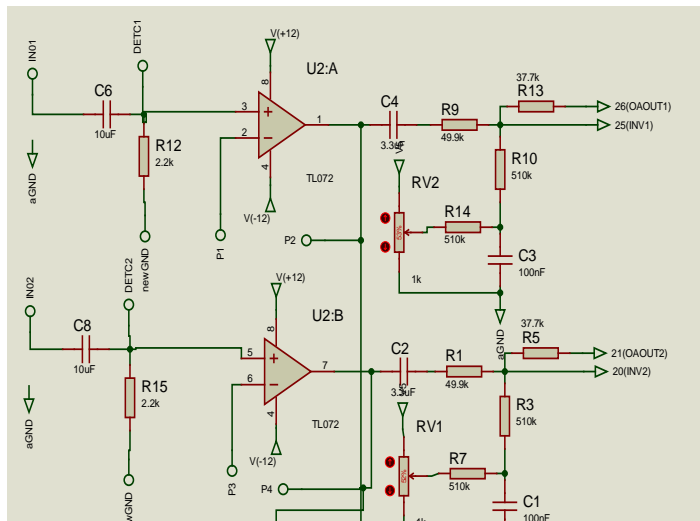
2.2.-Preamplifier Configurations. The preamp design a circuit is to optimize the signal enters and filter noise signals, the application aims to make profits will depend on how they are configured. In this case the TL072 was used in two types of mode settings, non-inverting amplifier and a follower amplifier.

2.2.1. Op-Amp Non-Inverting Amplifier. Is indispensable to obtain as output the noninverting input signal, in turn there will be obtained a gain appropriate voltage to the power amplifier. The circuit has two digital potentiometers the AD5220BN100 that will be very useful to control gains control system as this will depend on the signals to be sent to the power circuit. The C6, C8 with R12, R15 perform the function filters the incoming signal characterized by a high impedance Z for frequencies below 10Hz.

$$F = 1 / (2\pi \times C6 \times R12)$$

$$F = \frac{1}{2\pi \times 10\mu f \times 2.2} = 7.234 \text{ Hz}$$

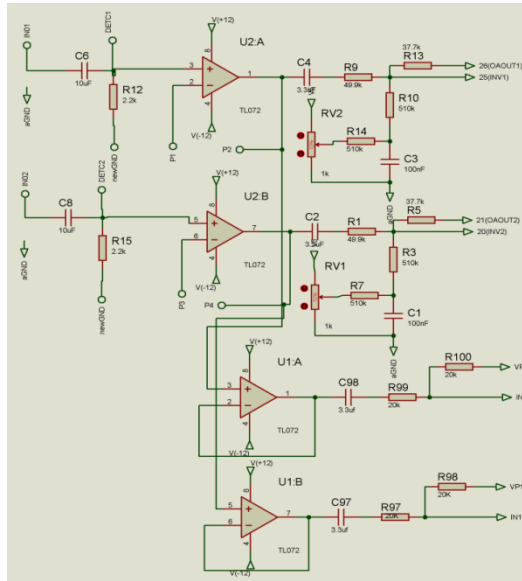
C6=C8=10uf, R12=R15=2.2KΩ, F<10Hz



The gain depends on the Digi pots, these are connected in the order [P2-P1] will be like a resistor (R2), [P1-newGND] be a resistor (R1).

$$\Delta V = 1 + R2 / R1$$

$$Vo = \Delta V * Vin$$



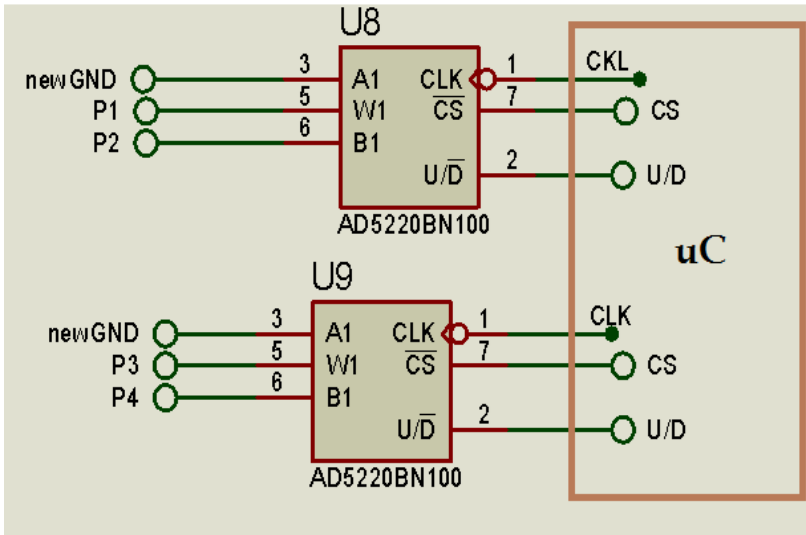
Digital potentiometers U8 = U9 = 100KΩ are configured by the microcontroller (ATmega32) and if the input is 50mV as the uC using the ADC reads the 50mV digitally, this led to act in uC, setting the two potentiometers are connected in parallel. Modifying and R1 = R2 = 93KΩ 7KΩ. As a result it will 714.29mV.

$$\Delta V = 1 + \frac{93K}{7K} = 14.2857$$

$$Vo = 14.2857 \times 50mV = 714.29mV$$

It should be noted that the non-inverting amplifier signal is sent to the power amplifier, which is 300W (TA3020).

2.2.2.-The follower amplifier. Was used to maintain the amplitude of the signal and the gain provided by the noninverting amplifier. That said have a gain equal to the $\Delta V = 1$ and $V_o = V_{in}$ unit. In figure shows U1: A, U1: B amplifier configured as a follower. If the $V_{in} = 714.29\text{mV}$ since it will result to $V_o = 714.29\text{mV}$. Clearly, the signal is sent to a follower amplifier average power is 10W (TA1101B).

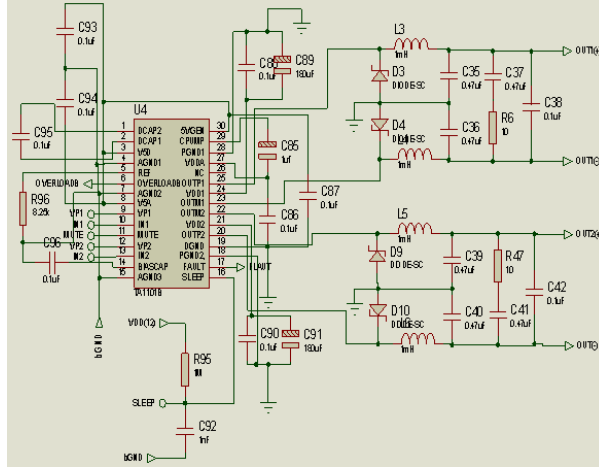


3. Power Amplifier Circuit. At this stage the circuit is designed based on class T amplifiers Both amplifiers offer the audio fidelity of Class-AB and the power efficiency of Class-D amplifiers. In search of the proper and efficient amplifier, was reached to selecting two integrated audio amplifiers. Audio Integrated circuits are **TA1101B**, **TA3020**. These amplifiers are really optimal and efficient for those characterized.

- Fully integrated solution with FETs
- Class-T architecture
- Easier to design-in than Class-D
- Reduced system cost with no heat sink
- Dramatically improves efficiency versus class –AB
- Signal fidelity equal to high quality linear amplifiers
- Dynamic Range ≥ 102 Db

The TA1101B operates by generating a high frequency switching signal based on the audio input. This signal is sent through a low-pass filter (external to the Tripath amplifier) that recovers an amplified version of the audio input. The frequency of the switching pattern is spread spectrum and

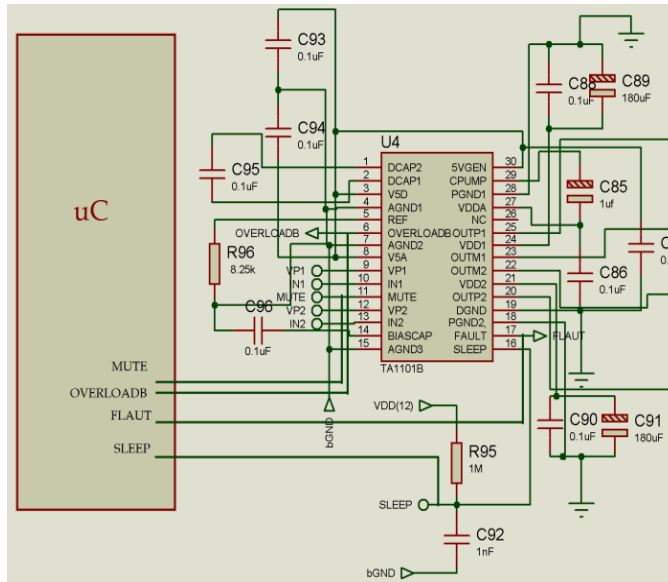
typically varies between 100kHz and 1.0MHz, which is well above the 20Hz–20kHz audio band. The pattern itself does not alter or distort the audio input signal but it does introduce some inaudible components. The design and configuration of CI TA1001B shown in the figure.



Where VI is the input signal level and VO is the differential output signal level across the speaker 9.18Watts of RMS potput power results from an 8.57V RMS signal across and 8Ω speaker load. If R100=R99 then 9.18W will be achieved with 714.29mV of input signal.

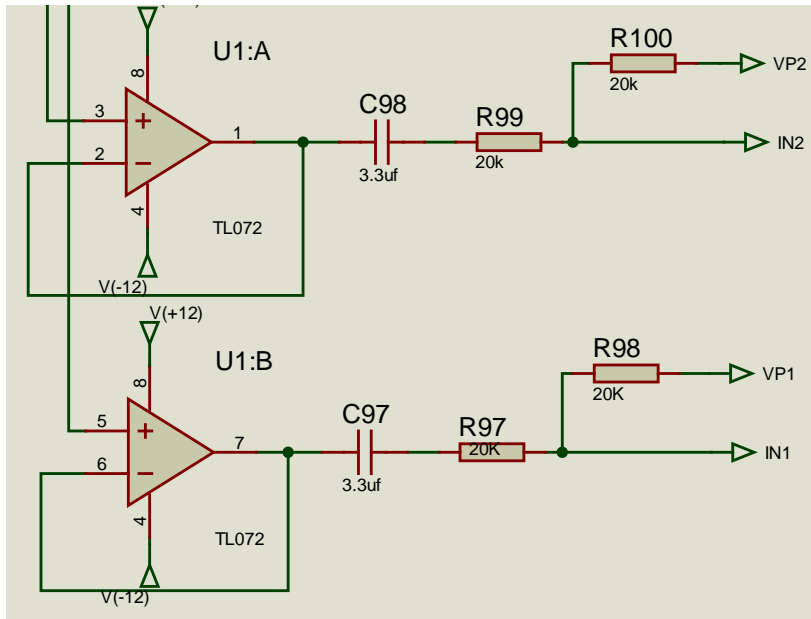
$$VO = 12 * 714.29mV = 8.57V \quad VO = \sqrt{8 * 9.18} = 8.57V$$

18Watts of RMS output power results from an 8.57V RMS signal across and 8Ω speaker load. If R100=R9



3.1.-10W Amplifier. For amplification reaches generate a power of 10W we resorted to implement integrated audio amplifier TA1101B. Besides supporting said as efficient as power and class AB, D apart from that requires only 12V supply. Physically has a small footprint, this makes perfect to save space

3.1.1.-Amplifier Gain. In the figure the pre-amplification circuit which is implemented is shown. We can say that VP2, N2, VP1, N1 are the pins belonging to the amplifier input TA1101B



The gain of the TA1101B is set by the ratio of two external resistors, R99, R97. and R100, R98, and is given by the following formulate:

$$\Delta V = \frac{VO}{VI} = 12 * \frac{R100}{R99} = 12 * \frac{20k}{20k} = 12$$

$$VO = 12 * 714.29mV = 8.57 VVO = \sqrt{8 * 9.18} = 8.57V$$

3.1.2.-TA1101B interaction w/ATMEGA32 uC

The integrated is interacting through peripherals with OVERLOADB, Flaut, SLEEP, MUTE. While OUTP1, OUTP2 amplifier outputs are to be connected directly to two audio loads.

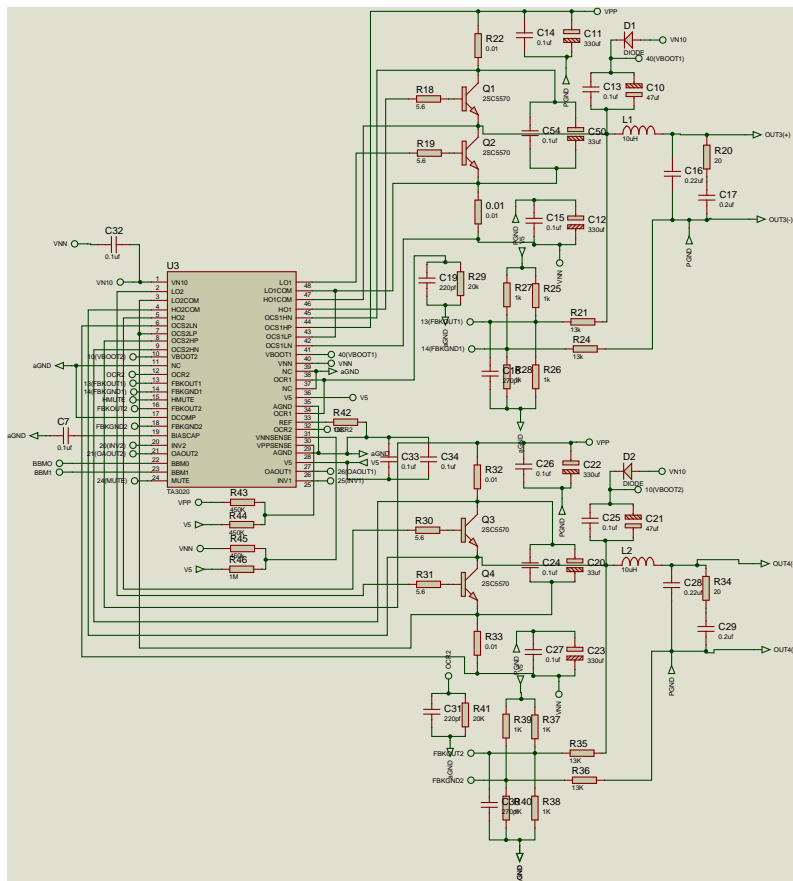
The OVERLOADB pin is a 5V logic output. When low, it indicates that the level of the input signal has overloaded the amplifier resulting in increased distortion at the output. The OVERLOADB signal is used to control a distortion indicator light.

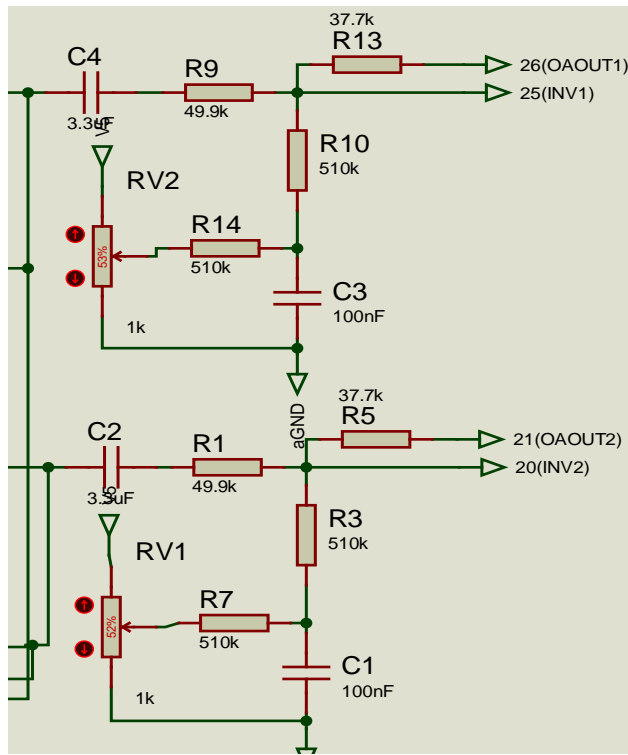
The **FAULT** pin is a 5V logic output that indicates various fault conditions within the device. These conditions include: low supply voltage, low charge pump voltage, low 5V regulator voltage, over current at any output, and junction temperature greater than approximately 155°C. All faults except overcurrent all reset upon removal of the condition.

The **SLEEP** pin is a 5V logic input that when pulled high (>3.5V) puts the part into a low quiescent current mode. This pin is internally clamped by a zener diode to approximately 6V. To disable SLEEP mode, the sleep pin should be grounded.

The **MUTE** pin When set to logic high, both amplifiers are muted and in idle mode. When low (grounded), both amplifiers are fully operational. If left floating, the device stays in the mute mode. Ground if not used.

3.2.-300W Amplifier. For obtain this powering is implemented with TA3020, is a stereo power amplifier. As the amplifier is TA1101B T class and is therefore much more efficient than any high power amplifier since this can generate more profit and achieve very high power greater than 1000W.



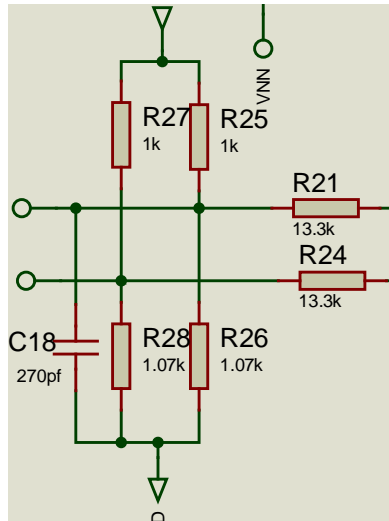


The audio input signal is fed to the processor internal to the TA3020, where a switching pattern is generated. The average idle (no input) switching frequency is approximately 700kHz. With an input signal, the pattern is spread spectrum and varies between approximately 200kHz and 1.5MHz depending on input signal level and frequency. Complementary copies of the switching pattern are level-shifted by the MOSFET drivers and output from the TA3020 where they drive the gates (HO1 and LO1) of external power MOSFETs that are connected as a half bridge. The output of the half bridge is a power-amplified version of the switching pattern that switches between VPP and VNN. This signal is then low-pass filtered to obtain an amplified reproduction of the audio input signal. The processor portion of the TA3020 is operated from a 5-volt supply. In the generation of the switching patterns for the output MOSFETs, the processor inserts a “break-before-make” dead time between the turn-off of one transistor and the turn-on of the other in order to minimize shoot-through currents in the MOSFETs. The dead time can be programmed by setting the break-before-make control bits, BBM1 and BBM0. Feedback information from the output of the half-bridge is supplied to the processor via FBKOUT1. Additional feedback information to account for ground bounce is supplied via FBKGND1. The MOSFET drivers in the TA3020 are operated from

voltages obtained from VN10 and LO1COM for the lowside driver, and VBOOT1 and HO1COM for the high-side driver. VN10 must be a regulated 10V above VNN. N-Channel MOSFETs are used for both the top and bottom of the half bridge. The gate resistors, RG, are used to control MOSFET slew rate and thereby minimize voltage overshoots.

3.2.1.-Amplifier Gain. The gain of the TA3020 is the product of the input stage gain and the modulator gain. Please refer to the sections, Input Stage Design, and Modulator Feedback Design, for a complete explanation of how to determine the external component values.

$$AV_{TA3020} = AV_{INPUTSTAG} * AV_{MODULATOR}$$



Preamp and Amplifier Figure.

The gain of the input stage, above the low frequency high pass filter point, is that of a simple inverting amplifier:

$$AV_{INPUTSTAG} = -\frac{R13}{R9} = \frac{37.7k}{49.9k} = 0.7555$$

The modulator converts the signal from the input stage to the high-voltage output signal. The optimum gain of the modulator is determined from the maximum allowable feedback level for the modulator and maximum supply voltages for the power stage. Depending on the maximum supply voltage, the feedback ratio will need to be adjusted to maximize performance. The values of RFBA, RFBB and RFBC (see explanation below) define the gain of the modulator. Once these values are chosen, based on the maximum supply voltage, the gain of then modulator will be fixed even with as the supply voltage fluctuates due to current draw. shows how the feedback from the output of the amplifier is returned to the input of the modulator. The input to the modulator (FBKOUT1/FBKOND1 for

channel 1) can be viewed as inputs to an inverting differential amplifier. RFBA and RFBB bias the feedback signal to approximately 2.5V and RFBC scales the large R24/R21 signal to down to 4Vpp.

$$AV_{TA3020} \approx -\frac{R_{13}}{R_9} \times \left(\frac{R_{21} * (R_{27} + R_{28})}{R_{27} * R_{28}} + 1 \right)$$

$$AV_{TA3020} \approx -19.123 V/V$$

If the input voltage V_{in} in the TA3020 equal to 1.8V as this may be obtained through the microcontroller ATmega32 may modify the value of digital potentiometers.

$$VO_{TA3020} = 1.8 * -19.123 = -34.4214$$

$$P = \frac{VO_{TA3020}^2}{RS} = \frac{-34.4214^2}{8\Omega} = 148.104W$$

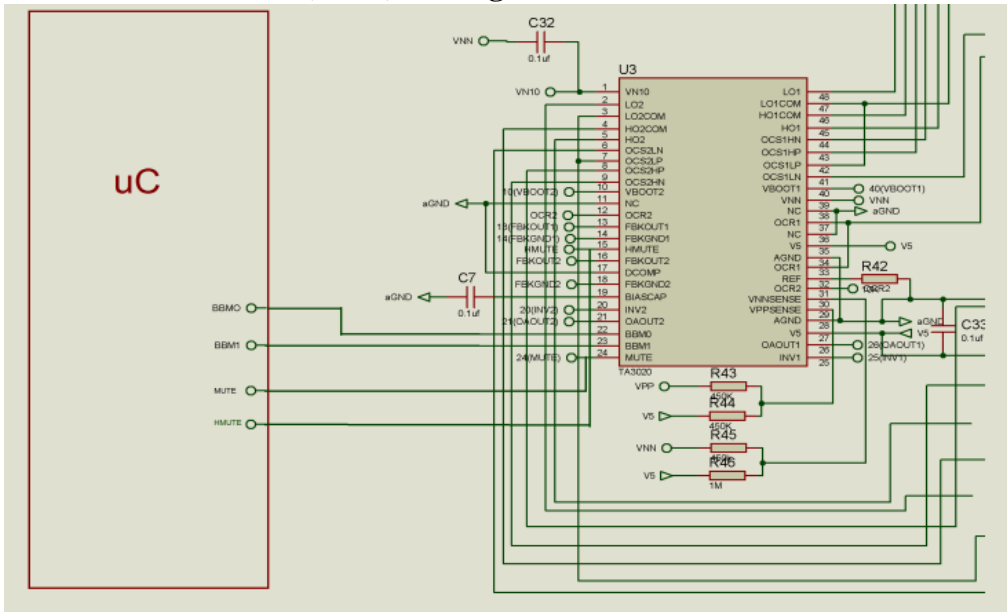
P is the power delivered by a single channel,

Overall serious $p_t = 2 * P = 296.208W$

If 4Ω load off you can get more power from $p_t = 2 * 296,208 = 592.416W$. MOSFETS supplies current so you can reach these powers are used. While it is true I clarify that if we want to generate more power MOSFETs we must increase depending on how much is required regarding the current required.

3.2.2.-TA3020 interaction with ATMEGA32uC Al igual que el TA1101B, el amplificador interactúa mediante pines de configuración. BM0, BM1 y periféricos MUTE, HMUTE.

Break-Before-Make (BBM) Timing Control



The half-bridge power MOSFETs require a deadtime between when one transistor is turned off and the other is turned on (break-before-make) in order to minimize shoot through currents. BBM0 and BBM1 are logic inputs (connected to logic high or pulled down to logic low) that control the break-before-make timing of the output transistors according to the following table.

BM1	BM0	DELAY
0	0	120ns
0	1	80ns
1	0	40ns
1	1	0ns

The tradeoff involved in making this setting is that as the delay is reduced, distortion levels improve but shootthrough, BBM1 should be grounded in most applications. All typical curves and performance information was done with using the 80ns or 120ns BBM setting. The actual amount of BBM required is dependent upon other component values and circuit board layout, the value selected should be verified in the actual application circuit/board. It should also be verified under maximum temperature and power conditions since shoot-through in the output MOSFETs can increase under these conditions, possibly requiring a higher BBM setting than at room temperature.

MUTE. When a logic high signal is supplied to MUTE, both amplifier channels are muted (both high- and low-side transistors are turned off). When a logic level low is supplied to MUTE, both amplifiers are fully operational. There is a delay of approximately 200 milliseconds between the de-assertion of MUTE and the un-muting of the TA3020.

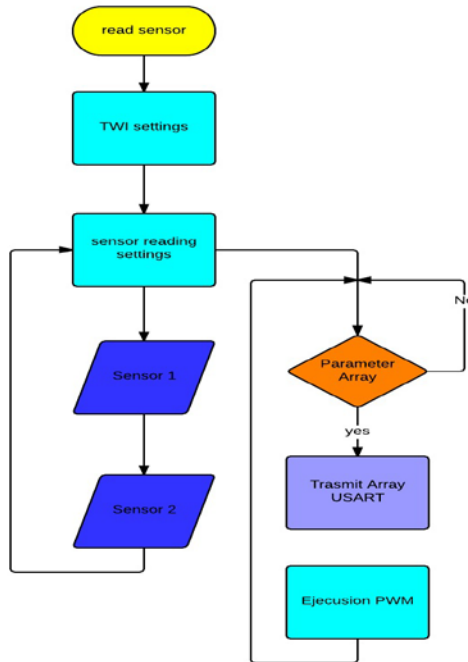
HMUTE. This is connected like input at uC.

The HMUTE pin is a 5V logic output that indicates various fault conditions within the device. These conditions include: over-current, overvoltage and undervoltage.

4. Control Circuit. As discussed previously we will use a programmable integrated circuit. In this step, an 8-bit microcontroller of undertaking various processes through scheduling algorithms. We can say that therefore the maximum use applications and modules offered by the uC. In this case we use the ATmega32 AVR. Is a low-power CMOS 8-bit microcontroller based on the AVR enhanced RISC architecture. By executing powerful instructions in a single clock cycle, the ATmega32 achieves throughputs approaching 1 MIPS per MHz Allowing the system designer to optimize power consumption versus processing speed. Significantly, we used Bus Interfaces ADC, I2C, PWM, USART, INT and I/O.

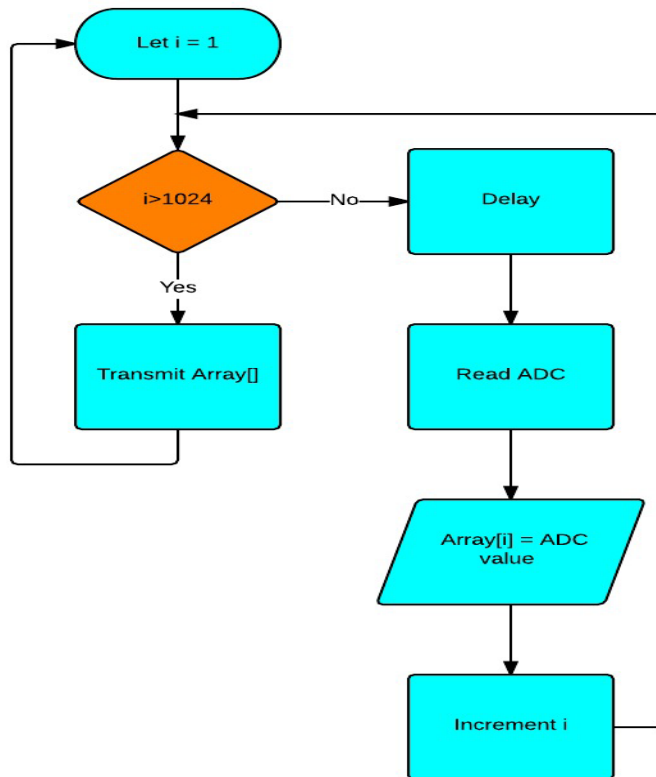
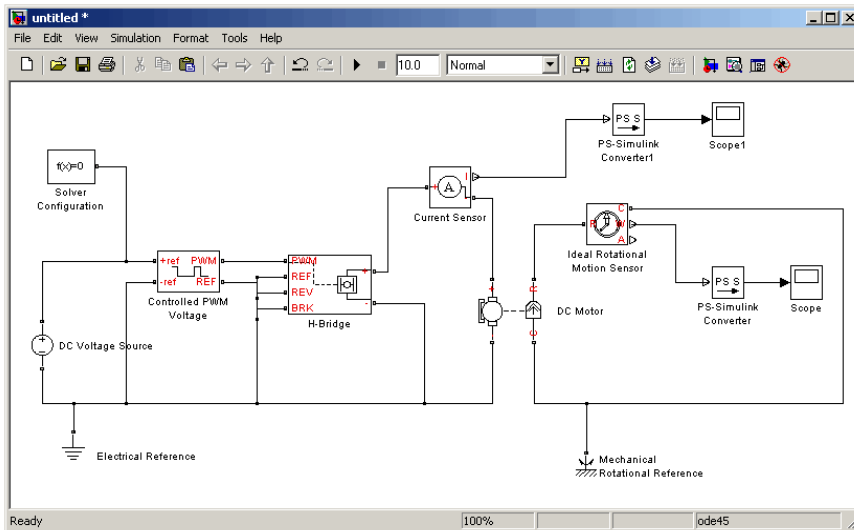
4.1- Detail Process Microcontroller. At this stage be explain the process and actions that will do the microonrolador. Through a series of programmed instructions. This process is divided equally by each stage of design, but in general for all programming is a control circuit that it must endure. First to start the uC makes a series of readings by the ADC module this must be because these parameters can identify if a and a signal at both entrances of the preamplifier, so it makes reading the ADC in the DC / DC converter Similarly happens with readings of two current sensors which is ACS712ELCTR. these readings are our essential input data. apart from that the USART is implemented to transmit the readings array.

The action to executed through parameters reading in the ADC is a series of different processes and spread over the two first stages. This performs actions as modify AD5220BN100 digital potentiometers and modify the frequency of TIMER1A and TIMER1B, belonging to ATmega32, controlling the pulse width (PWM) found in the Buck-Boost.



Readings of protocol I2C / TWI, through this protocol the uC communicates with temperature sensors be found with power amplifiers. The monitoring system in which the temperature gradients of each sensor is obtained. If it will be compared the values of reading and then will be sent by the USART port, once that do this would be modified the PWM. The cooling system is implemented with three fans that are responsible of cooling the amplification circuits, these fans are controlled by PWM using

the TIMER0 of ATmega32 and are actuate the other two through trigger pulses every 100ms.



Set the Controlled PWM Voltage block parameters as follows:
 PWM frequency = 4000
 Simulation mode = Averaged

This value tells the block to generate an output signal whose value is the average value of the PWM signal. Simulating the motor with an averaged signal estimates the motor behavior in the presence of a PWM signal. To validate this approximation, use value of PWM for this parameter

Conclusion

Both analysis and theoretical control simulation showed that the use of a good control configuration based on energy regulation and switching amplifiers allows the temperature was controlling with excellent accuracy and reduces wear on stage of electronic circuit.

Acknowledgments

We thank staff Department of Electrical and Electronic, School of Mechanical and Electrical Engineering, University San Luis Gonzaga, Peru

Author contributions

Danilo Caceres Quintanilla, MSc. (Proffesor Associate Professor at the Department of Electrical and Electronic, School of Mechanical and Electrical Engineering, University San Luis Gonzaga, Peru).

References:

- Cirrus Logic. (2015). Low Power Class-D Audio Amplifiers. Retrieved from <https://www.cirrus.com/en/products/cs35100-01-03.html>
- Crown International. (2001). Guia de aplicacion para amplificadores. Retrieved from <http://www.crownaudio.com/media/pdf/135045.pdf>
- exas Instruments. (2014). Arbona J. PurePath Smart Amp Overview. Application Report. Retrieved from <http://www.ti.com/lit/an/slaa625c/slaa625c.pdf>
- Zorzano, A.M. (2010). Amplificador de audio de alta fidelidad para sistemas activos de altavoces con bajo consumo de energía (Doctoral dissertation). Retrieved from Universidad La Rioja <http://dialnet.unirioja.es/descarga/tesis/20788.pdf>

PERSPECTIVES OF FORMATION MARITIME LOGISTIC CLUSTERS IN GEORGIA

Medea Kavtaradze, PhD in Engineering Sciences

Nataliia Revutska, PhD in Economic Sciences

Natia Bejanidze, PhD student

Batumi State Maritime Academy, Batumi, Georgia

Abstract

The purpose of this research is to estimate the prospects and possibilities of establishing maritime logistics clusters in Georgia. Cluster forms of activities, particularly maritime logistic clusters, have been the object of the study in this article. The main method of the research is a comparative analysis of the advantages and limitations of cluster forming and functioning of maritime logistics. Development of maritime logistics clusters, in the article, is considered as using of transport industry potential through the development of logistics processes for the creation of additional value. Sea ports are considered as important links in the logistics chain. Creation of maritime cluster was studied in the article on the basis of Batumi and Poti Sea Ports, what should increase the competitiveness of both the port and other companies - cluster members. Creating a cluster provides synergies and new opportunities for innovative handling of technological operations in port logistics. The implementation of the logistics cluster business model based on the Batumi Sea Port should facilitate the involvement of industry, transport and logistics companies in the impact zone of the port logistics. The result of the maritime logistics cluster operation should strengthen the position of Batumi Sea Port in Georgia, both in the terms of transit goods maintenance and in the economic development of country as well. The paper contains the main prerequisites for the forming and functioning of maritime logistics cluster in Batumi and Poti Sea Ports: significant untapped potential in marine, cargo storage and air cargo logistics; completion of Georgia-Turkey railway will open new possibilities in efficient transportation. In the article was concluded that marine and railway development will stimulate road transport and logistics centers development. Development of transport system will significantly improve competitiveness of Georgian products in price.

Keywords: Seaport, logistics, maritime logistics cluster

Introduction

Advantageous geographical location of Georgia on the Caucasus Transit Corridor (CTC) has highlighted the importance of national transport and logistics sector as a stimulating factor of growth for other economy sectors. Taking into account the strategic nature of the sector, the Government of Georgia has identified it as one of the priorities to develop and explore the ways of regional hub creation. The objectives of modernization and development of Georgian transport potential actualize the need to improve the competitiveness of the regions by strengthening their infrastructure and innovative development. Regional transport and logistics clusters formation and development are the most effective tools in this direction.

Being the only access to the Black Sea for the Caucasus, Georgia's sea ports have to be the centers of logistic clusters.

Georgian ports functions as logistics centers are investigated on the basis of a number of reasons, the main ones are:

- By the end of the 20th century the world leading ports evolved into logistics centers and their work shows that: by the years of operation they have achieved competitive advantages;

- In case the ports are not logistics centers, small logistics companies, which do not have their own oil and container terminals, assume this function and perform the role of intermediaries. Then the length of logistics chain increases at least per one unit that influences on the cost of turnover.

- It is profitable for cargo owner to deal directly with the seaport as a logistical partner, because the port is a major constituent supply chain node.

Seaports are concentrated on the traffic flows and are important supply links in the transport and logistics chain, thereby they representing a cluster, the core of which is the port. The purpose of port cluster creation is to increase the competitiveness of the transport hub. It has economies of scale and more opportunities to improve handling of technological operations. Obtaining the free economic zone status is a catalyst for the formation of port clusters.

Strengthening Georgian port functions and their transformation into a logistics center will improve competitiveness, both from the standpoint of transit goods maintenance and for the development of the Georgian economy.

Logistics cluster is considered as a group of competitive companies and enterprises (industrial, commercial, transport, logistics), that are linked geographically and cooperate on a voluntary basis to improve the overall efficiency of the logistics process. Clusters are recognized as one of the most efficient production systems of the globalization era and Knowledge Economy.

The literature review on the formation of the transport and logistics clusters research allows to determine the main synergies from their creation (Fig. 1). [1-5]

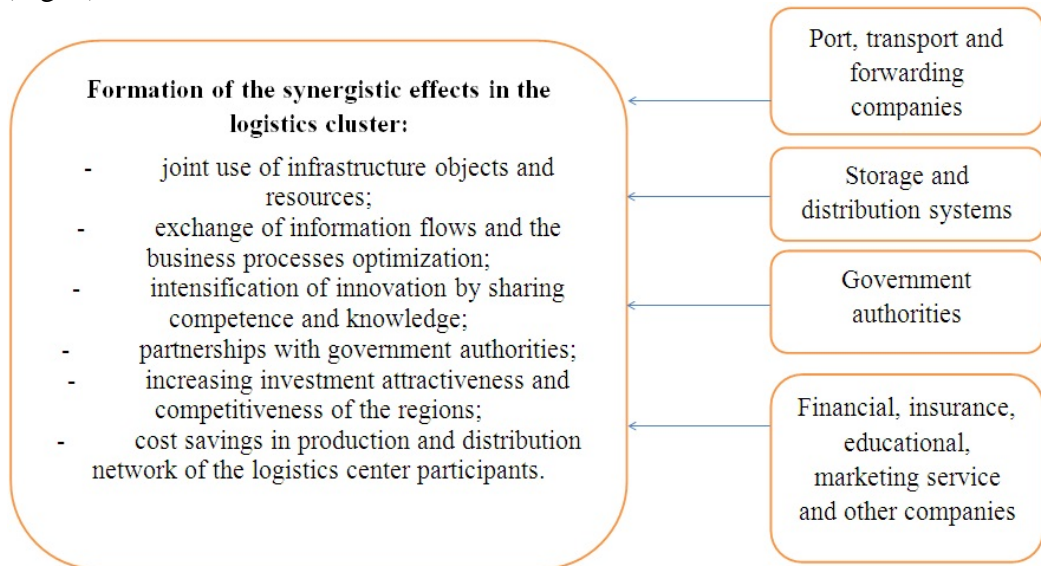


Figure 1. Types of synergistic effects in the logistics cluster
(adopted from http://www.rusnauka.com/36_PVMN_2013/Economics/11_152118.doc.htm)

World experience of transport and logistics clusters operation shows that their activity is effective in the areas with high transit potential. Taking into account the favorable geographical position of Georgia, increasing its transit potential is a key task, which was defined on the government level as one of the priorities in the economic development strategy "Georgia - 2020".

The completion of the expressway, railway route Baku-Tbilisi-Kars, construction of a new cargo terminal and the extension of Kutaisi airport runway, as well as the completion of the deep-sea transport in Anaklia are priorities to enhance the transit function of Georgia.

The development of Georgian transit potential is seen as a revival of the new "Silk Road". Thus, according to experts' opinion, the opening of a new railway line will reduce the time required for transportation of Chinese goods to Europe to 20 -25 days. Kazakhstan also intends to join the project - an agreement on the establishment of a coordinating committee of the Transcaucasia route was signed in Astana. According to the draft, cargo from China will go on Kazakhstan railway, then through Aktau port (Caspian Sea) to Baku, where by railway to the Georgian Black Sea ports - and from there to Europe. China, which is strongly investing in the development of transport routes, is working on two directions – the first - through Russia, the second - on the new "Silk Road", through Kazakhstan, Azerbaijan, and Georgia. According to preliminary calculations, trade between Turkey and China in

2023 will increase from 24 to 100 billion dollars; significantly the transport corridor will play an important role.

Taking into account Georgia's existing transit prospects it is important to assess the dynamics of cargo transportation in the country (Figure 2).

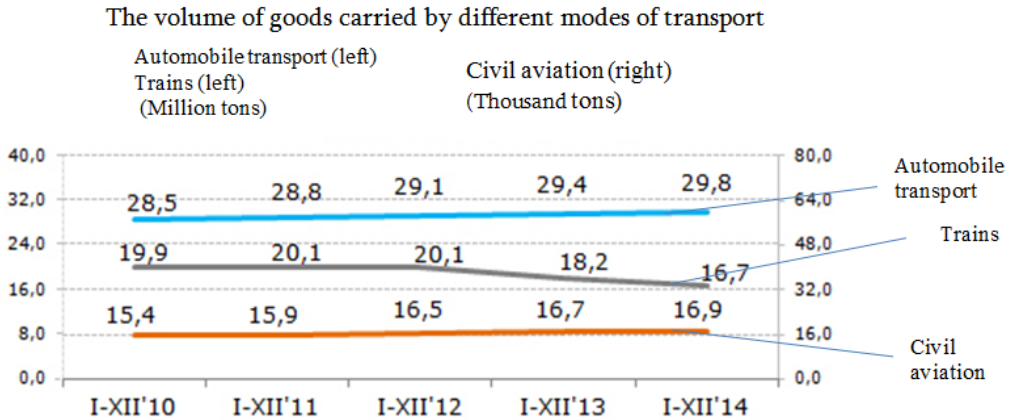


Figure 2. The volume of goods carried by different modes of transport [6]

These data are indicated a positive trend of increasing turnover by main modes of transport in Georgia. Reduced traffic on railway can be compensated by increasing transit opportunities, in particular, by the developing transportation of goods from the Caspian region to Turkey and Europe.

On the other side, obtaining the effect of the railway development is not possible without involving of Georgian seaports resources and the using of Georgia's access to the Black Sea. In this aspect the creation of logistics clusters based on the existing infrastructure of the Batumi and Poti ports is very perspective (Figure 3). [7,8]

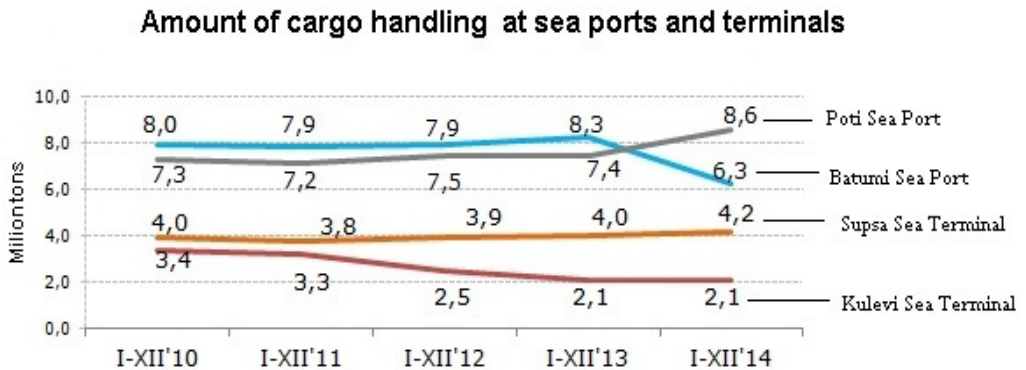


Figure 3. The volume of cargo handling at Georgian sea ports and terminals [6]

As it is vivid from the chart, the volume of cargo processed in the Batumi Sea Port in 2014 in comparison with 2013 year decreased to 6.3 million tons, while in the port of Poti increased on 16%. With regard to marine terminals, the volume of cargo processed in the Supsa terminal in 2014 compared to the same period of the previous year increased by 5%. Despite the fact that the Kulevi terminal is characterized by a decrease in this indicator, it has not caused a significant reduction of cargo volume in the industry.

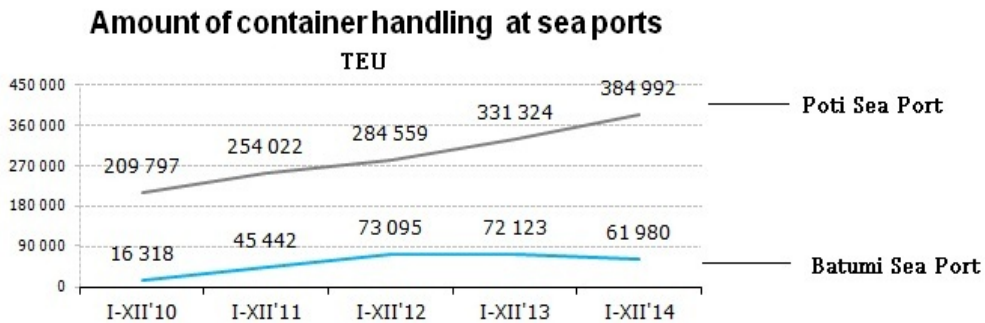


Figure 4. The volume of container handling at Georgian sea ports [6]

Poti Sea Port for several years has been a leader in the processing of container cargoes. In 2014, there were processed on 83% more containers than in 2010 and on 16% more than in 2013. Batumi Sea Port has reached the highest growth in 2012, although in 2014 compared with 2013 it decreased slightly and amounted to 61,980 TEU.

The important role of ports as the central objects of the logistics center is explained by their specialization in the transshipment of oil. Expanding of transit routes passing through the territory of Georgia, is also a requirement of the global world economy, due to large reserves of carbon raw materials in the Caspian Sea.

The forecasted growth of oil production in the Caspian Sea region will increase demand for its transportation by tankers (Table 1).

Table 1. Forecast indicators of oil production (million barrels per day)

County/year	2015	2020	2025	2030
Azerbaijan	1.0	1.0	1.1	1.1
Kazakhstan	2.7	3.1	3.4	3.7
Turkmenistan	0.3	0.3	0.3	0.3
Uzbekistan	0.3	0.3	0.5	0.6
Total	4.3	4.8	5.3	5.7

Source: International Energy Outlook, Energy Information Administration (EIA)

The table data shows that the forecasted indicators of oil production in the Caspian Sea region is growing rapidly, and by 2030 will reach a total of 5.7 million barrels per day. Such amount of oil can't be passed through the currently existing oil pipelines and it is expected that part of it will be exported from the Georgian Ports passing through the railway. If Georgian maritime infrastructure by that time will not be ready for the above mentioned processes, the loads will be redistributed to other alternative ways.

For this purpose the Turkish Government intends to increase the capacity of the Bosphorus Strait. New channel called "Istanbul Channel" will be more the Suez and Panama canals. Channel length will be near 40-45 kilometers width -140-150 meters, depth - 25 meters. The capacity of Channel planned near 160 ships daily, including oil tankers.

Conclusion

Development of maritime logistics clusters is the implementation of transport industry potential through the development of processes that bring added value in the field of logistics.

Georgian sea ports concentrated traffic flows and are important links in the supply of transport and logistics chain and should be the core of logistics cluster. Creation of a maritime cluster on the basis of Batumi and Poti sea ports should increase the competitiveness of both the port and other companies - cluster members. Creating a cluster provides synergies and new opportunities for innovative handling of technological operations in port logistics.

The implementation of the business model of maritime logistics cluster based on the Georgian sea ports should facilitate the involvement of industry, transport and logistics companies in the impact zone of the port logistics.

The result of maritime logistics cluster operation should strengthen Batumi and Poti Sea ports position not only in Georgia, but also in Caucasus region. It should be implemented both in terms of goods and raw materials transit maintenance and in the economic development of country as well.

The main prerequisites for Georgian maritime logistics cluster forming and functioning are:

- availability of significant untapped potential in marine, cargo storage and air cargo logistics;
- completion of Georgia-Turkey railway that will open new efficient transportation possibilities;
- port and railway logistics development that will stimulate road transport and development of innovative logistics centers;

- development of transport system will significantly improve the cost of Georgia's products competitiveness.

References:

Cigolini, R., Cozzi, M.; Perona, M. A new framework for supply chain management: Conceptual model and empirical test. *International Journal of Operations and Production Management*, v. 24, n. 1, p. 7-41, 2004. <http://dx.doi.org/10.1108/01443570410510979>

Germain, R.; Claycomb, C.; Dröge, C. Supply chain variability, organizational structure, and performance. *Journal of Operations Management*, v. 26, n. 5, p. 557- 570, 2008. <http://dx.doi.org/10.1016/j.jom.2007.10.002>.

Patti, A.L. (2006) "Economic Clusters and the Supply Chain: A Case Study", *Supply Chain Management: An International Journal*, Vol 11, No 3, pp. 266-270.

Sorensen S.Y. EMCC case studies. Transport&Logistics sector: Padborg cluster, Denmark / S.Y. Sovensen at al. – Copenhagen: Danish Technological Institute, 2008. – 362 p.

Sheffi, Y. Logistics clusters. Delivering value and driving growth. (2012, p. 78).

http://www.rusnauka.com/36_PVMN_2013/Economics/11_152118.doc.htm

<http://www.economy.ge/en/economy-in-figures/transport>

<http://www.batumiport.com/>

<http://www.potiseaport.com>

DENTURE - “BRIDGE OF BRUKLIN”

Tamar Dolidze, Associate Professor
Grigol Robakidze University, Tbilisi, Georgia

Abstract

This article deals with an analysis of a new method of making prosthesis in dental orthopedic clinics. It serves as an alternative method to solve a problem induced by posterior unilateral free-end saddle of a teeth row. And also in the article there is given general analysis of clinical laboratory stages of the so called “Bridge of Bruklin” prosthesis, which allows a dental practitioner to get acquainted with the method how to implement the given appliance in practice. And in the article there is given an 8-year-observation data as well.

Keywords: Bridge of Bruklin, CAD/CAM (computer-aided design and computer-aided manufacturing) dentistry, CEREC (chairside economical restoration of esthetic ceramics)system, dental implant attachments, Kennedy classification

Introduction

One of the main goals of an orthopedic dental practitioner is the selection of a suitable and esthetically attractive appliance for a patient individually. It should be selected according to the patient’s needs and life-style, which will have a positive impact on the patient’s personality. Certainly, it cannot always be achieved. However, nowadays there are a great number of varieties of dental appliances available which enables dental practitioners to meet patient requirements.

There are a lot of methods of **prosthodontics** all over the world. In today’s dentistry dental implantation and prosthesis on an implant has a leading position, as well as, CEREC – a method of CAD/CAM (computer-aided design and computer-aided manufacturing) dentistry, and so on (1).

Figure 1



Figure 2



Figure 3

In orthopedic dentistry when dealing with a secondary edentia dental practitioners usually use the so called Kennedy Classification, which includes 4 classes (2).

- Class I – posterior, bilateral free-end saddles
- Class II – posterior, unilateral free-end saddle
- Class III – posterior, unilateral bounded saddle
- Class IV – anterior bounded saddle
- Class I, II and III can have modification

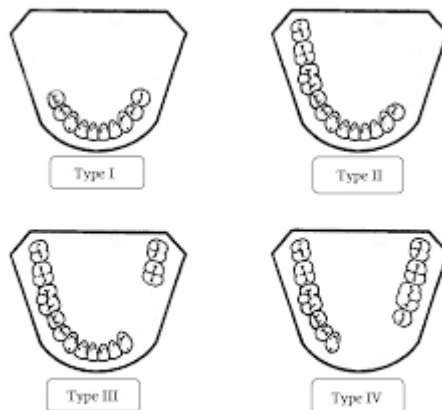


Figure 5

In **Prosthodontics** the most problematic thing is Kennedy II class i.e. posterior, unilateral free-end saddle defect treatment. In this case we can offer a patient partial removable dentures, (2) **biugel** prosthesis (arch type dentures with attachments), (2) which requires supportive teeth preparation and covering them with artificial crowns. However this method appears to be less preserving and a specific number of patients are against getting healthy teeth prepared for such manipulations. Besides, this type of appliance is not a fixed denture. It is removable. And it is not acceptable and is not satisfactory for a number of patients. We can offer a simple dental plate or a simple partial removable (arch-type) denture. However there may be some problems with fixation of such dentures. It is highly recommended in such cases to use alternative, the most convenient way and you may offer such prosthesis that can be fixed on an implant, though in such cases a number of problems may arise. While making an implant on maxillary jaw very often the base of the maxillary sinus reaches alveolar ridge apex because of atrophy of the alveolus, consequently in such case there is no other way left, other than to lift the base of maxillary sinus, or to select the shortest implant for implantation without sinus lifting. (4) Most of the patients refrain from surgical operations, thus refrain from implantation and prefer a removable denture.

Implantation practice is developing in Georgia with great success. However, the number of patients who are against it is very high. First of all this fact is dependent on fear of surgical manipulations and secondly on financial problems. Some people suffer from a kind of nausea reflex. And for them a removable denture is practically impossible. The age of patients using removable dentures has become quite young. But still young patients are not willing to use a removable denture, as it is a denture to be kept “in a glass”. It causes stress and an inferiority complex in them. What alternatives are

there to offer to such patients? Solving this problem is quite possible. We can offer the so called denture, “Bridge of Bruklin”.

Clinic “Medi-Dent+” has been using this appliance since 2007 and still it is a success in this sphere. It is a great relief for the patients who have been suffering from using partial removable dentures for years. It is a great opportunity for them to start a new life. The inventor of this appliance is Oleg Surov, a great implantologist, prosthodontist, a prominent figure. “Bridge of Bruklin” consists of both the bridge and the removable part, which are connected by locking type attachments. A patient is not able to remove the denture, but in case of necessity a dentist practitioner can accomplish an inspection and dental care.c



Figure 6



Figure 7

The appliance looks quite like a bridge which is supported by a metal paw where lies on the alveolar process ridge in the region of tuber. The negative factor of the “Bridge of Bruklin” is that it cannot be used on the mandibular jaw, because the jaw is movable and it has to overcome too much pressure (3).

One of the characteristics of the denture is that there is a necessity that the supportive teeth of the fixed part of the denture to have high clinical crowns. Now we have an 8-year-observation data. This appliance has been made for 32 patients. And from the 8-year-observation, only one case had some type of complication. The place on the frame where an attachment is fixed was broken. According to complete case history, the patient was under alcohol effect and the denture was broken by a mechanical force. In other cases no disorders have been observed and there have not appeared even a washout of the cement.



Figures: 8,9

Conclusion

After analyzing the 8-year-observation data, we can state that the denture, “Bridge of Bruklin”, is a durable and the best alternative method for teeth row posterior unilateral free-end saddle defects.

References:

- Gargari M., Gloria F., Napoli E., Pujia AM. Zirconia: cementation of prosthetic restorations. Literature review. *ORAL & Implantology*. 2010 Oct-Dec; III (4) [[PMC free article](#)] [[PubMed](#)].
- Trezubov V. N., Sherbakov A. S., Mishnev L. M. “Prostodontic dentistry” for students and dentists. Tbilisi, 2006
- Surov A., Surov O., Dolidze T. “Dental impantology” published by Grigol Robakidze University, Tbilisi, 2005.
- el-Charkawi H. The use of precision attachments in a lower full-arch rehabilitation with osseointegrated implants - a clinical report. *Egyptian Dent J*. 1994; 40(4):919–922. [[PubMed](#)].

GENDER STEREOTYPES AND LABOUR SEGREGATION IN DENTAL OFFICES

Sopio Samkharadze, Professor
Zurab Alkhanishvili, DMD, M.P.H. MhlthProm
Landa Lursmanashvili, DMD
Nino Gvasalia, DMD
Grigol Robakidze University, Tbilisi, Georgia

Abstract

Ensuring the gender equality is one of the most important element for the formation of developed society. The aim of the research represented the study of factors acting on the processes of the gender socialization in dentists, the estimation of self-perception or denial of gender inequality by dentists, the manifestation, description and analysis of gender stereotypes and the study of gender characteristics, such as the gender identity, mood and behavior of involved subjects. The number of respondents were 179 dentist. There were used both qualitative and quantitative methods of research. The research confirms that the gender stereotypes, existent in specialists, cause division of dentistry in “women” and “men” specializations. The basis of the above-mentioned relation is common stereotypical opinions such as: Woman is more delicate, therapeutic dentistry does not demand heard work, there are needed thin and small fingers in dental therapy; Man is strong, smarter and calmer, he can risk and make a decision and so on. According to the results of this research, we can mention, that women dentists have stronger stereotypical opinions, than men dentists do. However, 100% of men dentists think, that dental surgeon must be a man and 100% of them think that it is better a man to be a head of clinic. Mostly men dentists work at full time jobs, they get married and have higher income then women dentists do. Most of the women dentists think that housework (husband, children) effects their professional growth. The gender stereotypes are widely spread and it has negative influence on both sex students and residents when choosing narrow specialties. General stereotypes that “create” the social roles for men and women influence the working load of dentists; women dentists choose therapeutic and pediatric dentistry, hence they have less working hours and accordingly lower compensation.

Keywords: Dentistry, Gender socialization; Gender identity; Stereotypes; Social comparison

Introduction

Gender stereotypes and gender discrimination are directly related. Gender stereotype is one of the methodologies of sexism and it is the basis of unequal separation of work.

We have to look for the factors making the neutral gender system unequal, not only into the system, but also in a broad social-cultural context. Olga Voronina, the researcher of the gender field, thinks that the modern theory of gender does not call the differences between men and women in question and that there is interesting not the fact of difference itself, but their socio-cultural interpretation and also how the background of these differences builds power systems [2].

The gender stereotypes in dentistry and not only in this field can have negative influence on man/woman self-realization, it can inhibit their individual development and free choice. The hypothesis of the above mentioned research can be stated as: The presence of gender stereotypes in specialists cause the dentistry to be divided into “man” and “woman” specialties, it endangers collegiality between the doctors and also the self-assessment by dentists, it has the negative influence on the work compensation and creates the basis of discrimination.

This research does not have the analogue in Georgia. Self-administrated questionnaire, the research instrument is made especially for this research and is completed by semi-structured questions. According to the content of the research there are used both quantitative and qualitative methods. These methods gave us the ability to see this phenomena in a different aspect and also they provided completed approach. We studied and analyzed Georgian and international law and documentation.

The research was made in Tbilisi and regions, according to the planned frame of chosen respondents in 2013-15 years.

The universe of target groups are considered 5988 dentists licensed in Georgia in 2010 y. and 820 residency students (the maximal quota of seekers of Georgian residency bases); selective totality was composed with 600 dentist (residency students and licensed dentists), that represents 9% of the universe. In sum total there were processed 179 questionnaires, so the number of respondents was 179.

The working relationships in the field of dentistry is specific in Georgia. In some cases it is not regulated by active working laws.

The compensation

In the field of dentistry we meet several types of compensation of the employed.

1. Compensation according to the performed work. This form of compensation is most common in Georgian dental clinics. As a rule, the dentist's monthly income represents certain percent of the sum, paid by the patient. The number of percent depends on the clinic, clinic's price-list, the dentist's length of service, the narrow specialty of dentist (for ex: the highest percent from 50 to 70 % goes to the orthodontists. Dental therapists take 25-35%)

2. Fixed compensation. We don't actually meet this kind of working relationship in Georgia. It was spread in the dental clinics belonging to the insurance companies and also in chain dental clinics. The system didn't work effectively because of several reasons:

- In the case of fixed compensation, the motivation of dentists was low to make the patient satisfied, because more satisfied patients didn't mean more compensation.

- There was time limit for the dentist per-patient visit. Theoretically, as they were demotivated, they could artificially lengthen time of patients' visit and process of treatment to receive less patients. However this rule limited the dentist ability to help the patient adequately, to do appropriate treatment procedures routinely as well as in the case of medical complications.

- Because of these and other reasons, because of the increasing number of dissatisfied workers and consumers as well, the great number of clinics using the above mentioned system were shut or their compensation system was changed.

3. Working on the basis of the lease. After the employer and employed the working relationship implies the owner of dental clinic, who offers the hired dental surgery or dental chair in exchange for certain compensation. In this case clinic's routine and politics doesn't extend on the hired. The hired, pays the fee of the lease periodically according to the agreement. He/she works with his/her own materials and instruments and makes the cost of manipulations himself/herself. The owner of the earned sum is just a dentist.

The leave

According to the specificity of compensation system we can say that there doesn't actually exist idea of the compensated leave in the field of dentistry. Because, except of the conditions of fixed compensation, in conditions of any other types of working relationships the employer is free of obligation, because each employed earns his/her compensation himself/herself. We can tell that in conditions of organizational adjustments,

working relationship does not always mean the job of the employed done for the employer in the exchange of compensation in Dental clinics.

According to Georgian labour code, if the employed is pregnant, has delivered recently or takes care of her baby the compensated leave covers 126 calendar days for her and if there is complicated or twin delivery-140 calendar days are covered. The above mentioned obligations do not regard to the heads of dental clinics. In this case women have special problems of course.

In case of the fixed compensation, men have special problems connected to the maternal leave. Because there exists the issue of realization of this right and collision of the norm by a man, that is present between the note of the labour code and the order, #231/n 2006 y, of Georgian minister of labour, health and social defense about confirmation of “the rule of leave because of the pregnancy, delivery and baby care, also adopting baby”. 27th article of Georgian labour code forms the right of leave of employed in case of pregnancy, delivery or taking care of a baby, where there is not defined a concrete sex of the subject. Employed is considered either man or woman, however there is mentioned in the 6th paragraph of 10th article of the rule confirmed by the order, that the leave and accordingly the compensation won't be given to other family member of woman in case of her pregnancy, delivery and taking care of her baby except if mother is departed, in this case her compensation will be given to baby's father or other guardian. This note makes illegal discrimination of a man due to his sex and opposes the demands of the organic law (Georgian labour code) [5].

The basis of discrimination

According to Georgian labour code, making the conditions that directly or indirectly worsens somebody's state compared to other person's in an analogous conditions is considered as discrimination. In dentistry clinics (and not only) it is common practice that one dentist, because of his/her working experience and/or academic degree, is in privileged state compared to other dentists employed on the same position. As a rule this kind of dentist gets much higher compensation (percent), makes his/her working schedule himself/herself and her price-list differs from the clinic's principal price-list.

The women employed in dental clinics have to work in an unequal working environment. The researches held in The United States confirm, that more men work at full-time jobs than women. The income of women dentists is 22% lower compared to the opposite sex income. Men work more hours and work part time less frequently; they work more than 42 hours per week more frequently. Older dentists work fewer hours, with a larger impact of age seen among men. Having children has a significantly greater effect on

the number of hours work per week among female dentists than among male dentists [2], [3], [5].

Concretely in Washington state:

- Women dentists work 10% lesser days, treat 10% lesser patients and carry out 10% lesser procedures annually compared to men dentists.
- The income of women dentists is 10% lower than the men dentists.
- Also, 50% of women dentists work two or three days per week, because of their kids [3].

The above mentioned problem is connected to the stereotypical relationships. The narrow specialties are divided into “men” and “women” professions and this point of view is common in dentists as well. According to the results of research 42% of Georgian dentists think that, the surgeon must only be a man and much more-51% consider that dental implantation must be done by a man surgeon. 51% of respondents think that, pediatric dentist must only be a woman.

The issue of choosing narrow specialty is one of the factors influencing the lower compensation of women dentists. Because surgery, that is considered as a “men’s work” and most of the surgeons are man, is much more gainful than therapeutic and pediatric dentistry considered as a “women’s work”.

In addition, 44% of women dentists mention, that housework (husband, kids and so on) has negative influence on increasing career. Great number of married women dentists are moved to part-time jobs by the employers because of the probability of being late, absence and other potential problems due to housework. The researches confirm that there are not this kind of problems in relation to men dentists.

The heads of dental clinics (employers) refrain to employ young women dentists, because pregnancy and being mother of newborn are the issues that makes the employer negatively minded when selecting the worker.

The spread of stereotypical relations between dentists having different specialties is also important. for example, 100% of respondent pediatric dentists consider that it’s better a woman dentist to work for kids and 71.4% think that the dental surgeon must be a man. 60% of surgeons share the same opinion. 60.4% of dental therapists, surgeons, implantologists and orthodontists agree that dentist of any sex can be an implantologist. 65% of orthopedists think that it is just a “man’s work”. 56% of dental therapists consider that, pediatric dentist should be a woman.

Dental implantologists, who work with prosthodontists, think that prosthodontist should be the men (51%). It was found that orthodontia is also stereotypical-100% of dental implantologists and 51% of prostodontists think that, only a man must be an orthodontist.

According to the results of research, the division of field of dentistry into “men” and “women” professions is widely spread in dentistry society as well. 26% of respondents mention that they have got familiar with this kind of differentiation by friend dentists, 17% -at university.

Conclusion

More traditional the society stronger the role of the gender stereotype, where there is strictly defined the features of men and women and their roles and considered as opposite to each other. For example, our researches manifested several gender stereotypes: “man is smarter”, “woman is more delicate”, “the men are preferred”, “it’s more difficult for woman to obtain the confidence of a patient”, “woman is more humane and patient”, “man is strong”, “woman will be a good pediatric dentist because of her maternal instinct”, “dental therapy needs thin fingers” and so on.

According to the results of this research it is clear that the gender stereotypes widely spread in dentistry society has negative influence on both sex students and residency students when choosing narrow specialties. Conformably in the low-compensated fields of dentistry-therapeutic and pediatric dentistry-mainly women are present, as for the dental surgery, oral and maxillofacial surgery and prosthetic dentistry men are preferred for these fields.

The fact that there are just several implantologist women in Georgia confirms that there is really negative and strong influence of the division of dentistry into “man” and “woman” specialties.

In addition general stereotypes that “form” the social roles for man and woman influence the working load of dentists, that is expressed in lesser working hours and hence lower compensation for women dentists.

According to the results of research pediatric dentistry is especially stereotypical and stereotypical relations, that somehow defines the woman role in dentistry is more common among women.

Despite of the government’s lot positive steps for the formation of gender sensitive law for last several years and despite of that the nongovernmental sector is also active the level of education is low in Georgian population. The solution of this problem will stay in a perspective for a lot years, if there aren’t changes in educational system.

The most fundamental thing that should happen is to change the population’s relation to equality. Changing the relation is difficult and long-lasting process, it demands a lot effort, including governmental politics, the law, increasing the educational level of society, purposeful actions of governmental and nongovernmental institutions.

One of the important issues for the reduction of problem, is to ensure the gender equity in the educational system. Taking in view the fact that the

formation of children's opinions happens at home and at school, there should be paid a special attention on the gender equity at school. The school teachers should get training for increasing gender sensitivity. And it should be continuous on every step of education at universities and studying modules should be rechecked.

References:

2010 Survey of Dental Practice, Characteristics of dentists in private practice and their patients. American Dental Association, 2012.

Berekashvili N, 2012, The Factors of Gender Socialization in the Georgian Educational Context, Ilia State University PhD Thesis. 2012.

C. McKay J., R. Quiñonez C, The Feminization of Dentistry: Implications for the Profession, Essential Dental knowledge, American Dental Association Publication. 2012.

<http://www.jcda.ca/article/c1>

Kereselidze T, Analysis of Georgian labour legislation, Gender-based discrimination in the workplace and its legal implications. Partnership of Human Rights PHR, Georgian Young Lawyers' Association, European Union. Tbilisi, 2014.

Walton SM1, Byck GR, Cooksey JA, Kaste LM. Assessing differences in hours worked between male and female dentists: an analysis of cross-sectional national survey data from 1979 through 1999. University of Illinois at Chicago, College of Pharmacy, Department of Pharmacy Administration, 60612-7231, USA. Walton@uic.edu. 2004.

RISK FACTORS WHILE PERFORMING LOCAL ANESTHESIA IN DENTAL PRACTICE

Nino Tsilosani, Professor

Marika Kublashvili, Professor

Grigol Robakidze University, Tbilisi, Georgia

Abstract

According to the statistical data at least 30% of outpatients suffer from general somatic diseases in a compensated form. Dental care of such patients might result in various complications. Besides, main category of such patients is the persons with risk factors, such as: age factor (in pediatric and geriatric patients), factors arising during pregnancy and lactation and simultaneous therapy with various other drugs. All these patients belong to a risk group. For the safest and adequate treatment of this contingent, the most important factor is to get detailed information about complete case history. Everyday practice shows the importance of the problem related to local anesthesia in the risk group patients. The most problematic issue is the correct selection of anesthetic agents.

Keywords: Local anesthesia, risk factors, risk group patients, dental care

Introduction

The main way to control dental pain in today's dental practice is a local anesthesia. The safety of a pain reliever is dependent on the methods of applying it, as well as, on the thorough selection of an anesthesia medication. The problem arises and is actually dependent on frequent administration of anesthetic injections, while the number of dental patients with general somatic diseases is also very high. The term "Risk Group Patients" refers not only to the patients with chronic somatic pathologies, but also to the patients with various other risk factors. So, anesthetic procedures to such patients should be carried out with caution.

According to statistical data 30% of the patients visiting dental ambulatory suffer from various general somatic diseases in a compensation phase. Anesthetic medications may lead such patients to some complications in the period of treatment, as well as, in the post treatment period (6).

One of the most important factors which ensure an adequate and safe treatment of Risk Group Patients is collecting complete general anamnesis

(11). Besides, it is of great importance to take into consideration physicochemical features, pharmacokinetic and pharmacodynamic characteristics, side effects, and adverse reactions of the components of local anesthetics.

Risk Factors of Local Anesthesia

While selecting tactics for local anesthesia, we should take into consideration the following risk factor groups:

1. Local anesthesia may result in general types of complications in the process of treatment in patients with co-existing diseases and pathological conditions:

- Cardiovascular pathologies (cardiac ischemia, myocardial infarction, heart failure, hypertension, post-stroke conditions, heart arrhythmia);
- Hypotension;
- Allergic status;
- Bronchial asthma;
- Status epilepticus;
- Thyrotoxicosis;

2. Local anesthesia may induce general complications later, after the treatment in patients with co-existing diseases and pathological conditions:

- Diabetes;
- Rheumatoid arthritis, rheumatism;
- Liver pathologies;
- Kidney pathologies;
- Immunodeficiency conditions, malignant tumors;
- Glaucoma;

3. Co-administered medication therapy;

4. Risk factors, which require thorough selection of special dental treatment tactics:

- Emotional lability;
- Age factor;
- Pregnancy;
- Lactation;

In this article we will not analyze co-existing pathologies, but the above mentioned risk factors.

Fear and Anxiety – a Problem in Dental Practice

Approximately 99.5% of outpatient dental treatments are carried out under preserved consciousness and as a rule it is associated with pain or other negative reactions. Psychogenic Reactions Anxiety-induced events are by far the most common adverse reactions associated with local anesthetics in

dentistry. These may manifest in numerous ways, the most common of which is syncope. In addition, they may present with a wide variety of symptoms, including hyperventilation, nausea, vomiting and alterations in heart rate or blood pressure. Psychogenic reactions are often misdiagnosed as allergic reactions and may also mimic them, with signs such as urticaria, edema and bronchospasm (7).

Homeostatic changes in dental patients under emotional stress are nearly the same as in patients experiencing stress before abdominal surgeries. Fainting (syncope) occurs in average 2 % of dental patients caused by the fears to dental manipulations, the cause of which is psycho-reflexive vascular crisis (10).

Pre-operation stress causes changes in heart contraction force, rhythm, heart rate, respiration rate and arterial pressure. Skin temperature may also change. **Physiologic data changes under emotional stress may be as follows: heart contraction and respiration rate may increase 2.5 -3 times and arterial pressure 10-20mm, dental boring machine sounds may increase heart contraction rate for 10-15 beats per minute** (10).

Emotional stress may increase skin galvanic reflex, sweat secretion, glucose and histamine level in blood, skin electrical resistance, and also oral dryness, diarrhea, changes in blood count may occur. Stressful emotions may affect pituitary gland, adrenal gland, and the sympathoadrenal system. Thus epinephrine, norepinephrine and corticosteroid levels in blood and urine may be significantly higher than normal. Changes of hormonal levels, gaseous exchanges, and hemodynamics are a problem for a dentist and may induce some complications. The degree of surgery risk is increased (especially when there are cases of cardiovascular pathologies, bronchial asthma, endocrinopathy, psychosis). Tooth extraction operation is usually followed by high arterial blood pressure in patients suffering from cardiovascular pathologies. According to ECG (the electrocardiogram) a hypoxia of cardiac muscle develops, which is similar to the hypoxia observed in patients at an early stage of myocardial infarction. In 5-6 hrs after the operation arterial pressure elevates again. At this stage ECG reveals a coronary failure picture. All the above mentioned factors trigger the development of pathologic conditions under the general somatic risk-factors. This condition requires from a dentist to select efficient premedications in order to ensure prevention of stressful conditions and in case of urgency, to carry out pre-hospital emergency care.

Selection of Local Anesthetics for the Pediatric Dental Patients

To ensure adequate pain management in children and to prevent general toxic reactions, it is recommended to use the most up-to-date, efficient, and safe pain medications. In order to avoid toxic effects it is

important to pay attention to the speed of the injecting procedures of the local anesthetic agent. **Speed at which the medications are to be administered is 1 ml of anesthetic over a period of 1 minute!!!** The reason of systemic toxic reactions caused by local anesthetic overdose may occur if we do not take into consideration the pediatric patient's age and weight. This type of complications in pediatric patients occurs with inexperienced dentists when they carry out treatment in all four quadrants simultaneously.

Tab.1 Recommended Dosage of Local Anesthetic Agents for Pediatric Patients (Malamed, 1997)

Age of the Pediatric Patient	Recommended dose of Local Anesthetic Solutions
One-year-old	0.25 ml
Two-year-old	0.3-3.4 ml
Three-year-old	0.4-0.5 ml
Four- year-old	0.5 ml
Five- year-old	0.6 ml
Six- year-old	0.6-0.8 ml
Seven- year-old	0.8-1 ml
Eight- year-old	1-1.5 ml

Selection of Local Anesthetics for the Elderly Dental Patients

A safe selection of local pain medications in the elderly patients is associated with several age-related metabolic changes, cardiovascular and respiratory system failure compensation abilities, and also liver and kidney dysfunctions.

To select local anesthetics in the elderly patients great attention should be paid to age-related disorders, cardiovascular and respiratory system compensation failure, and also liver and kidney dysfunctions. After 30 years of age human body physiological functions begin to reduce about 1% a year, i.e. at the age of 70 metabolism decreases up to 60%. This factor slows down drug metabolism and excretion processes. Because of lack of abilities to bind drug to plasma proteins, the drug may accumulate and circulate in blood in high concentrations(3).

In the elderly age organ systems may have the following changes:

- Insufficiency of the cerebral circulation and oxygen metabolism;
- Flexibility of arterial system is degraded due to sclerosis;
- Vital capacity of lungs is decreased causing saturation reduction;
- The weight of the kidneys, as well as blood delivery to the kidneys, is decreased; especially renal cortical perfusion is diminished, which results in diminished glomerular filtration and failure of functional reserves;
- Liver weight and perfusion is decreased, enzyme synthesizing process is reduced;

- Drug Metabolism is worsened and excretion of medications is delayed, the level of plasma proteins decreases and most of the administered medications remain active. The reason is not only the plasma protein deficiency, but also the fact that some of the proteins have already been bound to other medications, which is taken by the patient as a treatment for general somatic pathologies. With age reduced drug metabolism period starts and drug excretion ability decreases. Due to the above mentioned, free unbound fractions of medications in blood flow can induce general toxic effects (2).

Tab. 2 Recommended Doses of Local Anesthetic Medications in Elderly (Geriatric) Patients (Malamed, 1997)

Desired duration of anesthesia	Local anesthetic medication for single injection
Up to 15 min	3% epinephrine-free mepivacaine 4% epinephrine-free articaine
Up to 30-45 min	4% articaine with epinephrine n 1:200000 2% mepivacaine with epinephrine 1:200000

Toxicity of Local Anesthetics

Toxic reactions induced by anesthetic drug overdose may appear when the medication accumulates in blood plasma, CNS (central nervous system), or endocardium and when it reaches such critical point that a patient's life is endangered (5).

The reason may be as follows:

- Rapid intravascular administration of the injection;
- Excessive doses of the medication;
- Disorders in bio-transformation processes of the drug;
- Disorders in drug eliminations from the body;

According to the widely accepted data, anesthesia drug overdose may cause a number of side effects – loss of consciences, breath suppression, tremor, generalized convulsion, nausea, vomiting. Using anesthetic drugs according to recommended doses is relatively safe in today's dental practice (except in case of allergic reactions). Caution should be taken to select an individual dose for a patient, taking into account the weight of the patient's body. e.g.: maximum permissible dose of **articaine** with a vasoconstrictor for an adult patient is 7mg/kg. So, if a patient weighs 70kg, maximum permissible dose will be 500mg which equals to 7 carpules of 4% **articaine** (1carpule contains 1.7 - 1.8 anesthetic solution).

Special caution should be taken with patients who have over-weight pathologies, elderly patients, pregnant and breast-feeding patients. It is desirable to use minimal doses of anesthetic injections. **It is recommended**

to use 1/2 or 1/3 of the maximum permissible dose in a dental ambulatory.

Tab.3 Maximum Permissible Doses of Anesthetic Substances (Malamed, 1997)

Anesthetic medication	Maximum Permissible Dose	
	With vasoconstrictor	Vasoconstrictor free
novocain	14	7
lidocaine	7	4.4
mepivacaine	6.6	4.4
prilocaine	8 (5- in children)	6
articaine	7 (5- in children)	5

Selection of Local Anesthetics for the Pregnant and Breast-feeding Dental Patients

According to statistic data, 5% of congenital anomalies of a fetus are caused by medications. Medication penetration through placental barrier is dependent not only on physicochemical features of the medication, but also on placenta's conditions. So, while treating a pregnant patient, we should take into account the fact that most of the medication substances can penetrate placental barrier and that their inactivation, release elimination speed in an embryo and fetus is not so high. This may have an undesirable effect on the fetus (4). During the period of pregnancy the amount of blood flow circulation and glomerular filtration increases, liver enzymes are highly activated, which may affect medication metabolism and elimination processes, i.e. pharmacokinetics. Consequently it changes medication activity and toxicity.

During pregnancy period the ability of medications to bind to plasma proteins is lowered resulting in accumulation of free fractions in the blood flow. Low concentrations of plasma proteins in a fetus blood diminishes the tissue ability to bind medication substances, which generates high risk of free fractional concentrations, as well as the risk of damaging a fetus.

Risk factors of treating the patients in the pregnancy and lactation period that may appear as the cause of undesired effects in a fetus and a newborn are as follows:

- I and III trimesters of pregnancy;
- Age of a pregnant: under 16 and over 40;
- Complications in obstetrical-gynecological anamnesis;
- Somatic pathologies in the anamnesis, especially that of the liver and the kidneys;
- Pregnancy-induced pathologies ;
- Overdose of anesthetic medications;
- Special characteristics of mental status of a patient; (4)

In the sense of phetotoxic effects, lipid solubility of an anesthetic drug (which ensures proper distribution of the medication in the fetus body) and its ability to bind to plasma proteins (as only free fractions of medication passes placental barrier) is of great importance.(11).For example, the ability of lidocaine to bind to plasma proteins is 77% and articaine's ability is 95%. Consequently, in case of high lipid solubility coefficient (46.4), 23% of administered lidocaine will appear in a fetus body. And, in case of articaine, as its lipid solubility coefficient equals 17, only 5% of the administered medication passes placental barrier. As articaine's ability to bind to plasma proteins is high, 95 % of the medication remains in blood circulation and the bond ensures the medication to appear pharmacologically inactive and its low lipid solubility results in its reduced penetration ability through tissue membranes. So, when selecting local anesthetic medications for pregnant and nursing patients, we should select a medication which has a high ability of binding to proteins and a low coefficient of lipid solubility. **According to experimental researches, articaine is considered to be the best choice in breast-feeding patients, as this medication has not been discovered in mother's milk in clinically unacceptable concentrations.**

As to the vasoconstrictors, from systemic pharmacological effects of **epinephrine** that are undesirable for pregnant patients we should point out the following:

- Stimulation of tonic myometrial contractions;
- High level of sugar in blood;
- Increased heart rate;
- High arterial pressure;

The above mentioned characteristics of ephinefrine, limits the use of articaine with ephinefrine to some extent. In this case, the best choice will be anesthetic agent with mepivacaine because of its vasoconstrictive features, as it does not need to be used with adrenaline. It should be noted that anesthetic injections containing felipressine is not acceptable to be used in pregnant patients because it stimulates the labor process (9). Overdose of anesthetic medications during pregnancy may result in breath suppression in a newborn infant, and the use of prilocaine and novocaine may lead to methemoglobinemia (4).

Conclusion

The factors to Be Considered in Outpatient Dental Treatment with Anesthesia

1. To determine functional conditions of a patient;
2. To ensure premedication;
3. To plan appropriate dental care;

4. After carrying out all the manipulations, to keep a close eye on a patient and to give all the necessary recommendations;

The factors to Be Considered in Pediatric and Adult Dentistry

- The use of vasoconstrictors is not acceptable in children under 5;
- Vasoconstrictor (epinephrine) concentration in children above 5 must not exceed 1:200000; The use of articaine is not acceptable in children under 4. It is highly recommended to use relatively safe anesthetics, such as, medications based on articaine, mepivacaine, lidocaine which are to be used considering the age and body weight of a child.

The Factors to Be Taken into Consideration When Selecting Anesthetic Medications for Elderly Patients

- Possible disorders of local anesthetic injection pharmacodynamics in geriatric patients;
- Interaction of anesthetic drugs with other medications;
- Selection of anesthetic drugs should be carried out in consideration with the patient's general conditions and co-existing pathologies;
- It is highly recommended to use anesthetic agents without vasoconstrictors, or if necessary only optimal amount of concentration to be used – 1:200000.

When using amidic anesthetic medications in geriatric patients, there is great probability the so-called delayed drug elimination to occur, due to age-related dysfunctions of kidneys and liver. On the other hand, ester group drug metabolism and excretion, most likely will not be changed as Pseudocholinesterase activity does not change with age.

As to articaine, it belongs to amidic anesthetics, which contains ester group as well. Ester bond splits in blood faster, than in the liver. Approximately 90 % of administered articaine is transformed with blood esterases, and its half-life time is ($t_{1/2}$)-22min, which is the shortest time among amidic anesthetics and it does not change with age.(8).

Maximum recommended dose of epinephrine in healthy patients should not exceed 40mcg/kg (8 ml solution 1:200000), and in risk group elderly patients 20mcg/kg (4 ml solution 1:200000). If the manipulation and trauma volume and the duration of surgical intervention allows, it would be better to use anesthetic solutions without vasoconstrictors.

In order to prevent reactions induced by anesthetic agents, the following rules of medication administration should be kept:

- Overdose of drug delivered into the body, which was induced by intravascular delivery of the medication, may be avoided by carrying out

aspiration. Delivery speed is of great importance. Maximum recommended delivery speed equals 1 ml / min;

- It is recommended to use minimum effective doses of medications, which is enough for specific techniques;

- It is recommended to use medications including vasoconstrictors, except the case when we have fundamental reason to say no to vasoconstrictors;

- We should take into consideration maximum recommended doses, which is individual in each case and should be determined according to the weight of the patient's body;

In case of routine treatment in pregnant patients, 14 – 28 week of pregnancy period is the best time for treatment. In this period organogenesis of a fetus is completed, placenta is almost formed, hemodynamics is stable at some extent, and immunological status is improved. It should be noted that I and III trimesters of pregnancy are considered to be “critical” when the risk of miscarriage and preterm labor is very high.

Emergency dental care in pregnant patients should be carried out at any time of pregnancy, taking into consideration existing pathologies and a patient's allergic status. In any case dental care should be performed in absolutely painless conditions, with appropriate anesthetic medications, if necessary premedication and psychotherapeutic care also should be carried out. (4).

Pain threshold in pregnant women is rather low, than in normal conditions. So, using diazepam group medications with analgesic drugs ensures vegetostabilizing and analgesic effects. Adequate premedication ensures safe and high quality dental care. In pregnant and nursing patients the use of local anesthetic containing articaine with optimal concentration of epinephrine (1:200000) is relatively safe (10).

References:

Malamed, Stanley F. Handbook of Local Anesthesia. Edition 6, 2012.

Veerin B. Pharmacological Aspects of Local Anaesthetics in the Elderly, Anesthesiology, Leiden University Medical Center, Leiden, The Netherlands, P. 49–52 | Vol. V. №1, 2011.

List V. Anesthesia for the elderly, 2007. http://www.it-medical.ru/index.php?option=com_mtree&task=rate&link_id=34&Itemid=33.

Rabinovich S. A., Zoryan E. V., Nosova-Dmitriyev S. A. Justification of medicinal therapy at treatment of dental diseases in pregnant women and nursing mothers, the Attending doctor. - 2005. - N 1. - P. 62-68. - Bibliogr.: page 68.

- Malamed S. Allergic and toxic reactions to local anesthetics. *Clinical stomatology*. 2004, N 4.
- Shaida L.P., et al. Carrying out local anesthesia in patients of group of risk. *Dentistry Today*. 2002.#6(9).
- A. Haas, BSc, DDS, BScD, Ph, FRCD(C), An Update on Local Anesthetics in Dentistry • 2002.
- Kirh W., Ortel R. Local anesthesia at elderly patients during dental interventions, 2001.
- Malamed S. Possible complications at a local anaesthesia.//*Clinical Dentistry*. No 1, 2000.
- Rabinovich S. A. Modern technologies of local anesthesia in dentistry. Moscow, 2000.
- Zoryan E. V., Rabinovich S. A., Anisimova E. N., Lukyanov M. V. Features of rendering the stomatologic assistance to patients with risk factors: Methodical recommendations. Moscow, Ministry of Health of the Russian Federation, 1999. - 44 p.

TOWARD A PSYCHOLOGICAL THEORY OF BODY LANGUAGE

Ramaz Sakvarelidze, PhD

Manana Buachidze-Gabashvili, PhD

Grigol Robakidze University, Tbilisi, Georgia

Abstract

The concept of the Language of Body is analyzed based on literature. The attempts of its theoretical explanation are discussed. The Psychology of Set (Uznadze) is considered as having potential for further research and better understanding of the phenomenon.

Keywords: Body language, paralinguistic properties, emotion theories, Dimitri Uznadze, Psychology of Set

Introduction

The concept of body language is among the most popular topics discussed nowadays. Like other concepts, appearing in different contexts, the term tends to be polysemantic – in addition to its denotative meaning, it also has various contextual implications which, if summarized, form the following general definition: body language is a meaningful pattern of physical parameters of personality functioning; the pattern that has its own semantics, pointing out something more besides these physical parameters and, at the same time, something different from them. Stemming from its nature, the language of body has become the focus of interest in different spheres – both academic and practical.

According to the one of the most common understandings of body language, relation between a somatic sign (symbol) and its signified is twofold. On the one hand, the relation is certainly conditional, formed by the tradition established in corresponding culture, but on the other - the signified could acquire some broader meaning, implying anything beyond the “agreed” content. From this viewpoint, verbal language could also be seen as a variety of body language with *the signifier* (a combination of human sounds or graphic forms) and *the signified* (that can appear to be any piece of reality). A clear example of conventional body language is gesture language for people with hearing and speaking deficiency, as it is the language which is “spoken” by movements with unlimited semantics. Cult rituals are also

conventional and have wide semantic spectrum as well. These phenomena are the subject of semiotics and are explained, in general, through conventionality.

More specific understanding of body language stays with paralinguistics – with those nonverbal elements which accompany and facilitate verbal (spoken) communication, including voice, timbre and intonation, gestures and facial expression. The significance of gestures and intonation in public speech was recognized yet by Greek and Roman rhetors. British physician J. Bulwer was the first who wrote about gestures as *natural* vehicles of information, comparing them to *artificial* verbal language (J. Bulwer, 1644/1974).

Paralinguistic features are mostly conventional and any speaker is aware that they are just the means for communication. Therefore, it seems justified both to call them “body language” and to study them in a linguistic manner: identifying semantics for separate signs, compiling dictionaries for different cultures and so on. (D. Morris, 2002). At the same time, we can use paralinguistic means impulsively, without any realization of its communicative function or conventional meaning. Thus, paralinguistic language could be considered conventional only partly.

In general, there is a need for psychological interpretation of paralinguistic elements. What is behind them? Why this additional language exists in parallel with verbal language? Why it is differently represented in different situations and different cultures? It is known that the usage of paralinguistic means intensifies with growth of personal emotionality. Correspondingly, it is more characteristic to emotional (southern) cultures. Therefore, conventionality could not be the only matter behind paralinguistics, for better understanding of this phenomenon psychological nature of emotions should be also considered (M. Argyle. 2010).

New meaning to body language was added following the research of social relationships, in particular – observation of human actions, physical ones, which convey information on the actor and influence relationships. Such understanding of body language is very popular with practitioners, working with different social groups. In this context, the spectrum of body language signs has become broader to include human posture, movements, use of space and even image-making. While using these elements, person mostly does not realize that s/he unintentionally conveys information about herself/himself to others. Some researchers (Paul Ekman, 2003, Alan & Barbara Pease, 2004) argue that comprehension of unconscious language of body is both – the means to uncover other person’s hidden intention and the means to influence other people. However, in such cases, it is not fully justified to use the term “body language”, referring to this phenomenon since “language” is such system of signs which is intentionally aimed at

communication whereas in social relationships body reveals information unintentionally. Thus, “body language” is rather metaphor here (cf. “Language of nature”). However, practitioners seldom pay attention to respective terminological nuances, neither look they for relevant theoretical explanations. Abundance of theories related to body language is seen in another context related to non-verbal communication.

The relation of body and mind (psyche) most intensively was studied in psychology of emotions. The problem of emotions brings a new version of body language meaning – in this context body changes mostly imply person’s inner somatic processes which form feelings of this person. This connection of soma and psyche is unconscious and no conventionality could be brought into it. Intensive generation of respective models started in the second half of the 19th century when Charles Bell presented the first [neuro] physiological explanation of emotions. Ch. Darwin, on the basis of unity of mimics in humans and animals, put forward a hypothesis of development of human emotions from animal emotions. Ernst Kretschmer put somatic constitution as a basis for classification of types or temperament (Hippocrates also considered temperament as psychosomatic).

The role of body in emotions was particularly underlined by psychologist W. James and physiologist C. Lange who independently from each other proposed the theory according to which emotion is experience of bodily changes reflected in interoception. This was the first explanatory model which cannot be ignored by anyone studying emotions. It is worth noting that Hans Selye and Walter Cannon’s theories of stress were formed in “debates” with James-Lange. In this process, some other hypotheses were tested but finally it became clear that it is not body that makes the basis for emotional experience but confluence of body and its cognition generates emotion (Cannon-Bard neurophysiological model, Schachter's experiments in social psychology and his two-factor theory of emotions). It might seem that theory problem is solved here, however, only - partly.

To conclude, both attempts of explanations – past and modern – are problematic from theoretical point of view. This is the problem that frequently arises in the field of psychology and therefore it is worth to focus on. To bring an analogy: scientific cognition standards are usually set in natural sciences. In accordance with these standards: *ad hoc* hypotheses have been criticized throughout the history of physics. Nevertheless, they appear nowadays too as theoretical models which stem not from general paradigm but are constructed to explain one, certain, concrete fact [Philosophy, 2004]. They usually evoke criticism because in such cases it becomes impossible to reconcile the research object and scientific laws which is an essential condition for complete understanding. *Ad hoc* hypothesis indicates on

shortcomings of the applied paradigm and it often becomes the very reason to change it.

If we look at theories of emotions discussed above from this viewpoint, they look as *ad hoc* hypotheses in relation to behavioral paradigm; they prepare basis to form new, cognitive paradigm, however ... cognitive approach has not succeeded since the 1960-ies and up to now could acquire the form of paradigm. The principle of cognition and soma (body) unity appears only with the topics related to emotions (namely - emotions, motivation, stress, psychosomatic disturbances, psychotherapy), with other topics of modern psychology this principle is less seen. Thus, regardless reasons existing behind it, it is clear that theories of emotions (like many other psychological theories) belong to the group of *ad hoc* hypothesis. Therefore, they have weak explanatory potential since it is impossible to reconcile them with general regularities. We will be able to get satisfactory explanation of emotions only when the explanation model will appear as just a separate case of general psychological regularities.

There is also another current of interest towards body language which is related to in-depth psychology and psychoanalysis – in particular. Wilhelm Reich, Sigmund Freud's pupil, stemmed from Freud's idea that neurosis caused body tension and concluded that character rigidities were also manifested in muscular tensions. He described chronic muscular tension as “somatic or muscular armor”, The “armors” appear when people block their unwanted sexual aspirations or emotions. Reich concluded that neurosis could be treated by removing muscular tension and thus he was the first to start mind-body therapy, building foundation for further development of body-oriented psychotherapies. To soften “somatic and muscular armor” Reich used physical exercises, breathing, massage, postures. At the same time, he was very attentive to explain the psychological meaning of these procedures to his patients.

Alexander Lowen, Reich's pupil, developed a method of bioenergetics analysis, In 1958 he published his first book “The Language of the Body” and actually introduced this term in psychotherapy [A. Lowen, 1971]. The essence of Lowen's therapy lies in teaching people to listen to their bodies, understand the language bodies speak, establish harmonious relations with their own bodies and free themselves from neurotic rigidities. Lowen and his therapeutic group constantly investigated relation between tension in various segment of the body and concrete psychological problem.

Another school that developed on the basis of Reich's ideas is David Boadella's biosynthesis school (D. Boadella, 1987) which relates psychological structures with embryo somatic structures and unifies them by means of the concept of live energy. Along with muscular armor, Boadella distinguished also two other types – visceral and cerebral armors.

Reich and his followers, like other adepts of the emotion theory, regarded body language as inner somatic process involved in formation of emotions. When focusing on his/her own body language, the person masters the instrument to relate with herself/himself (and not others) and helps to restore the body's spontaneity. Muscular tension hinders this spontaneity, forms negative emotions and distress, blocks other emotions. The language of the body, as a brake of person's mental life, is one more version of understanding of this concept. In general, Reich and his pupils' approach is quite significant since it brings positive therapeutic results.

Mentioning positive therapeutic results, it is worth also noting that role of physical exercises or massage in this process might be questioned, ascribing the positive results to therapist's efforts to prepare the patient for this therapy (note that all these schools concentrate on analysis). Therefore, the placebo effect could not be excluded in this case.

To test the placebo version, other body-oriented psychotherapies, where there is no focus on analysis, should be looked at. For example, in Rolfing (the system of Ida Paulina Rolf) psychological problems are not discussed and only posture and physical part of procedures are advanced. Analogical is the system developed by Austrian actor M. Alexander where physical exercises aim at body-mastering and coordination only (that is why they are popular among actors). Also, dance therapy works on movements only.

The progressive muscular relaxation (Edmund Jacobson) and autogenic training (Johannes Heinrich Schultz) – two well-known relaxation techniques work also without any specific psychological concept. In all these cases, patient are told that tension is something undesirable and that it should be removed or softened. Psychophysical procedures help patients to overcome muscular tensions. These methods are leading techniques in stress management process [J. Greenberg, 2002]. This is the evidence that physical procedures have therapeutic effect even without psychological interference. Therefore, there is no doubt that body language correction in these cases really helps to manage stress and, therefore, here the placebo effect could be overruled.

Based on this phenomenon, Reich and his followers have built theoretical constructs, not always sufficiently convincing. They consider that free movement of energy in body, not interfered by muscular spasm, is a sign of healthiness. This idea of psychobiological energy is closely related with Freud's concept of mental (physic) energy. Apart from this, the presented health model almost coincides with eastern views of body energy and Franz Anton Mesmer's magnetic fluid theory. However, until now all these theories have not been fully justified. Thus, energetic theories in psychology could not be viewed as scientific. The sense behind their origin might be that

any healthy person, unlike depressed patients, feel body energy. But this fact itself needs some explanation. In other words, energy theories try to explain body language peculiarities through something which needs explanation itself. Making conclusions on biological life energy on the basis of person's experiences turns to be the same *ad hoc* theory which further, if develops, may take shape of cosmogonic mythology (which really happened in Reich's case).

Literature on body language is really large in number and the format of this article does not allow us to continue over-viewing it (for instance, we haven't touched upon interesting topics of animal body language, language of eastern asanas, psychosomatic disturbances body expressions). However, we believe that we reflected basic tendencies of body language research. The analysis has shown that there is no contradiction between conventional forms of body language and the theory that underlies their existence, however, in every other case, when psychological aspects step forward, theoretical problems arouse. In this regard, it is natural for representatives of the school of Psychology of Set to investigate whether this theory has any potential to solve the problems regarding theoretical issues of body language.

For better understanding of the concept and the theory of set, it is important to take into account Uznadze's experiments (1927) aimed at investigation of psychological nature of meaning of the object [D. Uznadze, 1956]. Within the frame of Wundt's structuralism, Uznadze studied the experiences which arouse in the process of understanding of objective meaning ("the meaning of the object"). The same frame was used by the Wurzburg School to research thinking processes. They concluded that in the process of perception of intellectual material (instruction, task, phrase, word) occurred some integral state (disposition) which was unconscious. Uznadze applied the Wurzburg School's method of systematic self-observation in his experiments but instead of words he used objects (for make the perception process slower, people participated in experiment with closed eyes). The result coincided with that of the Wurzburg School. The Set of Consciousness occurred in every case when a version related to the objective meaning arose.

In these experiments the set is mental equivalent of the meaning of object. Later when analyzing language issues, Uznadze wrote that verbal set was mental equivalent of [word] meaning [D. Uznadze, 1964]. From these two fragments, we can conclude that for Uznadze the set is mental equivalent of any meaning, semantics, thought...

It is reasonable to suppose that in his later works, when writing about the set, Uznadze implied the mental equivalent of meaning. When the set is considered to be the main determinator of behavior, it means that Uznadze derives behavior determination from its semantics (it is known that for

Uznadze the specifics of psychological behavior lies in its meaning – D. Uznadze, 1967), whereas the semantics of behavior results from the insight of relation between the meaning of the need and the meaning of the situation.

Later, under influence of K. Marbe, Uznadze defined the set as organism's psychophysical readiness for behavior. The readiness for behavior could not occur unless the semantics of behavior is determined. Thus, the version of „psychophysics readiness“ does not exclude but, on the contrary, implies the “semantic”. At the same time, the “semantic” model is more general than that of “readiness” and it broadens the concept of the set.

Also, it is worth emphasizing that body involved in behavior obeys the semantics of behavior. Under influence of semantics, body modification generate psychosomatic, set-like state external expression of which is body language. This model of Uznadze is common for all activities of all living beings, i.e. body language precedes and accompanies each and every activity. Thus, on the background of Uznadze's model, the theories of James-Lange, Cannon-Bard and Schachter do not look ad hoc hypothesis any more since for Uznadze not only emotion but any other state is unity of the mental (cognitive) and the “physical” which is reflected in body changes.

From this position it is easy to conclude that body tension and relaxation generate different forms of emotional feelings. Certain semantics corresponds to both states. Since tension arises when people are incapable in front of impending danger, the chronic tension of the body forms the set that these people are weak, that they need to get rid of this environment and be passive. With the same logic, calm body would generate feelings of strength, superiority over the environment and semantics, readiness (energy) for action, i.e. it would form the set, the set which determines person's physical and psychological well-being.

The last but not the least: in his theory, Uznadze emphasizes the important role of fixation elements (subjective meaning, repetition, sensor modalities) for the process of set formation. It is likely that paralinguistic components (which act at several sensory channels) play this very role of strengthening verbally conveyed content (to fix the set) in both listeners and speakers since the content is usually more differentially perceived when formed in multisensory manner.

Conclusion

Summing up the analysis of the body language theme, we are able to conclude on existence of theoretical problems associated with this subject of study. Testing the potential of the Psychology of Set in this context, we have an impression that Uznadze's conception could contribute to successful solution of these problems in understanding of body language.

References:

- Argyle, Michael. *Bodily Communication*. London: Routledge. 2010.
- Boadella, David. *Lifestreams: An Introduction to Biosynthesis*. London and New York: Routledge, 1987. (*Reprinted in 2015*).
- Bulwer, John. *Chirologia, or, The Naturall Language of the Hand, and Chironomia or the Art of Manual Rhetoric*. London: Tho. Harper. 1644. (*Reprinted in 1974 by J. Cleary, Ed. Carbondale: Southern Illinois University Press*).
- Ekman, Paul. *Emotions Revealed: Recognizing Faces and Feelings to Improve Communication and Emotional Life*. Times Books, 2003.
- Greenberg, Jerald. *Managing Stress*. 7th edition; St. Peterbourg: Peter, 2002. (in Russian)
- Lowen, Alexander. *The Language of the Body*. — New York: Macmillan, 1971.
- Morris, Desmond. *People watching: A guide to body language*. London: Vintage, 2002.
- Pease, Alan, Pease, Barbara. *The Definitive Book of Body Language*. Pease International Pty, Limited, 2004.
- Philosophy: *Encyclopedic Dictionary*. M.: Gardariki. 2004. (in Russian)
- Uznadze, Dimitri. *Works in Georgian*. Tbilisi: 1927, 1964, 1967.

GROUP PSYCHOTHERAPY IN GEORGIA

Revaz Korinteli, Professor

Grigol Robakidze University, Tbilisi, Georgia

Abstract

The author describes the so-called Post-Soviet Phenomena and defines its aspects. The article shows Past and Present conditions of Group psychotherapy and its Current and future challenges and perspectives. The paper describes the correlation between post-Soviet phenomena and the challenges of practicing psychodynamic group psychotherapy.

Keywords: Group psychotherapy, Georgia

Introduction

E. Hopper (1996) stressed that the groups and their participants are constrained unconsciously by social, cultural and political facts and forces as well as unconscious. He writes: “The central theme in my work is the study of the constraints of social systems on people and their internal worlds, and, in turn, the effects on social systems on unconscious fantasies, actions, thought, and feelings. An analysts who is unaware of effects of social facts and social forces cannot be sensitive to the unconscious recreation of them within the therapeutic situation. He will not be able to provide a space for patients to imagine how their identities have been formed at particular historical and political junctures, and how this continues to affect them throughout their lives” (Hopper, 1996). According to him, here and now is influenced by the there and then in ways that affect the group's functioning. Identifying this influence accents what is possible or not possible in the therapy group as a social microcosm or mirror of the society in which it is embedded (Hopper, 2003).

Thomas Singer and Samuel L. Kimbles (2004) developed the notion of a cultural complex from Jung's theory of complexes to build a new idea for the purpose of understanding the psychology of group conflict. Cultural complex, as defined by authors in their books “Cultural Complexes” is a psychoanalytical term applied in a global anthropological context to help describe the splintering of identity and resultant anger and conflicts in the post –Soviet, non-binary era. Cultural complexes are highly emotional, function independently of the ego, and possess multilayered dimensions, their content being structured by archetypal, cultural, and personal elements. They also suggest that cultural complexes can

manifest in the individual psyche as a collective inheritance, formed over generations. A cultural complex, then, is a psychological complex applied to the collective consciousness of a group, as well as its individual members. The authors have defined cultural complexes as tending “to be repetitive, autonomous, resist consciousness, and collect experience that confirms their historical point of view.” (Singer and Kimbles, 2004).

In order to explain the conditions of Group psycho therapy in Georgia , I would like to describe the phenomena that we inherited from the Soviet Union.

The past

Soviet Mentality

Soviet Ideology has had an important influence upon the development of psychiatry in Georgia. The Soviet Mentality included: 1. Materialistic world view; 2. Authoritarianism; and 3. Intolerance against dissidence.

Materialistic world view

During Soviet Times, Psychiatry and Psychotherapy was based on the materialistic understanding of a human being. Although Marxism-Leninism distinguishes dialectical materialism from the reductionism of crude materialism, which fails to account for the significance of social and cultural life. (Calloway P. 1992).

During the early years, there was a small psychoanalytical movement based in Moscow. In the 1920s, there was a Moscow section of the International Psychoanalytical Association. Russian Psychoanalytical Society was disbanded in 1933.

Authoritarianism

The relationship between the State and the People can be characterized as one between the Master and the Slave (Hegel, 1807). The state power, especially the Leader, has always been identified as a masculine human being - a strong, just, merciless father, who protects, supports and takes care of the people (Urbanovich, 1999). Yet Russia was a closed and isolated political system. It was based on dogmatization of social life and society, with rigid norms to which one had to conform and obey (Chaadayev, 1970; 1991; McNally, 1969; Kliuchevskii, 1960). In this grey and oppressive atmosphere, people had to conform to survive. Such a system can give birth to a benevolent dictator or a “tyrannical omnipotent father.” Russia has almost always created conditions favorable to the rise of such omnipotent and tyrannical leaders, violators of human’s rights and dignity, such as Ivan the Terrible, Peter the Great and Stalin. At the individual level, the internalization of

such figures leads to the creation of a rigid and destructive super-ego that can easily degenerate into an internal totalitarian persecutor.

Intolerance against dissidence

Snezhnevsky A. (1960, 1970) widened the frames of Schizophrenia. People who were against Soviet regime could be treated as having personality disorders or psychosis with slow-flow Schizophrenia i.e. Psychopathic-like Schizophrenia. Thus there was theoretical and legal substantiation for using compulsory, involuntary treatment of dissidents in psychiatric hospitals. Sane people were admitted to psychiatric hospitals and treated against their will. (Calloway, 1992). The practice began with the revolution. However, it was only from the 1960s onwards, with the growth of civil rights movements within the Soviet Union, that there was awareness of the issue in the West.

Theory and Practice of Psychotherapy

The Leningrad and Moscow Schools of Group Psychotherapy

Personality theory based upon the theory of attitude was developed by Miasishchev V.N. (1893-1973). Miasishchev considered that the most important aspect of personality was the system of relationships/attitudes or attitude (especially the social relationships), but this was not independent of the functioning of the brain or Pavlovian physiological Principles (Miasischev, 1960).

Pathogenetic psychotherapy was the only dynamically oriented psychotherapeutic approach within the Soviet Union. The aim of pathogenetic psychotherapy is reconstruction of the disturbed system of relationships/attitudes. The disruption of the attitude should normally be resolved by satisfying a need, resolving the contradiction, or changing the relationships or attitude. Failure of resolution produces a state of tension and excitability in which thought processes become subjective and behavior lacks clear direction so that it is no longer adaptive.

The psychology of relationships/attitudes or attitude is becoming increasingly used in soviet psychotherapy. It is taught at All -Union psychotherapy center in Moscow under the guidance of Prof. V.E. Rozhnov. The All Union psychotherapy center helped psychotherapists from all over the Soviet Union to learn more about depth psychology and group psychotherapy.

Rehabilitation

Rehabilitation has a special place in soviet Psychiatry. According to M. Kabanoff (Kabanoff, 1978), systems theory is more helpful in rehabilitation than simple psychoanalytic or behaviour models. (These allow one to avoid the dichotomy of social versus biological.) He wrote that rehabilitation presents an

arena for systemic activity, where interacting participants became an organism that is an open system, altering social and biological environment.

Professor M.M. Kabanoff was the director of St Petersburg V. Bekterev Psychoneurological Research Institute. He was Director of the first rehabilitation Psychiatric department in USSR. He considered Rehabilitation as a dynamic system of measures and activities that included medical, psychological and social ones. The rehabilitation concept developed by him and his associates had wide application in medical practice in USSR.

Group Psychotherapy

Group psychotherapy in the former Soviet Union could be described as authoritarian, hierarchical, psycho-educational, and directive. Psychotherapists did not necessarily have psychiatric training, although they were usually medically trained (Calloway, 1992).

Therapy groups are led by doctors and psychologists. Techniques used are: 1. Nonverbal activities: psychogymnastics, pantomimes, miming; 2. Discussion: A) Biographical (discussion of the past) B) Thematic; (discussion of general problems such as Health, Neurosis, Healthy Relationship, Conflicts) C) Interactive (Analysis of interactions, Role-playing and role reversal) Transference issues are not discussed (Libich, 1974 Karvasarsky, 1975).

Georgian Psychiatry and Psychotherapy Mikhail Asatiani and Jungian Influence

Georgian psychiatry differed from the Soviet one. The founder of the Georgian Psychiatric School and Institute of Psychiatry, Mikhail Asatiani, practiced psychoanalytical treatment. In 1908 he met C.G. Jung. After this event, for the first time in the history of the Russian psychiatry, the outline of C.G. Jung's Analytical Psychology was published (Asatiani, 1910). The tradition of psychodynamic approaches was continued by Serge Tsuladze who studied medicine psychiatry and psychoanalysis in Paris at Sorbonne University (Miller, 2001). He was analyzed by the famous French psychoanalyst Françoise Dolto. In 1961, he came back to Georgia and started to work in M. Asatiani's Institute of Psychiatry in Tbilisi Georgia. In 1978, a conference was held in Tbilisi dedicated to the problems of the unconsciousness. This conference was attended by: George H. Pollock from Chicago Institute for Psychoanalysis, North western University Medical School; Silvano Arieti from New York Medical College; Roman Osipovich Jacobson from Harvard University and the Massachusetts Institutes of Technology; Didier Anzieu and Serge Leclaire from Paris University; Gunter Ammon from German Academy for Psychoanalysis and others (A Collective Monograph, Tbilisi, 1978).

Uznadze Theory of Set.

It is worth mentioning the contribution of the Georgian school of Psychology and its founder D. Uznadze (1887-1950). He was the first among soviet psychologists to acknowledge and experimentally prove the ontological existence of the unconscious mind. He elaborated the Theory of Set (Uznadze, 1933, 1966). According to him, the unconscious exists as a set (Uznadze, 1966).

D. Uznadze received education in Germany, under the guidance of the famous German Psychologist, W. Wundt (1832-19200), one of the founders of Experimental Psychology. Under his influence, Uznadze became interested in exploring the unconscious mind. According to Uznadze (1939, 1966), in classical Depth Psychology, the ontological content of the unconscious is substantiated theoretically but not empirically; (the unconscious is a hypothesis but not reality). Uznadze recognized the need to study processes that lay beyond the boundaries of consciousness and accepted the principle that these unconscious processes determined the direction and content of psychic activity. He maintained that man has no true idea of the true sources of his motivation - they remain hidden. According to him, the ontological nature of the unconscious is a Set that cannot be conceived of in purely physiological or purely mental terms. Set constitutes a primary, mentally and physiologically integrated state of personality, out of which the purely physiological and purely mental activity derived (through abstraction).

Uznadze attempted to prove experimentally the existence of Set. In his experiment Set is revealed through the fixation process. During the experiment the subjects are exposed repeatedly to objects (for example: two balls) differing in size. After exposing him two objects equal in size these were perceived as unequal. Uznadze thinks that this demonstrates the effect of preliminarily fixated Set. The Set explains the purposefulness of any behavior, since it represents both the need (subjective factor) and the situation (external factor).

The general structure of psychic reality implies not only consciousness and the unconscious mind taken together, but Set as a certain protopsychic state of integrity, underlying the realization of consciousness and unconsciousness, including a full realization of the personality. This resembles the Jung's notion of psychoid pole.

Individuals are not aware of these Sets, although this does not stop them from being active forces in controlling their activity at a given moment. They cannot check or abolish these Sets (of which he is not aware) so they are forced to control the act of their thoughts under the decisive influence of these Sets. Uznadze believed through objectivization, a maladaptive response could be corrected, and new or different Sets could be brought into play. He also emphasized education as the way to elevate awareness. Sherozia A. (1979) has tried to develop the Uznadze's theory of Set, and suggested a tripartite system of psych: consciousness, unconscious psychic activity and Set. For him Set

functions unconsciously to direct the focus of consciousness, but this is only part of the unconscious. Other parts include traces of wishes, strivings, imagination, thoughts and ideas. Any of these can be reactivated by the selection process of Set, when need and situation combine to require their representation in consciousness.

Current characteristics

Post Soviet mentality

Master- slave relationship between the state and people

This type of relationships still exists in the psyche and mind of some people. People can have a high valence for Bion's dependency basic assumption group. They can see the leader as a savior and they project their own responsibility onto the leader. A common observation among scholars is that the authority of the father and of the political leader are closely intertwined, that there is a symbolic identification between domestic authority and national political leadership. In this sense, links have been shown between the concepts of "patriarchal", "paternalistic", "cult of personality", "fascist", "totalitarian", "imperial" (Borneman, 2004).

Following is an example where the "master-slave mentality" resonates in the family and how it expresses itself in a therapy group.

Mr. D was a 55 year old man. He had long standing dysthymic disorder and constantly complained of sleep disorders, difficulty in making decisions, lack of energy and anxiety. He managed to show up at his job conscientiously, but he found it difficult to take any initiative when it was expected of him. In the group he initially presented himself as a rather submissive and passive "good boy" who was completely unable to express any anger within session.

In the group he revealed a lifelong pattern of anxious dependency. He shared with group member his concern that he had always experienced considerable anxiety at the prospect of doing something alone or upon initiating any plan of action without consulting others. He was unable to make decisions for himself; even everyday decisions depended on excessive amount of advice and reassurance from others. He was unusually submissive and always in need of others to assume responsibility for major areas of his life. His fear of loss of support and approval made it difficult to express disagreement with others. He went to excessive lengths to obtain nurturance and support from others to the point of volunteering to do things that were unpleasant to him. He was unrealistically preoccupied with fears of being left to take care of himself and could not function well without someone else to take care of him.

He was brought up in a very old fashionable family. The father was a high rank official in Soviet Government. He was also fascinated by the great dictators and was very strict in the matter of discipline. Mr. D's mother never really wanted a child and had only produced him as a sort of gift to his father

and she took little interest in him. She seemed hypnotized by his powerful and glamorous father who was idealized in the family, sometimes to the point of worship. Father held them in contempt and ridiculed their shortcomings. He turned Mr. D against his mother and in so doing he fed his own narcissism by ensuring that all of his son's love was directed towards him. The atmosphere of constraint, hidden existential dissatisfaction, fear, punishment, suspicion and basic lack of love for oneself and each other was reigning at home. The same was at school. People surrounding him impressed upon him what lucky a boy he was to be son of such a wonderful father. The father forced him to become an "example" of a diligent child, well-bred in the communist spirit. The boy had to conform to these rigid norms.

His admiration of his tyrannical omnipotent father had never been total and there was also a strong wish to be free of it. He complained about his father's tyrannical character in the group. "I felt smothered and exploited by him. I always felt his strict eyes within me, controlling my every step. He controlled my life but if he didn't, my life would fall apart." Further group psychotherapeutic sessions led to uncovering anger at his father. Any independent action on his part seemed to reactivate feelings of painful anxiety, fear and guilt associated with early separations and punishment. He behaved as though convinced that he would be abandoned and punished for any autonomous behaviour.

This example illustrates that patient's internal world was dominated by his relationship to tyrannical father. The father was feared and idealized. Society encouraged him to develop an attitude of worship towards his father. The entire family was captured by the tyrannical omnipotent father. In his inner life, Mr. D was persecuted by a strict rigid Super Ego, which functioned like an internal tyrant. He develop a negative father's complex.

Under Father complex I mean a group of emotionally charged unconscious representations, or a strong unconscious impulses about the archetype of the father, which may be either positive (admiring and seeking out older father figures) or negative (castrating, distrusting or fearful). The negative father complex might leads to a distrust of older males, including one's own father. It generates resistant attitude to hierarchical organizations: corporations, religious institutions or the military. This attitude may hamper the person's career, which may depend on participation in one or another of such bodies. An authority complex can derive from the father complex. (No matter the gender of the authority figure, authority is considered to be an aspect of the archetypal father.) Sometimes the complex is manifested in an individual's desire and effort to be boss or to be the ally of a strong leader. The leader may take the form of a charismatic public official, a spell-binding preacher, a street gang leader--or a Hitler.

Due to group psychotherapy, his harsh Rigid Super ego structure gradually became softer. Interaction with members helped him to be more tolerant to himself and others. Group as whole provided him with a Holding environment, secure space of good enough mother (Winnicott, 1960; 1965) and thereby strengthening his Ego structure.

Nostalgia for and Idealization of Soviet Times

The idealization of the Soviet past consists of denying the horrible and negative sides of Soviet times: political repressions, concentration camps, conformism, empty shops without necessary things and total lack of initiative and individualism (Solzenitsyn, 1978).

Identity Crisis

A trauma for the Georgian State was the loss of its territories and distortion of its territorial integrity. The country got split, causing people to lose links to each other. The harshness of economic realities after the break up also contributed to an identity crisis. Compared to the big European Empires, the Soviet Union was unique. More than 100 nations, having different ethnic roots, languages and religious beliefs lived together for centuries, first within the Russian Empire and later within the Soviet Union. Russia never had overseas colonies. Russia did not have an identity independent from its colonies; there was never a clear division between Russia, as a nation, and Russia, as an imperial power. Economy, very hard condition of life cause depreciation of idea of social justice and protection.

Socio-economic traumas

Catastrophic Events

April 9, 1989 - This mass meeting promoting independence was attacked by military forces of the Soviet Empire; 21 people were killed. April 9 has become a symbol of the innocent heroes sacrificed for independence of their motherland. A year later, on April 9, 1990, the parliament adopted and signed the Declaration of Independence of Georgia and thus mourning was transformed into celebration. April 9 became the symbol of National Independence (Baltic Assembly, 1989; Sarjveladze, 1999).

During ethno-conflict in South Ossetia and ***Civil War in Abkhazia people were cruelly victimized*** and heavy casualties were reported. More than 250,000 Georgians were ethnically cleansed from Abkhazia by Abkhaz separatists and North Caucasians volunteers (Dale, 1996).

War with Russia

After the war with Russia, approximately 20,000 Georgians were displaced who - in addition to the many thousands more forced into flight by the conflicts of the early 1990s - need to be rehoused and provided with the means of

access to food and healthcare. The damage to Tbilisi, capital of Georgia economically and politically, was severe. There was severe destruction of roads, installations and army bases, and housing of approximately 20,000 ethnic Georgians. The more definitive loss of the two territories was less easily quantifiable or repairable (Rayfield, 2008).

Rose Revolution

Massive political demonstrations (the so-called "Rose Revolution") were held in Tbilisi between November 20 and November 23, 2003. Many called the change of government a popular coup. Opinion polls suggest the President M.Saakashvili had been the country's most popular politician, but critics describe him as a demagogue and a populist with a strong lust for power.

After the Rose Revolution, there were bold measures to fight corruption were taken. However, afterward, antidemocratic tendencies emerged and human rights violations flourished. The judiciary was seen as the government's "appendix" (Amnesty International Georgia 2005; Humans Rights Watch 2005). There also have been concerns about the freedom of the media. There is a tendency toward fragmentation of society and to Dysutopian anarchism, a contentious "us - over -them" culture (Ettin & Cohen, 2003). There is danger of a return to an authoritarian and totalitarian structure. One can imagine how difficult it would be to provide psychotherapy under these conditions. Ettin posit that developmental phases in process –focused therapy groups are comparable to corresponding stages of political evolution in the history of the human governance (Cohen, Ettin & Fidler, 2003). Dependent phases in therapy groups corresponds to monarchist macro political cultures. Counter dependent phases in therapy to anarchism in macro political situation. Dystopian and utopian phases to authoritarian collectivism which emphasize either difference within and between groups (Facism), or similarities within and between groups (communism) and independent and interdependent phases to liberal Democracy and Social democracy respectively. Anarchy is a counter dependent response to authoritarian control. A counter dependent culture may manifest through active (dystopian) or passive (utopian) forms of anarchism. The Dystopian form accentuates the differences separation an aggressively self –anointed in-group from all other which differs from utopian one where member deny their differences and relax in the warm, if illusory glow of wished-for harmony. Dystopian anarchism tends toward a contentious "us-over-them culture and utopian anarchism toward a universal "we –are- all –one" culture (Cohen, Ettin,2003).

Current and future challenges

After the breakdown of totalitarian and authoritarian ideology, the possibility of integrating western spiritual approaches emerged.

In 2003 in order to improve Group psychotherapy services in Georgia the Georgian Group Psychotherapy Association GGPA was founded. It is a voluntary, non-governmental professional organisation. It unites psychotherapists, clinical psychologists and members of other professions who are interested in these sciences. Honorary members of the association are Mrs. Susanne Jensen and Mr. Douglas Greve from AGPA.

With the help of American Group Psychotherapy Association (AGPA) and International Association of Group Psychotherapy and Group Processes (IAGP) we are on the way to establish the Training for Group Psychotherapy in Georgia. The principle promoters of this project are Ilia State University and the Georgian Group Psychotherapy Association. The aim of the project is to establish training programs, 3-4 year institute with invited international group psychotherapists/faculties 3-4 times per year, for group psychotherapy in Georgia according to International Standards.

Throughout June 22-24, 2015 in Tbilisi with the help of the IAGP there was a 3-day training for psychologists and psychotherapists from Georgia conducted by Dr. Jeff Kleinberg, former President of the American Group Psychotherapy Association and the editor of the recently published Wiley-Blackwell Handbook of Group Psychotherapy. The training program should continue in order to prepare qualified Group Psychotherapists according to the international standards and establish an Institute of Group Psychotherapy in Georgia.

This project has a great importance for Georgia for the following objective reasons:

I. Political - Georgia is on the way to creating democratic Western values and integrating with the European Union. Group therapy is a product of Western civilization and the development of it in Georgia is a small but significant lepton, with considerable power for the process of convergence with Western values.

II. Economical - Group therapy is a treatment method, which does not require such costs as surgical and medicament treatment. Group psychotherapy has the advantage in comparison to the individual and/or drug therapy as it encompasses a larger number of patients for a certain period of time. It will be a big help to the poor layers of the society in Georgia, which is still economically backward country in comparison with the Western countries.

III. Medical aspect – 1). Group psychotherapy designed not only for treatment but also for prevention of mental problems and problems of day-to-day living.

2). It's focus is not only on the result of a problem and symptoms as it occurs in drug treatment but it is oriented to the cause, purpose and meaning of it.

Cultural aspect

Group psychotherapy is aimed at growth of personality at its cultural and spiritual development. It also gives a good opportunity to study transcultural issues (cross cultural study) in experiential groups, in the Post Soviet area in particular.

Conclusion

The collapse of the Soviet Union gave birth to 15 independent states and dozens of expected and unexpected challenges that are described as Post Soviet Phenomena. The Soviet Mentality included: .materialistic, biological world view, authoritarianism and intolerance of dissidence. The Post-Soviet mentality is characterized by master- slave relationship between the state and people, nostalgia for and idealization of Soviet times, identity crisis, socio-economic traumas and political and economical conditions. Current and future challenges consist of improving psychotherapy services in Georgia and bringing its practice closer to western standards.

References:

- A Collective Monograph. (1978). *The Unconscious Nature Functions Methods of Study*. Tbilisi: Metsniereba.
- Amnesty International, Georgia. (2005). *Torture and Ill-treatment Still a Concern after the Rose Revolution*.
- Asatiani, M. (1910, 2001). The Present State of Psychoanalysis Theory and Practice Matter According to Jung's View. (In Russian). *The Georgian Psychiatry News*. 1, 26-29.
- Asatiani M. Institute of Psychiatry. (1978). *Collected Works*. XIII, Tbilisi.
- Baltic Assembly. (1989). Resolution of the Baltic Assembly on the Events in Georgia on April 9, 1989. *Popular Front of Estonia*. Tallin: Valgus Publishers.
- Borneman, John (2004) *Death Of The Father: An Anthropology Of The End In Political Authority*. Edited by George Borneman Berghahn Books N.Y. Oxford pp.1-2, 11-12, 75-76.
- Calloway, Paul (1993). *Russian / Soviet and Western Psychiatry. A Contemporary Comparative Study*. John Wiley & Sons, Inc. New York.
- Chaadayev, P. Y. (1970). *Philosophical Letters & Apology of a Madman*. Translated with an Introduction by Mary-Barbara Zeldin. Knoxville, University of Tennessee Press, 1970. xi + 203 pp.
- Chaadaev, P. I. (1991). *Polnoe sobranie sochinenii i izbrannye pis'ma*, t. 1, Moscow.
- Dale, C. (1996) "Abkhazia and South Ossetia: Dynamics of the Conflicts" In Pavel Baev & Ole Berthelsen. *Conflicts in the Caucasus*, PRIO Report 3, 96, Oslo.

- Ettinger, M. F. & Cohen. B.D. (2003). Working Through a Psychotherapy Group's Political Cultures. *International Journal of Group Psychotherapy*.53, (4) 479-504.
- Hegel, G. W. F. (1807) 1967 *Phenomenology of Mind*. N Y: Harper and Row Publishers.
- Hopper, E. (1996). The Social Unconscious in Clinical Work. *Group*.20, (1), 7-42.
- Hopper, E. (2003). *The Social Unconscious*. Selected Papers. By J. Kingsley Publishers. London.
- Human Rights Information and Documentations Centre. (HRIDC). (2002). An Alternative Report on Economics Social and Cultural Rights in Georgia.
- Human Rights Information and Documentations Centre's Reports. (2005). Next Stop – The Belarus? Human Rights in Georgia. 37-38.
- Human Rights Watch, (2005). Georgia and the European Neighbourhood Policy.
- Jung, C.G. (Editor), Von Franz M. L. & Henderson J.L. (1970). *Man and His Symbols* by Doubleday & Company Inc., Garden City, New York.
- Kabanoff, M. M. (1978). *The Rehabilitation of Psychotic Patients*. Leningrad.
- Karvasarsky, B. (1975). Group psychotherapy. In: *Group Psychotherapy of Neuroses and Psychosis*. (pp.19-26) (in Russian). Leningrad.
- Kliuchevskii, V. O. (1911-31; repr. 1960). *A History of Russia* tr., V, 5.
- Libich, S. S. (1974). *Collective Psychotherapy of Neurosis* (In Russian). Leningrad: Medicine.
- McNally, R. T. (1969). *The Major Works of Peter Chaadaev*. A Translation and Commentary.
Introduced by Richard Pipes. Notre Dame/ London, University of Notre Dame Press. xix + 261 pp.
- Miasishchev V.N. (1960). *Personality and Neuroses*. Leningrad.
- Miller, M. (2001). *Freud au Pays des Soviets*. Paris : Le Seuil.
- Rayfield, D. (2009). *The Georgia-Russia war, a year on*
www.opendemocracy.net
- Sarjveladze, N. (1999). *Societal Trauma, the Phenomenon of Return and Aspiration for Re-Birth Society and Psychological Support*. *The Conference Proceedings*. Tbilisi. 63-65.
- Sherozia, A. E. (1973). *A Contribution to The Problem of Conscious and the Unconscious*. "Metsniereba" Publishing House. Tbilisi.
- Singer, T. and Kimbles, S. (ed.) (2004). *The Culutral Complex: Contemporary Jungian Perspectives on Psyche and Society*, London and New York, Brunner- Routledge.
- Snezhnevsky A.V. (1960). (In Russian). *On Peculiarities of the Course of Schizophrenia*. *Journal of Neuropathology and Psychiatry*. 9, 1163-1175.

- Snezhnevsky A.& Vartanin,m.E. (1970) *The Forms of Schizophrenia and their Biological Correlates*. In: Biochemistry, Schizophrenias and Affective Illnesses. Baltimore: Williams & Wilkins, 1-28.
- Solzhenitsyn, A. (1978). *The Gulag Archipelago*. New York: Harper& Row.
- Todd, E. (1976). *The Final Fall: An Essay on the Decomposition of the Soviet Sphere*.
- Urbanovich, Y. (1999). *Psychodynamics of Post-Soviet Phenomena -Russian Case*. Conference and Psychological Support. The Conference Proceedings Tbilisi, 67-68.
- Uznadze, D.N. (1939) *Untersuchungen zur Psychologie der Eistellung*. Acta Psychologica.B.4,№3, S. 323-360.
- Uznadze, D. N. (1966) *The psychology of Set*, Ed. Joseph Wortis, trans. Basil Haigh, NY:Intern. Behaviour Science Series, New York: Consultants' Bureau.
- Winnicott, D. W. (1960). '*Ego Distortion in Terms of True and False Self*'. In: *The Maturation Process and the Facilitating Environment: Studies in the Theory of Emotional Development*. N.Y: International Universities Press, 1965, 140-152.
- Winnicott, D. W. (1967). *Mirror-role of the Mother and Family in Child Development*. In: P. Lomas (Ed.), *The Predicament of the Family: A Psycho-Analytical Symposium* (pp. 26-33). London: Hogarth. .

FACE-ATTACKING AND FACE-ENHANCING STRATEGIES

Natalia Koroshinadze, PhD student
Grigol Robakidze University, Tbilisi, Georgia

Abstract

This paper is based on the analysis of empirical data made by Face-attacking conflict strategies that attack a person's positive face (for example, comments that criticize the person's contribution to a relationship or any of the person's abilities) or a person's negative face (for example, making demands on a person's time or resources or comments that attack the person's autonomy). Face-enhancing strategies are those that support and confirm a person's positive (praise, a pat on the back, a sincere smile) or negative face (giving the person space and asking rather than demanding), for example. Not surprisingly, academics have a special acronym for these: FTAs or Face Threatening Acts. More specifically, we explore (1) linguistic and extra-linguistic strategies of face-attack employed in the Georgian politics and (2) linguistic and extra-linguistic strategies of face-enhancing employed in the Georgian politics.

Keywords: Face attack, Face enhance, belt lining

Introduction

A wide range of conflict strategies could probably be viewed from the perspective of face and politeness. For the most part, it seems the kinds of strategies textbook authors recommend to use are polite and the strategies recommended to avoid them are impolite. But, several strategies seem especially appropriate to discuss in terms of politeness.

One popular but destructive face-attacking strategy is belt-lining (Bach & Wyden, 1968). Much like fighters in a ring, each of us has a "beltline," (here, an emotional one). When you hit below this emotional beltline, you can inflict serious injury. When you hit above the belt, however, the person is able to absorb the blow. With most interpersonal relationships, especially those of long standing, you know where the beltline is. You know, for example, that to hit a childless couple with the inability to have children is to hit below the belt. You know that to hit unemployed people with the

failure to get a permanent job is to hit below the belt. This type of face-attacking strategy causes all persons involved added problems.

Another such face-attacking strategy is blame. Instead of focusing on a solution to a problem, some members try to affix blame on the other person. Whether true or not, blaming is unproductive; it diverts attention away from the problem and from its potential solution and it creates resentment that is likely to be responded to with additional resentment. The conflict then spirals into personal attacks, leaving the individuals and the relationship worse off than before the conflict was ever addressed.

Strategies that enhance a person's self image and that acknowledge a person's autonomy will not only be polite, they're likely to be more effective than strategies that attack a person self image and deny a person's autonomy. Even when you get what you want, it's wise to help the other person retain positive face because it makes it less likely that future conflicts will arise (Donahue & Kolt, 1992).

Instead of face-attacking, we should try face-enhancing strategies:

- Use messages that enhance a person's self-image;
- Use messages that acknowledge a person's autonomy;
- Compliment the other person even in the midst of a conflict;
- Make few demands, respect another's time, give the other person space especially in times of conflict;
- Keep blows to areas above the belt;
- Avoid blaming the other person;
- Express respect for the other's point of view even when it differs greatly from your own.

Below I will represent the example of face-attacking. The participants of this extract are two female leaders: speaker A belongs to the government party (which makes her a more powerful participant of the debate) and speaker B, to the opposition. The extract contains direct accusations aimed at the government. While performing direct attacks on each other, both participants choose to accuse the leaders from both side of being cowards. By doing so, they aim at damaging each others' group face (lines 1-5). At the same time, these accusations also contain indirect messages to the potential voters aiming at convincing them that (a) only the party speaker A belongs to is capable of genuinely opposing the governmental policy (line3) and (b) as the opposition does not have many followers, the governmental party remains popular (lines 6-8).As can be seen from the extract, both participants, irrespective of their power, are quite assertive and bravely attack each other's group face employing criticism, accusations and other means of conversational violence (lines 1,5, 6-7).

A: 1. *Xelisuflebam ver dadzlia is shishi, rats mat hkonda opozitisis mimart, (.)magram*

The Government did not manage to overcome the fear they had towards the opposition, (.) but

2. *axla moutsevt dadzlion es shishi da chaataron demokratiuli archevnebi.*(-)

Now they will have to do so and conduct democratic elections (-)

3. *Sxva partiebi, garda chevnisa, aris "psevdo-opozitsia", tkveni satelituri partiebi da*

All the other parties but ours belong to the "pseudo-opposition", your satellite parties and....

4. *tu tkvens liders eshinia konkurentunariani garemos, es misi problemaa.*(.)

If your leader is afraid of a competitive atmosphere, it is his problem (.)

B: 5 *.(-)Tkven axsenet sityva "shishi", diax ak vighatsas eshinia, magrama es aris ara prezidenti, aramed*

(-)You mentioned the word "fear", yes, someone is afraid, but it is not the President, the person who is

6. *sulsxva, tkveni lideri, romelsats martlats eshinia, rom ar gamochndes, rom mas ar hkavs scared, it is your leader, who is genuinely terrified of people realising that he doesn't have*

7. *mxdamcherebi, tuki es archevnebi chatardeba konkurentunarian garemoshi* many followers left, as they will do if these elections are conducted in a competitive atmosphere

8. *(.)diax, isini samartsxvinod tsaageben (-) [da kideverti](.)* (.)Yes, they will lose, shamefully (-)[and one more](.).

9. *[didi bodishi magram]ak sazogadoeba shegkavt shetsdomashi, radganats*[I am sorry, but here], you are leading the viewers to misunderstanding as a safe election

10. *tavisufali saarchevno garemo aris kanonis motxovna da ara vinmes piradi gadatskvetilaba.* environment is secured by law and does not depend on anybody's personal decision.

11. *dzalian samtsuxaroa, tukit kven es procesi iset tamashad tsarmogdeniat, romlis*

It is a shame that you should think that the whole process is a child's game and the issue could be

12. *gamosavali shesadzloa ikos is, rom vinmme tserlis gamoakveknebs da mere sheitsvleba kvelaferi*

sorted out by some politician publishing some letter and everything will change 13 *[Shesadzlebelia...]* (-). [It maybe.....] (-).

13. *[me ara, tkven, tkven (-), samtsuxarod, tkven ggoniat ase .*
[Not me but you, you] (-), unfortunately, assume so.

The choice of aggressive words and phrases with negative connotation (fear, absolutely terrified, lose shamefully), insincere apology (line 9) make the face-attack even stronger. In addition to this, extra-linguistic aspects of the debate, such as interruptions in turn-taking, loud speeches and aggressive facial expressions add to the verbal aggression and construct a clear picture of female leaders who, by attacking their opponents' group face openly, make a determined effort to convince the electorate that, in spite of being females, they are strong, able leaders and thus, to persuade them to vote for them.

Conclusion

While performing the face attack, Georgian political leaders address individual as well as group face of the opponent. While doing so, they employ direct and indirect accusations, criticism, contempt, irony and sarcasm manifested by the following linguistic means. Face-enhancing strategies are those that support and confirm a person's positive (praise, a pat on the back, a sincere smile) or negative face (giving the person space and asking rather than demanding).

References:

- Bousfield, Derek. (2010). *Impoliteness in Interaction (Pragmatics & Beyond New Series)*. Amsterdam/Philadelphia: John Benjamin's Publishing Company.
- Brown, P. and Levinson, S. (1987). *Politeness. Some universals in Language Usage*. Cambridge University Press, Cambridge.
- Culpeper, J. Bousfield, D and Wichmann, A (2003). "Impoliteness revisited: With special reference to dynamic and prosodic aspects". *Journal of Pragmatics* 35, 1545-1579
- Culpeper, J(2005). "Impoliteness and the Weakest Link". *Journal of Politeness Research* 1 (1): 35-72.
- Harris, S (2001) *Being Politically Impolite: Extending Politeness Theory to Adversarial Political Discourse: Discourse and Society*, 12/4, pp.451-472
- Harris, S. (2007). *Politeness and Power: Llamas, C. Mullany, L. and Stockwell, P.(eds) The Routledge Companion of Sociolinguistics*, London: Routledge, pp. 122-129
- Luginbuhl, M (2007) *Conversational violence in political TV debates: Forms and functions: Journal of Pragmatics* 39, 1371–1387
- Tracy, K (2008) "Reasonable Hostility": Situation- appropriate Face – Attack: *Journal of Politeness Research* 4, pp. 169-191.

Transcription Conventions

- (.) indicates a pause of two seconds or less
- (-) indicates a pause of three seconds
- [] closed brackets indicate simultaneous speech

PERCEIVED STRESS AND COPING STRATEGIES IN UNIVERSITY ADMINISTRATION AND SERVICES STAFF

Angelines Díaz Corchuelo

Licenciada en Psicología, Gabinete Psicopedagógico, Universidad Granada

Ramona Rubio Herrera

Catedrática Universidad, Departamento Psicología Evolutiva y de la

Eulogio Cordón Pozo

Educación

Profesor Titular Universidad, Departamento Organización de Empresas

Abstract

This study was conducted to explore the stress levels and the coping strategies used by the administration and services staff (PAS) of a scientific and technical campus. This research was carried out among workers of the University of Granada. A total of 352 workers (55.4% woman and 44.6% man), representing 84% of the personal of the campus, completed anonymously questionnaires with regard to perceived stress rates measured by the Perceived Stress Scale (PSS-14 version), and the Stress Coping Questionnaire (CAE). Statistical analysis were performed to establish the relationship between the level of perceived stress and some socio-demographic variables such as age, marital status, number of children, people depending on them, healthy or harmful habits, years in the institution and type of contract, as well as coping strategies used.

The results show statistically significant differences in the level of perceived stress in some of the factors discussed, as well as certain relationship between stress levels and certain coping strategies.

Keywords: Perceived stress, stress coping, university staff

Introduction

Work-related stress is one of the most serious health problems today, not only affects workers to provoke physical or mental disability, but also to employers and governments, they begin to assess the financial damage they cause (Tello, Tolmos, Váñez & Vázquez, 2001).

Stress is defined by Lazarus and Folkman (1984) as a result of the relationship between the individual and the environment, assessed at that as threatening, overflowing its resources and puts their welfare at risk. This definition is known as transactional theory of stress, according to her, so that a stress response occurs should be both internal and external conditions, and the relationship between them, leading to their appearance and personality

It is characterized by high levels of arousal and distress and often by feelings of not being able to cope with the demands of the job activation. To manage and cope, they turn to cognitive and behavioral responses (known as coping) that affects between perceived stress and somatic and psychological adjustment. The ability to handle stressful situations depends on the resources of coping with the subject that has to deal with that situation. These resources that the subject has stress are fundamental in the relationship, health and disease and are stable characteristics of the individual and the environment (Omar, 1995).

There are many definitions that have been presented in the literature to define the coping, however, the definition that has gained greater acceptance has been conceived as process (Lazarus, 1966, Lazarus & Folkman, 1986, Sandin, 1995). Thus, the term coping as cognitive and behavioral efforts to manage internal or external demands that are perceived as exceeding the resources of the person.

Since the transactional stress model of explanation, in the generation and development of it, different factors, from personal variables such as age, sex, marital status, number of children, etc. to psychological variables such as coping strategies used by each person

In the last decade the university sector in Spain has undergone a major transformation as a result of adaptation to European Higher Education Area. This adaptation has taken place in a short period of time and has led to numerous organization problems and management, such us new curricula, development of new qualifications or integration of ICT. It has also been accompanied by deep cuts in budgets, which has resulted in a significant decrease in staff, both teaching and research staff (PDI), and Administration and Services (PAS). Perhaps the main problem the universities are facing is the inability to ensure these people's job so we have to add the state of job insecurity that subjects perceived as a real possibility of losing their jobs.

The changing situation Spanish universities are facing today implies a rise in workers' obligations, an increase in job demands, as well as a loss of control due to the lack of resources to meet those demands or having to deal with new and unknown situations. All of this is causing psychological and physical discomfort in the subject, leading them to start suffering from stress (Mas Torelló, 2011). This is a problem for individuals who may have a

domino effect, as far as it becomes a determining factor in their overall quality of life, including family life.

The Spanish universities like many other organizations in general, do not pay the same attention to the risk of occupational stress that hygienic or safety risks. Possibly this is because the stress is not a very noticeable problem and its effects, including financial ones, tend to be underestimated. All this despite the fact that, statistically, stress situations cause great losses as a result of poor service, absenteeism, poor work climate, accidents, illness, addiction, etc.

Research in Spain on stress in education; have been particularly focused on primary and secondary education and very little in college (Mairal, 2010). Due to their working conditions: high stability and low workload, they have been considered bit stressful. In addition to that, studies conducted have focused particularly on analyzing academic stress (teachers, students), but these same studies have shown that stress is a fairly common problem throughout the university staff, and even more with the changes the university is currently undergoing (Guerrero Barona, 2003). As Avargues & Borda (2010) noted, the study of stress in the university would be incomplete if the professional activity of the PAS was not included.

Our study is therefore focused on the Administration and Services Staff University. We have set different goals, among which include coping strategies used by subjects to cope with stressful situations. The ability to handle stressful situations depends on the coping resources each person has because they play a crucial role in maintaining stress.

The aims of our study were:

1. Analyze the stress perceived level of the university PAS, the possible existence of sex differences and the relationship between the level of stress and some socio-demographic variables.
2. Identify and study the situations that generate high levels of stress in university PAS.
3. Identify the coping strategies used by individuals which may have a significant impact on them.

The results obtained will serve to raise awareness of the benefit of maintaining health and well-being, both physical and mental, and will be a valuable contribution to develop intervention programs aimed at strengthening the factors that act as moderators of stress at PAS.

Methodology

Participants

A total of 352 workers (55.4% women and 44.6% men) participated in this study. This sample represents 84% of the campus PAS (20% of university). The median age of the participants was 47.2 years (SD=9.3,

range 22-65). Table 1 shows the socio-demographic characteristics of the study participants. Full-time employees account for 79.3% (n=279) of the population. The mean years of service in the university was 17 years. PAS develops functions in the following areas: administration faculties and departments, maintenance, sports facilities and lab technician.

All participants in the study were informed of the survey's aim and assured that their responses would be kept strictly anonymous. Each completed questionnaire was put into an envelope, and then sealed by the participant him/herself. All completed questionnaires in sealed envelopes were sent to the research team for data processing. Ethical approval for the study was granted by the Human Research Ethics Committee for Non-Clinical Facilities of the University of Granada.

Instruments

Perceived Stress Scale EEP-14. (Remor & Carrobles, 2001).

The level of perceived stress was evaluated by means of Spanish version of the Perceived Stress Scale (Cohen, Kamarch & Mermelstein, 1983). This scale is a self-report instrument that was originally developed as a 14-item scale that assess the perception of stressful experiences by asking the respondent to rate the frequency of his/her feelings and thoughts related to events and situations that occurred over the previous month. Seven out of the fourteen items of PSS-14 are considered negative (1, 2, 3, 8, 11, 12, 14) and the remaining seven as positive (4, 5, 6, 7, 9, 10, 13), representing perceived helplessness and self-efficacy, respectively. Each item was rated on a five point Likert-type scale (0 = *never*, 1 = *almost never*, 2 = *once in a while*, 3 = *often*, 4 = *very often*). Total scores for EEP-14 range from 0 to 56. Higher scores correspond to higher perceived stress. Regarding internal consistency of the EEP-14, Remor y Carrobles (2001) obtained an alpha Cronbach value of $\alpha = .67$, and Remor (2006) a value of $\alpha = .81$.

Stress coping questionnaire CAE (Sandín & Chorot, 2003).

It is an instrument developed as a 42 items scale. Each item was rated on a five point Likert-type scale to score using the form of coping (0: *never*, 1: *rarely*, 2: *sometimes*; 3: *often*, 4: *almost always*). It is designed to assess seven different styles of coping: 1) focused on solving the problem (FSP), 2) negative self-targeting (AFN), 3) positive reappraisal (REP), 4) open emotional expression (EEA), 5) avoidance (EVT), 6) seeking social support (BAS) and 7) religion (RLG). The dimensions of coping questionnaire show low correlations with each other, allowing assess coping styles independently.

Statistical Analyses

Descriptive statistics (mean, standard deviation and range) were calculated with all socio-demographic variables selected. Data processing was performed with the SPSS statistical package (version 22.0). The reliability related to internal consistency of the full scale and subscales was by calculating Cronbach's alpha coefficient and consistency if the item is omitted. Alpha coefficient from .70 to .90 is considered satisfactory because a higher value may reflect unnecessary duplication of content items (Streiner, 2003). A minimum value of .30 has been considered a significant factor loading and interpretation of size based on those variables with factor loading of $\pm .50$ or more to have practical significance, as recommended by some authors (Hair, Black, Babin & Anderson, 2014). The analysis of differences in levels of perceived stress by various factors was conducted by Student t-test.

Sample adequacy to perform factorial analysis was further assessed by the Kaiser-Meyer-Olkin (KMO) measure and Barlett's test of sphericity.

Factor Structure

Perceived Stress Scale (EEP-14). To analyze the factorial structure of the scale we carried out an exploratory factor analysis (EFA) using the extraction method of principal components and Promax rotation method. The KMO measure was found to be .877, while Barlett's test of sphericity was significant, with $\chi^2 = 2,172.7$, $p = .000$. thus, fulfilling the prerequisites for conducting EFA. Since the EEP-14 includes items in both directions it has been estimated factorial two-factor solution, but, in general, we recommend using the scale as one-dimensional, considering that what it measures is simply stress (Campo-Arias, Bustos-Leiton & Romero-Chaparro, 2009; Pedrero-Pérez & Olivar-Arroyo, 2010). Together the two factors explained 53.0% of the variance. *Factor 1* consisted of items 1, 2, 3, 8, 11, 12, and 14, suggesting *no stress management*, with factor loadings between .390 and .800 and accounted for 34.1% of the variance; *Factor 2* comprised the remaining items 4, 5, 6, 7, 9, 10 and 13, related to *stress management*, with factor loadings between .554 and .801, and accounted for 19.8% of the variance. No double loadings occurred in the pattern matrix, with all significant item loadings >0.5 . The two factor structure was consistent with the factor structure revealed in most previous studies (Remor & Carrobes, 2001). The full scale and subscales derived from *factor 1* and *factor 2* have high internal consistency (Cronbach's alpha .840, .821 and .814, respectively) within the recommended range (Campo-Arias et al., 2009). The correlation of each of the items with the total scale has proved adequate and the removal of any item not significantly enhanced the value of Cronbach's alpha.

Stress coping questionnaire (CAE). The value of the statistic Kaiser-Meyer-Olkin (KMO) and Barlett test ($KMO = .849$; $\chi^2 = 6,407.1$, $p = .000$) indicated that the data were adequate to the EFA used. One factor solution of seven factors, which represent the seven basic coping styles as indicated by most authors (González & Landero, 2007; Sandin & Chorot, 2003) was estimated. The factor solution explained on the whole a 53.7 % of variance (*factor 1*: 15.9 %, *factor 2*: 13.2 %, *factor 3*: 7.0 %, *factor 4*: 6.0 %, *factor 5*: 4.3 %, *factor 6*: 3.9 % and *factor 7*: 3.4%). The correlations between factors were low to moderate. The Cronbach reliability coefficients for the seven subscales ranged between 0.64 and 0.92 (mean = 0.79).

Results

Levels of perceived stress

To assess the state of stress in the studied sample, we have established as some authors did before (Kobra, Fariborz, Alehe, Sargazi, Alireza & Sargazi, 2014) three levels of stress according to scores on this scale : low perception : 0-18 , medium or moderate level of perception: 19-37 , high level : 38-56 .

The average perceived stress of the sample is 23.1 (SD = 8.3), range 46 and the median was 23. The 30.7 % of the subjects participating in the study show a low level of stress, a 64.3 % show moderate levels of stress, and a 5% (18 subjects) are at a high stress level. Scores on each of the items of the scale are between 1.3 and 2.6, i.e. at an average interval “moderate”.

Table 1 shows the levels of perceived stress in relation to the socio-demographic characteristics of the sample. The results show statistically significant differences in ratings (always women scores higher than man) in the following cases: married women - married men (24.1 vs 21.2; $t = -2.521$; $p = .012$); when they are aged between 35 and 50 (25.0 vs 21.6; $t = -2.573$; $p = .011$), when they have worked at the university between 6 and 10 years (24.0 vs 19.2; $p = -2.070$; $p = .042$), and when they have two children (25.6 vs 21.9; $t = -2.791$; $p = .007$). However, having habits like drinking and smoking, or doing some kind of physical activity do not seem to have any effect on stress levels.

Table 1. Perceived stress depending on sociodemographic variables.

Variable		Woman	Man	Sig.
		Average (SD) [n]	Average (SD) [n]	
Marital status	<i>Married</i>	24.1 (8.5) [111]	21.2 (7.3) [91]	$t = -2.521$ $p = .012$
	<i>Single</i>	24.2 (8.7) [39]	27.7 (8.5) [28]	$t = -1.146$ $p = .256$
	<i>Others</i>	21.6 (9.9) [32]	23.5 (7.8) [27]	$t = .816$ $p = .418$
Age (years)	< 35	23.9 (8.6) [26]	20.0 (9.2) [15]	$t = -1.356$ $p = .183$
	35 – 50	25.0 (8.8) [81]	21.6 (7.3) [69]	$t = -2.573$ $p = .011$
	> 35	23.2 (8.0) [67]	22.0 (6.8) [53]	$t = -.882$ $p = .380$
Job tenure (years)	< 1	22.4 (9.5) [10]	25.2 (9.2) [9]	$t = .658$ $p = .519$
	1 - 5	22.2 (8.6) [22]	19.4 (6.9) [25]	$t = -1.215$ $p = .231$
	6 - 10	24.0 (10.4) [44]	19.2 (7.1) [25]	$t = -2.070$ $p = .042$
	11 - 15	26.6 (8.7) [46]	24.0 (6.6) [25]	$t = -1.239$ $p = .188$
	> 15	23.5 (8.6) [105]	22.8 (7.5) [89]	$t = -.660$ $p = .510$
Number of children / daughters	0	22.7 (8.2) [45]	22.8 (8.6) [44]	$t = .073$ $p = .942$
	1	21.3 (8.2) [31]	20.9 (7.1) [21]	$t = -.191$ $p = .849$
	2	25.6 (8.1) [79]	21.9 (7.4) [63]	$t = -2.791$ $p = .007$
	≥ 3	21.8 (11.3) [28]	20.2 (7.0) [20]	$t = -.556$ $p = .581$
People dependents	<i>Yes</i>	23.3 (9.1) [106]	22.0 (8.1) [88]	$t = -1.034$ $p = .303$
	<i>No</i>	24.1 (8.4) [80]	22.1 (6.7) [62]	$t = -1.680$ $p = .086$
Habits (drinking smoking,...)	<i>Yes</i>	23.5 (9.1) [140]	21.7 (7.3) [109]	$t = -1.654$ $p = .090$
	<i>No</i>	24.9 (8.1) [43]	22.7 (8.0) [44]	$t = -1.292$ $p = .200$
Physical activity	<i>Yes</i>	25.7 (8.4) [55]	22.3 (9.4) [23]	$t = -1.588$ $p = .116$
	<i>No</i>	23.2 (8.9) [137]	21.8 (7.2) [132]	$t = -1.380$ $p = .169$

Table 2. Scores [mean, (DT)] at coping strategies and correlation with perceived stress..

Strategy	Woman	Man	W + M	
			Coping strategy scores	Correlation with perceived stress scores
FSP	15.0 (4.4)	15.1 (4.7)	15.0 (4.5)	- 0.390 *
REP	14.2 (4.0)	13.4 (3.7)	13.9 (3.9)	- 0.288 *
BAS	12.4 (6.1)	9.8 (5.2)	11.2 (5.7)	0.270 **
EEA	6.5 (3.5)	5.4 (3.8)	6.0 (3.6)	0.314 *
AFN	7.5 (3.4)	8.8 (3.4)	8.1 (3.5)	0.363 *
EVT	6.2 (8.2)	6.2(7.2)	6.2 (8.1)	- 0.280 **
RLG	4.6 (5.2)	3.1(4.6)	3.9 (4.9)	0.238 *

* $p = 0.000$, ** $p > 0.05$

Regarding the 18 subjects of our population (14 women and 4 men) with high scores on perceived stress: a) 11 are married and 3 single, b) 8 are

aged between 36 and 50 years, 4 subjects older than 50 years, c) 5 have worked between 11 and 15 years, and 8 over 15 years, d) 12 subjects with two or more children and 5 have no children, e) 7 subjects have dependents, while that 11 no, f) 11 engaged in some form of physical activity, while 7 no.

Coping strategies

Participants in this study scored higher in active (FSP, REP and BAS) than passive (action-oriented and focused on emotion) coping strategies (Table 2). This pattern is repeated when considering socio-demographic variables selected in this study.

Correlation between perceived stress and coping strategies

Coping strategies that are negatively and significantly correlated with perceived stress (Table 2) are FSP and REP, while EEA, AFN, and RLG are positively and significantly correlated with perceived stress. BAS correlates positively and EVT correlates negatively, but in both cases the correlation is not significant.

Discussion

In the present investigation we had set three objectives.

Regarding the *first objective*, we detected sex differences in perceived stress, as women achieve significantly higher scores than men. A 95 % of the sample (54.5 % female, 45.5 % male) perceives a situation of moderate–low stress, women score higher always remain. However, the difference is more pronounced among subjects who have a high stress level, and that 78% (14 of 18) are women.

Married women attain significantly higher scores than men. "Being married" may mean for men a protective factor of stress (lower scores); however, for women, "being married" is associated with higher levels of perceived stress. Some studies indicate that married women seem to experience a special receptivity to stress (higher levels) due to factors such as family responsibility or extended working hours in and out of the house (Ramírez Velázquez, 2001). Although women in Spain have been gaining social space, those entering the labor market, make a "double" day, as they continue to assume most of the housework. Even if men spend more time on paid work, the total working time of women is higher and increases linearly according to the increase of the family which ultimately affects negatively their health compared to men (Cohen, Janicki-Deverts, & Miller, 2007). Compared to previous studies, others point out that women, because of different roles (marital, maternal, housewife, employee, etc.) need not necessarily suffer higher levels of stress. The positive or negative effects of

combining different roles depend on the context in which these (conditions, work, age of children, spousal support, etc.), not so much with the amount of role they perform. Excessive demands for care and lack of resources is what might explain the increased levels of stress (Gómez Ortiz, 2004).

Significant differences we found in those individuals who have worked at the university between 6-10 years. Possibly this may be because this period of work corresponds to greater efforts for promotion (both horizontally and vertically) with the consequent recognition (also of an economic nature). Moreover, in these early years of his professional career women they face different psychosocial factors than men, derived from more vital and impactful events on your health: pregnancy, childbirth, breastfeeding, and appear to experience , influenced by different mechanisms , a greater degree of psychological stress due to increased vulnerability to the effects of stress , although there are no gender differences in the degree of exposure to work stress , and exposure to more work stress than men (Velazquez-Machado, 2013).

Although maternal role is an important factor in the level of perceived stress for women (Gómez Ortiz, 2004), the number of children (daughters) does not appear to be a factor that give to rise significant differences. Curiously only when subjects have two children, scores of women are significantly higher than those of men.

The factor "having dependents" influences the perception of stress level significantly differently by gender, women's fashion tie. Care and work are often conflicting needs for informal caregivers. Having to care for a person supposed changes (reduction of working hours, request permission, reorganization of schedule, etc.), which besides being perceived as an overload can result in economic losses (possible withdrawal from the labor market, reduction hours at work, absenteeism, early retirement, etc.) and can generate stress, (Garcia-Calvente, Mateo-Rodriguez & Maroto-Navarro, 2004; Morris, 2002).

In regard to the factor "habits like drinking or smoking," we found that women who have these habits scored slightly higher on perceived stress compared with the scores of men. It is difficult to draw conclusions on this point, since it is known that stress induces the substance; however, the relationship is not unidirectional. That is, individuals can use substances in an attempt to self-medicate by tension or stress can result from the use of substances.

The practice of physical exercise, associated with psychological well-being (Jiménez, Martínez, Miró & Sánchez, 2008), does not seem relevant to the perception of stress in our research in any of the situations factor.

Regarding the *second objective* we have located 18 subjects (14 women and 4 men) with high scores on perceived stress. We found a positive

relationship between the level of stress (increase) and age, being married and if they have children. However, job insecurity does not seem to have a negative impact, since 78% are fixed, and 75% spent more than five years in the same job. There is a positive relationship between the level of stress (increase) and age, being married (or) and have children. Job insecurity has a negative impact especially pronounced in men with less than a year old (replacement staff), while from 5 years old has more weight age in the increased level of stress as the 78% are fixed. Possibly away from the situation of job insecurity in the country, our people, to meet the great majority in a permanent job, aspire more to get motivated to get their duties, higher salary or hold a job in line with training. For this group of persons, it is designing an intervention program for stress management.

Regarding the *third objective*, the participants in this study face stressful events using active coping strategies (FSP, REP and BAS are those that score higher), compared with passive or focused on emotion, it may be favorable for both their psychological well-being and your quality of life. This pattern is repeated when selected sociodemographic variables analyzed in this study. Women had significantly higher values than men in the ways of coping BAS and RLG, while men scored higher with a relative significance in AFN. Our results are consistent with other research on the existence of gender differences in the use of coping strategies, as well as the fact that women generally use more than men most coping strategies (Sandin & Chorot, 2003; Castaño, & León del Barco, 2010).

Correlations of perceived stress with coping strategies (Table 3) we have found in the sample studied, reveal the following: 1) FSP (direct and rational action to solve problematic situations) and REP (coping focused on creating a new meaning - positive - to the problem situation), which represent active forms of coping were significantly associated with low levels of perceived stress; 2) AFN (negatively convince himself, resign or take his own inability to solve the problem), EEA (behaving in a hostile manner, download moodiness with others or emotional outlet) and RLG (ask for spiritual help or attend church to pray the problem is solved), which represent passive coping strategies were significantly associated with high levels of perceived stress; 3) BAS and EVT (think or do other things, ignoring the problem or stressful situation) are forms of coping associated, although not significantly, the perceived stress.

References:

Avargues, M. L. & Borda, M. (2010). Estrés laboral y síndrome de burnout en la universidad: Análisis descriptivo de la situación actual y revisión de las principales líneas de investigación. *Anuario de Psicología Clínica y de La Salud*, (6), 73-78.

- Campo-Arias, A., Bustos-Leiton, G. J. & Romero-Chaparro, A. (2009). Consistencia interna y dimensionalidad de la Escala de Estrés Percibido (EEP-10 y EEP-14) en una muestra de universitarias de Bogotá, Colombia. *Aquichan*, 9(3), 271-280.
- Cohen, S., Janicki-Deverts, D. & Miller, G.E. (2007). Psychological stress and disease. *Jama*, 298(14), 1685-1687.
- Cohen, S., Kamarck, T. & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396.
- Castaño, E., & León del Barco, B. (2010). Estrategias de afrontamiento del estrés y estilos de conducta interpersonal. *International Journal of Psychology and Psychological Therapy*, 10(2), 245-257.
- García-Calvente, M. M., Mateo-Rodríguez, I. & Maroto-Navarro, G. (2004). El impacto de cuidar en la salud y la calidad de vida de las mujeres. *Gaceta Sanitaria*, 18, 83-92.
- Gómez Ortiz, V. (2004). Estrés y salud en mujeres que desempeñan múltiples roles. *Avances en Psicología Latinoamericana*, 22, 117-128.
- González, M. & Landero, R. (2007). Cuestionario de afrontamiento del estrés (CAE): Validación de una muestra mexicana. *Revista de Psicopatología y Psicología Clínica*, 12(2), 189-198.
- Guerrero Barona, E. (2003). Análisis pormenorizado de los grados de burnout y técnicas de afrontamiento del estrés docente en profesorado universitario. *Anales de psicología*, 19(1), 145-158.
- Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2014). *Multivariable data analysis*. Britain: Pearson Education Limited.
- Jiménez, M. G., Martínez, P., Miró, E. & Sánchez, A. I. (2008). Bienestar psicológico y hábitos saludables: ¿están asociados a la práctica de ejercicio físico? *International Journal of Clinical and Health Psychology*, 8(1), 185-202.
- Kobra, P., Fariborz, R., Alehe, S., Sargazi, N., Alireza, N. & Sargazi Vida (2014). Relationship between perceived stress and quality of life among cancer patients referring to the educational.therapeutic centers in Zahedan city. *Science Road Journal*, 02(02), 124-132
- Lazarus, R.S. (1966). *Psychological stress and the coping process*. Nueva York: McGraw-Hill.
- Lazarus, R. S. & Folkman, S. (1986). *Estrés y procesos cognitivos*. Barcelona: Martínez Roca.
- Lazarus, R. S. & Folkman, S. (1984). *Stress, coping and adaptation*. New York: Springer.
- Mairal, J.B. (2010). Emociones negativas en el profesorado universitario: burnout, estrés laboral y mobbing. *EduPsykhé: Revista de psicología y psicopedagogía*, 9(1), 85-100.

- Mas Torelló, O. (2011). El profesor universitario: sus competencias y formación. *Revista de currículum y formación del profesorado*, 15 (3).
- Morris, M. (2002). Gender-sensitive home and community care and caregiving research: A synthesis paper. Ottawa: National Coordinating Group of Health Care Reform and Women, *Health Canada*.
- Omar, A. (1995). *Stress y coping. Las estrategias de coping y sus interrelaciones con los niveles biológico y psicológico*. Buenos Aires: Lumen.
- Pedrero-Pérez, E. J., & Olivar-Arroyo, A. (2010). Estrés percibido en adictos a sustancias en tratamiento mediante la escala de Cohen: propiedades psicométricas y resultados de su aplicación. *Anales de psicología*, 26(2), 302-309.
- Ramírez Velázquez, J. (2001). Mujer, trabajo y estrés. *Revista Latino Americana de Salud en el Trabajo*, 1,58-74.
- Remor, E. & Carrobles, J. A. (2001). Versión española de la escala de estrés percibido (PSS-14): Estudio psicométrico en una muestra VIH+. *Ansiedad y Estrés*, 7(2/3), 195-201.
- Remor, E. (2006). Psychometric properties of a European Spanish version of the Perceived Stress Scale (PSS). *The Spanish Journal of Psychology*, 9, 86-93.
- Sandín, B. (1995). El estrés. En A. Belloch, B.Sandín y F. Ramos (Eds.). *Manual de psicopatología*, Vol. 2 (pp. 3-52). Madrid: McGraw-Hill.
- Sandín, B. & Chorot, P. (2003). Cuestionario de afrontamiento del estrés (CAE): Desarrollo y validación preliminar. *Revista de Psicopatología y Psicología Clínica*, 8, 39-54.
- Streiner, D. L. (2003). Starting at the beginning: an introduction to coefficient alpha and internal consistency. *Journal of personality assessment*, 80(1), 99-103.
- Tello, S., Tolmos, M. Vállez, R. & Vázquez, A. (2001) Estudio del síndrome de burnout en los médicos internos residentes del Hospital Clínico de San Carlos. España. [On-line] Disponible en: www.abacolombia.org/areas/organizaciones/burnout.htm
- Velázquez-Machado, A. (2013). Depresión, diferencias de género. *Multimed*, 17(3).

CATEGORIES OF VISUAL PUNS

Meri Giorgadze, PhD

Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia

Abstract

The paper deals with the creative aspects of visual (pictorial) pun and its subcategories. The aim of the research is to study the lingvo-semantic structure of visual (pictorial) pun and its subcategories. It explores the benefits of the cognitive approach to the stylistic aspects of language in use and focuses on perception and comprehension of the textual and the visual. A visual representation of the image serves to create a new mode of narrative, which is both visual and textual. Comprehension and interpretation rely on the ties between the visual and the verbal, as well as the knowledge of the sociocultural background and the symbolic implications.

Keywords: Pun, visual, pictorial, semantic structure, ambiguity

Introduction

The research deals with the study of **Categories of Visual Puns**. The objective of the research is to investigate the phenomenon of pun (visual pun), its subcategories and specific linguistic features.

The significance of the present article lies in the factor according to which linguo-semantic structure of visual pun is discussed from the point of general theoretical as well as contextual-pragmatic positions.

Keeping all the mentioned aspects in mind, it is interesting to know how a visual (pictorial) pun is created and what its subcategories and pragmatic values are.

What is a pun?

The **pun**, also called paronomasia, is a form of wordplay which suggests two or more meanings, by exploiting multiple meanings of words, or of similar-sounding words, for an intended humorous or rhetorical effect. (Merriam-Webster Online Dictionary, 2009).

Henri Bergson defines a pun as a sentence or utterance in which "the same sentence appears to offer two independent meanings, but it is only an appearance; in reality there are two different sentences made up of different

words, but claiming to be one and the same because both have the same sound" (Augarde, 2003).

As John Dryden puts it, punning is to torture one poor word *ten thousand ways*. (*Dryden's quotes*).

Walter Redfern succinctly says: "To pun is to treat homonyms as synonyms".

Considering the above mentioned definitions and the study of empirical material, we can come to the conclusion and say that the pun is a figure of speech which consists of a deliberate confusion of similar words or phrases for rhetorical effect, whether humorous or serious. It is a way of using the characteristics of the language(s) to cause a word, a sentence or a discourse to involve two or more different meanings. So humorous or any other effects created by puns depend upon the ambiguities words entail.

Puns, acknowledgedly regarded as a rhetorical device and a communicative strategy, are widely employed both in literature and in daily life and have gradually received more and more scholarly attention. As a figure of speech, puns have been widely used in advertisements, jokes, riddles, literary works and the like, to make the language lively and impressive and to produce a humorous, jocular or sarcastic effect.

Classification and the types of puns

The delicate classification of puns has always been a headache for scholars. As a result of the different perceptions of the pun there are also various approaches as to how it should be classified.

Vittoz-Canuto (Attardo, 1994) puts forward a detailed classification of puns as follows: exploitation of the signifier, exploitation of the signified, homonyms, exploitation of the signified (polysemy), exploitation of the connotations, neologisms (new signified added to the preexisting ones), and others.

Sherzer (1985) also holds that puns can be produced by manipulating different levels and aspects of language such as sound patterns, morphology, syntax and semantics.

Besides, Vickers (1988) puts forward a very general classification of puns. According to him, puns consist of three types, that is, syllepsis, paronomasia and antanaclasis.

According to Delabastita (1996:128) pun is divided into four categories: homonymy, homophony, homography, paronymy.

Gottlieb's (2005) classification of a pun is the similar to Delabastita's one. He only adds and singles out three subcategories of homonymy: lexical homonymy (the central feature is single-word ambiguity), collocational homonymy (the word-in-context ambiguity is the central feature), phrasal homonymy (the clause ambiguity is the central feature).

My own classification form of pun (worked out in my PhD thesis) is different, it includes all the main types of puns - lexical-semantic pun, structural-syntactic pun, structural-semantic pun. (Giorgadze, 2014).

As research revealed there are many different ideas, several categories of pun and consequently its various classifications and types are formulated by different scholars.

As we have already mentioned, the creation of all the above mentioned types of pun happens at different levels of language(s) and is expressed verbally. Besides verbally expressed puns there is also a category of visual puns.

What is a visual pun?

Pun as a linguistic phenomenon increasingly attracting the interest of the researchers from the last few decades. The review and analysis of numerous books, articles and conference materials are devoted to the subject. It should also be noted that almost all of the above mentioned works are concerned the form of verbally expressed puns.

Thus, puns are so predominantly verbal in their character that one is apt to forget that they may be visual (pictorial) as well and hence make their appeal through the eye rather than the ear.

Besides, Salvatore Attardo (2005) believes that puns are verbal humour. He talks about Pepicello and Weisberg's linguistic theory of humour and believes the only form of linguistic humour is limited to puns. I do not fully agree with the idea that puns are only language specific, as the visual representation of an image can create an ambiguity which is considered to be a central figure of creating a pun.

As Koestler defines, an image presenting visual puns typically has a double meaning, as if two events were connected; in other words, multiple meanings can lead an audience to the same conclusion (Koestler, 1964).

Visual puns are a type of visual expression in which the concept of word play is applied to an image (Hempelmann & Samson, 2007).

So, we can come to the conclusion that a visual pun is the use of symbols or pictures to suggest two or more meanings or different associations. A visual pun is an image that depicts objects or the arrangement of objects, in such a way that the names of the objects or their arrangement creates a pun.

It is interesting, how a pun is created in the case of visual play. Ambiguity is a common phenomenon that cannot be avoidable in any natural language. Usually it is defined as expressions which have more than one meaning. As we have already discussed, pun is a figure of speech depending upon a similarity of sound and a disparity of sound and a disparity of

meaning. So it means that ambiguity is the main source of creating pun and it can be expressed verbally and visually.

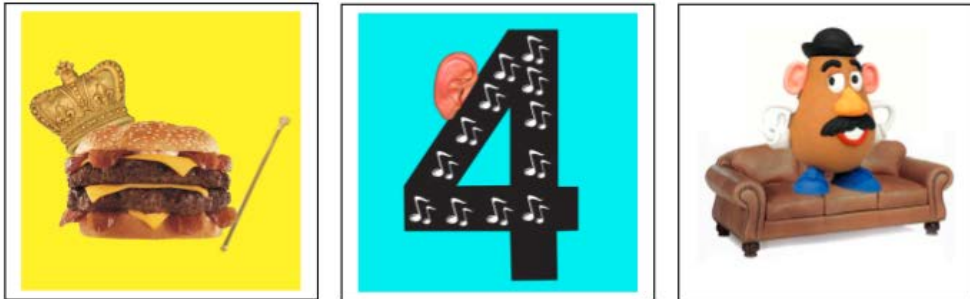
Puns can be regarded as a special form of ambiguity that happens at different levels of language(s). e.g. (phonological, graphological, morphological, syntactic, semantic and other levels). In the case of visual puns ambiguity is created on the bases of symbol or a picture and it, may also happen at different levels of language(s). Therefore puns can be divided into two main types: verbal and visual puns.

On its side visual puns can be classified in the following categories:

Visual (pictorial) pun

A visual pun, when the pictures occur without any verbal accompaniment. It is a way of combining images to create a pun.

A)



For example, in the first picture “**Burger King**” is created by combining a burger + crown + scepter = Burger King.

On the second picture combination of the images ear + four + music notes = “**Ear for Music**”. This expression has a figurative meaning and means to have the ability to learn and understand music well. Unlike the first picture visual pun is created on the basis of images and the homophony of the image “four (for)”.

On the third picture combination of the images couch + potato = “**couch potato**“. **Couch potato** (n. slang) - A person who spends much time sitting or lying down, usually watching television.

When these combined images are viewed, the visual pun on the word becomes evident. First simply brainstorm for ideas. You can use a word or commonly known phrase.

This kind of puns can be discussed as **visual (pictorial) puns**.

B) Another type of visual (pictorial) puns uses a visual symbol that has the same meaning as the word it replaces (like a red heart shape instead of the word “love”), or that has a similar sound to the sound of the word it replaces, as in Paul Rand’s 1981 design for IBM. The word “eye” sounds

like the letter “I”, the word “bee” sounds like the letter “B”, and the letter M remains an M.



Verbo-visual or verbo-pictorial pun

The case, when the visual effect works together with the verbal in creating a visual pun.

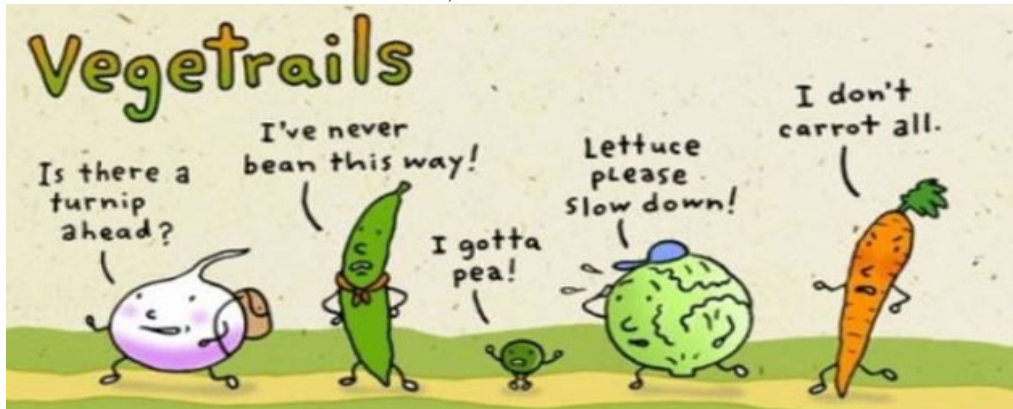
A) Picture 1.



In the given example pun is created on the basis of homophony of the word meat (meet).

Visual image of the sausages (meat) and also the background knowledge of the fixed phrase “nice to meet you” gives the viewer a hint to guess the pun.

B) Picture 2.



According to the online urban dictionary, the word “**vege**” is a short hand way of saying vegetarian.

(<http://www.urbandictionary.com/define.php?term=vege>). The word “**trail**” means - a path, track, or road. In the presented example, the word “**trail**” can also be understood as a “**train**” in fluent speech. So, we can interpretate the compound word “**vegetrails**” in two different ways – 1. Vegetarians’s road or 2. Vegetarian’s train.

Horizontal arrangement of different types of vegetable on the picture gives us the chance of two-way interpretation – trail or train.

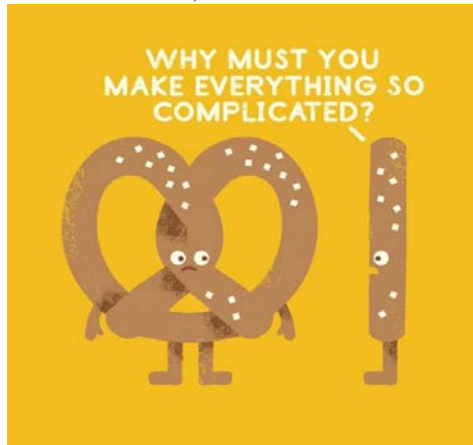
In the given example verbo-visual or verbo-pictorial puns are based on homophones of the names of different types of vegetable:

Turnip - turn up, bean-been, pea-pee, lettuce -let us, carrot -care at.

The visual effect works together with the verbal in creating a verbo-visual or verbo-pictorial pun and makes the situation funny.

According to the analysis of empirical material and the examples discussed in the article, it becomes clear that the visual puns (based on the homophony) are formed in two ways. When the homophone of the original (notional) word is given on the picture (e.g. Pic. 1) and the case when the viewer must guess the homophone of the original word (e.g. Pic. 2) given on the picture. In both cases visual manifestation of the image helps and makes the viewer guess the pun.

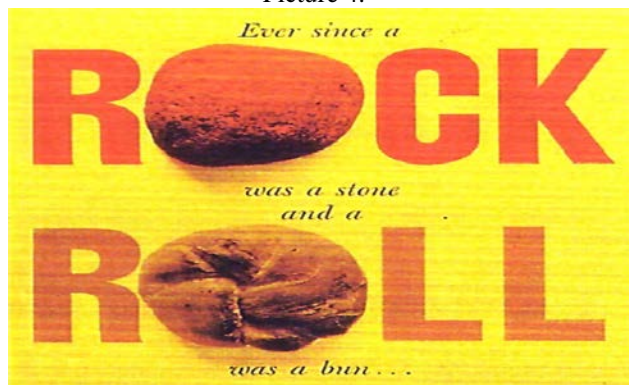
C) Picture 3.



In the given verbo-visual pun example, visual image plays an important role of forming a pun. If we take the sentence “why must you make everything so complicated?” separately, without any context, it does not create a pun. Here the visual image and their forms makes the situation humorous. Thus, the actualization of this type of verbo-pictorial pun is context specific.

D) The occasion when verbo-visual (verbo-pictorial) puns comprises of symbols that replace letters that are similar in shape, such as in the “Rock & Roll” design for an insurance company magazine cover, designed by Herb Lubalin in 1956, where the letter “o” in the word “Rock” is represented by a round rock image, and the letter “o” in the word “Roll” is replaced by an image of a round bread roll.

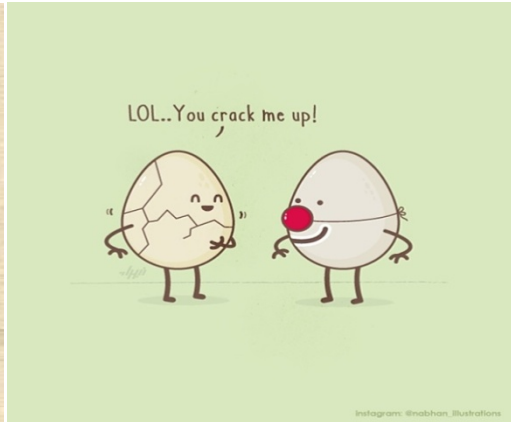
Picture 4.



E) In the following examples verbo-visual or verbo-pictorial puns are based on structural ambiguity.



Picture 5.



Picture 6.

Picture 5 - “*Sleeping pill*” is a tablet of a drug which helps to induce sleep. On the one hand, there is nothing unusual in the above mentioned expression until we have a look at the visual image on the picture. The play happens between a verbal and a visual representations.

Picture 6 – The expression “*Crack someone up*” has different meanings:

1. to damage someone or something.
2. to make someone laugh very hard; to make someone break out laughing
3. to crash something; to destroy something (in an accident).

The expression without a visual representation of the image does not create a verbo-pictorial pun. Pun occurs between verbal and pictorial signs. Ambiguity is created on the multiple meanings of the idiomatic expression.

Thus, the visual representation of the image becomes a genuine part in pun perception and cognition.

As pointed out by Laviosa (2005) visual puns resemble verbal puns and are a type of visual statements; visual puns adopt visual structure to be persuasive.

On the basis of the discussed material and analysis of the above mentioned examples, it becomes clear that a verbally and a visually expressed puns have the same linguistic features and characteristics.

Conclusion

As the research revealed the pun (generally) is a figure of speech which consists of a deliberate confusion of similar words or phrases for rhetorical effect, whether humorous or serious. It is a way of using the characteristics of the language(s) to cause a word, a sentence or a discourse to involve two or more different meanings. So humorous or any other effects created by puns depend upon the ambiguities words entail.

As a feature of language, ambiguity occurs when a word or phrase has more than one meaning and accordingly one linguistic expression allows more than one understandings or interpretations. So ambiguity is a convention of punning, but as Attardo points out, not every ambiguous word constitutes a pun (1994:133).

What's worth mentioning is that context plays a crucial role in the process of pun production and pun interpretation.

Visual pun combines two or more symbols (pictures and / or texts) to form a new meaning. The viewer must mentally elaborate on the visual stimulus to interpret the message.

Thus, there is not a distinct difference between a verbal and a visual pun. They, both can be created at different levels of languages (phonological, morphological, syntactic, semantic, textual and others).

As for their pragmatic functions, they can be used for creating humorous, sarcastic, ironic, or simply ambiguous situation: to attract recipients' attention or spark their interest.

The only difference that lies between a verbal and a visual pun is that a visual pun plays on the possible double meaning in certain *kinds of* images. A verbal pun is a play on various possible meanings of a word or phrase. Visual puns are triggered by verbal quirks. In visual language, it's often necessary to substitute one image for another, or one symbol for another—not just for purposes of jest, but to enhance meaning.

In conclusion a pun is “a play on words” therefore a visual pun is “a play on visual images”.

References:

Attardo, S. *Linguistic Theories of Humour*. Berlin and New York, NY: Mouton de Gruyter, 1994.

Attardo S. "Puns, Relevance and Appreciation in Advertisements." *Journal of Pragmatics* 37.5 707-21, 2005.

Augarde, Tony. *The Oxford Guide to Word Games*, 2nd ed., Oxford: OUP, 2003.

Delabastita, D. *Wordplay and Translation: Introduction*. In *The Translator. Studies in Intercultural Communication*. Volume 2, Number 2; special issue. Manchester: St. Jerome Publishing, 1996.

Giorgadze, M. *Linguistic Features of Pun, Its Typology and Classification*, *European Scientific Journal*, /SPECIAL/ edition vol.2 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431, November 2014.

Gottlieb, Henrik. “You Got the Picture?” *On the Polysemiotics of Subtitling Wordplay*. In

Gottlieb, Henrik: Screen Translation. Eight Studies in Subtitling, Dubbing and Voice-over.

Copenhagen, 2005.

Hempelmann, C. F., & Samson, A. New approaches to the linguistics of humor. Popa, D., & Attardo, S. (Eds.), Galati. Editura Academica, 180-196; 2007.

Koestler, A. The act of creation. London: Hutchinson; 1964.

Laviosa, S. Wordplay in advertising: Form, meaning and function. Scripta Manent, 1(1), 25-34; 2005.

Redfern, W. Puns. Oxford, England: Basil Blackwell; 1984.

Sherzer, J. Puns and jokes. In Teun A. Van Dijk (Ed.). Handbook of discourse analysis. (Vol. 3, pp. 78-92). London, England: Academic Press Inc; 1985.

Vickers, B. In defense of rhetoric. Oxford, England: The Clarendon Press; 1988.

FORMATION OF WORDS ON THE EMIC LEVEL

Nino Kemertelidze, Professor
Liana Koroshinadze, Assistant Professor
GrigolRobakidze University, Tbilisi, Georgia

Abstract

The main function of word-formation is to meet the requirements of a speech community. In linguistics, word formation is creation of a new word. There are different ways of forming new words in linguistics. But the aim of this paper is not to discuss formations on etic level. It aims at showing how words that do not belong to language (to say otherwise those that cannot be found on etic level), are formed in speech. Due to phonological, morphological, morphonological and semantic restraints, formation of some kinds of words is restricted on the etic level though, the emic level is free from such restrictions. Such kind of formations can quite freely be used in fiction. They are used by a writer in certain cases and for certain purposes as occasional formations. It is also possible, such formations to be transferred to the etic level and become the possession of language. But some of them stay as occasional formations.

Keywords: Etic level; Emic level; Metasemiotic level; Prosody

Introduction

The main function of word-formation is to meet the requirements of a speech-community. In linguistics, word formation is creation of a new word. Word formation is sometimes contrasted with semantic change, which is a change in a single word's meaning. The boundary between word formation and semantic change can be difficult to define: a new use of an old word can be seen as a new word derived from an old one and identical to it in form. Word formation can also be contrasted with the formation of idiomatic expressions, although words can be formed from multi-word phrases.

There are different ways of forming new words in linguistics. But the aim of this paper is not to discuss formations on etic level. It aims at showing how words that do not belong to language (to say otherwise those that cannot be found on the etic level), are formed in speech.

Sometimes, due to phonological, morphological, morphonological and semantic restraints, formation of some kinds of words is restricted on the etic level though, the emic level is free from such restrictions. Thus, such kind of formations can quite freely be used in fiction. They are used by a writer in certain cases and for certain purposes. In other words, they often are occasional formations. It is also possible, such formations to be transferred to the etic level and become the possession of language. But some of them stay as occasional formations.

It is also noteworthy that on the emic level, new words are formed not only in belles-lettres style, but also in scientific prose.

When we analyze literary work (fiction), it is often difficult to realize which is an inherently connotative word or word-combination and where a word or a word-combination acquires expressive-emotional-evaluative overtone in the context of fiction.

In scientific prose, where the main function is transferring information and the context is less coloured emotionally, connotative elements are distinctly singled out on general neutral background. Prosodic analysis of scientific texts is also very significant. As the timbre II¹⁴¹ of the scientific text is much less coloured and variative than the timbre II of the text of fiction, all deviations of unmarked timbre II are vivid and can objectively distinguish metasemiotically coloured parts and elements. But while reading a literary text, prosody exceeds syntactic level and horizontal stratification of the text becomes complicated; a singled out word or word-combination is as if “dissolved” in the marked timbre II of the narration.

Newly formed words that are fixed in dictionaries are limited to semantic level. Word-combinations functioning on the metasemiotic level or the cases of figurative meanings are not met here. It should be stated that the majority of new-formations met in scientific texts are linguistic units, i.e. they are fixed in dictionaries as really existing words. Though, we managed to find interesting cases of new formations in speech, i.e. on the emic level.

“The examples adduced above were meant as an illustration of the difference between immediate and **definitionally** based knowledge”.

(D. Crystal)

“This flexibility is ultimately undesirable as any final theory would have to be more explicit in specifying the relationships between the components, but **procedurally** it is invaluable”.

(D. Crystal, D. Davy)

¹⁴¹Timbre II – complicated complex of super-segmental means of phonation functioning on the metasemiotic level, i.e. serving for expressing different expressive-emotional-evaluative tints of meaning.

“It is almost impossible to describe babbling in terms of phoneme-representing segments, but it can be done **parametrically**”.

(D. Abercrombie)

As we see, these new formations (definitionally, procedurally, parametrically) are not marked prosodically. This probably can be explained by the fact that their function is very close to the function of grammatical forms.

Now let's analyze the material from the literary work and see how new formations function on the emic level.

“ ‘I couldn't marry Felix, couldn't you?’ I asked **unguardedly**, following in a completely unserious way this train of thought”.

(Lynne Reid Banks “Two is Lonely”)

“In her gray dress, moving her hands **indefatigably** yet quietly, she seemed like the champion of the rights of sleepers”.

(V. Woolf “Mrs. Dalloway”)

“These two men lived in a world where strangers of intelligence shared a common landscape of knowledge, a community of information, with a known set of rulers and attached meaning. What doctor today knows the classics? What amateur can talk **comprehensibly**?”

(John Fowles “The French Lieutenant's Woman”)

Though the underlined words (“unguardedly”, “indefatigably”, “comprehensibly”) are not met on the etic level, they are quite easily formed on the emic one and their understanding does not cause any problem.

Prosody of the analyzed words and word-combinations can be described in terms of syntactic prosody: these new formations are not marked prosodically.

It is noteworthy that on the emic level are met such words, the morphological composition of which seems to impede its formation on the etic level (morphological restriction). For instance, in William Golding's novel “The Spire”, we meet the new formation “interiorly” though, its prosody stays within the syntactic scopes.

“He bowed his head as he passed through, and said as he always did **interiorly**, ‘Lift up your hands!’ ”

(William Golding “The Spire”)

Meanwhile, on the emic level there are quite often formed such cases that should be given special consideration. They essentially are related to special stylistic devices. These new formations cannot be pronounced in a neutral way; they are singled out from the general rhythmic-melodic picture by slow tempo and sometimes combined with other parameters.

In Virginia Woolf's novel “Mrs. Dalloway” we find an interesting example showing the semantics of the initial word.

“**Volubly, troublously**, the late clock sounded, coming in on the
wake of Big Ben,
_____ slowly _____
with its lap full of trifles”.

(V. Woolf “Mrs. Dalloway”)

The collocation “to sound troublously” is easily converted into the collocation “a troublous sound”; in both cases we deal not only one simple stylistic device, but with a more complicated one – metaphorical epithet.

The following example depicts what kind of creativity new formations can conceal in the context of literary work and how rich polyphony they can create.

“After a time Shark was no longer satisfied with her (daughter’s) purity unless he had been assured of it. Each month he pestered his wife. He knew the dates better than she did. ‘Is she all right?’ he asked

wolfishly.
_____ slowly _____

(J. Steinback “The Pastures of Heaven”)

It immediately strikes our attention that the new formation “wolfishly” prosodically is singled out not only by slow tempo, but also by using the lower diapason. In the given case, we have to understand all tints of the meaning of not only the adjective “wolfish”, but also of the noun “wolf” from which the adjective is formed with the help of the productive suffix “-ish”. In Longman New Universal Dictionary, the adjective “wolfish” is defined in the following way: “befitting or suggestive of a wolf (e.g. in savage appearance, fierceness or greed)”. In the dictionary entry of the noun “wolf” we find the following definitions among the other ones: “2. a fiercely rapacious person; 4. a man who pursues women in an aggressive way”. Using the connotation “asked wolfishly”, the author managed to render inner psychological state of the father rapaciously protecting his daughter against someone’s violence in a succinct and expressive form.

It is noteworthy that not only new words are formed on the emic level, but also new meanings of the existing words that are not found on the etic level. The word “copy” from Martin Armstrong’s story “The Poets and the Housewife” serves as a good example to show such a case.

“Once upon a time, on a summer’s day, two poets having shut up shop, went out into the country to collect **copy**, for their stock of this commodity was exhausted.”

(Martin Armstrong “The Poets and the Housewife”)

In the given example the noun “copy” acquires such a meaning that cannot be found in any dictionary – “muse”. This meaning, though invented several years ago, still remains “the property” of the emic level and has not been transferred to the etic level so far.

Conclusion

New formations, would it be formation of new words or new meanings, are limitless and are not subject to any restrictions on the emic level. This fact definitely shows the advantage of the emic level over the etic one.

References:

Bauer L. English Word-Formation. Cambridge: Cambridge University Press, 2002.

Pounder A. Trends in Linguistics. Process and Paradigms in Word-Formation. New York: Mouton de Gruyter, 2000.

Olive J. L. Reflecting on the Tensions between Emic and Etic Perspectives in Life History Research: Lessons Learned. In: Quantitative Social Research.

Volume 15, No. 2, May 2014. <http://www.qualitative-research.net/index.php/fqs/article/view/2072/3656>

Etic and Etic Approaches.

<http://isites.harvard.edu/icb/icb.do?keyword=qualitative&pageid=icb.page340911>

Etic and Etic World Views in Anthropology.

<http://study.com/academy/lesson/etic-and-emic-world-views-in-anthropology.html>