

PROCEEDINGS

6th EURASIAN MULTIDISCIPLINARY FORUM,

EMF 2017

27-28 April, Vienna, Austria

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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(062)

COBISS. MK-ID 103544842

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PROCEEDINGS: 6th Eurasian Multidisciplinary Forum (6, 2017; Tbilisi)
/ 6th Eurasian Multidisciplinary Forum, EMF 2017, 27-28 April, Vienna, Austria

European Scientific Institute, ESI, 2017. (346 p.) : ilustr. ; 21 cm

Kocani, Republic of Macedonia

Email: contact@eujournal.org

Printed in Republic of Macedonia

ISBN 978-608-4642-58-9

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Public Transport Quality and Travel Experience: The Italian Case Study

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Abstract

Quality in public transport is an important driver for customer satisfaction and for the competition (in the market) among public transport operators. There are both standard and non-standard attributes that influence users choices. For example, among the standards one there are the punctuality and regularity of services, the on-board travel time (e.g. how much time and with what comfort/pleasure) and the cleanliness of trains/buses. While, among the non-standard perceived quality attributes probably the most impacting one is the aesthetic and the design values of transport terminals (hedonic quality). Starting from these consideration in this research was investigated the role of the hedonic quality of the terminals (e.g. aesthetic, service offered and comfort) within the overall quality perception of the travel (travel experience). The case study was the extra-urban bus services in Italy. A specific mobility survey was carried out in some Italian bus terminal. The analysis of the survey results shows that the willingness to pay for an high quality terminal is about the 30% of the actual ticket price. Furthermore, a travel experience effect was observed; the average perceived transport quality varies with the trip characteristic. Even if a passenger spend time (e.g. waiting for a bus) in an high quality terminal, the overall perceived quality of the trip is “low” for the users that carry out a “long trip” (e.g. the overall travel time greater than 2 hours or were used more than one transport mode, while the opposite occurs for the “short trips”. This results is the main original findings of this research and if confirmed will allow to conclude that the overall quality perception of an high quality terminal could be reduced (or even eliminated) if the overall travel is on average a "low quality" experience (e.g. elevated waiting times, not regular services, many interchange modes). This circumstance is known as "*travel experience effect*" and could be considered an explicit design variable in transport planning.

Keywords: Transportation planning, sustainable mobility, engineering, environment

Introduction

The quality in public transport is an important attribute that influence the customer satisfaction and could influence also the mobility choices (Cascetta and Cartenì, 2014a). Mobility needs require to be satisfied through public transport services in order to reduce the private car usage especially in urban areas (Bordagaray et al., 2014, Cartenì, 2014 and 2015). Quality is one of the main driver for public transport services and, for this reason, is important to identify which are the attributes perceived as relevant by the passengers (Cascetta and Cartenì, 2014a, Cartenì et al., 2016 and 2017). The quality of public transport can be analyzed from two different points of view: the service provider's and users' point of view (Cascetta and Cartenì, 2014a). The quality for service provider depend on the target service quality (e.g. travel time, waiting time, and cost of ticket) which expects to offer (the quality expected) and the level of services that is actually achieved (real quality). From users' point of view the quality can be divided into: i) perceived quality (Cascetta and Cartenì, 2014a; Wen et al., 2005; dell'Olio et al., 2010) and desired service quality, that is the target of quality which the user would like for receive (Cascetta and Cartenì, 2014a; dell'Olio et al., 2011; Eboli and Mazzulla, 2008; Nkurunziza et al., 2012).

Among the quality attributes, the quality of the transportation terminals (e.g. rail station, bus terminal, airport terminals) is probably one of the most impacting on user perception. Since 1980 an architectural movement (Station Renaissance) promoted by rail operators spreads in Europe, aimed at satisfying customer expectations with respect to travel attributes such as on board comfort, safety in railway stations and the functionality and reliability of public transport services (Hensher and Prioni, 2002; Cascetta et al., 2014). According to this movement, the transport terminal become places where it is possible to carry out different activities (e.g. shopping, go to a restaurant) and had not the only function of waiting for the public transport services (Cascetta et al., 2014).

Several research has shown that the quality of the station influences the perceived quality of the whole trip. Cascetta and Cartenì (2014b) showed that the urban hedonic value of a beautiful and comfortable transport terminal (users' willingness to pay for a high quality terminal) is 40-euro cents per trip (33% of the ticket price). This means that a user willingness to pay is 40 euro cents per an urban trip for using a service characterized by stations with high aesthetic and architectural standards and wait up to 5 minutes longer, or to walk up to 8 extra minutes to reach a beautiful station.

The perceived quality of the whole trip depends on both the terminal quality and on the quality of the services (transport modes) used along the trip. Hernandez et al., (2016) identify the design characteristics of a good urban transport interchange node (terminal) in order to increase the user's perceived quality.

Starting this consideration, aim of this research is twofold: i) investigated the role of the terminal quality (e.g. aesthetic, comfort and service offered) within the overall travel experience; ii) estimate the willingness to pay for an high quality terminal (e.g. high architectural standards and more services for passengers as: bar, restaurant, shops , free WI-FI). The case study was the extra urban Italian bus network. A specific mobility survey was carried out on the major Italian terminal bus to perform these aims.

The paper is divided into three sections; in the first one, some of the best practices regarding terminal quality was presented; in the second, the case study and the mobility survey was described. In the third part the main results of the analysis was reported, while in the last section the main conclusion and research prospective were presented.

High quality transport terminal: some best practices round the world

The trend of design high quality transport terminal, is widespread in the major cities round the world (e.g. the examples in USA, Figure 1). There are illustrious example also in Europe and recently the British newspaper The Telegraph has classified the main ones (Figure 2) proclaiming the Toledo station in Naples (Italy) one of Europe's most beautiful (Figure 3).

From an analysis of international best practices is possible to individuate the main characteristics of an high quality transport: architectural standards, traveler services, environmental sustainability and modal integration. For all the major case studies analyzed, appears that the accurate definition of the terminal architecture together the quality of services offered to the passengers (e.g. free Wi-Fi, restaurant, bar, shops) are the main elements that characterized an high quality public transport node. From a functional point of view, physical (long-term parking, both bus and rail stations) and modal (same ticket for all the modes) integration allows users to reduce the interchange time enlarging the perceived overall quality. Finally, in many case studies analyzed emerge a special attention to the environment through the use in the terminal of recycled or recyclable materials and/or energy saving both for lighting and for the indoor climate.



Figure 1. An example of high-quality terminals round the world (Cascetta and Gravagnuolo, 2016).



Figure 2. Some illustrious example of transport terminal classified by the British newspaper The Telegraph (Cascetta and Gravagnuolo, 2014).

The case study and the mobility survey

To evaluate the influences of the terminal quality in the overall travel experience, was carried out a mobility survey. The case study is composed from the main bus stations in Italy. The criteria used to choose the most representative bus terminals that compose the panel were:

- both terminal in large and small cities,

- terminals located in all the different parts of the country (north, central and southern Italy),
- both beautiful and traditional terminals (with and without special attention to architecture and design of the building);
- terminals with and without interchange among different transport modes (e.g. bus, train, private car).



Figure 3. The Toledo station: classified as “The most impressive underground railway stations in Europe” by the newspaper Telegraph (Cascetta and Gravagnuolo, 2014).

Five bus terminal were individuated:

1. Milan (north);
2. Rome (centre);
3. Naples (south);
4. Avellino (south);
5. Crotone (south).

The main characteristics of the panel are reported in Table 1.

In the following subsections describes the mobility surveys and the main results. The city of Milan, with a population of 1.2 million of inhabitants, has a standard (from an architectural point of view) bus terminal with an interchange node from bus to metro services. The main services offered to the passengers are bar, restaurant, public phones, WC and a comfortable waiting room. The city of Rome (capital city in Italy), with a population of 2.6 million of inhabitants, has a traditional bus terminal with an interchange node from bus to both rail and metro services. The main services offered to the passengers are bar, restaurant, public phones and WC. The city of Naples (city in South of Italy near Pompei, Amalfi e Sorrento), with a population of about 1 millions of inhabitants, has a traditional bus terminal with an interchange node from bus to both rail and metro services. The main services offered to the passengers are bar, restaurant, shops, phones. The small city of Avellino, with a population of 427 thousand inhabitants, has a traditional bus terminal without any interchange node and services. The small city of Crotone, with a population of 171 thousand inhabitants, has an high quality bus terminal with an interchange node from bus to rail services. The main services offered to the passengers are bar, restaurant, shops, phone, WC and waiting room.

Table 1. The main characteristics of the panel

	Cities and Town	Populations of the city (millions)	Architectural standards	Passenger Services	Interchange node
Nord	Milan	1.2	Traditional	bar, restaurant, phone, WC waiting room	yes
Central	Rome	2.6	Traditional	bar, restaurant, WC, phone	yes
Southern	Naples	1.0	Traditional	bar, restaurant, shops, phone	yes
	Avellino	0.4	Traditional	-	no
	Crotone	0.2	High quality	bar, restaurant, shops, phone, WC waiting room	yes

Starting from this panel, in May 2016 it was carried out a mobility survey at bus terminals composing the panel. The method used is a CAWI (Computer-Assisted Web Interviewing) survey, developing a dedicated App. All the previous said, the sample considered consist in 1,100 extra-urban travellers stratified (according to the population of the cities) random selected from the cities in the panel. The survey has revealed the following information:

- socio-economic information's (e.g. gender, age, occupation);
- trip characteristics (e.g. origin and destination, transport modes used, tickets, trip purpose among systematic and non-systematic);
- perceived quality of transport, rating different attributes: i) level of services (e.g. travel time, waiting time); ii) architecture quality of the passenger building; iii) services offered to the passengers (e.g. restaurant, bar, shop);
- declared willingness to pay (in terms of percentage increase in the ticket) for an high quality terminal (e.g. high architectural standards and more services for passengers as: bar, restaurant, shops , WI-FI).

The main results of the analysis and conclusion

The analysis of the results shows that the major part of the users (between 54% and 57%) move for systematic purposes (work and study). About 56% of the users respondent in a bus terminal localized in the main cities (Milan, Rome and Naples) move with an extra-urban bus service occasionally (low frequency trips). By contrast, the trip frequency is high (about 62%) in the case of bus terminal located in the small cities (Crotone and Avellino).

With reference to the quality of the bus services (on- board services), for all terminals analysed, there is, on average, a medium-high perceived quality in terms of travel time, waiting time and regularity of the service (Figure 4).

From the analysis of the preferences expressed about the quality of services offered in the bus terminal, was observed that for the bus stations in Milan, Rome and Avellino the quality is perceived as "low" for the 73% of the respondents, while in Crotone (the most beautiful terminal bus of the panel) is perceived as "high quality" for 70% of the passengers; while in Naples there is a "medium quality" perceived for the 63% of the travellers (Figure 5).

From the aesthetic point of view, the bus terminal of the panel were perceived as "low quality" for 75% of the passengers in Milan, Rome, Naples and Avellino, while is perceived as "high quality" for 80% of the users in Crotone (Figure 6.)

An in deep analysis shows that the perceived quality varies within the characteristic of the whole trip (a travel experience effect was observed). Even if a passenger passes through an high quality terminal, the overall quality of the trip is perceived as “low” for the 46% of the users that carry out a “long trip” (travel time of “low quality” and greater than 2 hours) or used more than one transport mode (if at least one is of “low quality” e.g. subway and bus; bus and train). The opposite occurs for the “short trips”.

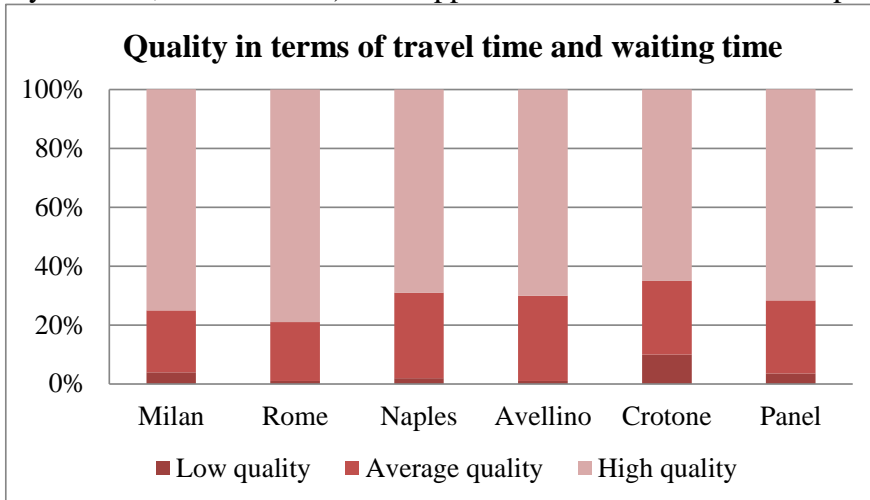


Figure 2. Perceived quality in terms of the level of services

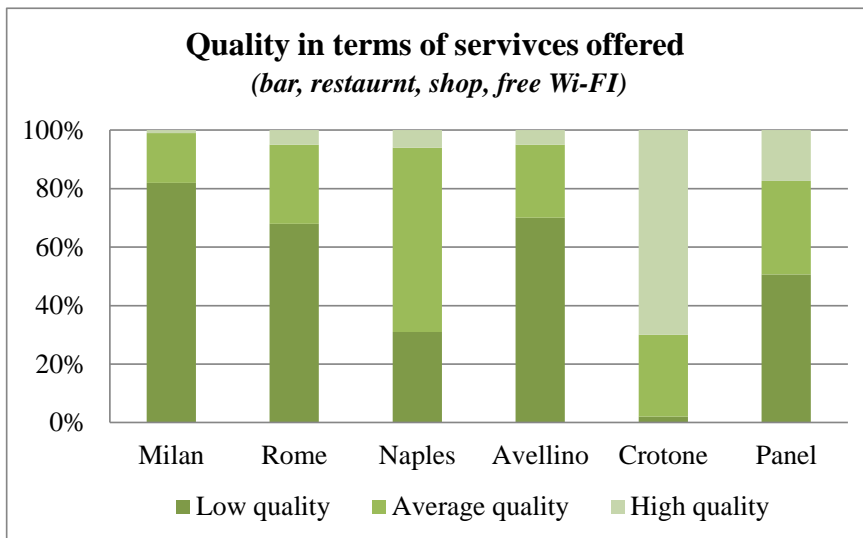


Figure 3. Perceived quality of the services offered in the terminals

Furthermore, the survey results show that about the 75% of the travellers, are available to pay up to 30% more for the ticket price for having an high quality terminal.

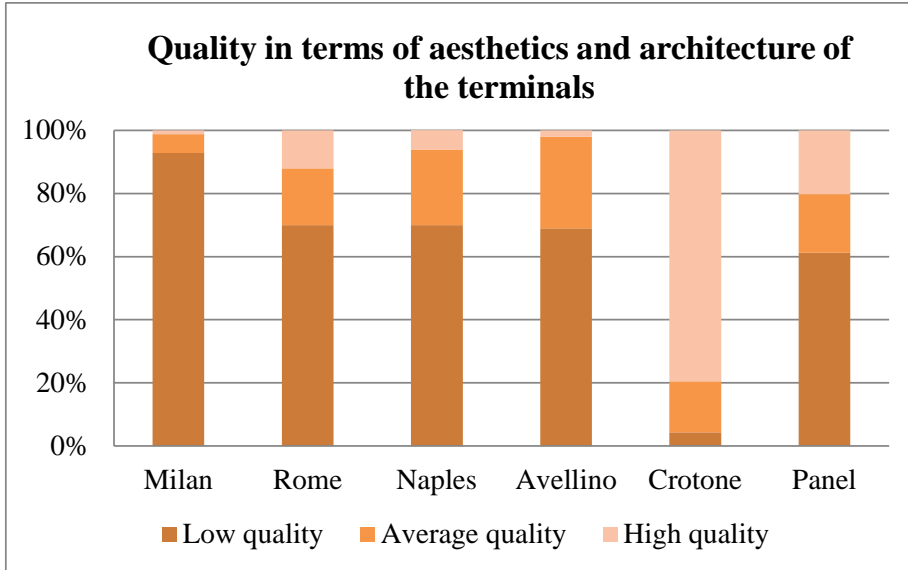


Figure 4. Perceived quality of the aesthetics and architecture of the terminals

The perceived quality of the overall trip with an high quality transport terminal

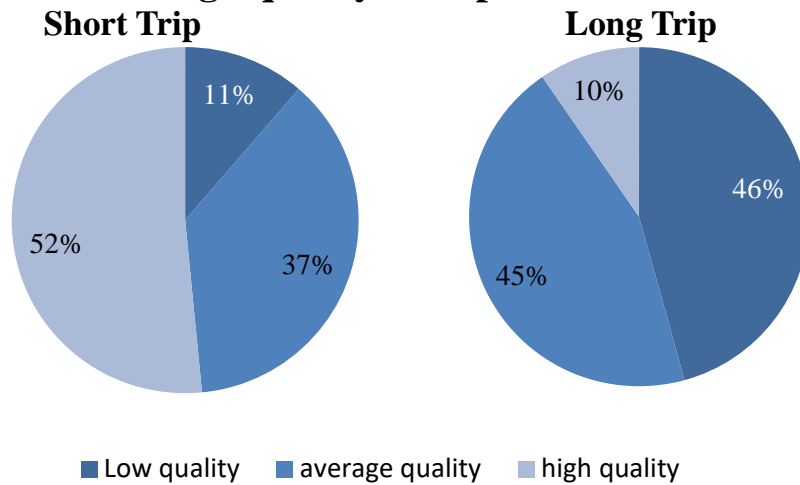


Figure 5. The role of an high quality terminal in the perceived quality of the overall trip with an high quality transport terminal

Willingness to pay for an high quality terminal

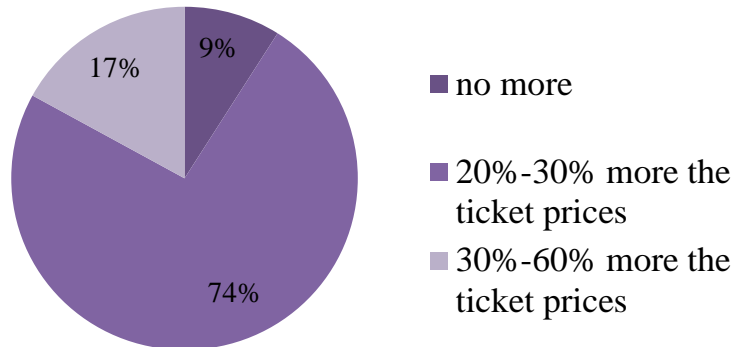


Figure 6. The willingness to pay for an high quality terminal (e.g. high architectural standards and more services for passengers as : bar, restaurant, shops , free WI-FI)

Conclusion

The aim of this research was to investigate the role of the terminal quality (e.g. aesthetic, comfort and service offered) within the overall travel experience. In May 2016 a mobility survey was carried out at this scope at Italian case study.

The analysis of the results shows that the perceived quality varies within the characteristic of the whole trip (a travel experience effect was observed). Even if a passenger passes through an high quality terminal, the overall quality of the trip is perceived as “low” for the 46% of the users that carry out a “long trip” (travel time of “low quality” and greater than 2 hours) or used more than one transport mode (if at least one is of “low quality” e.g. subway and bus; bus and train). The opposite occurs for the “short trips”.

This results in the main original findings of this research and if confirmed allow to conclude that even if in a journey, a passenger passes through an high quality terminal, the overall perception of that transport node could be reduced (or even eliminated) if the overall journey is of "low quality" (e.g. high waiting times, irregular services, many interchange modes).

This circumstance is known as "travel experience effect" and must be an explicit design variable in transport planning (Cascetta et al., 2015)

Starting from these results, one of the research perspectives will be the estimation of a discrete choice model (e.g. Logit Model) able to quantify the willingness to pay for an high quality terminal.

One of the possible application will be the estimation of the delta (with respect to a traditional service) number of users attracted by an high quality public transport service characterized by high quality interchange nodes (as proposed, for example, in Carteni et al. (Carteni et al., 2016).

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Public Sector Accounting: Transparency Issues

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Abstract

Public accounting systems differ among countries so the reform towards harmonization is needed especially for EU Member Countries. The transition from cash-based to accrual-based accounting is necessary in order to provide the wide scope of relevant information to the internal and external users. The objectives of the paper are: to examine the level of conversance with IPSAS (International Public Sector Accounting Standards) among public sector accountants in Croatia, to outline the potential benefits and improvements of accrual principle application, and to determine the implication of increased effectiveness and efficiency of the administrations' actions on greater transparency of financial statements. Empirical research is based on survey addressed to the accountants employed by local government. The findings suggest that accrual principle application in Croatian public sector accounting would lead to the increase of effectiveness and efficiency of the public sector and eventually to the higher level of transparency.

Keywords: Accounting, public sector, EPSAS, IPSAS

Introduction

The public financial crisis in Europe has underlined the need for more rigorous and even more transparent reporting of accounting (and also fiscal) information. The issue of transparency is especially important in the countries that do not apply accrual-based accounting in public sector. Scholars often emphasise many benefits of implementation of accrual-based accounting standards. The main advantages of government accrual accounting given in the literature are (Bergmann, 2012, p. 16): reliable cost and pricing information, stewardship or accountability for assets and liabilities, faster information availability, the provision of forward-looking information, similarity to private sector accounting (which facilitates training and understanding), and also standard-based accrual accounting correlates well with other public sector financial disciplines, such as budgeting or cash

management. Grossi and Soverchia (2011, p. 528) state that accrual accounting is expected to provide more useful information for long-term assessment of public policies' financial sustainability, both for internal use (for cost and price calculation, make-or-buy choices, outsourcing, etc.) and for external use, thus improving government's transparency, accountability and performance evaluation. Proponents of accrual-based accounting also argue that decision-making processes on public resources would be facilitated that can lead to prevention of the debt accumulation increase and improvements in effectiveness and efficiency of the administrations' actions.

On the other side, the literature review (Bergmann, 2012, p. 16) reveals the disadvantages of accrual-based accounting like: significant cost of implementation, increased complexity, the not-for-profit orientation, and low use of balance sheet information made by decision-makers, fear of absence of cash or liquidity information.

The adoption of a full accrual framework in the public sector is differentiated country by country both for budgeting and for reporting phases (Giosi, Brunelli and Caiffa, 2015, p. 297). An increasing demand for the adoption of IPSASs for compatibility and comparability reasons is noticed in the developed countries (Berger, 2012, p. 12). The IPSAS are a set of accrual-based accounting standards for use in public sector entities in preparation of financial statements. The IPSASs could be regarded as a reference model for the reform of governmental accounting in EU (Berger, 2012, p. 12). Being derived from international accounting standards for private sector, IPSAS are not entirely well-suited for public entities so the need for new framework emerged - European Public Sector Accounting System (EPSAS). The EPSAS are being created with the main purpose - to harmonize and unify accounting and budgeting system for all EU Member States allowing comparison of financial indicators and ultimately higher level of transparency.

In the light of potential future reform that will inevitably lead to accrual-based accounting and budgeting, this study explores the views of public sector accountants in Croatia on this matter. The objectives of this paper are threefold:

- 1) To analyse the conversance with IPSAS,
- 2) To explain the expected improvement of the introduction of accrual-based accounting,
- 3) To determine the effect of increased effectiveness and efficiency of the administrations' actions on greater transparency of the financial statements.

The potential benefits of introduction of accrual-based accounting in Croatian public sector could lead to the resolution of transparency issues. Bearing this in mind, the hypothesis is defined as follows:

H₁: Introduction of accrual-based accounting would increase efficiency in public sector that leads to higher transparency of financial statements.

The paper is organized as follows. Next section describes the present regulatory framework of the public sector accounting in Croatia with the focus on potential path of development. Empirical research methodology is elaborated in the third section where the results are discussed before concluding remarks.

Public sector accounting in Croatia – current issues and perspectives

Public sector accounting is often defined as a system which collects, records, classifies and summarises transactions occurring in the public sector entities and provides information to users enabling them to make economic, social and political decisions. Public sector entities are entities that implement public policy through the provision of primarily non-market services and the redistribution of income and wealth, with both activities supported mainly by compulsory levies on other sectors (Jovanović, 2015, p. 792). The public sector entities in Croatia are obliged to apply adjusted (modified) accrual accounting system. According to the current regulation on public sector accounting expenses are defined as decreases in economic benefits during the reporting period, which means that they are recognized at the time of the transaction, regardless of the time of payment (accrual principle). Revenues are defined as an increase in economic benefits during the reporting period in the form of inflows of cash and cash equivalents so the recognition of revenue retained at cash concept. The adjusted accrual accounting principle is marked by the following (Dražić Lutilsky and Dragija, 2012):

- The costs of procuring a fixed asset are not capitalized and they are not systematically apportioned on a time or functional basis as expenses during the period of useful life. Therefore, the annual amounts of depreciation are not calculated and the cost of the asset becomes an expense of reporting period when the asset is purchased. This principle applies also to advances that have been given in the process of procurement as well as investments in progress regardless if the process of procurement is not completed, or that asset is not ready for use.
- Increase in assets during the procurement fixed non-financial assets without the costs (capital received donations) are not recognized as revenue but directly increased the sources of ownership (public capital).
- Spending fixed non-financial assets during the estimated life-cycle is expressed as the expense of the sources of ownership (public capital) using the proportional method of value adjustment.

- Residual value of the fixed non-financial asset that is sold or decommissioned is not reported as an expense that arises from the fact that the total expense was recognized at the time of purchase.
- The changes in value and volume of assets and liabilities are not reflected in the financial result, but they directly reflect on the value of sources of ownership (public capital).

The main features of public sector accounting system in Croatia are (Vašiček and Roje, 2010, p. 42):

- All general government entities (central and local government and their component entities) are obligated by the law to apply governmental accounting and financial reporting model. The fact that all entities within general government are obligated to do so assures complete accounting and reporting on general government activities.
- Unified chart of accounts and consistent appliance of rules for recording cash transactions and economic events are regulated by the law as well. This assures standardized information base for conducting additional data analysis when needed.
- Regarding the information on budget (budget planning and budget execution), accounting and financial reporting, the appliance of organizational, economic, functional, location and program classifications of the budget is obligatory.
- Entities that apply government accounting are obligated to make periodical and annual financial statements.
- There is the obligation for consolidated semi-annual and annual settlement of budget accounts of the Republic of Croatia.

Most of the criticisms to the current accounting system are related to its potential of providing relevant information for decision-making. Dražić Lutilsky and Dragija (2012, p. 46) point out that the goal of the existing system is primarily in satisfying legal terms in the form of external reporting, but not in providing quality information to the internal users for effective management. Accounting systems (of public sector entities) cannot provide basic information about the costs of special programs or international projects. Grubišić, Nušinović and Roje (2009, p. 355) argue that modified accrual accounting makes public asset accounting difficult, because it does not enable proper recognition and valuation of public assets. When comparing Croatian and Slovene public sector accounting, Jovanović (2015, p. 791) states that regardless of the stage of accrual implementation in national accounting legislation, the planning and execution of state budgets (that is, budgetary accounting) is still based on the cash principle.

On the other hand, certain existing procedures/solutions applied in Croatian public sector accounting practise comply with those recommended

in IPSASs, even though IPSASs have not been enacted on a mandatory basis (Roje et al., 2012, p. 27). Roje, Vašiček and Hladika (2012) examined areas where IPSASs have been influential in Croatian public sector accounting practise, and specified certain eligible tendencies and possible courses towards more comprehensive compliance with IPSASs. They concluded that Croatia has implemented modified accrual accounting as a gradual transition from cash to accruals in its government financial reporting, that its budget(s) are publicly available, and that it has consistently applied internationally recognised and comparable analytical framework of financial and statistics reporting. The process of complying with IPSASs requirements in Croatia as being directed towards three goals: the introduction of accruals in governmental financial reporting, the reconciliation and eventual consistency of accounting basis adopted for financial reporting with the accounting basis adopted for the budget, and the reconciliation and presentation of differences between statistics' reports on public expenditures' and the amounts in financial statements (Roje et al., 2012, p. 40). According to Ball (2015), Greek economy would benefit of adoption of IPSAS. Being committed to using IPSAS will also help build trust and confidence in Greek government (Ball, 2015, p. 398). This might be also a potential advantage for Croatia when public sector accounting shifts to accrual principle. Another study (Roje et al, 2010) shows that transition countries (among which is Croatia) have put effort in following the international developments regarding governmental accounting. The authors also acknowledge that further development of the governmental accounting system is needed to allow transition countries to be linked with wider international public sector reforms' trends.

Empirical research – methodology and results

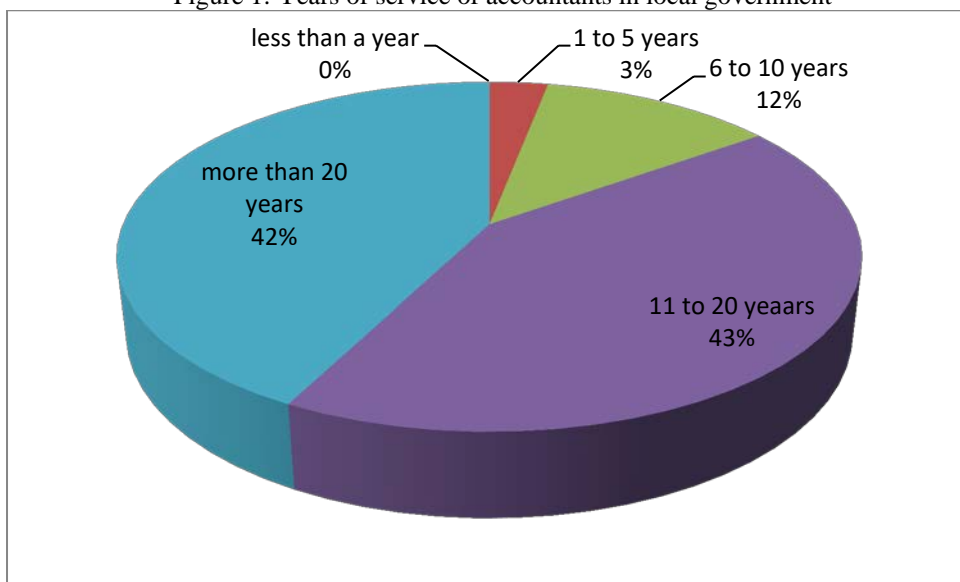
The empirical research methodology is based on a survey. In order to test the hypothesis, a research instrument in form of questionnaire was created. Web-based survey using *Google docs* platform was performed during June and July 2016. The link for the on-line survey was emailed to accountants in 21 counties and 65 towns in Croatia. The questionnaire was filled by 33 accounting professionals employed in local government among which 13 accountants who work in counties and 20 in towns so the response rate is 38.37%.

Data collected from this survey was statistically analysed using SPSS 17.0. Descriptive and univariate statistics (Mann-Whitney U test) was performed.

Demographic analysis shows that most of respondents are women (69.7%). Professional accountants employed in local government are

experienced (most of them are more than 10 years in service) as shown in figure 1.

Figure 1: Years of service of accountants in local government



Source: Authors' calculation

When asked if the introduction of accrual-based accounting would make local government financial statements more transparent, most of the accountants agreed (63.6% of respondents). Their opinion is relevant because accountants in Croatian public sector are familiar with IPSAS so they can foresee the outcomes of its adoption. The level of conversance with IPSAS (self-assessed) is presented in tables 1 and 2. Using a 5-point Likert scale (where: 1 – “not familiar” and 5 – “completely familiar with”) most of the accountants admitted that they are well acquainted with IPSAS (appointing level 3).

Table 1: Mean values of conversance with IPSAS level

N	Valid	33
	Missing	0
Mean		3,52
Median		3,00
Std. Deviation		,939
Variance		,883
Minimum		2
Maximum		5

Source: Authors' calculation

Table 2: Conversance with IPSAS - ranks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	4	12,1	12,1	12,1
	3	14	42,4	42,4	54,5
	4	9	27,3	27,3	81,8
	5	6	18,2	18,2	100,0
Total		33	100,0	100,0	

Source: Authors' calculation

When asked about possible implications of accrual-based accounting introduction on the increase of effectiveness and efficiency in public sector, most of the accountants were optimistic (75.8% of respondents). Also, they have positive expectations of accrual-based accounting adoption on quality and scope of the accounting information (tables 3 and 4). Most of the respondents (60.7%) perceive great increase of accounting information quality and scope due to the shift to accrual principle (levels 4 and 5 on 5-point Likert scale).

Table 3: Mean values of perceived improvement of accounting information quality and scope

N	Valid	33
	Missing	0
Mean		3,61
Median		4,00
Std. Deviation		,933
Variance		,871
Minimum		2
Maximum		5

Source: Authors' calculation

Table 4: Perceived improvement of accounting information quality and scope

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	5	15,2	15,2	15,2
	3	8	24,2	24,2	39,4
	4	15	45,5	45,5	84,8
	5	5	15,2	15,2	100,0
Total		33	100,0	100,0	

Source: Authors' calculation

The potential disadvantages of accrual principle adoption were explored as well so those accountants were asked if it could cause the

overload of data that could interfere with decision-making. Most of the respondents (60.6%) are not convinced that greater scope of data would create difficulties to the users of accounting information. Accountants who work for the local government (60.6% of respondents) believe that the lack of experience regarding IPSAS implementation is a huge obstacle of IPSAS implementation in Croatia.

On the other hand, when asked if disclosure of the complete and comprehensive accounting information on general government would lead to greater responsibility towards users, accountants were very positive (93.9% of respondents). Furthermore, they state (97% of accountants) that increase of responsibility towards users would improve transparency of financial statements.

The empirical research results indicate that the level of accounting information relevancy for economic, social and political decision-making is high. Descriptive statistics (tables 5 and 6) show that at 5-point scale (from 1 – “at least” to 5 – “the most”), the median value is 4 suggesting that accounting information as a result of the reformed system would be very useful in decision-making.

Table 5: Mean values of usefulness of accounting information in economic, social and political decision-making

N	Valid	33
	Missing	0
	Mean	3,79
	Median	4,00
	Std. Deviation	,781
	Variance	,610
	Minimum	2
	Maximum	5

Source: Authors' calculation

Table 6: Usefulness of accounting information in economic, social and political decision-making: ranks

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2	2	6,1	6,1	6,1
3	8	24,2	24,2	30,3
4	18	54,5	54,5	84,8
5	5	15,2	15,2	100,0
Total	33	100,0	100,0	

Source: Authors' calculation

In order to test the hypothesis according to which the introduction of accrual-based accounting would increase efficiency and effectiveness in public sector that leads to higher transparency of financial statements, the Mann-Whitney U test was performed. The test results are presented in tables 7 and 8.

Table 7: Mann-Whitney test of hypothesis

Implications of accrual-based accounting on the increase of effectiveness and efficiency in public sector		N	Mean Rank	Sum of Ranks
Transparency of financial statements due to accrual principle	0 - No	8	10,63	85,00
	1 - Yes	25	19,04	476,00
	Total	33		

Source: Authors' calculation

Table 8: Test Statistics^b

	Transparency of financial statements due to accrual principle
Mann-Whitney U	49,000
Wilcoxon W	85,000
Z	-2,570
Asymp. Sig. (2-tailed)	,010

b. Grouping Variable: Introduction of accrual-based accounting leading to the increase of effectiveness and efficiency in public sector

The statistically significant results (p-value is 1%) support the hypothesis regarding the positive effect of accrual principle application in Croatian public sector accounting that leads to the increase of effectiveness and efficiency of administrations' actions and ultimately to higher level of transparency. These findings are in line with claims of EPSAS proponents and some mentioned studies (Roje et al, 2010; Grossi and Soverchia, 2011).

Conclusion

Harmonisation of public accounting system in EU is inevitable and the introduction of accrual-based accounting in every EU Member State will be the first step on this path. Accrual principle should be applied due to several benefits it brings like wider scope of useful information for long-term assessment of public policies' financial sustainability, improvements in effectiveness and efficiency of the administrations' actions with, consequently, many valuable implications. The set of accounting standards for public sector already exists (known as IPSAS) although many EU

countries still do not apply it. These standards rely on IAS/IFRS (International Accounting standards and International Financial Reporting Standards) that are created for business sector so more adjusted (to the operations of governmental entities) framework is announced in form of EPSAS. EPSAS can be considered as improved version of IPSAS, more in line with public sector activities enabling accrual-based budgeting.

The empirical research is focused on the perspectives of accrual principle adoption in Croatian public sector. Accountants who work for local government (in towns and counties) were included in the survey. The results show that most of them are familiar with IPSAS. The positive effect of accrual-based accounting introduction on the increase of effectiveness and efficiency in public sector is expected. Furthermore, the accrual principle application should reflect on higher quality and wider scope of the accounting information. The anticipated increase of responsibility towards users of accounting information would improve transparency of financial statements. All of this enables accounting information to be relevant for economic, social and political decision-making of internal and external users.

The main finding of this paper is the positive effect of the accrual principle application in Croatian public sector accounting that leads to the increase of effectiveness and efficiency of administrations' actions and eventually to higher level of transparency. The shift to the accrual-based accounting in the public sector would enable resolving the transparency issues in the public sector.

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Insight Into Alignment Between Compensation Strategy and Business Strategy in Selected Croatian Companies

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Abstract

This paper deals with the relationship between compensation strategy and business strategy in Croatian companies. It is the first output of a large investigation into compensation management practice and possibilities for its improvement in Croatia. The findings of this paper result from the Delphi method conducted on experts from 13 selected companies. The research results suggested that there is no alignment between compensation strategy and business strategy in Croatian companies. The reasons for this are: lack of clearly defined functional strategy and lack of management engagement in aligning these strategies; unclear company objectives and strategies, as well as frequent changes in business strategy; collective labour agreements and lack of the autonomy of the HR departments. The experts in Croatian companies consider that compensation strategy can impact on firm's competitiveness through improved employee loyalty and satisfaction; motivation and performance; attracting high quality employees and improved employee image. Research results also identified the obstacles for implementing contemporary compensation management mechanisms in Croatian companies. The general conclusion of this paper is that in Croatian companies there is a much room for improvement in the domain of alignment between compensation strategy and business strategy and for the introduction of contemporary compensation management practices.

Keywords: Compensation strategy, business strategy, company

Acknowledgment

This paper is based on the research performed within the project "Closing the gap in compensation strategy and practice between Croatia and EU - CompCroEU" (IP-09-2014-5600) supported by the Croatian Science Foundation.

Introduction

Compensation strategy is a document, which defines how employees are paid for their work. Compensation strategy sets the objectives for the compensation programs and describes the general approach for procedures and processes (Davis and Edge, 2004). It also defines clear priorities for the development or redesign of the compensation components that are included in compensation programs. It states and explains what compensation components should be used to build a competitive advantage in the labour market. The compensation strategy helps the organization to control its costs because personnel expenses are a significant part of organizational costs and they are a great worry for many organizations. However, this worry is unfounded because compensation strategy includes many non-financial dimensions that could improve employees' motivation, innovations, performance and loyalty and keep cost at a satisfactory level. Henderson (2003, pp. 23) identifies those non-financial dimensions of compensation strategy that are: enhance dignity and satisfaction from work performed, enhance physiological health, intellectual growth and emotional maturity, promote constructive social relationship with co-workers, design jobs that require adequate attention and effort, allocate sufficient resource to perform work assignments, grant sufficient control over the job to meet personal demands, offer supportive leadership and management. Those dimensions, besides financial and material compensations components, should be an important part of compensation strategy.

Today's market competition is so high that it is very important, but also very difficult to attract and keep the highly competent employees. Based on the compensation strategy, the company differentiates itself on the labour market and influences on the level of its attractiveness for the best employees. Those employees want to be engaged by an attractive organization; they don't want to work for the average company proposing the same conditions as any other organization in the market. Because of this, organizations should provide the right level of compensations and right components of compensations programs to those employees.

Compensation strategy is an essential factor of an effective and competitive organization. The inadequately defined compensation strategy, which does not support organizational goals, and that is not aligned with the business strategy, can jeopardise the organizational success by decreasing performance and not utilizing the full potential of the employees. So, the alignment between compensation strategy and business strategy means that the organization rewards employees' effort and performance which are significant for achieving organizational goals and organizational success.

The compensation strategy should support human capital requirements and improve their effectiveness. At the same time, the

compensation strategy should motivate employees and should support the achievement of organizational objectives. Namely, employees' extraordinary performance should be rewarded because those performances will lead to the achievement of organizational goals. If this does not happen the organization will fail in the implementation of its business strategy.

The oldest insights into the relationship between compensation strategy and business strategy have their origin in executive compensation analysis (McGuire et al., 1962; Salter, 1973; Gomez et al., 1987). As a continuation to this, many authors have dealt with the link between compensation strategy and business strategy. Devanna et al. (1981) stated that the compensation strategy should be a part of human resource strategy and human resource strategy should be an integral part of organizational strategy. Ellig (1981) stated that an alignment between compensation strategy and business strategy should exist and he concluded that the compensation strategy should be defined on the basis of the business strategy. Schuler and MacMillan (1984) pointed out that when properly designed, the reward system of an organization can be a key contributor to the accomplishment of its strategic objectives. Long ago, in 80ties, Hay Management Consultants (1986) stated that connecting compensation systems to organizational strategies will be the major challenge in compensation management in 21st century. Lawler (1990, pp.15) stated that the starting point for any compensation system design process needs to be the strategic agenda of the organisation. Balkin and Gomez-Mejia (1990) find out that corporate strategy was a significant predictor of pay package design, pay level relative to the market, and pay administration policies. Additionally, they discovered that business unit strategy was a significant predictor of pay package design and pay level relative to the market. The effectiveness of the compensation system is partly a function of the fit between pay strategies and organizational strategies. Both researchers and practitioners suggest that a firm's business strategy should be a key determinant of the firm's compensation system. Consequently, firms pursuing different business strategies develop different compensation systems (Yanadori and Marler, 2003). Davis and Edge (2004) stated that compensation strategy and business strategy must be synch and most successful companies have particularly clear examples of both. Additionally, they stated that compensation strategy and business strategy are interesting, but the magic occurs when the two interrelate and support each other to effectively drive the business (Davis and Edge, 2004, pp. 18). Milkovich and Newman (2005) also confirmed the conclusion of other authors about the necessity of the alignment between compensation strategy and business strategy. Yanadori and Marler (2006) found out that a firm's strategic intention to pursue innovation has a significant influence on the relative pay

level, compensation time horizon, and stock option vesting period lengths of this strategic employee group.

Adequate compensation strategy influences on employees' behaviour that is instrument of effective realization of organizational strategy and the achievement of organizational goals. So, the alignment between compensation strategy and organizational strategy leads to increased organizational effectiveness, growth and development (Montemayor, 1996; Gerhart, 2000; Gerhart and Rynes, 2003; Milkovich and Newman, 2005).

This paper deals with exploring the alignment between compensation strategy and business strategy in selected Croatian companies. So, the research questions of this paper are:

1. *What is the relationship between compensation strategy and business strategy?*
2. *What is the relationship between compensation strategy and competitiveness?*
3. *What are the perspectives of compensation strategies in Croatian companies?*

This paper is the first output of large investigation into compensation management practice and possibilities for its improvement in Croatia. The findings of this paper result from the Delphi method conducted on experts from 13 selected companies. Those companies are large companies, profitable, with well-established HR sector and compensation management practice.

The paper is organized in the following way. After the introduction, there section 2 explores the important issues regarding the alignment between compensation strategy and business strategy. Section 3 is related to research methodology, section 4 represents research results, and section 5 is the conclusion. At the end of the paper, there is a list of references.

Alignment between compensation strategy and business strategy

Business strategy is a plan of action that guides the achievement of each company's ultimate goal: maximizing shareholder value. Compensation strategy guides the design of compensation programs to effectively focus behaviours and decision making to drive performance and execute the company's business strategy. Unless compensation strategy and business strategy are aligned, operating decisions will not be optimized, and shareholder value creation will be impaired.

The common symptoms experienced by companies suffering from misalignment between their compensation and business strategies are (Davis and Edge, 2004, pp. 33): executives are unaware of the company's compensation strategy; company has difficulty attracting and/or retaining high calibre talent; incentive awards generate little, if any; "bang for the

buck”- executive motivation is of concern; appropriate level of performance is not being achieved for the amount of pay being delivered; employees lack line-of-sight between the compensation program(s) and the strategic direction of the company; compensation program(s) have not been updated to reflect changes in internal business strategy or external competitive environment; compensation programs do not reinforce the company’s cultural values.

If any of these symptoms occur, especially if they often occur, it can be stated that there is a gap between the compensation strategy and business strategy. In the case of these symptoms company should perform a detailed analysis regarding the connection between compensation strategy and business strategy. This analysis should be based on the following issues (Davis and Edge, 2004, pp. 33-36): business strategy and the goals that want to be achieved; compensation strategy and its objectives; the message that company sends through its compensation programs; the understanding of business strategy by the employees.

Identifying and understanding the gap between compensation strategy and business strategy is the first step in establishing the necessary connection between these two strategies. First, it is necessary to identify internal and external factors that affect the business strategy and compensation strategy. Then, it is necessary to define the aims of business strategy; the aims of compensation strategy, and to define compensation policy and compensation programs. Furthermore, it is necessary to analyse the messages that company sends through its compensation programs and determine whether they are consistent with the business strategy. For example, if a company wants to improve the productivity of their production workers, in their compensation package will not include long-term bonuses but will, for example, introduce a program of gainsharing (Scanlon plan, Rucker plan, Improshare plan, etc.). Additionally, employees should understand the compensation strategy. However, many managers have a problem with meaningful, coherent and clear communication of the business strategy to its employees. This then makes their understanding of compensation strategies difficult and limiting.

The contingency theory is a popular theory that tells managers to tailor pay systems to align with the organization’s business strategy approaches (Milkovich and Newman, 2005). Basically, the contingency theory explains that there are specific situational factors that can affect the direct relationship between two variables. One variable is an independent variable and it is the cause of the change in the dependent variable, while dependent variable is a response affected by an independent variable. So, in the context of alignment between compensation strategy and organizational strategy, it could be stated that differences in a firm’s strategy

should be supported by corresponding differences in its human resource strategy, including compensation. The underlying premise is that the greater the alignment, or fit, between the organization and the compensation system, the more effective the organization. If the basic premise of a strategic perspective is to align the compensation system to the business strategy, then different business strategies will translate into different compensation approaches. The innovation strategy stresses new products and short response time to market trends. A supporting compensation approach places less emphasis on evaluation skills and jobs and more emphasis on incentives designed to encourage innovations. The cost cutter's efficiency-focused strategy stress doing more with less by minimizing costs, encouraging productivity increases, and specifying in greater detail exactly how jobs should be performed. And finally, customer-focused business strategy delighting customers and employee based pay on how well they do this. So, it is very clear that different business strategies require different compensation approaches (Milkovich and Newman, 2005, pp 33-34). By following those premises, alignment between compensation strategy and business strategy will be achieved.

Methodology and procedure

This paper presents the results of a large-scale project the intention of which is in-depth exploration of compensation management practices in Croatia and possibilities for its improvement. The research was performed in two rounds: the first round based on qualitative research followed by quantitative research. The study presented in this paper is qualitative-based and it was carried out in three phases. The first phase was based on subject-matter experts' round-table discussion about the status and problems of compensation management in Croatia. Participants in the round-table were expert practitioners working in the field of compensation management or general human resources management. The purpose of the discussion was not only to get a general overview of the compensation management practice in Croatia, but also to identify and discuss potential improvements that could be made to compensation management practices used in Croatia in order to converge practices used with "best practices" used, especially by companies in other EU countries. Findings from the experts' panel were implemented as grounds for the second and third phase of study - two rounds of qualitative Delphi research. Practitioners identified a number of issues that needed improvement so the Delphi study was used to reach general consensus about these open questions. The drive for undertaking more qualitative research was the necessity to understand the practice and deep level of knowledge of compensation management from insiders' (practitioners') point of view.

Results of the Delphi research will be used as inputs for a quantitative research that follows.

In this paper, we focus on the Delphi research performed in order to get insight into compensation management challenges among Croatian companies. The Delphi technique was originally developed at the Rand Corporation in the 1950s, and was named after the ancient Greek temple of Delphi where, according to legend, the oracle could be found (Woudenberg, 1991). Its intention remained to serve almost like an oracle: knowledgeable experts provide their opinions on topics from their area of expertise to a central coordinator. At the core of the Delphi technique is sending a structured or unstructured questionnaire to expert panel respondents. The responses are then collated and the original or a revised questionnaire is re-circulated, accompanied by an anonymized summary of responses (Mullen, 2003). This process continues until the coordinator sees that a consensus has been formed (Grisham, 2009). Since its initial use for technological forecasting in the 1950s, Delphi has been applied for many other applications in social development and phenomenon, including health care, hospitality research, and research associated with human resource issues etc. (e.g. see Mullen, 2003; McGuire and Cseh, 2006; Paraskevas and Saunders, 2012).

The main characteristics of Delphi research are anonymity of participants, iteration in several rounds and feedback to participants after each round (Sackman, 1975; Woudenberg, 1991). Although, one of the pillars of this technique is that the participating experts do not know who the other experts included in the study are, crucial question here is the size of the panel. Pioneering Delphi studies used very small samples (Mullen, 2003), although some report samples of more than thousand participants.

The number of research iterations can vary. Its primary purpose is to allow panellists to confirm or to modify their previous responses, until a consensus has been reached. Delphi studies usually include three rounds of questionnaires (Powell, 2003) but, the final decision about the number of rounds can be largely determined based on pragmatic reasons. The first round is largely based on unstructured questionnaires and open questions followed by an analysis to secure results that will serve as the basis for subsequent rounds (Powell, 2003, Paraskevas and Saunders, 2012). Second and later rounds are usually more specific, and include rating or ranking techniques. As Paraskevas and Saunders, (2012) argued, one central issue in the use of Delphi is the percentage of agreement a researcher should accept as synonymous with expert consensus. Practice shows that it can vary between predetermined explicit percentages cut-off points (e.g. 50-80% agreement) to arbitrary cut off points (Paraskevas and Saunders, 2012).

On the other hand, one of the major critiques of Delphi is the lack of psychometric validity (see Sackman, 1975). In fact, Sackman (1975, pp. 74),

as one of the critics, argued that “the massive liabilities of Delphi, in principle and in practice, outweigh its highly doubtful assets”. Still, the Delphi approach provides a scientific methodology that is well suited to issues that require the insights by subject matter experts to complex and multifaceted topics (Grisham, 2009) and to increase accuracy of forecasts (Woudenberg, 1991). Furthermore, Delphi assures expert opinion poll in an area where none existed previously (Sackman, 1975).

The purpose of our study was to determine major open issues with compensation management in Croatian companies according to practitioners’ views. In order to fulfil this purpose, a Delphi methodology was adopted. This paper presents experts’ views on several issues related to compensation strategies. The sample only encompasses experts in Croatia.

Figure 1: Two rounds of Delphi research

ROUND 1		ROUND 2	
1.	What is the relationship between compensation strategy and business strategy?	1.	Why is compensation strategy unrelated to business strategy?
2.	What is the relationship between compensation strategy and competitiveness?	2.	A) Rating of different features that enable compensation strategy to impact competitiveness?
3.	What are the perspectives of compensation strategies in Croatian companies?		B) Rating of relationship between compensation system and human resource systems?

The participating experts’ group was based on a convenience sample. A total of 13 participants participated in Round 1 of the Delphi research. The attrition rate (dropout rate between the two rounds) was 15% (2 participants). All participants were sent an e-mail invitation to participate in the study which also contained an explanation of the Delphi process. The e-mail also contained the Delphi instrument where respondents were asked to respond to several research questions. A two-week time frame was assigned to each round of the research, with a reminder sent after the first week of each round.

The second stage of the research can be described as the narrowing phase, since respondents were asked to provide reasoning for broader issues identified in phase one. Some additional items regarding the future expectations of experts’ panel occurred in phase one of the research. Rating questions were analysed according to descriptive statistics (mean and SD).

Results and Findings

The research questions of the Delphi study focused on experts' opinion about different issues related to compensation strategies.

R1Q1: What is the relationship between compensation strategy and business strategy?

Table 1: The alignment between compensation strategy and business strategy

The relationship between compensation strategy and business strategy	Count	%
Fully aligned	1	7.7%
Mostly aligned	3	23.1%
Nor aligned or not aligned	4	30.8%
Mostly not aligned	5	38.5%
Not aligned at all	0	0

According to the 13 respondents who completed the first round of the Delphi study, compensation strategy shows a low alignment to business strategy. Although, it is widely accepted that compensation strategy should be based on human resources (HR) strategy, and HR strategy should follow business strategy, in Croatian companies this is not necessarily the case. It must be emphasized that this is experts' opinion, and in fact these experts are responsible for developing and executing compensation strategies. Since there are numerous contributions that explain the benefits of aligning compensation strategy to business strategy (e.g. Armstrong and Stephens, 2005), the lack of such relationship could result in inefficient compensation management and lack of company competitiveness.

R2Q1: Why is compensation strategy unrelated to business strategy?

Since the first round of the Delphi research revealed that compensation strategy was not highly related to business strategy, as a part of the second round of the Delphi research we tried to determine reasons for such a situation. Such a situation might result from lack of clearly defined functional strategy and lack of management engagement in aligning these strategies. Besides these, experts considered that the lack of alignment is the result of unclear company objectives and strategies, as well as frequent changes in business strategy that seek adaptations from HR and compensation strategies. Experts also identified collective labour agreements as a potential cause of such mismatching between strategies, namely because high employee coverage with collective agreements and the fact that it is very difficult to amend such agreements in Croatia. A respondent identified that lack of alignment could be attributed to the role assigned to human resources department, where this department is not given adequate autonomy to perform tasks it should do.

Table 2: Causes for compensation strategy - business strategy mismatch

Reasons for reward strategy unrelatedness to business strategy	Mean	Stand. dev.
Lack of clearly defined functional strategy (including HR strategy)	3.91	0.70
Lack of management engagement in aligning these areas (strategies)	3.91	0.70
Corporate culture that a priori protects workers	3.00	0.89

Note: 1- strongly disagree, 5-strongly agree

R1Q2: What is the relationship between compensation strategy and competitiveness?

Theory considers that reward strategy has the potential to act as a source of competitiveness. The research examined the extent to which compensation strategies can support competitiveness. Experts' panel agreed that compensation strategy can impact on firm competitiveness (53.8% of experts agreed and additional 15.4% strongly agreed). Practitioners attributed such a relationship to several reasons, such as for example, the instrumental role of compensation systems in shaping employee behaviour to act towards fulfilling company objectives, the role of reward strategies in talent management and employer branding, attracting and enabling retaining employees and improving their motivation, performance, engagement, satisfaction and/or loyalty.

R2Q2: A) Features that enable compensation strategy to impact competitiveness?

Although the impact of compensation strategy on firm competitiveness is relatively well known, due to the problems associated with compensation strategies in Croatia (lack of congruence with business strategies), based on insights provided in research round 1, practitioners were asked to rate different roles of compensation strategies in improving competitiveness. The most important impact compensation strategy has on firm competitiveness is assured through improved employee loyalty and satisfaction, followed by its impact on employee motivation and performance. Additional reasons might include attracting high quality employees and improved employee image.

Table 3: Compensation strategy and competitiveness

Compensation strategy impact to competitiveness	Mean	Stand. dev.
Improves motivation and employee performance	4.27	0.65
Improves attracting high quality employees	4.09	0.83
Improves employee loyalty and satisfaction	4.36	0.50
Improves employee image (employer branding)	4.09	0.54

R2Q2: B) Relationship between compensation system and other human resources systems

An important aspect of successful human resources management is the alignment among different human resources systems. Therefore, it was important to identify the level of alignment between compensation systems and other human resources systems and activities such as performance appraisal and management, job design, career management and employee education. Results indicated that practitioners did not rate these relationships as strong at all. Such a low alignment might have implications for improving general competitiveness.

R1Q3: What are the perspectives of compensation strategies in Croatian companies?

Examining the future of compensation management in Croatian companies was the final aspect of Delphi round 1 research. Such views of compensation experts could represent major contribution to the field and indicate the future developments of compensation management among Croatian companies. Experts' views were very heterogeneous and it was impossible to draw clear conclusions. A possible reason for this finding is the difference among currently employed practices (e.g. private-foreign-state owned companies, small-large companies, unionized-non unionized companies etc.).

However, experts identified some additional obstacles for implementing contemporary compensation management mechanisms to Croatian companies, such as: lack of trust between employees and employers, uneducated management that is unable to take the initiative to improve the system, limited budgets, rigidity of companies that are not prepared to change, numerous stakeholders in the system with conflicting objectives (e.g. employees, unions, work councils, management, employers), lack of compensation system transparency. Interestingly, experts also emphasized that transferring any of the popular practices in compensation management to the Croatian context cannot be performed without adapting these practices to the specifics of the national context which further complicates the improvement/development of compensation management practices in Croatia.

Conclusion

Compensation strategy is a document, which defines clear priorities for the development or redesign of the compensation components that are included in employees' compensation programs. It also states and explains what compensation components should be used to build the competitive advantage in the labour market. The alignment between compensation strategy and business strategy means that the organization rewards

employees' effort and performance that are significant for attaining organizational goals and organizational success. An inadequately defined compensation strategy, which does not support organizational goals, and that is not aligned with the business strategy, can jeopardise organizational success by decreasing performance and underutilizing the full potential of employees.

This paper deals with the relationship between compensation strategy and business strategy in Croatian companies. It is the first output of wide investigation into compensation management practice and possibilities for its improvement in Croatia. The findings of this paper result from the Delphi method conducted on experts from 13 selected companies.

Regarding the research questions, the findings of this study could be summarised in the following way. In Croatian companies, there is no alignment between compensation strategy and business strategy. The reasons for this are lack of clearly defined functional strategy and lack of management engagement in aligning these strategies; unclear company objectives and strategies, as well as frequent changes in business strategy; collective labour agreements as a potential cause of such mismatching between strategies and the role assigned to human resources department, where this department is not given adequate autonomy to perform tasks it should do.

Regarding the relationship between compensation strategy and competitiveness, the findings of this research showed that compensation strategy can impact a firm competitiveness. This impact could be manifested through improved employee loyalty and satisfaction, motivation and performance, attracting high quality employees and improved employee image.

And finally, this research identifies some obstacles for implementing contemporary compensation management mechanisms on Croatian companies. Those obstacles are lack of trust between employees and employers, uneducated management, limited budgets, organizational rigidity, numerous stakeholders in the system with conflicting interests and lack of compensation system transparency.

So, it could be concluded that in Croatian companies there is much room for improvement in domain of alignment between compensation strategy and business strategy and for the introduction of contemporary compensation management practices.

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International Economic Integration and Human Development: Informing the Debate in Favour or Against Formal Integration and Migration

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Abstract

Recently, some leaders in different countries have promoted positions towards immigration and formal international economic integration that contest policy recommendations resting on predominant microeconomic and international economics theories. The cases of Brexit, the new presidency in the United States of America, and election processes in countries such as Germany and France have put forward topics showing distrust or, at least, great disappointment in free markets and open economies. Inequality in income distribution and social exclusion in developing and developed countries have triggered a protectionist discourse of some political or independent leaders seeking to gain political power. All this might represent a significant challenge for higher education institutions offering courses and doing research based on the principles of mainstream economics.

Considering the previous context, using panel data for the period from 1985 to 2014, this paper analyses the impact of the degree of formal integration and migration on human development in 26 countries located in three continents and that are part of international integration instruments such as the World Trade Organisation, the North American Free Trade Agreement (NAFTA) and the European Union. The analysis sheds light on what makes a difference in terms of human development and to what extent, contributing to inform the debate on the impact of countries' openness to international flows of goods, services and labour.

Keywords: Economics, migration, globalisation, protectionism, higher education, human development

Introduction

Microeconomics and international economics courses offered at the main universities around the globe are based on the fundamental concepts and theories of mainstream economics.¹

For example, microeconomic courses go through the prevailing ideas behind markets' functioning such as the basic building blocks of markets, demand and supply, explaining how demand and supply interact to determine the quantity of goods or services traded and the price paid for them. They also study markets considering the idea of perfect competition as a benchmark to analyse efficiency and economic agents' gains in other market conditions. This includes the exploration of real markets and how or to what extent they differ from perfect competition.

In the case of international economics or international trade courses, their foundation is the mainstream theories around the functioning of markets learnt in microeconomics courses, macroeconomics postulates, and the classical fundamental concept of comparative advantage which consider openness to trade as key for reaching economic efficiency and maximum gains.

Recent political vicissitudes have put in perspective a strong view that questions the benefits of aspiring to perfect competition through free international markets of goods and services and, even the labour market openness as in the case of the European Union or the migration, legal or illegal, of working age population from different countries to the United States of America (USA).

However, the debate in favour or against protectionism dates back at least from the XVI century according to Krugman and Obstfeld (1999). The mission of international economics as a branch of economics, as stated by the cited authors, has been to analyse the effects of protectionist policies,

¹ Contents or recommended texts of courses offered at Massachusetts Institute of Technology (<https://ocw.mit.edu/courses/economics/14-01sc-principles-of-microeconomics-fall-2011/Syllabus/> and <https://ocw.mit.edu/courses/economics/14-581-international-economics-i-spring-2013/index.htm>), Harvard (<http://www.summer.harvard.edu/courses/principles-economics/30057> and <http://www.hbs.edu/faculty/Pages/item.aspx?num=132>), the London School of Economics and Political Science (http://www.lse.ac.uk/resources/calendar/courseGuides/EC/2016_EC315.htm, <http://www.lse.ac.uk/study/summerSchools/summerSchool/courses/economics/EC351.aspx> and http://www.lse.ac.uk/resources/calendar/courseGuides/EC/2016_EC411.htm), Toronto University (http://calendar.artsci.utoronto.ca/crs_eco.htm#courses), and Princeton University (<https://www.princeton.edu/~grossman/Eco551%20Fall%202016%20ReadList.pdf>) were reviewed (Web pages accessed on March 1st, 2017).

criticise them and objectively show the advantages of free international trade.

Considering the support of the general public in different countries to politicians with views against globalisation and international flows of labour, capital, goods and services, it seems that international economics is losing the debate. As a result, this paper presents a simple but rigorous analysis without the characteristic complexities of highly structured models based on strong assumptions to explore quantitatively the impact of international economic integration and migration on human development.

Formal economic integration, migration and human development

Since the last century, formal international economic integration has taken many specific forms from the General Agreement on Tariffs and Trade (GATT) to the World Trade Organisation (WTO), and from it to bilateral or multilateral agreements or other kind of associations. However, one of the main characteristics is that many countries have been participating and competing in international markets by regional blocks. That is the case, for example, of the North American Free Trade Agreement (NAFTA), the European Union (EU) and Mercosur in South America. The case of China is particularly interesting because its participation in international markets has experimented an overwhelming growth through the years even before it became part of the WTO in 2001.

Without doubt greater participation has had an important positive impact on Chinese economic performance and its citizens' material well-being. For a country like Mexico, participating in NAFTA since 1994 with two developed countries, the economic benefits have been evident although openness to trade caused economic structural changes as predicted by international economics, implying that economic agents in less competitive economic activities lost with the agreement. That would be the same in any other country and any particular regional economic integration instrument. In David Ricardo's conceptualisation, the production of a good without comparative advantage would tend to suffer from integration in favour of more efficiently produced imports of that good.

In other words and taking into account other elements of mainstream international economics, international trade can cause strong distributional effects within countries by means of distributional effects between economic sectors or industries as well as between the owners of different factors of production, and even within the same factor of production. An example of the latter is labour depending on the characteristics of the skills needed in the resulting competitive economic activities in comparison with the losing ones.

Overall, international economics experts argue that the economic benefits or gains of international trade are greater than the losses and,

therefore, compensation to losers could happen by means of public policy (Krugman, Obstfeld and Melitz, 2012). In this sense, in terms of the analysis presented in this paper, it is expected that the higher the degree of formal international economic integration in a country, the higher the level of human development. The benefits of such integration generate a positive effect on people's quality of life by means of the market forces and, even more, if public policies manage to tackle the negative income distribution effects for some economic agents.

The relationship between migration and human development can be understood by looking at the main economic reason behind labour mobility between regions within a country and between countries. In general, people look for better present and future income opportunities. If wages or salaries are higher in other places, there is a strong incentive to move residence in a context of free movement of people between boundaries. Even in a context of strong restrictions of many kinds, if the economic incentive is strong enough, people are willing to migrate as the illegal migration of Latin American people to the United States has shown for decades.

Migrants put pressure on the labour markets of the recipient economy as greater supply, other things being equal, would cause salaries to decrease. If this continues happening, microeconomic theory predicts that at some point salaries would converge and migration would reach an end. However, if the recipient economies continue growing and offering opportunities to skilled and unskilled labour, migration would continue. Therefore, migrants would contribute to the economic performance of the recipient economies by fulfilling an excess demand or shortage of labour that cannot be profitably satisfied - considering the market of the good where labour is needed- by the interaction of the local supply and demand (due to a labour supply elasticity close to zero). Considering this simplistic explanation of the phenomenon, a positive net migration would have a positive impact on the economy of the receiving country allowing for better conditions for human development.

Other considerations as migration for other causes such as humanitarian, social or political are left out of this analysis but, if considered, could have different impacts than the one expected here.

Studies within the realm of economic geography could be more powerful to understand the economic impact of labour mobility and its interaction with other elements than considering only the fundamentals of international economics and microeconomic theory.

Model, data, and analysis results

Model and data

Using panel data covering the period from 1985 to 2014, this paper analyses the impact of the degree of formal integration and net migration on human development in 26 countries.

A multiple linear regression of an empirical model that takes the following general form is proposed to assess whether greater net migration and international economic integration have an influence in human development, in what direction and to what extent:

$$HDI_{it} = \alpha + \beta_1 IntInt_{it} + \beta_2 NetM_{it} + \gamma_k X_{kit} + \varepsilon_{it}$$

where HDI_{it} is the dependent or response variable and refers to the human development index in country i in time t . $IntInt$ is one of the independent variables of interest representing the level of economic integration to the world economy, while $NetM$ refers to net migration. X is a vector of control variables, including a number of factors which may affect the human development of the analysed countries, while ε is the error term.

HDI data from 1985, 1990, 1995, 2000, 2005, 2010 and 2014, calculated and published by the United Nations Development Programme², was considered for building the dataset. The index is calculated on a scale of 0 to 1, and countries are ranked and classified according to how close their HDI is to one (UNDP, 2000). Originally, medium level human development countries were the ones with a HDI between 0.500 and 0.799. The countries considered with a high level of human development had figures higher than 0.799; and the ones with a low level, figures lower than 0.500. More recently, the UNDP uses a slightly different classification, including the 'very high human development countries' that are the ones with HDI above 0.899 (UNDP, 2009).

The main countries of interest were members of the European Union (EU), NAFTA and Mercosur, plus China and Japan. However, in the end, not all the member countries of the mentioned integration instruments were taken into account because of a lack of information on the dependent or the explanatory variables.³ In fact, the most complete calculation of the model in terms of incorporated explanatory variables considers 25 countries as reliable information on net migration could not be found for one of the 26 countries.

As far as the degree of international integration is concerned, a number 1 is assigned to a country that, at a particular year, was not even part of the GATT or the WTO, while a 5 denotes that a country was fully

² <http://hdr.undp.org/en/indicators/137506> (Accessed on January 2nd 2017)

³ EU countries: Austria, Belgium, Bulgaria, Cyprus, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal, Spain, Sweden and the United Kingdom. NAFTA countries: Canada, Mexico and the United States of America. Mercosur: Argentina, Brazil, Uruguay and Venezuela.

participating in the most ambitious of the integration instruments, the European Union. For example, a 4 is assigned to the United Kingdom in 2014 in comparison to a 5 for Germany as the former does not participate in the monetary union and, therefore, is considered to be less integrated to this international economic block.

Net migration refers to the net total of migrants, that is, the total number of immigrants less the annual number of emigrants, including both citizens and noncitizens of a particular country. The source of information for this and the rest of the independent variables included in the model is the World Bank databank.⁴ Table 1 shows a list of control variables and their expected effect on human development.

Table 1. Control variables

Variable	Rationale	Expected impact
Trade (% GDP)	Refers to the sum of exports and imports of goods and services measured as a share of gross domestic product. It represents a measure of countries' openness to trade even if they are not part of formal regional integration instruments.	Positive, indicating that those countries with higher international trade through time, as a proportion of their GDP, experience greater human development.
Urban population (% of total)	Urban population refers to people living in urban areas as defined by national statistical offices. For centuries, the urban-rural landscape has been changing in favour of urban areas, which are seen for many, as engines of economic development.	Positive, meaning that countries with a higher proportion of urban population through time experience higher human development.
Gross fixed capital formation (% of GDP)	In general, gross fixed capital formation includes land improvements; machinery, and equipment purchases; the construction of roads, railways, ports and other infrastructure such as education facilities, hospitals, private residential dwellings, and commercial and industrial buildings, among others. Investment in fixed capital increases the productive	Positive, meaning that the higher the gross fixed capital formation through time, the higher the HDI through its impact on economic performance.

⁴ <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators> (Accessed from the 4th to the 10th of January 2017)

	capacity of a country.	
Mean years of schooling (years)	Average number of years of education received by people ages 25 and older. It is considered as an indication of the situation of each country in terms of education and a reflection of public policies on the matter through time.	Positive, meaning that the higher the average number of years of education through time, effective policies were applied, and, therefore, the higher the HDI.
Self-employed (% of total employed)	Self-employed workers are people who, working on their own account or with one or a few partners or in cooperative, hold a job which remuneration is directly dependent upon the profits derived from the services and goods produced. Here, it is an indication or approximation to entrepreneurial attitudes. It is expected that the more entrepreneurial a society is, the better the development prospects and results.	Positive, meaning that the higher the percentage of self-employed through time, the higher the HDI.

Results of model computations

According to Agresti and Finlay (2009), correlations between explanatory variables are not a problem if they are not highly associated as multiple linear regression models are designed to allow and adjust for them. In the case of high linear association confirmed by significant correlation factors higher than 0.79 (i.e. multicollinearity), the estimated model presents large standard errors and low precision for the correlated variables coefficients. According to Wooldridge (2008), it can be fixed by removing one of them. All the results are presented after checking and discarding for multicollinearity and leaving out non-significant control variables. The latter implies that aiming for a correctly specified model, and taking into account data availability, significance tests were used for models' selection.

Table 2 shows the results of the model computations including the 26 countries and one of the variables of interest as there was not information for Brazil on net migration.

Table 2. Computation 1

<i>n=182</i>	<i>df</i>	R^2
<i>Model</i>	5	0.9202
<i>Residual</i>	176	
<i>Total</i>	181	

	<i>Coefficient</i>	<i>Standard error</i>	<i>t</i>	<i>P-value</i>	<i>Confidence interval 95%</i>	
International integration	0.02963	0.00190	15.595	< 0.001	0.02588	0.03338
Trade (% of GDP)	-0.00016	0.00004	-4.131	< 0.001	-0.00023	-0.00008
Urban population (% of total)	0.00136	0.00018	7.755	< 0.001	0.00102	0.00171
Gross fixed capital formation (% of GDP)	0.00159	0.00045	3.519	< 0.001	0.00070	0.00249
Mean years of schooling	0.02814	0.00100	28.197	< 0.001	0.02617	0.03011

The results highlight that there is a positive and significant association between formal international integration and development across the 26 countries through time, once other factors which may affect human development are controlled for. The simple fact of participating in a greater degree of integration along time makes a favourable difference in terms of human development. This could represent a clear indication that participating in higher levels of formal integration with other countries undergird the development potential of a country.

Table 3. Computation 2

<i>n=175</i>	<i>df</i>	R^2
<i>Model</i>	6	0.9132
<i>Residual</i>	168	
<i>Total</i>	174	

	<i>Coefficient</i>	<i>Standard error</i>	<i>t</i>	<i>P-value</i>	<i>Confidence interval 95%</i>	
International integration	0.02989	0.00193	15.514	< 0.001	0.02609	0.03369
Net migration	3.765E-09	1.8849E-09	1.998	0.047	4.396E-11	7.4863E-09
Trade (% of GDP)	-0.00013	4.06211E-05	-3.229	0.001	-0.00021	-5.0984E-05
Urban population (% of total)	0.00138	0.00018	7.703	< 0.001	0.00103	0.00174
Gross fixed capital formation	0.00167	0.00046	3.610	< 0.001	0.00076	0.00258
Mean years of schooling	0.02683	0.00125	21.473	< 0.001	0.02437	0.02930

Table 3 shows the results of the model including the two explanatory variables of interest. It confirms that countries which during the period of analysis did get involved in further levels of formal integration with other countries tended to have statistically significant increases in their human development. As far as net migration is concerned, the results present a positive and significant association between net migration and human development through time, once other factors which may affect human development are controlled for. However, the latter association is statistically less significant than the former and its positive impact much smaller.

All the control variables in the results of the two model computations have the expected signs and are statistically significant at one percent level except for *Trade*. The association is negative, indicating that those countries with higher international trade, exports and imports, through time, as a proportion of their GDP, experience lower human development, controlling for the rest of variables.

As this variable represents a measure of countries' openness to trade keeping without change their level of formal regional integration, it is interesting to think about possible causes of this result. It might be the case for some countries included in the analysis that their exports do not generate or are supported by a national configuration or fabric of firms supplying inputs. This could be because their exports are based on primary sector goods, as in agriculture, which basically go to final consumers in other countries. More importantly, this could be due to a high amount of imports of goods and services for the production of final goods for satisfying their national and international demands. Therefore, importing all sorts of inputs does not stimulate value chains within their territory. Adding to this, noted by some economists such as Joseph Stiglitz (2015), the volume and value of international trade, as well as the concentration of income within and across countries, are the matter, in a high proportion, of a relatively small number of firms or even individuals.

The rest of the models' computations sacrifice the size of their samples in order to include another interesting control variable. Net migration is left out of the computations because it would represent a further sample reduction. As a result, I concentrate now on formal international integration as the main variable of interest to analyse its effects on human development in the presence of self-employment as an indicator of entrepreneurial attitudes.

Table 4. Computation 3

<i>n=140</i>	<i>df</i>	<i>R²</i>
<i>Model</i>	6	0.9341
<i>Residual</i>	133	
<i>Total</i>	139	

	<i>Coefficient</i>	<i>Standard error</i>	<i>t</i>	<i>P-value</i>	<i>Confidence interval 95%</i>	
International integration	0.02240	0.00188	11.887	< 0.001	0.018669	0.026123
Trade (% of GDP)	-0.00012	3.1674E-05	-3.899	< 0.001	-0.00019	-6.0855E-05
Urban population (% of total)	0.00047	0.00018	2.615	0.010	0.00011	0.00083
Gross fixed capital formation (% of GDP)	0.00205	0.00053	3.852	< 0.001	0.00100	0.00311
Mean years of schooling	0.02621	0.00105	24.840	< 0.001	0.02412	0.02829
Self-employed, total (% of total employed)	-0.00071	0.00023	-3.119	0.002	-0.00117	-0.00026

Table 4 presents the results of a third computation of the model. It adds self-employment to the analysis, showing similar results for all the explanatory variables introduced in previous calculations. Contrary to expectations, the association is negative and statistically significant, indicating that the higher percentage of self-employed from the total employed through time, the lower the human development of the countries, controlling for the rest of independent variables.

This could be a glimmer of the quality or the particular characteristics of self-employment and the degree of success or competitiveness of start-ups in the examined countries. Let us remember that self-employment here is only an approximation to entrepreneurial attitudes and it would be interesting to include, in future studies of the phenomenon assessed here, variables such as patent applications as an indication of the environment favouring innovation, as well as granted trademarks as an economic formalisation of the entrepreneurial and innovative spirit of countries' residents.

Computation 4 includes an interaction between international integration and self-employment to capture their complementarity. For example, one way of understanding this interaction is that the magnitude of the partial effect of international integration on human development depends on the value at which the percentage of self-employed is fixed.

Table 5. Computation 4

<i>n=140</i>	<i>df</i>	<i>R²</i>
<i>Model</i>	7	0.9384
<i>Residual</i>	132	
<i>Total</i>	139	

	<i>Coefficient</i>	<i>Standard error</i>	<i>t</i>	<i>P-value</i>	<i>Confidence interval 95%</i>	
International integration	0.01274	0.00365	3.487	< 0.001	0.00551	0.01997
Trade (% of GDP)	-0.00010	0.00003	-3.227	0.002	-0.00016	-3.9404E-05
Urban population (% of total)	0.00056	0.00018	3.144	0.002	0.00021	0.00091
Gross fixed capital formation (% of GDP)	0.00179	0.00052	3.420	< 0.001	0.00076	0.00283
Mean years of schooling	0.02520	0.00108	23.439	< 0.001	0.02307	0.02733
Self-employed, total (% of total employed)	-0.00211	0.00051	-4.145	< 0.001	-0.00312	-0.00111
SE*II	0.00050	0.00017	3.051	0.003	0.00018	0.00083

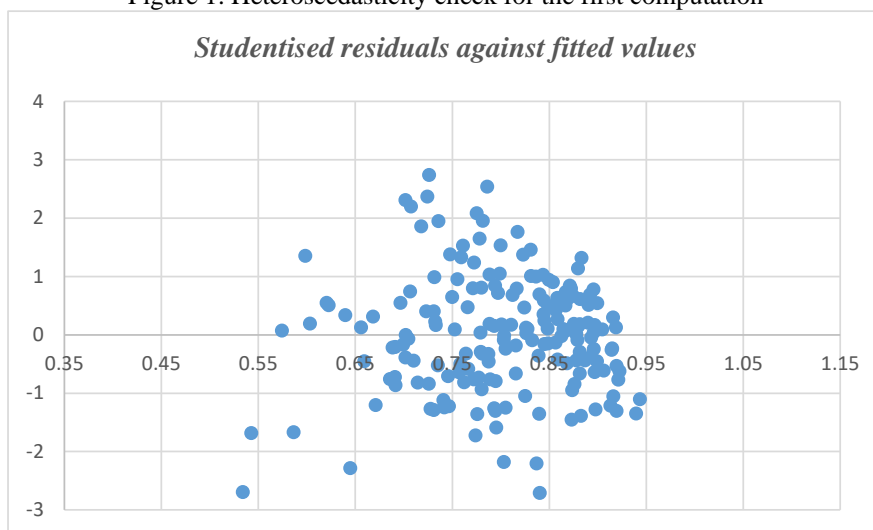
Table 5 shows that the negative effect of a higher percentage of self-employed on human development decreases the higher the degree of international integration. This might suggest that the latter opens development opportunities for the self-employed. All coefficients in the regression, including the interaction coefficient, are statistically significant at 1 percent level.

All the previous computations were also performed including a further control variable indicating if countries were considered developed or developing (i.e. a dummy variable was incorporated). The effects of the explanatory variables on human development and the statistical significance of their coefficients in all cases were very similar except for net migration which experienced a change in sign but statistically non-significant. As noted before, the reasons for migrating are not only economic and being able to separate them would be useful for future analyses.

Model diagnostics were performed in all computations inspecting for the presence of heteroscedasticity (i.e. non-constant variance) that could affect the efficiency of their results. Therefore, to be sure that the results were valid for statistical inference, following Agresti and Finlay (2009), I tested for heteroscedasticity by plotting studentised residuals and fitted values of the computed models. If homoscedasticity is found, the multiple regression model is valid. In terms of the mentioned plot, its points must form a band of even width instead of an evident pattern (Wooldridge, 2008).

No problems were found in the four model calculations. Figure 1 shows the plot for the first model computation as an example.

Figure 1. Heteroscedasticity check for the first computation



Conclusions

Using panel data from 1985 to 2014, this paper analysed the impact of the degree of formal economic integration, as well as migration on human development in countries that are part of NAFTA, Mercosur, the European Union or, at least, the WTO. The results show strong evidence of a positive influence through time of international economic integration on human development and, to a lesser extent, of the other main variable of interest, net migration. This contributes to inform the debate on the impact of countries' openness to international flows of goods, services and labour in favour of formal integration mechanisms. This represents clear disproof of the protectionist discourse of some political or independent leaders in recent political campaigns in countries such as Germany, France, the United States and the United Kingdom.

The small negative but statistically significant effect of the sum of exports and imports of goods and services measured as a share of gross domestic product on human development is a reminder of the need and importance of effective public policies to make the best of the benefits of international trade by stimulating competitive value chains within and across countries, creating new opportunities for the losers and, therefore, better distributing those benefits among countries' economic agents. Policies considering the concepts of acquired comparative advantage and dynamic gains of trade according to places' specificities could be of special relevance (Meier, 1998; Sandilands 2015).

The discipline of economic geography can help to identify suitable policies for particular territories by looking at the centrifugal and centripetal forces in place caused by a combination of elements such as trade or transaction costs, labour mobility, imperfect competition, the local availability of inputs and knowledge, as well as firms' and territories' increasing or decreasing returns of participating in international trade (Ascani, Crescenzi and Iammarino, 2012). Other considerations such as the presence of particular formal and informal institutions, the promotion of social entrepreneurship, smart specialisation and the local innovation climate, among others, are fundamental for the competitiveness of countries and their regions in a context of a globalised economy (Audretsch, Link and Walshok, 2015), understood as the international functional integration of economic activity across national territories (Dicken, 1998).

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Marketing Non-Degree Supplementary Programs in Tertiary Education Organizations in Russia

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Abstract

Successful entrepreneurial activity of a university determines its local and international competitiveness and budgeting efficiency. Modern global educational practices are witnessing a growing tendency to fund-raising from non-core activities via expanding the scope of extra-curricular fee-paying programs and educational events. Price-sensitive factors, which form and manage the demand for differentiated curricula in supplementary education in an economic university, are analyzed. A structured approach to increasing the consumer value of for-profit non-degree programs is suggested. Additional revenue generation is used to improve the service and contributes to the autonomy of a tertiary education organization.

Keywords: Consumer value, fund-raising, supplementary educational programs, pricing strategy, cost-effectiveness, non-degree education

Introduction

The global recession has affected the universities' economies, challenging the budget structure of public educational organizations. There is witnessed a tendency towards partial or full universities' self-financing which is seen as an autonomy stimulating factor. The study of international entrepreneurial practices in higher education enables universities more thoroughly comprehend the economic factors underlying the efficacious functioning of the educational industry. Successful entrepreneurial activities of a particular university may be crucial to its existence by bringing the income stream to constitute a vast share of the university revenue via diverse forms of instructional service and education.

Presently, state-financed universities in Russia are attempting to raise funds by diversifying their fee-paying educational service via offering various forms of non-curricular supplementary study programs. The study service offer being formed to cater for the customers' demand, various age-groups and audiences are targeted, taking into account their educational background and income. The supplementary educational programs break into

those that provide their graduates with a diploma or a certificate of competence development and the non-degree ones. Such extra-curricular activities as dance or music clubs bear more prestige than commercial value for a university thus being sponsored by the institution of higher education for the reasons of image. Other non-degree continuing education programs cover training in athletics, foreign languages, preparation for university enrolment, etc. Most of the latter are run by the university offices and departments with little experience in commerce thus building their sales empirically. The research presented in the paper is aimed at facilitating the fund-raising process for such programs by structuring their administering and marketing to create the utmost consumer value.

Literature Review

The research literature on entrepreneurial activities in universities mostly lays on case studies (Bernasconi, 2005; Chrisman, Hynes & Fraser, 1995; De Zilwa, 2005; McCaffery, 2010; Zhao, 2004). In an era of tight budgets at both local and national levels universities are asked to contribute more formally and directly to the development of new products and services in return for a certain level of funding (Kirby et al, 2011). The traditional university mission of teaching and research is complemented by generating social and economic value (Etzkowitz, 2004). An entrepreneurial activity of an innovative university should contribute to regional economic development by their knowledge (Van Vught, 1999). Entrepreneurial universities increasingly become involved in contracted research, consulting, external teaching, collaboration, new product development and distribution (Bernasconi, 2005; Zhao, 2004). To be able to adapt to the external environment the universities change their organizational structure (Guerrero & Urbano, 2011) and renovate their administrative functions to promote entrepreneurial culture. The major difference between academics and entrepreneurs is their attitude towards risk (Hay et al, 2002). Commercialization of the education vigorously influences the academic values (Bok, 2009; Saginova & Belyansky, 2008). A higher education organization faces a dilemma of being a market driven or mission driven (Anctil, 2008). The university administrators, faculties and other stakeholders involved must be clear on what being entrepreneurial means to them (Kirby et al, 2011). Curricular reforms emphasize change and multidisciplinary training (Van Vught, 1999; Huston, 2011), indirectly promoting for supplementary education. Simultaneously, they bring a number of barriers in terms of funding, which is corresponded by lack of incentives and entrepreneurial expertise (Zhao, 2004) among those who are to implement these reforms. A favorable staff attitude toward entrepreneurship is essential (Hay et al., 2002). Strategically, both monetary

and non-monetary reward systems need to be introduced to provide incentives for the potential profit-earning stakeholders to become more entrepreneurial (Bernasconi, 2005; Saginova et al, 2015). Weak entrepreneurial infrastructure for academic spin-off ventures is an issue to be dealt with and overcome (Degroof & Roberts, 2004). Rigid hierarchy and bureaucracy need limiting (McNay, 1995) by horizontal coordination to enable sharing intellectual, financial and physical university resources (Van Vught, 1989). Budgeting process in higher education is illustrated by examples of financial management in diverse educational organizations, various models to react to budget fluctuations and changing fiscal environment are suggested (Barr and McClellan, 2010; Schloss et al, 2013). Actions of university governance and organizational structure need proper coordinating (Middlehurst, 2004; Manning, 2012). The issues of financing higher education in retrospect, as well as current and future challenges are addressed by Zumeta et al (2012). Enhancing the university budgets is achieved through thorough work with the customer value, via creating stronger brands and developing smarter strategies (Carton et al, 2013) adaptive to challenging out- and in-house environment. Clearly stated missions, realistic goals, and achievable objectives (Drucker, 1985) make universities' entrepreneurial policies successful.

Data and methodology

For-profit non-degree supplementary education programs fall into two broad groups:

- facility-dependent ones are those whose pricing depends on the equipment lease and the depreciation charges, e.g. sports club, swimming pool or spa facilities, and the costs are correlated to the astronomical hour;
- knowledge-dependent ones are those whose pricing is determined by the quality of the intellectual service provided, e.g. competence development training or foreign languages studies, and the costs are calculated in correlation with the academic hour.

Within the second group there is high inter-university competition among the departments engaged in non-core activity profit-earning, most of which offering similar non-degree programs to nearly similar target audiences at different prices. Formally all the programs offer tuition of 72+ academic hours (ac.h.), which is determined by paying less tax (VAT avoidance), though the number of contact hours may vary from 36 to 90 ac.h. and even more. A quick overview of Table 1 shows the inner-competition and prices breakdown, the variance being up to 3 times as high in similar programs, the programs of the Department of Russian Language and Culture of Speech being the most expensive ones, while the Faculty of Distance Learning charges the lowest prices. The research is aimed at analyzing the

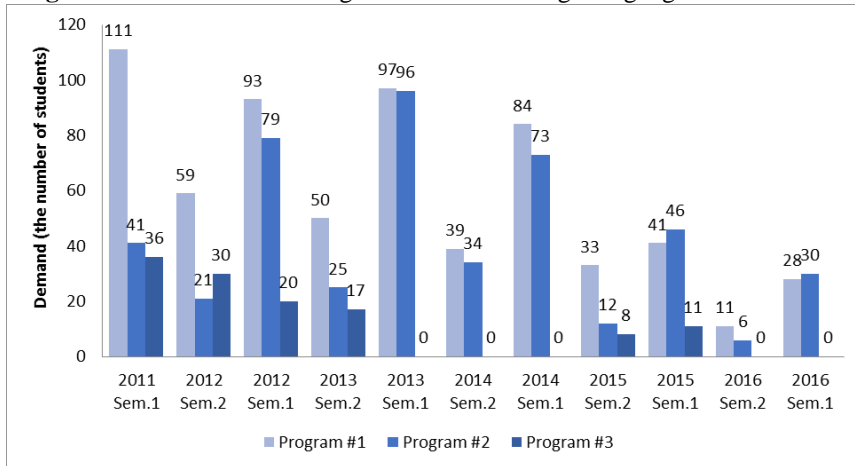
price constituents to make recommendations on increasing the cost-effectiveness of the programs and decreasing inner-undercutting to boost the competitiveness of the programs by other than pricing means.

Table 1. Price of one academic hour at the non-degree courses run by university divisions

№	University division	Programs on offer in 2016-17 academic year	Ruble/ac.h.
1-3	three Departments of Foreign Languages	General language training course	275
		L2 international examinations preparation course	298.6
		SKILLS-training express course	217
4	Faculty of Distance Learning	Basic accountancy state examination training course	from 125 to 256.94
		College graduates university admission preparation course	141.66 236.1
5	Admissions Office	State Examination preparatory course in English, Russian, Mathematics and Social Studies	444.44
			from 360 to 466.66
6	Department of Russian Language and Culture of Speech	State Examination preparatory course in English, Russian and Social Studies	480

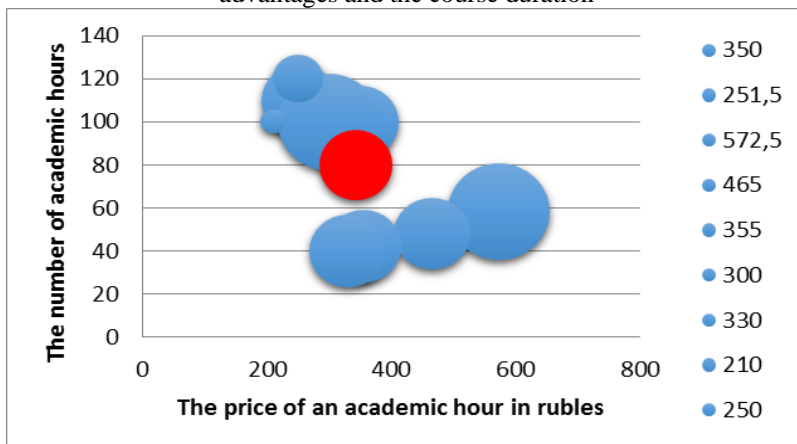
Pricing model by the Department of Foreign Languages has been evaluated since the sales start in 2011. Although the initial offer was calculated on a going-rate pricing basis, charging the same price as the competitors, the estimation proved that the model is not viable due to the fact that apart from the labour costs it included extra non-tuition service to cover the costs of study materials development and library stock purchase. Streamlining the costs allowed to use the market penetration pricing strategy which resulted in overall higher profits in the following year as illustrated in Figure 1. However, despite the early years' high enrolment figures, since 2014 total sales have been declining steadily following the recession, witnessing a dramatic fall since the end of 2015. The graph also features another negative tendency, when every second semester sales keep deteriorating as compared with the first semester figures.

Figure 1. Demand for non-degree courses of foreign languages in 2011-2016



Prior to starting the sales in 2011 the going-rate pricing by out-house competitors in foreign language training were analyzed. 9 major market-players pricing models were considered, as many as 15 available study offers were looked into. The competitive advantages of the courses of various scope and format were summarized and evaluated in terms of goodwill, facilities, accessibility, licensing, teaching staff qualifications and diploma value. The correlation of the academic hour cost to the number of competitive advantages inherent to a particular course type was measured. Two tendencies could be distinguished: 1) the higher duration of the course resulted in lower price for the academic hour; 2) an opportunity to be awarded a certificate or diploma by graduation added up in higher pricing. As highlighted by the red circle in Figure 2 the successfully performing study program should possess at least three competitive advantages totaling 80 academic hours at 343 rubles per ac.h. on average.

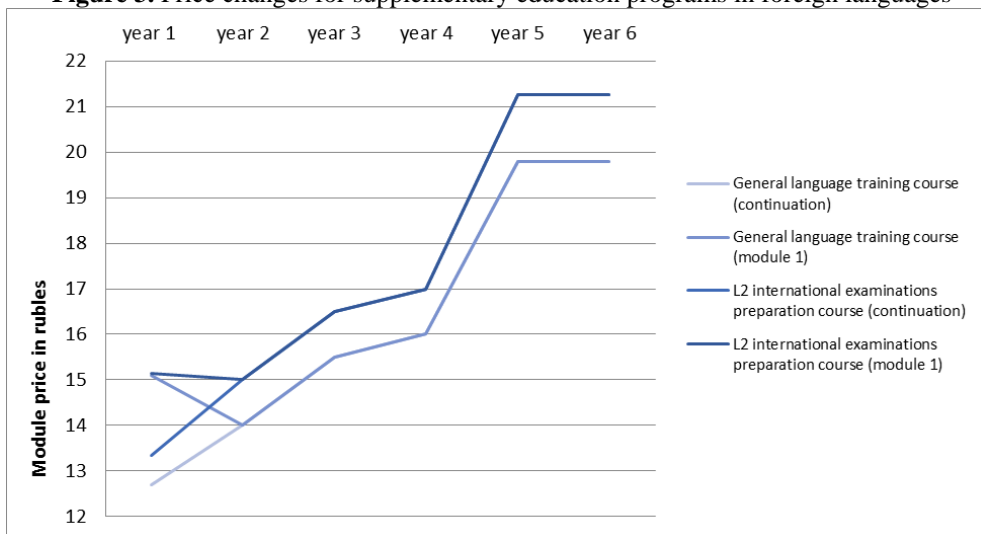
Figure 2. The correlation of the academic hour cost to the number of competitive advantages and the course duration



Judging by the statistical data it was decided to limit the number of academic hours in a module by 72. The target university audience for the non-degree foreign languages courses could enjoy the competitive advantage of in-campus location, the selected tutor's reputation being the second condition attractive for the potential consumer. This pre-determined the minor mark-up for the educational service and enabled to launch the courses in line with market-penetration pricing strategy. Odd-even pricing technique was employed to set the price of 195 rubles per ac.h. for the General foreign language preparation course, and 208 rub/ac.h. for the programs in higher demand, which correspondingly constituted 280 rubles and 298 rubles for the classroom study hour.

In the first year of sales to maintain the customer loyalty an attempt to develop a discount system for the continuing education enrollees was undertaken. The discount of 12-16%, as shown by the lower shorter lines in Figure 3, was offered to those students who were going to continue education in the second and subsequent study modules. However, such pricing policy did not stabilize the demand for the programs in the second semester of 2011-12 academic year and in the later years the discount system was found ineffective.

Figure 3. Price changes for supplementary education programs in foreign languages



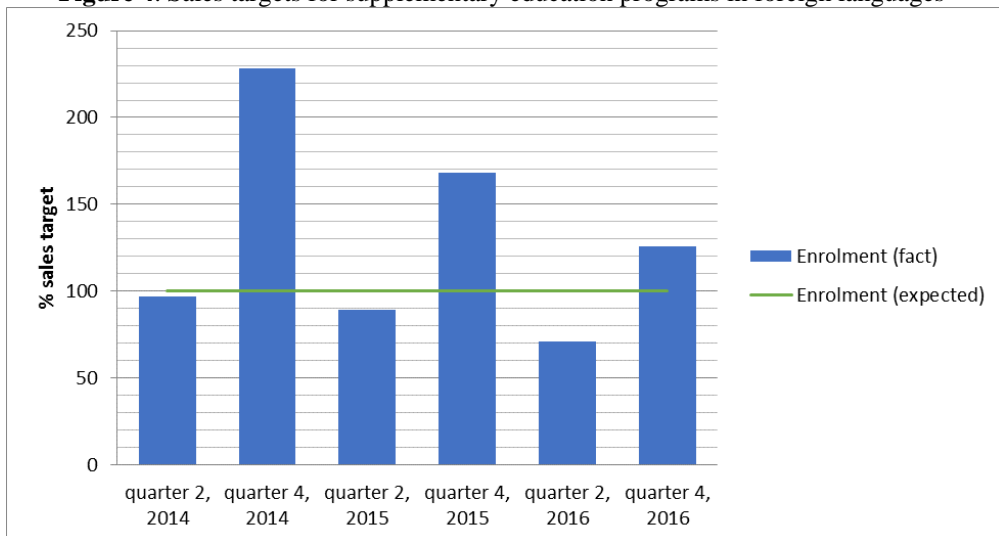
During the third year the tutors' pay was experimented with. In the first two years there was a pay differentiation according to the official standing of the teacher in the university, the certified associated professors getting higher payment in comparison with the senior lecturers or regular practicing teachers. The conducted analysis showed that the results in the groups taught by the more scientifically-minded associate professors were rather average or even below average concerning such indexes as the group

loyalty or consumer satisfaction by the end of the module, with fewer students wishing to continue their education in the courses after the first module of studies. To eliminate this negative tendency, it was decided to link the tutors' payment not to the educators' university status but to the reputation outcome based on the personal rating and to organize the payment scheme as proportional to the number of enrollees in a particular group. This allowed to attract and retain more reputable practicing teachers as they were then motivated by the pay growth, which resulted in the 10% price increase for the most demanded programs, though the prices did not exceed the going-rate charges in the city.

The fourth year witnessed the beginning of the global economic downturn, still a price increase of 5% was necessitated to pay the technical support staff, the cost of which amounted to 9.5% of the total price. Such minor increase resulted from the slight shrinkage of pay for the autonomous students' work control by the teachers. The sky-rocketing enrollment up to 15 groups followed in 2014 being caused by the more enthusiastic attitude then taken by the support staff at the non-degree courses.

In the fifth year despite the forecasted recession peak of 2015 it was decided to escalate the course prices by 25% due to lowering the target number of students in the groups to 8 enrollees which was the average figure for the previous years. Contrary to the pessimistic expectations 11 study groups were started which even surpassed the target sales figures as seen in Figure 4.

Figure 4. Sales targets for supplementary education programs in foreign languages



In 2016 the prices for the programs did not change in any of the university division programs analyzed. However, the demand for the programs keeps declining. Following the economic recession which lowered

the purchasing power of the consumer, several other unforeseen factors complicated the enrolment and caused the decline in the programs profit-earning:

- new administrating procedures were enforced to document the enrolment process;
- technical support staff were no longer satisfied by their payment for the increased workload, showing less affability to the potential enrollees;
- such stakeholders of the educational process as tutors themselves started to promote the courses in the classroom less actively, seeing such advertising as an added load to their primary work.

Results and Discussion

Taking the negative tendencies into account it is worth reassessing the relevant data and reviewing the pricing strategy with the aim of deciding whether it is possible to improve sales by means of undercutting prices, decreasing the target number of students, adding or increasing the expenditure on product promotion and the like. Table 2 illustrates the unique selling propositions and specifics of some of the analyzed programs, understanding which we intend to apprehend the price-sensitive information in more detail.

Table 2. Competitive advantages and course USP analysis

№	University Division	Programs on Offer	Target Audience (Enrollee)	Target Students Number	Strengths	Weaknesses
1-3	three Departments of Foreign Languages	foreign language training courses	any university student (in-house)	8	- tutors' reputation - on-campus studies - average price segment	- inner competition - one-off use service - lack of advertising support
4	Faculty of Distance Learning	Basic accountancy state examination training course	in-house and out-house	10	- outer competition analysis - discount system	- limited demand - image program
		College graduates university admission preparation course	college graduate – potential part-time student	20	- lowest price segment - college-level advertising campaign	- number of learners in the group (over 20)
5	Admissions Office	State Examination preparatory course in English, Russian, Mathematics and Social Studies	school leaver – potential full-time student	10	- established reputation - university-level advertising campaign - discount system - combined preparation at one territory	- number of learners in the group (over 15) - high price segment
6	Department of Russian Language and Culture of Speech	State Examination preparatory course in English, Russian and Social Studies	school leaver – potential full-time student	6	- number of learners in the group	- duplicates the Admission Office programs - highest price segment

The data analysis shows that:

- a number of programs compete with one another;
- the recession-following years have stagnated the price offer;
- the discount system is under-developed and not applied to most programs;
- the quality of the tutoring is affected by the number of learners;
- there is a correlation between the number of participants in the programs and the advertising support.

The costs of a particular program are calculated in a differentiated way in various programs. Provided the value of a program is 100%, the price-forming factors represent the following breakdown in Table 3:

Table 3. Job-costing breakdown

Costs by FLD	Foreign Language Training Courses
Classroom tutoring	68,0%
Autonomous work control	13,5%
Project administration	15,0%
Technical support	3,5%
Costs by DRL	Admission Preparatory Course
Classroom tutoring	58%
Administration and technical support of the studies	27%
Information support and advertising	15%
Costs by FDL	Basic Accountancy Course
Classroom tutoring	66%
Administration and technical support of the studies	19,5%
Information support and advertising	14,5%

Notably, the highest costs are allocated to the tutoring as within the supplementary programs offer it is the teacher's personality and reputation that have the deciding influence on the program enrolment, continuity of the program and profit generation. The low-price segment courses, being mostly the image-making ones, show the biggest expenditure connected with advertising.

The departments engaged in fund-raising by means of supplementary programs offer are able to satisfy their own various specific needs. A particular non-degree program profitability contributes to decreasing or increasing the expenditure which may not be directly connected with the primary educational process. Various in-house needs could be satisfied by allocating the costs to cover the following expenditure by the university divisions:

- tutoring linked to the number of contact hours;
- home tasks check linked to the number of learners;
- administrative or technical support;
- master-classes in various preparation training;

- admission tests for school-leavers;
- seminars and workshops in social-networking for the learners' research work;
- tutorials in social-networking development;
- learners' programs development;
- equipment and stationary purchase for the courses;
- souvenirs and presentation materials purchase to promote the programs;
- special equipment purchase for the lyceum's physical science classroom;
- low-income lyceum students' nutrition compensation;
- business trips reimbursement, etc.

Having considered various aspects of cost calculation and competitiveness management in the supplementary educational service of a particular university, the following problem areas are recommended to be tackled by altering pricing approaches at non-degree courses as in Table 4:

Table 4. Issues for non-degree supplementary education programs

PROBLEM AREAS	SOLUTION OPTIONS
undiversified tutors' pay	<ul style="list-style-type: none"> • link the learners' autonomy hour payment to the number of students in the group; • link the tutor's payment to the personal teacher's rating by the results of the previous semester.
technical support pay as extra costs	<ul style="list-style-type: none"> • facilitate the correspondence and document management by introducing two-stage on-line enrollment procedure: 1) on-line application for the course; 2) on-line contract filing; • link the technical support payment to the number of students in the group.
insufficient advertising support	<ul style="list-style-type: none"> • make wider use of distance-learning technologies in product marketing, employing free-offers: computer-based tests for admission-level identification, sample computer-based IELTS, TOEFL examinations to identify the start, progress and final level of the learners; • use direct selling in the classroom more intensively; • use direct mailing to the target audience; • appoint an employee to stimulate the consumer demand in social nets regularly.
inner competition	<ul style="list-style-type: none"> • unify the price and contents offer of similar programs under one brand; • create a permanent link to the supplementary programs offer at the university site.
low sales	<ul style="list-style-type: none"> • offer special prices for the low-number-of-learners groups (6-8 learners); • devise special price offer for individual learning programs (1-2 learners).
price variances	<ul style="list-style-type: none"> • offer discounts for the repeated studies; • offer discounts for purchasing 2 and more educational products at a time; • offer discounts to the staff and staff's family members.

Conclusion

The analysis of educational content and price-sensitive factors influencing the profitability of non-degree fee-paying educational service in an economic university highlights the unique characteristics of supplementary programs, as well as their weaknesses and strengths. The consumer value of the programs under research is intended to be high for all the stakeholders of the educational process. Applying the marketing approach to modelling the supplementary programs offer becomes urgent in the period of economic downturn. To maintain a competitive edge and sustain the budget efficiency recommendations have been made. Facilitating the fund-raising process for such programs by structuring their administering and marketing to create the utmost consumer value enhances the university's economy and opts for more self-budgeting opportunities. Fund-raising by non-degree programs brings economic autonomy to the university departments, as in the modern socio-economic realises the supplementary education sales become a source of additional financing for the needs of a particular division and the whole university, thus enabling the non-profit educational organizations to improve their services, retain the staff and provide incentives to the stakeholders concerned.

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L2 Teachers' Professional Development Management

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Abstract

The article focuses on the issue of furthering foreign language (L2) university teachers' professional development which necessitates viewing in terms of a particular tertiary education institution and the state requirements. Summarizing the experience of the Plekhanov Russian University of Economics (Moscow, Russia) in creating various professional training opportunities for foreign language teachers, the survey examines the L2 teachers' needs and objectives in professional advancement, as well as motivating factors and preferences for professional development activities. The paper lays the foundation for a new a 7+Cs evaluation framework to determine the successful management of university-based language teacher training. Recommendations for further improvement of continuous teacher coaching and enhancing their efficiency are developed upon the analysis of the 7+Cs scale.

Keywords: Tertiary education, teacher training, professional development, foreign language, life-long learning

Introduction

The overall objective to tailor teaching practices to particular contemporary universities' standards accentuates the necessity for teachers to progress far beyond their initial qualifications and cultivate life-long learning culture. Teaching process has always been a highly complex mixture of expert knowledge, field practices as well as professional relationships and values. Globalization pressures in education have put new challenges and demands to the university teacher. The competence-based approach to higher education now accentuates the primary task of creating 'the whole student', which in turn facilitates the need of the professional development of the 'whole teacher'.

A teacher is a key figure and the most valuable asset in the pedagogical process. Myron V. Walwyn (2015) declares that "*Teaching is not merely a profession; rather it is a service to Country.*" Shaping the

generations of the citizens of the nation in general, quality teaching has an overwhelming influence not only on a range of his/her immediate students' outcomes but on increasing the profile of their educational organization. Many ambitious universities aspiring to enhance their both national and international ratings now have to put much emphasis into further development and refining their teaching staff's skills. Foreign language teachers working in economic universities due to the intrinsic nature of their subject are predetermined to be well-rounded personalities and life-long learners. Unlike most subject matter lecturers, the range of topics which the language teachers have to cover is exorbitant. While in classroom communication with the junior students L2 teachers discuss topics concerning their every-day practices and routines, those who progress to senior courses to teach Business English, let alone English for Professional Purposes (EPP), have to focus on such issues as Securities, Accounting, Taxation and the like, where they have no background education and their students are likely to be more professionally knowledgeable than them. So, for every EPP teacher continuous professional learning and development becomes a must. What is more, following the never-ending curricular shifts, triggered by the globalization changes in the tertiary education, L2 teachers occasionally have to switch from one course to another often without having sufficient time for preparation which in turn requires a great amount of flexibility, adaptability and stress-resistance on their part.

Literature Review

In the continuing global call for educational change and reforms, many recent researchers address the critical issue of teacher learning from diverse national contexts and perspectives. Boyd et al. (2003), focusing on the critical role of professional development as one of the key recommendations, note that a primary challenge for large-scale professional development projects lies in attracting teachers and sustaining their involvement so that they can receive the full dose of professional development. They state that "you have to make every effort to get the teachers there and once you get them there, you have to make sure you have something of high quality that will encourage them to come back". Richards (2005) provides a conceptual framework for teachers' professional development focusing on such strategies for facilitating language teaching professional development as self-monitoring, teaching portfolios, peer coaching, team teaching, support groups, journal writing, classroom observation, case analysis, analysis of critical incidents, and action research, which may be applied in the teachers' own context. Hoban (2002) examines dynamic interplay between learning and teaching when educational change and teacher learning are viewed from a paradigm based on complexity

theory, assuming that change is a nonlinear process that needs to be supported by a framework for long-term teacher learning. Aubusson (2008) synthesizes current practice on teachers' self-study and highlights the complexity, challenges, struggles, solutions and successes in teacher education experience. Thinking about the role of teacher training, Kooy & van Veen et al. (2012) believe that it is "teacher learning that matters" as it shapes and directs pedagogical practices with the goal of improving student learning and view teachers as the portals through which any initiative for change and reform is realized. McNamara, Murray, Jones et al. (2014) exploring teachers' workplace learning from four different perspectives: social policy, international comparators, multi-professional stances/perspectives and socio-cultural theory scrutinizes the inherent tensions between individual, school and government priorities. Drawing on cross-professional analysis the authors cross-fertilise research and practice across the field of education and study how best to conceptualise and theorise learning in the teacher workplace in order to facilitate the development of a more theoretically informed and robust model of learning and teaching.

The literature review let us conclude that despite the abundance of research on teacher training there are few studies which are directly related to the present paper.

L2 Teachers' Motivation

In order to identify foreign language teachers' learning goals and to understand what should be done to create pre-requisites for exposing L2 university lecturers to richer teacher experiences 5 key questions were chosen to be addressed in this study:

1. What facilitates and impedes teachers' motivation for further professional development?
2. What are the foreign language teachers' learning needs?
3. To what extent does a university have to embrace teachers' learning drives?
4. What factors determine the success of university-based teacher development activities?
5. What are the likely challenges, pitfalls and lessons for those wishing to implement programmes with the same goals in other higher education contexts?

The need for a L2 teacher's professional learning and development is caused by both intrinsic and extrinsic motivation. The intrinsic desire for self-actualization and strive for excellence makes many teachers themselves anticipate the gaps in their knowledge and professional skills and seek for opportunities to supplement and contribute to them. Data elicited from

interviews and questionnaires show that individual L2 teacher learning is taking place 7/24 in 360° directions. Individual professional learning comes from the following sources:

- on-hand acquisition through one's own teaching practice;
- reading pedagogical literature (textbooks, periodicals, scientific articles, etc);
- participating in webinars (e.g. organized by other universities and international publishing houses);
- learning from immediate colleagues and distant counterparts via personal contacts, blogs, etc.;
- professional networking via Linked-in, Academia.edu, ResearchGate, etc.;
- attending guest lectures, in-house teacher-training seminars and workshops;
- communicating with students outside the classroom (e.g. during the extra-curricular activities);
- incidental learning.

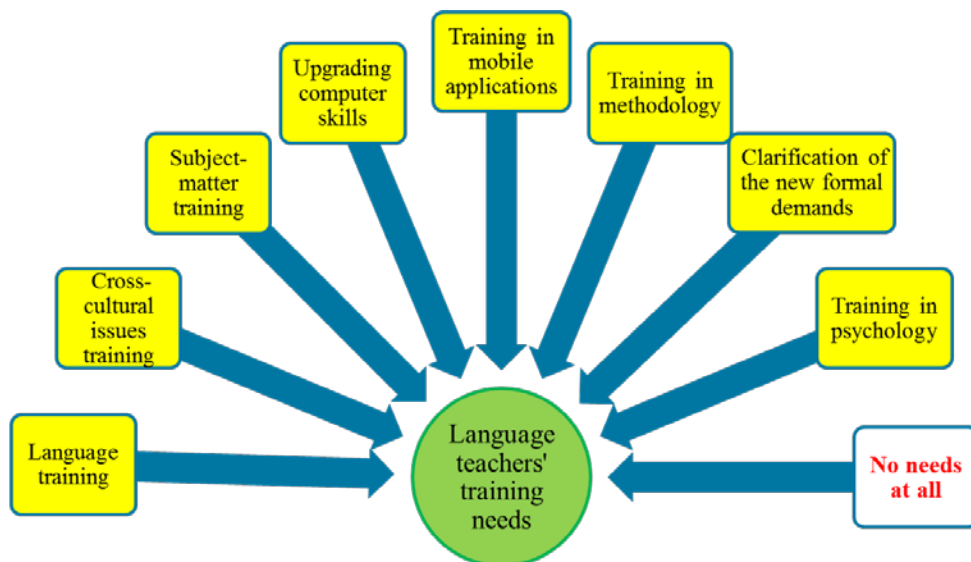
The scope and intensity of these intrinsic individual efforts depend on the personality of the teacher and may be highly systematic, sporadic or missing at all as this form of self-development is purely voluntary and self-regulatory and left to teachers whether to engage in it or not. The teachers themselves identify the issues of special importance, monitor the impact of their drives and adjust their further practical implementation. Suslu (2006) emphasizes that the intrinsic rewards outweigh the extrinsic ones in educator's motivation and job satisfaction as without the intrinsic motivation, the lack of success is inevitable.

However, it is the extrinsic motivation for L2 teacher professional learning that is more relevant for our research. The official 'effective' contract system of university teachers' employment makes it obligatory for them to comply with the competitive selection criteria on a regular basis and update their qualification to fit harmoniously into the highly-qualified teaching staff. For instance, a special appraisal committee in Plekhanov Russian University of Economics (PRUE) studies the achievements of every lecturer over a certain period of time (1-3 years) and adjudicates on the teacher's qualifications compliance with the university's requirements. The demands being very tough, even the teachers with a very good command of the foreign language and wide teaching practices may fail to meet the standards unless they provide a well-timed documentary proof of their professional progression thus making them more competitive in comparison to other candidates in the openly announced vacancy contest.

L2 Teachers' Professional Development Needs Analysis

Timperley et al. (2007) have shown that quality professional learning comes from providing opportunities for each teacher to engage at a deeper level with ideas and approaches. They must have extended time to do this, they need access to external expertise, they need to have their thinking challenged, they need to learn alongside their colleagues, and their leaders need to provide the stimulating environment for the learning.

In line with Suslu's (2006) standpoint that every teacher is not motivated entirely by the same demands and needs, and job satisfaction of each employee is different from another, a questionnaire was collected from 53 L2 teachers to summarize their professional needs in the PRUE's setting. PRUE, being the biggest economic university in Russia, now has 3 departments of foreign languages with 135 members of staff. For our survey we selected only those teachers who had more than 3-year experience in PRUE and no less than 5-year teaching experience in general within the age group of 27 to 55 (the retirement age in Russia). A specially designed questionnaire was distributed to 67 teachers complying with the selected criteria with the return rate of 79%. The questionnaire contained 9 categories of training needs where the respondents were asked to rate the importance of a particular form of teacher training from 1 to 5, where 1 was the least important. Every category enclosed an agree-disagree question to classify the possible problem issue or/and an open-ended question with a request to comment on the training type and identify an area of particular concern. A set of questions to pinpoint the motivation for training was added at the end of the question block. The questionnaire (see Appendix for an adapted to English variant) was distributed in Russian language as the foreign languages department staff comprises teachers of various foreign languages, ranging from Chinese to Spanish, not all of whom comprehending English. The responses revealed a wide variety of individual needs as illustrated in the figure and commented below.



Language training

Language immersion into the target language was mentioned by L2 teachers working outside natural linguistic surrounding as one of the most highly desirable opportunities to upgrade their qualification. 93% of the respondents are eager to visit English-speaking countries on a regular basis both as a part of inter-university staff exchanges and as proficiency language programs participants.

Subject-matter training

Language teachers delivering courses of English for Professional Purposes highlighted subject-matter training as an absolute necessity (100% of those interviewed) since the subject of their teaching shifts from the comfortable zone of teaching grammar and general vocabulary to ‘murky’ areas of Securities, Accounting, Economic Theory and the like where they at best have only basic knowledge.

Upgrading computer skills

Modern process of education at a university level is increasingly becoming more and more computer-based with the never-ending flow of new teaching materials, departmental instructions, memos and reports flooding on a teacher in high tides. Only 12% of respondents rank themselves close to digital natives while others are to some extent digital immigrants and let alone technophobes. Those L2 teachers who are proficient computer users stand out among their less technically-minded colleagues since they can enjoy all unlimited facilities provided by ICT. So, the majority of L2

teachers need instructing on the use of the latest versions of both hard- and software in a university.

Training in mobile applications

The same concerns various state-of-art mobile applications which are widely used by all students in their gadgets and especially those who study at the faculty of Distant learning which is one of the biggest in PRUE. Modern mobile devices are perfectly suited for using them as a learning tool as there are a number of apps designed for both Android and iOS to help a learner not only memorize new words and expressions, but to study grammar, practice writing and pronunciation as well. Gadgets let their users download and read any e-book formats thus turning their smart-phones into personified digital linguistic libraries. Watching YouTube videos or foreign movies with subtitles in a foreign language can also be helpful in an educational process. Sharing applications can enhance overall students' involvement in a particular classroom activity even in the cases when the classroom is not fully equipped for the presentation sessions or there is a need for immediate video input. A L2 teacher who is in the know of all opportunities provided by mobile apps can skillfully capitalize on them and increase their students' classroom and out-of-campus exposure to foreign language practices.

Training in the latest methodology

Seeking to improve the quality of teaching, practicing L2 teachers try to find out which method or approach is the most appropriate and effective for their university setting and particular classroom. However, still being an ambiguous concept in language teaching, the notion of method embraces a too wide range of techniques. Naturally, many L2 teachers need extensive drilling in them.

Clarification of the new formal standards

Fitting Russian tertiary education programmes into the framework of Bologna process still creates some confusion and misinterpretation of new requirements. Thus a number of L2 teachers emphasize the necessity of being regularly 'put into the picture' and not 'left in the dark' of the newest red tape demands and specifications.

Cross-cultural issues training

Like many other universities, PRUE has an international student and teacher body from different parts of Russia and other countries with various ethnic, cultural, linguistic and religious backgrounds. Therefore, deep and keen awareness of numerous cross-cultural issues helps the teacher avoid possible cultural pitfalls or embarrassing situations and create a cozy

atmosphere of creativity and knowledge acquisition in the classroom and in-campus.

No needs at all

The picture wouldn't be complete without approximately 8% of departmental 'couch potatoes', i.e. teachers who sincerely consider themselves the best teachers they know and thus any idea of some additional training efforts is inconceivable to them. Moreover, some L2 teachers especially those with a high language proficiency are so professionally over-confident in their expertise level that they hold the opinion that their knowledge and skills do not need any further improvement.

So, teachers have different learning needs and styles and a "one size fits all model" is as inappropriate for teacher professional development and the task of the university is, on the one hand, to systemize these seemingly diffused training drives into a more or less coherent co-regulatory structure within the university learning environment and, on the other hand, offer diversified coaching activities to suit them.

Controversies

Despite the evident success and popularity of teacher development programs we must admit that the whole picture doesn't look so rosy. Feedback received from the colleagues gave us some food for thought because about 15% of respondents' replies revealed the tendency to reject any form of training pressure imposed from above. These data support Suslu's (2006) observation that unreasonable demands of administrators are perceived by the teaching staff as demotivators. So, contrary to expectations, overabundant training menu may produce the opposite results.

Besides, teaching is considered as one of the most stressful professions as Kottler and Zehn (2000) note that "burnout is a professional hazard" and define three reasons why teachers burn out. The first element is emotional exhaustion and physical overextension. The next factor is depersonalization, which means being cynical, frustrated and critical when teachers have negative attitudes towards their colleagues. The lack of personal accomplishment is the third one. Feeling discouraged and disillusioned is the signs of burned-out teachers as they are dissatisfied with their own needs for challenges, recognition and appreciation. There is no full satisfaction in their job. Humphreys (1996) says that burnout is the reason for personal vulnerability and occupational stress. Regrettably, according to the data collected, in this day and age frustration is still the issue to be overcome.

Lack of intellectual challenge is another de-motivating factor. Without discovering and acquiring new knowledge and skills, many teachers

can “lose spark” (Dörnyei, 2001) having to teach the same subject and repeat the same things for many years. So, the prescribed requirements and fixed, imposed training course content do not let teachers have leeway to create variations and intellectual detours.

Last but not least, restricted autonomy is believed to be one of the negative influences on teacher motivation and need further self-development. Nationwide standardized tests, national curricula, growing centralized control and general mistrust reflected by the increasing administration demands are obvious obstacles for teacher autonomy and motivation to upgrade their qualification.

The 7 Cs of L2 Teacher Training

Research analysis of L2 teaching staffs’ questionnaires, intensive reading on the subject and data received from consultations with counterparts from like-minded universities let us conclude that success of any L2 teacher further training rests on 7 Cs.

Customization

As every university is a unique educational organization with its own mission and goals, any activity aimed at further teacher training is to be carefully tailored to fit the needs of the particular audience.

Compatibility

This point stresses the essentiality of combinability of teacher’s own goals with the training agenda offered to him/her. Unless they coincide, teachers are very likely to view them as another form of pressure imposed on them and such training will have zero effect.

Clarity

University teaching staff are one of the most difficult audiences to handle and many speakers make a mistake of trying to overload their lectures with lots of recondite words and ideas in order to make them look more scientific. Conversely, feedback from our colleagues articulates that they are more interested in practical seminars and workshops without plunging themselves too deep into twilight zones of theoretical issues.

Consistency

In order to raise their national and international rating contemporary universities now adhere to a philosophy of continuous improvement which is an ongoing effort to improve educational programs and pedagogical processes in an incremental mode rather than breakthrough improvement all at once. Thus, L2 teacher training should be offered as a sequential flow of

interrelated events on more or less regular and consistent basis. If the overall policy of getting better all the time permeates the university's corporate culture, it makes the teaching staff more loyal.

Convenience

As L2 teachers are chronically work-overloaded people with too many commitments, they are more likely to attend training events conveniently located for them, where the venue of their own university is the lead runner. What's more, events held in their own university usually painlessly fit into the study timetables and teachers don't have to reschedule classes to attend them.

Culture

Culture permeates any organization, let alone educational establishments. Creating a supporting learning environment for teachers promotes for a democratic rather than authoritarian style of organizational culture when highly-qualified staff are nurtured as the most valuable assets and are in the focus of university's aspirations. Cultivating the paternalistic attitude to teacher development can result in a notable shift from extrinsic to intrinsic motivation which is much stronger and doesn't wear off even when the external pressure weakens.

Cost-effectiveness

Neither people nor organizations like to input their time, money and efforts into actions which do not lead to positive outcomes and bring tangible results. So, universities inviting outside fee-paid guest lecturers need to be sure that they really can contribute to the teacher development. Or, for example, when installing new expensive interactive equipment in the classrooms, it's wise to organize teacher training first, so that nobody could accidentally damage it due to the technical illiteracy.

Conclusion and Recommendations for further research

Skillfully-managed and teacher-friendly professional development in modern higher educational environment may bring plentiful benefits both to the L2 teachers and the university. First and foremost, it directly reflects on their professional well-being giving them more confidence even in the most challenging classroom and adding new dimensions to their teaching. Then, regular on-site professional learning and further application of new interactive methods to L2 teaching substantively enhance the effectiveness of student learning and outcomes. In addition, certificates, diplomas and the like documentary proof increase the teachers' individual profiles among

colleagues within their university, as well as employability opportunities and career options in case the teacher undertakes another job search.

To be successful, any L2 teacher training session or event should meet the following requirements:

- to pursue sustainable strong university policy in developing their teachers: a truly caring institution gets more staff commitment;
- to conduct a thorough pre-event needs analysis of the audience: a series of occasional non-professionally related compulsory events distorts the intended outcome;
- to demonstrate high proficiency in the subject by the key-speakers and moderators: those who chair or organize the event must command the respect of others and possess higher expertise in the delivered matter;
- to cater visual aids customingly: despite the globalization tendency towards L2 teaching the perceptions of local audience may show variance;
- to offer free hand-outs: an advertising campaign for a new coursebook with the sales target is often disguised as a teaching development event, while free resource packs are more encouraging;
- to arrange for a variety of activities: monotonous routine does not stimulate creativity;
- to provide cross-departmental exchange: L2 teacher training for EPP needs deep collaboration and various forms of support from subject-matter departments in the format of individual and group consultations or even short induction courses;
- to establish and maintain deep collaboration with faculty authorities because if the event involves all L2 teaching staff curricula changes or provision of a special venue may be necessary, etc.;
- to focus on quality not quantity: training courses should not be too intensive otherwise a reaction may set in against them. Rare but bright events will make a more positive impact on L2 teachers' professional growth.

Many L2 teachers are less likely to engage themselves in teacher development activities unless they are provided the university support. Exposing L2 teachers to new experiences and perspectives and sustaining opportunities to reflect on those in dialogues with others, after-events publications, etc. transfers learning experiences into new dimensions and offers new opportunities for job enlargement and job enrichment.

Life-long and quality professional development is not only formal 'training'. It must integrate theory with practice, enabling L2 teachers to make ongoing decisions about their classroom practice within the context of deeply understood relevant theory. It therefore engages with teachers as thinking professionals, as intellectual workers, rather than treating them as technicians who merely need to be instructed what to do and then subjected to compliance measures to ensure that they do it. Unless the university

supports their teachers with professional learning opportunities, they will act in isolation from the wider knowledge that is available in the world and which could enhance their effectiveness.

However, there exist some limitations which may affect this research applicability. Firstly, despite the universal nature of the teaching profession, notable differences in approaches exist on different geographical locations. Our research conclusions concern mainly the venue of Russian economic universities, taking into account the corporate culture of a particular university. Secondly, the 55+ age group of L2 teachers was intentionally excluded as the motivation and training needs of the teachers who have reached their retirement age may be very different from their younger colleagues. Moreover, such factors as pay, duration and content of L2 courses, student body and other variables may have significant impact on university teachers' desire for self-development. Therefore, further researchers may be recommended to collect and systematize data on other geographical locations, within more narrow age groups and genders. Also, analysis of interrelation between the work experience and the corresponding shifts in teachers' training needs may be found noteworthy. Further research can focus on some other Cs vital in teacher-training such as Change, Content, Communication, Cross-cultural Communication, Collaboration, etc.

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Appendix

QUESTIONNAIRE (adapted from Russian)

Please mark the importance/necessity of the training type
(1 as the least high for you, 5 as the highest for you)

Your personal need in					
Language training	1	2	3	4	5
I would like to take part in the inter-university exchange program. Yes / No					
I would like to study at a proficiency language course here. Yes / No					
I would like to do a proficiency language course abroad. Yes / No					
Subject-matter training	1	2	3	4	5
<i>Please, answer only if you are an ESP/EPP teacher:</i>					
What subject would you like to get training in?					
Would you like to attend a course in this subject? Yes / No					
Suggest any other way:					
Upgrading computer skills	1	2	3	4	5
Can you call yourself a 'digital native'? Yes / No					
Are your students more efficient computer users than you? Yes / No					
What IT training would you like to get?					
Training in mobile applications	1	2	3	4	5
Do you use any mobile devices in teaching? Yes / No					
If yes, then what devices and Apps do you use?					
Training in the latest methodology	1	2	3	4	5
Training in what methodology would you like to have?					
Clarification of the new formal standards	1	2	3	4	5
Do you understand the new bachelor/master/post-graduate system of education? Yes / No					
Are you aware of the competence-based system of education? Yes / No					
What can be done to help you understand it better?					
Cross-cultural issues training	1	2	3	4	5
What nation/country would you like to understand better?					
Suggest a number of training kinds you would like to attend to get more understanding in cross-cultural issues:					
I do not need any training	1	2	3	4	5
Why do you think you need no training?					
Would you rather look for training opportunities yourself?	1	2	3	4	5
Would you like to have training organized for you?	1	2	3	4	5
Would you attend a course you are recommended by the administration?	1	2	3	4	5

Empirical Test of Fama and French Three-Factor Model in Amman Stock Exchange

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Abstract

This study aims to empirically test the ability of Fama and French (1993) Three-Factor Model (FF3F) in predicting monthly excess rates of returns of stocks traded in Amman Stock Exchange (ASE) during the period (2001 - 2010). The study uses similar methodology of FF3F. Stocks in the sample have sorted according to the size (market value) and value (book-to-market ratio, B/M) in order to form portfolios and measuring the dependent and independent variables. To estimate the FF3F parameters, a time series regression ran using the ordinary least square method.

The study documents positive value effect in ASE. Portfolios with high B/M outperformed those of low B/M. Also, the study finds small size effect, but not in a like-manner as in the U.S or other developed markets. The study finds that multi factor asset pricing model works better than the single factor model, i.e. the CAPM. Therefore, it is recommended that participants in ASE should exploit size and value effect in investment strategy and replace the CAPM by FF3F in various asset pricing applications.

Keywords: Asset Pricing Models, Fama and French Three-Factor Model, Size Effect, Value Effect, Amman Stock Exchange

Introduction

Asset evaluation is a crucial process in investment decisions, whether financial or real assets. Fama and French (FF) (1992) studied the effect of each of the following: market capitalization (i.e. firm size), earnings/price (E/P) ratio, debt/equity ratio, and book/market ratio (B/M) in an attempt to explain variations in the rates of returns between the stocks in the cross-sectional regression approach. In light of this, they have found that the market beta alone doesn't have any explanatory power, while size, E/P, leverage and B/M ratio each alone has a power in explaining the cross-sectional variations in the average rate of returns. But when they are used jointly, the size and B/M ratio have a significant power in explaining the

average rate of returns and they seem to absorb the ability of leverage and E/P ratio in explaining the cross-section variations in the average rate of returns.

Accordingly, FF(1993) proposed a new alternative model to the CAPM. The FF new model (FF3F) contains three factors: (i) market excess rate of return, (ii) size related factor, and (iii) B/M equity related factor. They found that the market factor alone can not explain all variations in the rate of returns; and that the two additional factors enhanced the explanatory power of the CAPM in capturing the variations in the rate of returns. In the light of these results, they recommended the use of their FF3F instead of the traditional CAPM.

In Jordan, a small number of studies (e.g. Ajlouni et al. (2013) and AL-Khazali (2001)) tested the ability of the CAPM to predict variations in the rate of returns of stock and found that the CAPM is not able to explain a sufficient amount of variations in the rates of returns. Furthermore, a number of international studies tested the ability of the market beta in predicting the rate of returns in Amman Stock Exchange (ASE) and did not find any relationship between the market and the rate of returns of stocks; see for example Calessens et al. (1995) and Serra (2002).

This study aims to answer questions about the FF3F's significant power in explaining common variations in the average rates of returns of stock and its superiority to the CAPM in predicting the rates of return in Jordanian capital market. This will provide investors with satisfactory tools to analyze and predict stocks prices and make accurate decisions. Therefore, the main objective of this study is to test the validity of the FF3F in ASE and sought to find if this model is better than the CAPM in explaining the variations in the rate of return in ASE. This study is expected to provide information about systematic factors that expected to have an influence on the rates of return of stocks, to provide participants in ASE with useful information, which leads to improve their decisions, to provide investors in ASE with important information about some profitable investment strategy. In addition, this study contributes to the literature in the field of asset pricing studies in general, and the FF3F in particular. However, the study exposed to some limitations, such as shortness of the testing period (July 2001 to April 2010), while most studies used long testing period extend between 30 and 80 years. Also, small sample size used in this study (200 stocks), compared with thousands of stocks used in USA studies. Small size of sample might have an effect on the results of analysis, as well.

Theoretical Background: Evolution of Asset Pricing Models:

In the early beginnings, evaluation of an asset depends on the expected value of its outcomes without considering the range of possibility of these outcomes. Such insufficient evaluation remained in use until Daniel Bernoulli introduced new concepts to finance in 1751: expected utility and risk. These two concepts represent the basis of all modern asset pricing theories and models, in which rational pricing depends on the expected return-risk tradeoff concept. Markowitz (1952) developed a way to build an investment frontier and put criteria within which the investors can choose their investment. Then, Sharpe (1964), Lintner (1965) and Mossin (1966) simultaneously developed the first asset pricing theory that was later called the CAPM. The theory assumes that the rate of returns on a financial asset has a linear relationship with the asset market beta. According to the number of risk factors that determine asset prices, asset pricing theories are divided into two types: single factor model and multi factor model. The best known example of the single factor model is the CAPM. On the other hand, there are various examples of multi-factor model, such as Arbitrage Pricing Theory (APT) and Inter-temporal CAPM (ICAPM).

Since its introduction, researchers, such as Black et al. (1972) and Fama and Macbeth (1973), have strived to examine the CAPM validity in predicting the rate of returns on assets. It did not take a long time before some researchers suggested modifications of the classical form of the CAPM. Some of these modifications did not get away from the basic spirit of the theory, such as Black (1972) who modified the classical CAPM assumption about lending and borrowing at the risk-free rate to introduce a less restricted CAPM form that was called the zero-beta CAPM (Z-B CAPM). Merton (1973) developed a new form of asset pricing model with a continuous time horizon and multi risk factors called ICAPM. Ross (1976) developed the APT, as an arbitrage process rather than an equilibrium condition. A number of studies have found that the CAPM has failed to explain the variations in the rate of returns between stocks, resulted from "anomalies". The most famous anomalies are, the size-effect (Banz, 1981), earnings/price ratio (Basu, 1983), return-leverage relation (Bhandari, 1988), and value-effect (Rosenberg et al. 1985). However, the CAPM is still the main asset pricing model which has been used in the financial community.

The macroeconomic variable approach has been used by many researchers to investigate the impact of multi variables other than market beta on securities returns, but they differ in terms of what variables are used in the analysis, since they used microeconomic variables other than macro ones. In other words, they used characteristics of securities as common variables in predicting securities returns and to infer if securities pricing

process is a multi-factor one, then to suggest what types of factors that misspecified by the well established asset pricing models, especially the CAPM.

Through using this approach, many researchers have found that there are additional factors besides the market beta. The most important evidence about effect of such variables was documented by studies such as Basu (1977) who found that stocks with high earning to price ratio (E/P) gain a higher risk-adjusted rate of return (adjusted in the sense of the CAPM) than stocks with low E/P ratio. Rozeff and William R. Kinney (1976) documented the widely known stock markets phenomena that called January Effect, in that the USA stock market earns substantially higher rates of return in January than any other month. The same evidence was also found by Keim (1983).

Banz (1981) introduced one of the most important contradictory evidence against the CAPM. He found that stocks with lower market capitalization generated higher rates of return than ones with higher market capitalization, and when he added market capitalization to the CAPM, it improved the explanatory power of the model. This evidence is what has become to be known as the Size Effect. In turn, De Bondt and Thaler (1985) found a reversal pattern (from 3 to 5 years) in the long-term rate of return. They argued that stocks with past poor performance tend to earn higher rates of return than stocks that well performed as well as the market. Opposite to this long term reversal pattern, Jegadeesh and Titman (1993) found a continuous short-term pattern (from 6 to 12 months) in the rate of return, in which higher rate of return is still earned by past winner stocks over loser ones.

Finally, Rosenberg et al. (1985) examined the effect of B/M. They found that stocks with high B/M have higher rate of return than stocks with low B/M. Such evidence has raised doubts about the ability of the CAPM to predict asset returns. Also these evidence and many others are regarded as the basis for most trading strategies that have been widely used in financial markets.

In addition, APT has used to test the ability of capturing some evidences of the CAPM shortcomings. An example of such investigation is the study of Reinganum (1981), which empirically investigated the ability of the APT to capture differences in the rate of return between small market capitalization stocks and large market capitalization stocks (size-effect). The results showed contrary conclusion to the APT. Small market capitalization portfolio earns 20% of the yearly excess rate of return over large market capitalization portfolio. Therefore, the APT fails to capture the size-effect. In addition to this evidence, Cho and Taylor (1987) found that the January

Effect still exist even after controlling for the APT risk. The same results confirmed by Gultekin and Gultekin (1987).

Emergence of the Fama and French Three-Factor Model (FF3F):

Since CAPM and APT have failed to capture some differences in the rate of return from securities that appear to be occur from differences in characteristics of firms, academics and practitioners considered these evidences and variables as anomalies and puzzles. Thus, a new model should at least be able to capture the existing shocking anomalies and be significant economically and statistically in predicting securities prices. FF (1992) have developed a new model that strongly captures the cross-sectional variations in the excess rates of return associated with size, B/M, E/P and leverage variables. In their second study (FF, 1993), they exploited this conclusion to build a new multi-factor model, which has become known as the FF3F because it assumes that securities returns are affected by three factors only, namely:

(i) Market risk premium rate of return, which is measured by the difference between the market return and the risk-free rate.

(ii) Equity market value, which is measured by the number of shares outstanding multiplied by the market price per share.

(iii) Book-to-market equity, which is measured by the book value of equity divided by the market value of equity.

They used Black et al. (1972) methodology. In the first stage, they sorted stocks according to their market value and B/M, and then divided each sort to five equal parts (5 quintiles) to form five equal portfolios according to market value and another five portfolios according to B/M. After that, they constructed a twenty-five portfolio by the intersection of five market value portfolios with the B/M five portfolios, and then the rates of return were calculated to be used as dependent variable in the test. They also constructed the factors that were supposed to be proxies for risk factors that affected rate of return. In the second stage, a time-series regression was conducted to test the relationship between the mentioned three factors and the rate of return on 25 portfolios. Finally, they concluded that common variation in stock returns can be predicted by the following formula:

$$R_p - R_f = a_0 + b_p [E(R_{mkt}) - R_f] + S_p SMB + h_p HML + \varepsilon_p \quad (1)$$

Where:

$R_p - R_f$: is the difference between the rate of return of portfolio and the risk-free rate (portfolio risk premium)

$E(R_{mkt}) - R_f$: is the market risk premium.

SMB: is the difference between the rate of return on the small market value portfolio and the rate of return on big market value portfolio.

HML: is the difference between the rate of return on the high book-to-market portfolio and rate of return on the low book-to-market portfolio.

b_p , s_p , h_p : are the factor loadings or slopes in the time-series regression.

FF have argued that the FF3F is statistically and practically better than the CAPM in predicting the price of a stock and can be used in an other applications of pricing model, such as evaluating portfolios performance, selecting securities, measuring abnormal rate of return in event studies, and estimating the cost of capital. They pointed out to a strong evidence of robustness of FF3F, its ability to predict rates of return of portfolios that are constructed according to some anomalies, such as E/P and dividend yield, in addition to its ability to capture the January Effect.

Since it is development, FF3F has represented a compelling argument and an altering point against the CAPM in the financial markets community. FF3F argument is consistent with APT and ICAPM.

However, FF3F should be exposed to many tests. Therefore, many researchers have directed their efforts to examine this model from different perspectives. Some of them investigated a theoretical explanation for a multi prediction process that was proposed by the FF3F, especially the predictive power associated with SMB and HML factors of risk. Others examined whether FF3F holds with periods and samples other than the one used by FF. All these efforts have produced a large amount of evidence around the FF3F, some of which accept the model predictions as risk factor-based and others have refuted this story and refused the model.

Literature Review

This section presents the empirical evidence of FF3F robustness. In responses to FF's argument about the ability of their FF3F to predict the rate of return of stocks and its superiority over the widely used classical CAPM, many studies aimed to explore if the model is holding, is able to predict a stock's returns and is useful in different asset pricing applications, in many countries, with different periods and statistical tests techniques.

A large number of these studies have used a two-stage methodology similar to that used in FF to develop the FF3F. For example, FF (1995) found results that confirmed the FF3F. An example of them is FF (1996), who tested the ability of FF3F to capture differences in the rate of return that appear in accordance to some anomalies, such as, long-term reversal pattern in rates of returns on stocks, short-term continuation pattern in rates of returns, earnings/price ratio, cash flow/ price ratio and sales growth, that still shocked the CAPM. By using data from the U.S markets through the period of 1963 to 1993, they found that, except for the short-term momentum, the

FF3F performed well in explaining all the previous investigated anomalies. In response, they argued that the FF3F is just a model and it is natural to be unable to explain all variations in rates of returns of stocks. Drew and Veeraraghavan (2003) examined if the FF3F has more ability over the CAPM in Hong Kong, Korea, Malaysia, and the Philippines through the period (1991-1999). They found that the FF3F has a more explanatory power over the CAPM in all these countries. The same result was found by studies, such as Gaunt (2004) for Australian market, Drew et al. (2005) for Chinese market, Lajili (2007) for French market, Rogers and Securato (2009) for Brazilian market, Homsud et al. (2009) for Thailand market, and Connor and Sehgal (2001) in the Indian capital market.

But, FF3F has been faced by a sharp controversy and a broad discussion. Kothari et al. (1995) showed evidence that in contradiction with FF3F evidence about B/M ratio effect. Moreover, Lakonishok et al. (1994) argued that high returns are associated with high B/M ratio and both are generated by an overreaction of investor to past performance.

In addition to the previous studies, other studies used the Fama and Macbeth (1973) cross-sectional methodology, besides the time-series regression. However, they found that the FF3F is better than the CAPM. For example, Lawrernce et al. (2007) found a better explanatory power for the FF3F over the Three-Moment CAPM and the traditional CAPM, and GÖKGÖZ (2007) found the same preference for the FF3F in the Turkish market.

Some researchers argued that it is difficult to apply the FF3F with the previous two-stage methodology. Therefore, they used existing indexes to construct the SML and HML factors and established market industries in place of the portfolios that were constructed based to size or other anomalies. An example is Faff (2001) who tested the model by using Australian data for (1991-1999). He found that the model is priced by investors. Similarly, Pham (2007) conducted the same simple methodology on Japanese market through the period (1984-2004) and found the same result.

In addition, some researchers tested the ability of FF3F in various applications of asset pricing models. Hu (2003) compared the use of FF3F and CAPM in capital budgeting and found that, in the short term, FF3F has performed better than the CAPM. Naceur and Ghazouani (2007) argued that FF3F is more useful than the CAPM in estimating cost of capital within the Tunisian banking sector. In addition, Chahine (2008) and Clement et al. (2009) used the FF3F in evaluating investment strategies in the Euro Zone markets and reached the same conclusion.

Hypotheses of the Study

The study hypotheses are:

H1: there is relationship between book-to market ratio and the rates of return of stock traded in ASE.

H2: there is relationship between market value and the rates of return of stock traded in ASE.

H3: the Fama and French Three-Factor Model is better than the CAPM in predicting stock rates of returns in ASE.

Data of the Study

The sample of the data of stocks (such as book value, market value and closing price) that used in this study to perform empirical test of FF3F contains stocks that are traded in ASE and which achieved the set of chosen criteria to generate the dependent and independent variables. The set of criteria, as used by FF (1992, 1993), are:

(i) A stock should be traded at June of year t and at June of year $t-1$. Also, it should have disclosed book value of equity for December of year $t-1$. Market value of a stock in June of year t is matched with its book value at December of year $t-1$, which investors consider this data in generating asset return for period t to $t+1$.

(ii) Each stock with negative book value was excluded from the sample. Only two firms were excluded according to this criterion.

(iii) Each stock without a trading record for more than two consecutive months was excluded from the sample.

(v) Each stock with turnover ratio less than 0.2% monthly was also excluded from the sample. The third and fourth criteria are used to reduce the impact of a stock with thin trading. Turnover ratio limit is chosen arbitrarily in a way to reduce the negative impact of thinly traded stock and to maintain an appropriate size of the sample.

The rate of return for each stock in the sample contains capital gain and dividends yield calculated on a monthly basis. As a proxy for market rate of return, the current study used monthly changes in the value-weighted index of ASE. This index used 1991 as a basic year and represents 90% of ASE market capitalization. Rate of return on the Three-month treasury bills was used as a proxy for the risk free rate. Application of these criteria during the period (December 2000-June 2009) gives a list of stocks qualified for the purpose of constructing mimicking portfolios. Table (1) shows average data statistics of the sample in ASE from July 2001 to April 2010.

Table (1) Yearly Averages of the Sample Data

Year	No. of Firms	CAP (Size)	B/M Ratio	ASE Index
2001-2002	76	33	1.60	1672
2002-2003	93	44	1.53	1772

2003-2004	96	50	1.65	2574
2004-2005	105	73	0.86	4753
2005-2006	131	168	0.68	7724
2006-2007	125	157	0.68	5991
2007-2008	175	122	0.68	7590
2008-2009	168	226	0.67	6937
2009-2010	161	117	0.99	5555
Average	126	110	1.04	4952

Notes: CAP, is the market value of sample in million of Jordanian dinar

B/M Ratio: the book-to-market ratio measured at Dec t-1

ASE Index: the value weighted index of ASE.

Methodology of the Study

Portfolio Aggregation Procedures

To generate the dependent and independent variables, the study builds two sets of portfolios: In the first set, 6 portfolios constructed in order to generate the independent variables, specifically the SMB and HML. First, stocks in the sample sorted into two groups according to their market value at June of year t, then the sample, independently, resorted into three groups according to their B/M ratio at December of year t-1. Then, by intersection of the two groups, six portfolios are generated and from these six portfolios the SMB and HML will generated: SL, SM, SH, BL, BM, and BH.

In the second set, the dependent variable is generated. 16 portfolios were formed by sorting the stocks sample into four groups according to their market value (MC1, MC2, MC3 and MC4). For example, stocks within the lowest 25% of market capitalization ranking go into portfolio MC1, and so on. Then each one of the four market value groups resorted into another four sub groups according to their B/M ratio. These sorting procedures create 16 portfolios: MC11, MC12, MC13, MC14, MC21, and so on). For clarification, stocks that make up portfolio MC1 and also fall within the group of lowest B/M ratio within the same market capitalization group go into portfolio MC11. Finally, the value-weighted rate of return computed on a monthly basis for these 16 portfolios for the period of July 2001 to April 2010.

Time-Series Linear Regression Model

To test the ability of the FF3F to predict stock rate of return in ASE, the current study follows FF(1993) and uses the time-series regression like the one introduced by Black et al. (1972), as follows:

$$R_{pt}-R_{ft}=a_0 + \beta_1 (R_{mt}-R_{ft}) + \beta_2 (SMB_t) + \beta_3 (HML_t) + \varepsilon_{pi} \quad (2)$$

Where

R_{pt} : is the rate of return portfolio at month t.

R_{ft} : is the risk free rate of return at month t.

R_{mt} : is the rate of return on the market portfolio at month t.

SMB_t : is the market capitalization mimicking factor at month t.

HML_t : is the book-to-market mimicking factor at month t.

ε_t : is the error term.

a_0 : is the intercept.

$\beta_1, \beta_2, \beta_3$: sensitivity associated with each corresponding factor.

In addition to the above three factor regression, this study also runs another three regressions. The first one is with a single market factor ($R_{mt}-R_{ft}$), and the other two regressions include two factors: the first is market factor and the second is either a market capitalization factor (SMB) or a book-to-market factor (HML). The purpose for running these three additional regressions is comparing predictive power of the FF3F with CAPM, as well as to detect the additional explanatory power from each factor (SMB and HML) individually.

Therefore, the input variables needed to run the time-series regressions to test the FF3F are as follows:

The Dependent Variable

(i) Portfolio monthly excess rate of return ($R_{pt}-R_{ft}$) is the monthly excess rate of return for the portfolios, which is measured as the rate of return on a portfolio at month t minus risk-free rate (rate of return on one month treasury bills).

The Explanatory Factors

(i) Market Factor or Market Risk Premium ($R_{mt}-R_{ft}$) is the monthly changes in the ASE value-weighted index (proxy for R_m), subtracted from it the rate of return of the one month treasury bills (Risk free rate of return).

(ii) Size Risk Premium (SMB) represents the premium required by investors as compensation for carrying the size risk, which is the difference in the rate of return between a small market capitalization companies and large market capitalization ones. As in FF (1993), the SMB risk factor is measured monthly as:

$$SMB = ((SL + SM + SH) - (BL + BM + BH))/3 \quad (3)$$

(iii) Value Risk Premium (HML) is risk price required by investors as a compensation for exposure to value risk, which is the difference in the rate of return between the high B/M ratio stock (Value stock) and low B/M ratio stock (Glamour stock). The HML is measured monthly as:

$$HML = ((BH + SH) - (BL + SL))/2 \quad (4)$$

Statistical Description of the Portfolios

This section aims to give an overview of the statistical description of portfolios and input variables of the time-series regression. Table (2) shows the number of stocks in each of the 6 portfolios that constructed for the

purpose of generating independent factors in the time-series regression in ASE from July 2001 to April 2010.

Table (2) Number of Stocks in each Portfolios formed by Size and Value

Date	SL	SM	SH	BL	BM	BH	Total
2001-2002	7	13	18	16	17	5	76
2002-2003	5	19	23	23	18	5	93
2003-2004	5	24	19	23	15	10	96
2004-2005	5	23	25	26	19	7	105
2005-2006	4	28	34	35	24	6	131
2006-2007	5	25	32	33	25	5	125
2007-2008	18	33	36	34	37	17	175
2008-2009	18	34	32	32	34	18	168
2009-2010	18	30	33	30	35	15	161
Total	85	229	252	252	224	88	
Average	9.4	25.4	28	28	24.9	9.8	125.6

Source: Calculated by the researchers.

Notes:

SL: Portfolio of stock with small market capitalization and low B/M ratio

SM: Portfolio of stock with small market capitalization and medium B/M ratio.

SH: Portfolio of stock with small market capitalization and high B/M ratio.

BL: Portfolio of stock with big market capitalization and low B/M ratio.

BM: Portfolio of stock with big market capitalization and medium B/M ratio.

BH: Portfolio of stock with big market capitalization and high B/M ratio.

It can be seen from table (2) that the small stocks are concentrated in the portfolios with a high B/M ratio, and big portfolios concentrated in the portfolios with a low B/M ratio, which may gives an indication that the small stocks are distressed because it's low earnings generating capability in the future. On the contrary, the big capitalization of stocks gives the sign of high earning capability in the future

Table (3) shows statistical description of the excess rates of returns for the two sets of portfolios in ASE from July 2001 to April 2010. Recall that 6 portfolios had been constructed for the purpose of generating independent variables, and 16 portfolios had been constructed for generating dependent variables. Also with each table there is a chart in order to facilitate review of the results reported in the table.

Table (3) The Mean of the Monthly Excess Rate of Return and Standard Deviation of the 6 portfolios

Value Size	Mean			Standard Deviation			Sharpe Ratio		
	L	M	H	L	M	H	L	M	H
S	0.62	1.60	2.18	6.15	6.75	7.21	0.10	0.24	0.30
B	1.13	1.89	1.75	6.99	7.36	9.35	0.16	0.26	0.19

Source: Calculated by the researchers.

Note: Each cell represents the intersection of size and value measures.

Table (4) shows that, in general, the small portfolios tend to have higher return than big portfolios. Thus, there is superiority for high B/M portfolios over low B/M portfolios. This is in contradiction with the results in table (3), and somehow consistent with FF(1993). This may occur because the aggregation procedures and method of calculating rate of returns of the 16 portfolios different from the ones used in the 6 portfolios that reported in the table (3). In fact, both sets of portfolios (tables 3 and 4) with high B/M portfolios have higher excess rate of return than low B/M portfolios, with except of some cases. Also, the differences in excess rate of return between high and low portfolios are broader than differences between small and big portfolios.

Table (4) The Mean of the Monthly Excess Rate of Return and Standard Deviation of the 16 portfolios

Value Size	Mean				Standard Deviation				Sharpe Ratio			
	L1	2	3	H4	L1	2	3	H4	L1	2	3	H4
MC1	1.48	2.20	2.45	3.65	7.2	8.9	7.1	12.4	0.20	0.25	0.34	0.29
MC2	0.74	1.88	1.10	2.21	6.6	8.2	9.1	9.1	0.11	0.23	0.12	0.24
MC3	0.77	1.25	1.42	1.78	6.0	6.8	8.5	8.4	0.13	0.18	0.17	0.21
MC4	1.44	1.77	1.30	3.00	8.3	6.8	7.2	10.1	0.17	0.26	0.18	0.30

Source: Calculated by the researcher.

As a measure of risk, standard deviation does not reflect an increase or a decrease in the excess rates of return of stocks in most of cases. That may occur because one of two reasons: (i) investors are irrational in pricing stocks and their behavior in investment does not reflect the risk in market, or (ii) because the standard deviation is a measure of total risk, so it doesn't reflect the actual risk that investors consider when pricing stocks. In summary, we find that standard deviations for small portfolios and high B/M portfolios are higher than big and low B/M portfolios. This means that these portfolios have higher total risk.

In measuring the performance of different portfolios, the current study uses Sharpe measure $((R_p - R_f) / \text{standard deviation})$. On average, small and high portfolios have a higher performance than big and low portfolios. Therefore, the investors should invest in small-high or big-high portfolios, since these portfolios yield the highest monthly excess rate of return, equal to 3.65% (43.8%) yearly and 3% (36%) yearly in SH and BH respectively. Also investor can generate superior rate of return if he invests in small portfolio. The difference in the excess rate of return between 4 smallest portfolios and 4 biggest portfolios is about 6.8% yearly.

Table (5) represents statistical description of the monthly average and standard deviation of the excess rate of return for explanatory variables market; HML and SMB risk premiums in ASE from July 2001 to April 2010.

Table (5) Independent Variables: Mean of the Monthly Value of the Market, HML, and SMB Risk Premiums

Risk premium	Mean	Standard Deviation
$R_m - R_f$ Premium	1.16	6.87
HML Premium	1.04	5.60
SMB Premium	- 0.13	4.64

Source: calculated by the researchers.

Note: HML: is the difference in the rates of return between high B/M portfolios and low B/M portfolios,

SMB: is the difference in the rates of return between small size portfolios and big size portfolios .

The above table reports that market risk premium has the highest average monthly excess rate of return and standard deviation, followed by HML, and SMB. The high standard deviation of the excess rate returns for these three explanatory variables will strengthen their power in explaining the excess rates of returns of portfolios.

Table (6) details the mean for each independent variable in each year in ASE from July 2001 to April 2010, rather than on the overall period as in the table (5) .

Table (6) Independent Variables: Mean of the Monthly Value of the Market, HML and SMB Risk Premiums

Year	SMB	HML	$R_m - R_f$
2001-2002	-3.15	2.60	2.04
2002-2003	1.45	1.29	0.48
2003-2004	0.35	1.12	2.70
2004-2005	-2.42	3.52	8.44
2005-2006	1.74	-1.70	-1.85
2006-2007	1.02	1.19	-0.81
2007-2008	-2.99	0.13	4.81
2008-2009	1.58	-0.35	-4.65
2009-2010	-0.76	1.62	-1.12

Source: calculated by the researcher

Interestingly, the average monthly excess rate of returns for SMB is increased when the market premium is decreased. This may indicates that when the market is poor the small size premium appears strongly, but when

the market is strong and in rally, the big portfolios premium appears. Also, SMB is highly fluctuating from year to year. The HML premium is more consistent than the SMB premium, and generally higher.

The following table (7) shows the correlation coefficients between independent variables.

Table (7) The Correlation Coefficient between Independent Variables

Variable	SMB	HML	R_m-R_f
SMB	1		
HML	-0.20	1	
R_m-R_f	-0.52	0.04	1

The table shows that SMB premium and market risk premium (R_m-R_f) is highly negatively correlated ($\rho=-0.52$). So, it is expected that the variation in the SMB variable have an impact on the market beta estimation. This finding is in line with FF (1993) but positively not negatively. Also, the same result for a correlation between the HML and SMB premiums but less severe ($\rho = -0.20$) and that inconsistent with the FF(1993) which found more less correlation between the SMB and HML ($\rho = -0.08$). Finally, there is a thin positive correlation between the HML and market risk premiums.

The Time-Series Regression Results

Time-series regression conducted to test the FF3F ability to predict the excess rate of return for stocks that traded in ASE. For the significance level, the study used $\alpha = 5\%$ for rejection of null hypothesis. The analysis of the FF3F will come in three sections: (1) the time-series regression run by using the three factors (R_m-R_f , HML and SMB) as regressors and the excess rate of returns on the 16 portfolios as dependent variables (2) the same three factors will be regressed on the excess rate of return on the 6 portfolios (SL, SM, SH, BL, BM, BH) that formed to generate the two factors (SMB and HML), and (3) the three factors will be regressed on the average of monthly excess rate of return of 16 portfolios, and once again on average of monthly excess rate of return of 6 portfolios.

Estimating the Excess Return of the 16 Portfolios

Table (8) reports the results of the time-series regression on the three factors, namely the market factor (R_m-R_f), HML and SMB. The dependent variable in this regression is the monthly excess rates of return on 16 portfolios in ASE during the period (July 2001 - April 2010).

Table (8) Three Factor Model Test: Three Factors are Regressors and the Excess Rates of Return of the 16 Portfolios are Dependent Variables

$R_p - R_f = a_0 + \beta_1 (R_m - R_f) + \beta_2 \text{SMB} + \beta_3 \text{HML} + e$								
Portfolio	Book-to-Market Ratio				Book-to-Market Ratio			
	L 1	2	3	H 4	L 1	2	3	H 4
Constant	a_0				t-statistic			
MC1	0.94	0.94	1.38	1.61	1.44	1.22	2.33	1.66
MC2	-0.26	0.45	-0.75	0.30	-0.57	0.75	-1.38	0.50
MC3	-0.25	0.03	-0.41	0.16	-0.52	0.07	-0.81	0.31
MC4	0.50	0.88	0.08	1.19	0.86	1.92	0.20	1.87
$(R_m - R_f)$	β_1				t-statistic			
MC1	0.59	0.69	0.64	1.24	5.50	5.44	6.47	7.71
MC2	0.80	0.9	1.05	0.90	10.6	9.20	11.70	9.10
MC3	0.50	0.72	0.97	0.83	6.30	8.60	11.70	9.70
MC4	0.85	0.69	0.75	0.96	8.60	9.10	10.70	9.12
SMB	β_2				t-statistic			
MC1	0.38	0.75	0.59	1.15	2.30	3.90	4.00	4.80
MC2	0.94	0.96	1.35	0.82	8.30	6.44	9.90	5.50
MC3	0.30	0.56	0.52	0.04	2.50	4.50	4.10	0.30
MC4	-0.04	-0.16	-0.2	-0.13	-0.30	-1.40	-1.90	-0.81
HML	β_3				t-statistic			
MC1	-0.08	0.55	0.40	0.74	-0.69	4.04	3.81	4.29
MC2	0.21	0.50	0.8	0.94	2.56	4.80	8.30	9.00
MC3	0.47	0.43	0.73	0.63	5.50	4.80	8.25	6.90
MC4	-0.06	0.07	0.30	0.63	-0.53	0.85	4.00	5.60
Determination	R^2				s(e)			
MC1	0.24	0.30	0.34	0.42	6.45	7.62	5.89	9.63
MC2	0.55	0.50	0.66	0.60	4.50	5.9	5.40	5.90
MC3	0.41	0.48	0.67	0.64	4.70	5.03	5.00	5.12
MC4	0.51	0.57	0.68	0.62	5.90	4.5	4.20	6.33

Source: calculated by the researcher

Note: Intersection of MC1 with L1 indicates to portfolio MC1.1, MC1 with L2 indicates to portfolio MC1.2, and so on.

Table (8) documents the results of the time series test conducted to examine the ability of the FF3F in predicting the monthly excess rate of return in ASE. The market risk premium coefficients, except high book-to-market group, aren't able to explain all variation in the excess rates of returns between small and big portfolios. Exception for (MC4.1, MC4.2, MC4.3, MC4.4 and MC3.4), the SMB coefficients are significant in all portfolios. Also the same thing is true for the HML but more strongly and systematically in reflecting variation in the rates of return. When we move

from portfolio with low B/M portfolio into high ones, the coefficient of the HML becomes higher. Also, the HML coefficients are significant in 14 out of 16 portfolios. This evidence is consistent with other results in Jordan (Claessens et al., 1995). Also, the result of HML and SMB is in some degree consistent with FF(1993) and Aksu and Onder (2007) in Turkish market. The better performance of the HML over the SMB is consistent with the results reported in tables (3) and (4) above regarding a strong and consistent value effect than the size effect in ASE. Despite, that the three factors are jointly significant in capturing the variation in the excess of rates of return between different portfolios. The FF3F can't explain enough variation in the excess of rates of return, specifically, the four smallest portfolios, where the FF3F explains only 0.24% and 0.30% of the variation in of the rates of return of MC1.1 and MC1.2 respectively.

Table (9) reports the result of the time series regression test of the CAPM, i.e. the market factor ($R_m - R_f$).

Table (9) CAPM Test: The Market Risk Premium is the Regressor and the Excess Rates of Return of the 16 Portfolios are the Dependent Variables

$R_p - R_f = a_0 + \beta (R_m - R_f) + e$								
Portfolio	Book-to-Market ratio				Book-to-Market ratio			
	L 1	2	3	H 4	L 1	2	3	H 4
Constant	a_0				t-statistic			
MC1	0.95	1.69	1.94	2.65	1.47	2.02	3.22	2.45
MC2	0.19	1.20	0.40	1.47	0.33	1.68	0.49	1.83
MC3	0.30	0.62	0.47	0.81	0.57	1.08	0.74	1.34
MC4	0.45	0.91	0.34	1.80	0.77	2.02	0.75	2.50
$(R_m - R_f)$	β_1				t-statistic			
MC1	0.46	0.45	0.44	0.86	4.85	3.73	4.79	5.49
MC2	0.47	0.58	0.60	0.64	5.76	5.66	5.16	5.53
MC3	0.41	0.54	0.82	0.84	5.35	6.57	8.86	9.56
MC4	0.86	0.74	0.82	1.03	10.34	11.50	12.60	9.96
Determination	R^2				s(e)			
MC1	0.19	0.12	0.18	0.23	6.60	8.50	6.50	11.0
MC2	0.24	0.24	0.20	0.23	5.77	7.20	8.20	8.10
MC3	0.22	0.29	0.43	0.47	5.37	5.80	6.50	6.20
MC4	0.51	0.56	0.60	0.49	5.86	4.60	4.60	7.30

Source: calculated by the researcher.

Table (9) shows that market coefficients for small portfolios groups (MC1 and MC2) are lower than those estimated by the three factors. This decrease in the market risk premium coefficient occurs due to the exit of the SMB from the regression. FF(1993) suggested that the market premium coefficients are collapsed toward one in the FF3F as a result of the high

correlation between the SMB and the market risk premium ($\rho = - .52$). According to the CAPM test, the market risk premium definitely could not be able to explain the higher excess of rates of return of small portfolios over big portfolios. The market premium estimated coefficients indicate that big portfolios are more risky than small portfolios at the same level of the B/M ratio. Thus, the market factor coefficients are not reflecting higher rate of return for the small portfolios that reported in the table (4). This evidence is consistent with studies of FF (1992, 1993), Davis et al. (2000), Aksu and Onder (2007) and Connor and Sehgal (2001). Comparing with the FF3F, CAPM is less satisfactory in explaining the variation in the excess of rates of return between portfolios sorted according to the market capitalization and B/M ratio. Most of R2 in CAPM are lower than those in the FF3F.

Table (10) reports the results of testing the CAPM with the SMB alone. The purpose is to examine the additional explanatory power of adding SMB to the CAPM.

Table (10) The CAPM with SMB: The Market Risk Premium and the SMB are Regressors and the Excess Rates of Return of the 16 Portfolios are the Dependent Variables

$R_p - R_f = a_0 + \beta_1 (R_m - R_f) + \beta_2 \text{SMB} + e$								
Portfolio	Book-to-Market ratio				Book-to-Market ratio			
	L 1	2	3	H 4	L 1	2	3	H 4
Constant	a_0				t-statistic			
MC1	0.85	1.54	1.82	2.42	1.34	1.91	2.94	2.35
MC2	-0.03	1.00	0.12	1.33	-0.07	0.12	0.18	0.09
MC3	0.26	0.51	0.40	0.85	0.49	0.93	0.63	1.40
MC4	0.45	0.95	0.41	1.88	0.77	2.13	0.93	2.64
$(R_m - R_f)$	β_1				t-statistic			
MC1	0.60	0.66	0.61	1.19	5.58	4.82	5.84	6.86
MC2	0.78	0.87	1.00	0.83	10.17	8.02	8.59	6.35
MC3	0.47	0.70	0.92	0.79	5.21	7.52	8.68	7.67
MC4	0.85	0.68	0.73	0.92	8.70	9.06	9.71	7.68
SMB	β_2				t-statistic			
MC1	0.40	0.59	0.47	0.94	2.55	2.92	3.05	3.66
MC2	0.88	0.81	1.11	0.52	7.72	5.07	6.50	2.83
MC3	0.16	0.44	0.31	-0.14	1.21	3.21	1.94	-0.95
MC4	-0.03	-0.18	-0.28	-0.31	-0.17	-1.62	-2.60	-1.76
Determination	R^2				s(e)			
MC1	0.23	0.19	0.25	0.31	6.43	8.17	6.26	10.40
MC2	0.52	0.39	0.44	0.28	4.62	6.50	6.95	7.48
MC3	0.23	0.36	0.45	0.47	5.35	5.55	6.40	6.16
MC4	0.51	0.57	0.63	0.50	5.90	4.50	4.48	7.20

Source: calculated by the researcher.

Note from the regression results in the table (10) that the SMB adds to the explanatory power for the CAPM in explaining variation in the excess rates of return. But, this additional explanatory power for the SMB appeared clearly, only in the two small groups of portfolios (MC1 and MC2). Also, the coefficient of determination (R²) is increased; the errors term is decreased as well as the intercept for some portfolios.

Table (11) reports the test of the explanatory power added by the HML to enhance the explanatory power of the CAPM in explaining the excess rate of return.

Table (11) The CAPM with HML: The Market Risk Premium and the HML are Regressors and the Excess Rates of Return of the 16 Portfolios are the Dependent Variables

$R_p - R_f = \alpha_0 + \beta_1 (R_m - R_f) + \beta_2 \text{HML} + e$								
Portfolio	Book-to-Market ratio				Book-to-Market ratio			
	L 1	2	3	H 4	L 1	2	3	H 4
Constant	α_0				t-statistic			
MC1	1.09	1.24	1.62	2.07	1.65	1.51	2.56	1.95
MC2	0.12	0.83	-0.21	0.63	0.21	1.19	-0.28	0.93
MC3	-0.13	0.26	-0.20	0.18	-0.27	0.48	-0.37	0.34
MC4	0.50	0.81	0.00	1.14	0.84	1.79	0.01	1.80
$(R_m - R_f)$	β_1				t-statistic			
MC1	0.46	0.43	0.43	0.84	4.91	3.74	4.83	5.57
MC2	0.47	0.57	0.58	0.61	5.71	5.75	5.44	6.40
MC3	0.39	0.53	0.80	0.82	5.72	6.79	10.43	11.27
MC4	0.86	0.74	0.81	1.01	10.3	11.45	13.48	11.21
HML	β_2				t-statistic			
MC1	-0.14	0.44	0.32	0.57	-1.17	3.10	2.86	3.08
MC2	0.07	0.36	0.60	0.82	0.68	2.99	4.58	7.05
MC3	0.42	0.35	0.66	0.62	4.99	3.67	7.03	7.02
MC4	-0.05	0.09	0.33	0.65	-0.48	1.16	4.43	5.88
Determination	R^2				s(e)			
MC1	0.20	0.19	0.24	0.29	6.59	8.13	6.30	10.60
MC2	0.25	0.3	0.34	0.48	5.78	6.97	7.53	6.69
MC3	0.37	0.38	0.62	0.64	4.84	5.47	5.35	5.09
MC4	0.51	0.57	0.67	0.62	5.88	4.55	4.24	6.30

Source: calculated by the researcher.

As shown in the table, the HML enhance the power of the CAPM in predicting the excess rates of return of portfolios, especially for high B/M portfolios with big size. It is noted from the results table (11) that when move from portfolios of low B/M ratio to portfolios with higher ratio, the goodness of fit criteria (R², α_0 , and s(e)) all become better.

Estimating the Excess Return of the 6 Portfolios

The additional sets of regressions reported here are the same ones that reported above, but with one difference. Here the excess rates of returns on the 6 portfolios (SL, SM, SH, BL, BM, BH) that constructed to generate regressors (SMB and HML) are used as a dependent variable in the regression. Table (12) reports the results of the time series test of the FF3F in estimation the excess rate of return of the 6 portfolios.

Table (12) Three-Factor Model: Three Factors are Regressors and the Excess Rates of Return of the 6 Portfolios are Dependent Variables

$R_p - R_f = a_0 + \beta_1 (R_m - R_f) + \beta_2 \text{SMB} + \beta_3 \text{HML} + e$						
Portfolio	Book-to-Market ratio			Book-to-Market ratio		
	Low	Medium	High	Low	Medium	High
Constant	a_0			t-statistic		
Small	-0.03	0.24	-0.43	-0.07	0.59	1.45
Big	-0.20	0.48	-0.19	0.79	1.20	-0.44
(Rm-Rf)	β_1			t-statistic		
Small	0.76	0.83	0.88	11.18	12.34	18.15
Big	0.90	0.85	0.77	21.28	12.78	10.54
SMB	β_2			t-statistic		
Small	0.79	0.91	0.87	7.70	9.04	11.8
Big	-0.13	0.06	-0.23	-2.07	0.57	-2.12
HML	β_3			t-statistic		
Small	-0.10	0.51	0.82	-1.42	7.17	15.8
Big	-0.13	0.40	0.96	-2.91	5.64	12.30
Determination	R^2			s(e)		
Small	0.57	0.66	0.84	4.08	4.01	2.91
Big	0.87	0.71	0.78	2.54	3.99	4.38

Source: calculated by the researcher.

By comparing reported results in the table above with table (8), it is obvious that FF3F is able to explain the excess rate of return of the 6 portfolios better than that for the 16 portfolios. R^2 s are higher than those reported in the table (8). Also, the intercepts and the errors term are less in case of the 6 portfolios. In except for portfolio of big size and medium B/M ratio, all coefficients of the SMB are statistically significant. The same result is found for the HML coefficients, but its coefficient is insignificant for the portfolio of small size and low B/M ratio.

Table (13) reports the results of the CAPM ability in predicting the monthly excess rates of return of the 6 portfolios.

Table (13) The CAPM: The Market Risk Premium is the Regressor and the Excess Rates of Return of the 6 Portfolios are the Dependent Variables

$R_p - R_f = a_0 + \beta (R_m - R_f) + e$						
Portfolio	Book-to-Market ratio			Book-to-Market ratio		
	Low	Medium	High	Low	Medium	High
Constant	a ₀			t-statistic		
Small	0.06	0.99	1.48	0.12	1.75	2.54
Big	0.04	0.91	0.73	0.13	2.03	1.04
(R _m -R _f)	β			t-statistic		
Small	0.48	0.52	0.61	6.50	6.41	7.20
Big	0.94	0.85	0.89	25.00	13.11	8.73
Determination	R ²			s(e)		
Small	0.29	0.28	0.33	5.21	5.74	5.91
Big	0.86	0.62	0.42	2.64	4.50	7.13

Source: calculated by the researcher.

Table (13) shows the same results of market risk premium failure in capturing differences in the rate of returns between portfolios. The market risk premium is highly loaded on the big portfolios, specifically, big portfolio with low B/M ratio (BL) despite that this portfolio generated lowest rate of return between the big size portfolios. This bias of the market factor in estimating risk of BL portfolio may be a result of composition of this portfolio. Where BL portfolio includes biggest size stocks in ASE and those stocks account for most weight of the value-weighted index. In short, the market risk premium alone is unable to predict the variation in the rate of returns.

Table (14) reports the results of two sets of regressions. The first one consists of market risk premium and SMB as regressors and the second one consists of market risk premium and HML.

Table (14) CAPM with each of SMB and HML: The Market Risk Premium and SMB or HML are Regressors and the Excess Rates of Return of the 6 Portfolios are the Dependent Variables

$R_p - R_f = a_0 + \beta_1 (R_m - R_f) + \beta_2 \text{SMB} + e$						
Portfolio	Book-to-Market ratio			Book-to-Market ratio		
	Low	Medium	High	Low	Medium	High
Constant	a_0			t-statistic		
Small	-0.14	0.80	1.33	-0.35	1.66	2.50
Big	0.05	0.92	0.86	0.22	2.06	1.27
(Rm-Rf)	B1			t-statistic		
Small	0.77	0.79	0.80	11.3	9.72	9.20
Big	0.91	0.81	0.71	20.80	10.90	6.20
SMB	B2			t-statistic		
Small	0.82	0.76	0.63	8.10	6.30	4.73
Big	0.09	-0.06	-0.51	-1.45	-0.54	-3.03
Determination	R^2			s(e)		
Small	0.57	0.48	0.45	4.10	4.90	5.40
Big	0.86	0.62	0.47	2.63	4.60	6.87
$R_p - R_f = a_0 + \beta_1 (R_m - R_f) + \beta_2 \text{HML} + e$						
Portfolio	Book-to-Market ratio			Book-to-Market ratio		
	Low	Medium	High	Low	Medium	High
Constant	a_0			t-statistic		
Small	0.29	0.60	0.77	0.56	1.13	1.73
Big	0.15	0.51	-0.29	0.58	1.30	-0.65
(Rm-Rf)	B1			t-statistic		
Small	0.49	0.51	0.58	6.74	6.70	9.17
Big	0.95	0.86	0.85	25.80	14.70	13.44
HML	B2			t-statistic		
Small	-0.22	0.38	0.70	-2.46	4.06	8.90
Big	-0.11	0.40	1.00	-2.50	5.66	12.80
Determination	R^2			s(e)		
Small	0.33	0.38	0.62	5.10	5.40	4.50
Big	0.87	0.73	0.78	2.60	3.98	4.50

Source: calculated by the researcher.

It can be seen from table (14) that adding the SMB enhanced ability of CAPM in predicting monthly excess rates of return for the small portfolios, which is highly loaded on the small portfolios, while big portfolios coefficients are insignificant. It seems that the SMB leaves this task for the market risk premium. These results are consistent with those reported in table (11) about additional explanatory power the HML contributes to the CAPM, per which HML did a well job in explaining the excess rates of return for the high book-to-market portfolios over low book-

to-market portfolios, its coefficients increase monotonically from low-negative for low book-to-market portfolios to high positive for high book-to-market portfolios. Also, the result reported in table (14) support the results earlier in this study about the stronger power for the HML over the SMB in enhancing the ability of the CAPM in predicting the monthly excess rate of return in ASE

Estimating the Average Monthly Excess Returns of Portfolios

It has been argued that sorting stocks in the sample according to some empirical regulatory might potentially reduce the errors in variable issue and lead to exaggerate the relation with such empirical regulatory, such as size, and influence the results of the pricing model test (Lo and Mackinaly, 1990). In order to deal with this problem, the study runs a test with three factors and one factor models to examine the ability to predict the monthly average excess rates of return of 6 and 16 portfolios. Table (15) reports the results.

Table (15) Time-Series Regression of Three Factors (and Single Factor) as Regressors and the Monthly Average Excess Rates of Return on the 16 and 6 Portfolios are the Dependent Variables

Panel A: FF Three-Factor Model and 16 Portfolios						
$R_p - R_f = a_0 + \beta_1 (R_m - R_f) + \beta_2 SMB + \beta_3 HML + e$						
	a_0	β_1	β_2	β_3		
Coefficient	.004	0.82	0.50	0.45		
t-statistic	2.32	26.90	10.70	13.90	$R^2 = 90\%$	$s(e) = 1.80$
Panel B: FF Three-Factor Model and 6 Portfolios						
$R_p - R_f = a_0 + \beta_1 (R_m - R_f) + \beta_2 SMB + \beta_3 HML + e$						
	a_0	β_1	β_2	β_3		
Coefficient	.002	0.83	0.38	0.41		
t-statistic	1.10	28.10	8.48	12.9	$R^2 = 91\%$	$s(e) = 1.78$
Panel C: Single Factor Model (CAPM) and 16 Portfolios						
$R_p - R_f = a_0 + \beta (R_m - R_f) + e$						
	a_0	β				
Coefficient	0.01	0.66				
t-statistic	3.30	13.70			$R^2 = 64\%$	$s(e) = 3.40$
Panel D: Single Factor Model (CAPM) and 6 Portfolios						
$R_p - R_f = a_0 + \beta (R_m - R_f) + e$						
	a_0	β				
Coefficient	.007	0.71				
t-statistic	2.34	16.50			$R^2 = 72\%$	$s(e) = 3.04$

Source: calculated by the researcher.

Table (15) reveals that FF3F is more powerful than CAPM in predicting variations in average excess rates of returns of both 16 and 6 portfolios. The result is in contrast with Berk (2000) argument that sorting of

stock according to the some anomalies reduce the errors in the variables. The explanatory power of three factors in explaining average monthly variations in the excess rates of returns is stronger than those for the individual portfolios. Panel A and panel B of table (15) shows that FF3F is able to explain 90% of the variations in the both average excess rates of returns. Also, the error in estimation is below 2. On the other hand, panel C and D document low power of market risk premium in explaining the variations in the excess rates of returns. The market factor has a lower coefficient of variation and higher estimation errors and intercept than those reported in the FF3F model.

Conclusion

This study aimed at investigating the validity of FF3F in predicting monthly excess rates of returns of stocks traded in ASE during the period (July 2001- April 2010), and to examine the effect of size and value in ASE.

The empirical results of the study shows that there is a strong value effect in the ASE within the sample period, and the excess rate of returns in most of cases is higher in portfolios with higher book-to-market ratio than in portfolios with lower ratio. These results are consistent with other studies conducted in emerging and small markets, such as Chui and Wei (1998) that find similar value effects in each of Thailand, Korea, Malaysia and Hong Kong, and Gaunt (2004) who finds strong value effects in the Australia market. While Homsud et al. (2009) find a reverse value effects in Thailand. Fama and French (1992, 1993, and 1995) find similar value effects in the U.S markets and argue that the excess rates of returns in the high book-to-market portfolio is a case of a higher risk, so they suggested that high book-to-market ratio is a sign of distress situations expected by the investors. Lakonishok et al. (1994) suggest that as a result of mispricing by the investors and the slow price corrections, value stocks are overpriced while glamour stocks are underpriced.

In addition, this study finds that size effects in the ASE are less consistent and weaker than value effects, as well as the pattern of size-return relations in ASE is different from the one documented by previous studies conducted in the U.S. The analysis reveals that the smallest size portfolios group (MC1) always earns a higher rate of returns than other portfolios. The second small size group of portfolios (MC2.1, MC2.2, MC2.3 and MC2.4) three out of four portfolios tend to earn higher rate of returns than corresponding ones in the higher size group of portfolios (MC3.1, MC3.2, MC3.3 and MC3.4). But in case of the biggest size group of portfolios (MC4.1, MC4.2, MC4.3 and MC4.4), the evidence indicates that these portfolios tend to earn higher rates of return than the two smaller size groups of portfolios (MC2 and MC3). These results are consistent with other

studies, such as AL-Khazali (2001) in ASE during the period (1980 to 2000) and Drew et al. (2005) in China market. Some researchers argue that excess rate of returns of small stocks over big stocks is a compensation for higher risk associated with small size. For example, Fama and French (1995) argue that small size firms tended to be less profitable than big firms, so investors required higher rates of returns for higher risk that is associated with investment in these firms. Others, such as Bhardwaj and Brooks (1992) and Stoll and Whaley (1983) suggest that the higher rate of returns of small stocks is a matter of increase in the cost of investing in these stocks.

Moreover, consistently with Fama and French (1993), the study finds that the CAPM is unable to predict the differences in the rates of returns between portfolios sorted according to size (market value) or value (book-to-market ratio). Although the big portfolios earn lower rate of returns than small portfolios, it appears from the regression results that the market factor coefficients are always highly loaded on the big portfolios. The same thing is true for book-to-market sorting, but here the market factor does a better job than in size sorting portfolios. The interpretations of these results are one of three reasons: (i) Jordanian investors are irrational and do not reflect the risk inherent in the stocks in their investment decisions; (ii) the CAPM assumptions are violated in ASE's environment, specifically, allowing short selling, this investment activity had been prohibited in the legislation of the Jordanian capital market; (iii) the CAPM is invalid, there are multiple pervasive factors instead of one single factor as the CAPM assumes. Most recent studies agree with the first and third interpretation. AL-Khazali (2001) examined the CAPM's ability to predict the rates of returns in ASE and find that the CAPM does not capture the differential rates of returns for small portfolios over big portfolios, and argued that the inability of the CAPM might be the result of the irrationality of Jordanian investors and of less diversified portfolios held by those investors.

Furthermore, in comparing between size and value, the results exhibits that the latter factor (the HML) has stronger and a more meaningful ability to explain the variation in the monthly excess rates of returns. This may be due to the consistent and the strong value effect in ASE. In addition, the HML has a very low correlation with the market risk premium, in contrast to the SMB which has a strong negative correlation with market risk premium. So, the HML is able to capture many variations in the rates of returns that are unexplained by the market risk premium as well as the SMB.

Finally, FF3F is better than the CAPM in explaining the variations in the rates of returns in ASE. The results of this study indicate that the additional of two factors, namely the SMB and HML, enhances the explanatory power of the CAPM. This evidence is consistent with the FF(1993) in U.S market, Connor and Sehgal (2001) in Indian market, Drew

and Veeraraghavan (2003) in Hong Kong, Korea, Malaysia and the Philippines markets.

However, the three factor model is still unsatisfactory in some cases. The results of this study show that an economically significant amount of variations in the excess rate of returns is still unexplained by the FF3F; specifically, the smallest size group portfolios (MC1).

Recommendations

According to the results found, the study recommends the following:

(i) According to the evidence found about the size and value effects in ASE, the study recommends that traders in ASE should exploit these effects in their investment strategy, by investing in portfolios with smaller market value and portfolios with higher book-to-market ratio.

(ii) In the light of results about inferiority of the CAPM and superiority of the FF3F, the study recommended the practitioners in ASE to utilize FF3F instead of CAPM in the various applications of the asset pricing models.

(iii) The study recommends the investors in ASE to take the size and value into consideration when making investment decisions.

(iv) The study recommends that investors in ASE may be able to improve their investment performance by transferring their investment from big stock to small stock when the market expected to go poorer and from small to big when the market expected to go higher.

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Performance of the Pension Fund Companies: Evidence from Turkey⁵

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Abstract

The individual pension funds not only complementary to public pension systems but also an important tool in order to meet the long-term funding needs of economies. Although not having a long history, the individual pension fund system, which has been practiced in various countries around the world for many years, has become one of the important elements of the economy in Turkey since October 27, 2003. The individual pension fund system is managed by private insurance companies and monitored by government authorities in Turkey. Therefore, these funds must be well managed and their performances should be closely monitored by either investors or governments in terms of contribution to economic progress.

In this paper, the performance ratios of each individual pension funds and the pension fund companies' performances were analyzed for the 2010-2016 period. Due to the new individual pension funds are comprised of different research periods, we created 4 different research sample windows (2010-2016; 2011-2016; 2012-2016; 2013-2016), in order to understand the performance of the pension fund companies. In the analyses, Sharpe, Sortino ratios, Treynor, Jensen indexes, and M2 performance measure are calculated for each individual pension fund based on research sample windows. In order to comprehend performances of the companies, the performance ratios of funds are clustered into two groups as positive and negative, and then the averages of both clusters are calculated for 11 different private pension fund companies. Within the scope of this study, 146 individual pension funds held by 11 pension fund companies were used and the pension funds daily return

⁵ This study was supported by Pamukkale University BAP department with 2017KKP069(2016KRM004) project number.

data gathered from The Capital Markets Board's database. The daily risk-free rate and market return data obtained from Bloomberg data terminal. The conclusion of the study reveals that all techniques illustrate similar results according to averaged positive and averaged negative performance ratios for each research sample window. The results of positive averages show that AVIVA and VAKIF outperformed other companies.

Keywords: Pension Funds, Portfolio Performance, Performance Ratios

Introduction

There is no doubt that the retirement period is one of the important parts of the human life cycle. Therefore, the income level during the retirement period is an important issue for the pensioners' life quality and to satisfy their all needs. Retirement income is a very important subject for every person in the world and it can be provided from four different sources: unfunded state pensions, funded private pensions, direct private savings, and post-retirement work (Blake, 2003: 1).

In recent years, all social security regimes and most of the social insurance institutions, whether developed or developing countries, have crises and in a trouble for many reasons such as aging of the population, deterioration of the asset-liability balance, increases in the costs of health services, unnecessary interventions of the political authorities in the health insurance, economic fluctuations, inflation, unemployment and the tendency to employ unemployed workers (Tuncay, 2000: 4). As a result of these problems, government authorities were insufficient to manage various risks and the necessity for private insurance companies has been increasing all over the world.

The first individual pension system was applied in Chile in 1981 (Korkmaz et. al, 2007: 65). Although the number of countries implementing the private pension system in the 1980s was less than five, this number increased significantly in the 2000s (Demirpehlevan, 2010: 12). According to the increase in the number of countries that have been implemented the system, the total amount of funds has increased considerably. Private pension assets are worth more than USD 38 trillion worldwide in 2015 and the largest values of invested assets in USD values are located in North America (United States, Canada), Western Europe (United Kingdom, Netherlands, Switzerland), Australia and Japan (OECD, 2016: 5). Table 1 presents the pension funds ratio to GDP and it is helpful to understand the situation. Such as in Netherlands, Iceland, and Switzerland, where they accounted for 178.4%, 149.2% and 124.7% of GDP in 2015, respectively.

Table 1: Total Investment of Pension Funds and All Retirement Vehicles, 2015

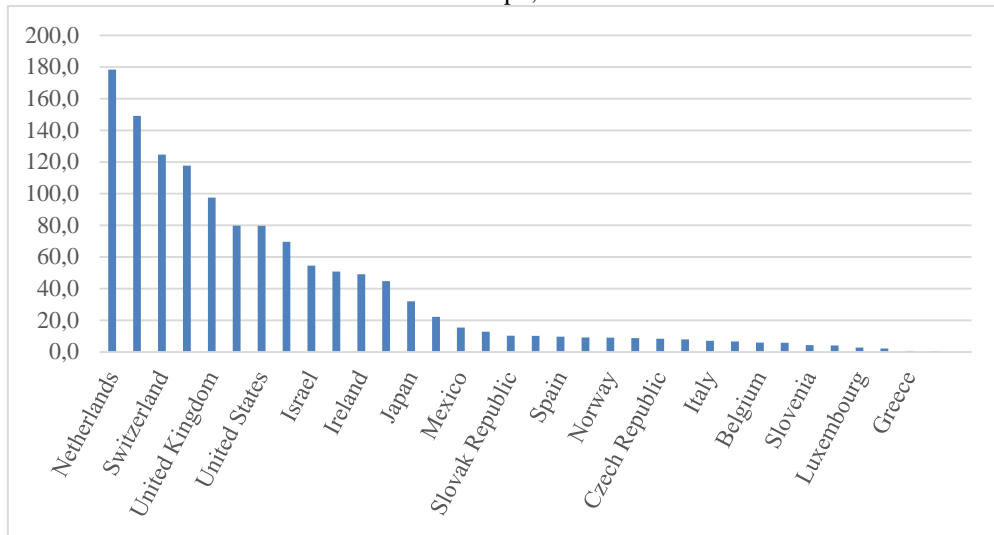
Pension funds				
Countries	Millions of national currency	Millions of USD	% of GDP	% of all retirement vehicles
Australia	1,894,431	1,454,923	117.7	97.1
Austria	19,646	21,389	5.8	..
Belgium	24,117	27,018	5.9	..
Canada	1,583,494	1,182,241	79.8	50.8
Chile	109,433,421	154,711	69.6	100.0
Czech Republic	373,069	15,029	8.3	100.0
Denmark	888,707	130,118	44.8	22.0
Estonia	2,613	2,844	12.8	88.2
Finland	105,258	114,594	50.8	..
France	12,200	13,282	0.6	5.6
Germany	199,197	216,865	6.6	..
Greece	1,135	1,236	0.6	..
Hungary	1,381,292	4,819	4.1	72.3
Iceland	3,266,214	25,204	149.2	94.8
Ireland	105,400	114,749	49.1	91.2
Israel	627,569	160,833	54.5	..
Italy	114,600	124,765	7.0	79.5
Japan	159,757,300	1,325,787	32.0	100.0
Korea	136,427,700	116,356	8.8	30.2

Table 1: Total Investment of Pension Funds and All Retirement Vehicles, 2015 (Continued)

Luxembourg	1,444	1,572	2.8	..
Mexico	2,789,870	162,140	15.4	93.0
Netherlands	1,210,321	1,317,676	178.4	..
New Zealand	53,235	36,317	22.2	100.0
Norway	283,126	32,137	9.0	..
Poland	142,810	36,608	8.0	94.0
Portugal	18,164	19,775	10.1	..
Slovak Republic	8,037	8,750	10.3	100.0
Slovenia	1,641	1,786	4.3	61.0
Spain	103,862	113,074	9.6	66.2
Sweden	380,000	45,019	9.1	13.6
Switzerland	797,648	804,000	124.7	..
Turkey	42,959	14,762	2.2	..
United Kingdom	1,818,507	2,694,846	97.5	..
United States	14,299,033	14,299,033	79.7	59.9
OECD		24,794,259	84.5	

Source: oecd.org

Figure 1. Total Investment of Pension Funds and All Retirement Vehicles as a percentage of GDP Graph, 2015



Source: oecd.org

It is obvious that the weight of pension funds has a major role in all retirement vehicles. Figure 1 illustrates the total investment of pension funds and other retirement vehicles as a percentage of countries' GDP. The highest scores belong to Netherlands, Iceland, Switzerland and Austria which are greater than %100 percent of their GDP. The least percentages belong to France, Greece, Turkey and Luxemburg which are 0.6, 0.6, 2.2 and 2.8 percent respectively.

Although, there was a single type of pension system that could only be carried out by the state before 2003, with a significant reform diversity of the pension system has increased in Turkey. According to the "The Individual Pension Savings and Investment System Act" Individual pension system has begun its operation on 27th October 2003. As of April 15, 2017, there are 18 private pension companies, 6,750,489 participants and 252 different funds, which the total worth of these funds is 57,640.1 million Turkish Lira, in the system.

In addition to the social security role of individual pension system, it also has an important role for the financial systems and financial markets. When the small amounts of premiums paid by the participants are gathered together, it creates large amounts of funds which should not be underestimated. When these funds are involved in financial markets, they can contribute to economic development by creating long-term resources and enlarging the borrowing opportunities of the public and private sectors. It also have positive effects on development of the capital markets' efficiencies by providing new resources (Uyar, 2012: 73). For economic stability, capital

markets' efficiencies and participants' benefits individual pension system should be monitored carefully and closely. The funds' risks and returns, and also funds managers' performance should be observed and the participants, government and also the fund managers should make their decisions and plan the necessary steps accordingly.

Fund performance studies began in the 1960s. (Especially studies by Sharpe, Jensen, Treynor) (Altıntaş, 2008: 88). Although fund performance has different meanings for different interest groups, it has a special importance for the investors. Because, current participants make their decision to change funds and make their portfolio according to funds performances and potential investors decide whether to participate or not by looking at performances. The aim of this study is to examine the performances of pension fund companies in Turkey. For this purpose in the analyses, Sharpe, Sortino ratios, Treynor, Jensen indexes, and M^2 performance measure are calculated for each individual pension fund for 2010-2016 period.

The remainder of this paper is organized as follows: In the next section, there is an investigation of the related literature on the fund performance. Section 3 describes the dataset used in the analyses and methodology. Section 4 presents the findings and discusses their results. Section 5 concludes.

Literature Review

Studies on portfolio and fund performance began in the 1960s and since then several articles have been written on portfolio management, portfolio selection, asset allocation, performance and market timing etc. The first study was done by Friend, et.al in 1962 (Ippolito, 1993: 43). 152 mutual funds analysed with annual data for the 1953-58 period. They created a performance index as a ratio with using net assets, dividend and distributed profit per share data (Shapiro, 1964: 201). While Standard & Poor, as a benchmark, had an average return of 12.6%, the mutual funds had a 12.4% average annual return, which was 20 basis points lower than the benchmark (Ippolito, 1993: 43). They explained the differences in portfolio structure of the funds; the division of their portfolios among common stock, preferred stock, corporate bonds, government securities and another asset (Shapiro, 1964: 201).

Treynor (1965) developed a measure for rating fund-management performance. The study refers to the relationship between systematic and unsystematic risks, and the model based on two important problems; one of these problems is that "the rate of return on investments made in any one period is usually swamped by fluctuations in the general market" and the other one is that, "measures of average return make no allowance for

investors' aversions to risk". Treynor's model consists of the difference between the expected return of the fund which estimated at a particular market rate of return and the return of a fixed-income security divided by a measure of volatility. In 1966, there was another study which belongs to Treynor and Mazuy, and their research question was "Is there evidence that the volatility of the fund was higher in years when the market did well than in years when the market did badly?" at this time. They analysed 57 open-ended mutual funds' yearly data and Dow-Jones Industrials for 1952-63 period with least-square regression technique to answer the research question. They concluded that "...no investor-professional or amateur-can outguess the market". In 1965 McCandlish, discussed three basic methods which are: (1) compound or discounted rate of return, (2) average return, and (3) trend of value in his article to decide which method is most suitable to measure of pension fund performance. He concluded that "...the compound rate of return is probably the best expression of performance because it indicates the one important thing the employer wants to determine: whether and to what extent his fund is outperforming its own actuarial assumptions."

Dietz (1966) examined each of these three methods to see the most suitable measure of return. He compares the results with two hypothetical portfolios (A and B) in two distinct market periods (X and Y). As a conclusion, because of the compound method's erroneous results, he recommends that using average return method is more suitable rather than the compound rate of return in order to measure performance. Polakoff (1966) concerned with the types of assets held by state and local pension funds for the years 1957-64 in U.S. He calculated the total assets of corporate and state and local pension funds both in terms of book and market values over the period. He indicated that, while the absolute amounts of all assets increased for corporate pension funds during the period, their relative importance has changed in terms of both book value and market value. The author stated that, while the proportion of corporate bonds was 53.8% of the total book value of the portfolio in 1957, declined to 41.1% in 1964. But the proportion of common stocks rose over the same period from 24.7% to 41.6%. According to market value, corporate bonds proportion was 50.2% in 1957 and it fell to 32.4% in 1964, while common stocks weight rose from 30.2% to 53.4%. He also indicated that while the state and local pension funds' annual average gain was 0.7%, corporate pension funds' annual gain was 2.8%. Thus, the annual difference between corporate pension funds and state and local pension funds was 2.1 %. Sharpe (1966) analysed the annual rates of return for thirty-four open-ended mutual funds and he calculated reward-to-volatility-ratios (Sharpe Ratio) for each fund during the period 1954-1963. Author calculated the annual rate of return based on sum of dividend payments, capital gains distributions, and changes in net asset value

for each fund and then compared these ratios with performance of Dow-Jones Index, its return average 16.3 per cent during the period with a variability of 19.94 percent and R/ V ratio of 0.667 and the average R/ V ratio for the funds in his sample was 0.633, he concludes that there are only eleven funds were successful than the Dow Jones index, while twenty-three funds did worse.

Jensen (1968) investigated 115 open end mutual funds' annual data, which 59 of them had 10 years data between 1955 and 1964, and 56 of them had 20 years data between 1945 and 1964. Jensen used market equation and calculated alphas for each fund. He calculated that the average value of alpha was -0.011 and 76 funds had negative alphas, while 39 funds had positive. As a result of the study, he concluded that the funds didn't have performance well enough. Carlson (1970) examined the relationship between annual risk and return of 82 mutual fund portfolios for the 20-year period 1948-67. In contrast to Jensen, Carlson found a positive 60 basis point average alpha for the sample. McDonald (1974) analysed 123 American mutual funds' performance with monthly returns in the period 1960-1969 and he found, a contradicted results with Sharpe and Jensen studies, an average alpha of 62 basis points using CAPM model and NYSE index. Mains (1977) re-analysed Jensen's study with monthly rates of return of 70 open end mutual funds for the same period. All of these 70 funds were selected from Jensen's study. Mains thought that monthly data (120 monthly observation) were better than yearly data (10 observation) to understand funds' risk and return behavior. He reported -0.62 annual average return and +0.09 alpha for his sample where 40 mutual funds were positive and 30 of them were negative alpha.

Ippolito and Turner (1987) evaluated approximately 1500 pension plans' performances with CAPM model and calculated the alphas of each pension plans over the 1977-1983 period. They reported that "private pension plans underperformed the S&P 500 by approximately 44 basis points per year but outperformed a weighted stock-bond index by approximately 38 basis points".

Keith Ambachtsheer, Ronald Capelle, and Tom Scheibelhut (1998) studied with 80 U.S. and Canadian pension funds for the 1993-96 period to explore the relationship between pension funds' performance and how they are organized. They analysed these funds according to "fund size, proportion of assets passively managed, and quality of the fund's organization design" with regression analysis. They indicated that "bigger is better" in pension fund management because of the economies of scale and there was a positive relationship between performance, fund asset size, and proportion passively managed and organisation design and the sample 60 basis points underperformed a year over the 1993-96 period. Mark Griffin (1998) examined the pension funds asset allocation with a global perspective. He

analysed all components of pension funds such as cash, real estates, equities and bonds and legislative regulations. The author explored that equities had much greater weights than bonds and regulatory differences have a strong impact on the pension funds asset allocations.

Moy (2002) made a comparison between Sharpe ratio and Jensen's alpha using actual mutual fund data gathered from Morningstar Web site and briefly illustrates the differences between these measures. Tonks (2005) analysed 2175 pension funds with quarterly return, "whether fund managers consistently add value to the performance of the funds under their management" between 1987-97 periods in the United Kingdom. Using regression analysis he found that in the long position (over 12 months), fund managers performance were better than a short position in terms of adding value to the pension funds. Korkmaz and Uygurturk (2007) studied 46 Turkish pension funds performances with regression analysis for the 2004-2006 period. They reported that there was an inverse relation between a number of independent variables and pension funds performances; "pension funds' performance level decrease when variable numbers increase".

Altintas (2008) investigated management performance of Turkish private pension funds for the 2004-2006 period and in order to understand managers' performance he applied the traditional performance evaluation techniques and regression models. According to the results, however, there were significant differences between the results of regression models and traditional performance evaluation techniques, in general, the pension fund managers had not adequate selectivity and timing capability. Dagli, Bank and Er (2008) tried to explore the performance of ten private pension fund companies which operates in Turkey for the 2003-2007 period. They studied with weekly data and used IMKB 100 index as a benchmark. Sharpe, Treynor and Jensen performance indexes were used to evaluate performances over the period. They concluded that pension funds managers were not successful to outguess to the market developments.

Omag (2010), using annual data, measured Sharpe ratio, Treynor ratio and Jensen performance index for the performance of A type and B type mutual funds for the 2000-2008 period and he highlighted that the performance of the funds were lower than the market. Ege, Topaloglu and Coskun (2011) evaluated 80 Turkish pension funds performances with Sharpe Ratios and Modigliani performance criteria for 2008-2010 period. Authors reported that all of the pension funds had lower performance than their benchmark over the period. Uyar (2012) examined the macroeconomic effects of the private pension system in Turkey. She studied with monthly data for the 2004-2009 period and explored that the number of certificates and interest rates have a significant effect on basic economic indicators of Turkey.

Ayaydin (2013) measured Sharpe, Modigliani, Sortino Ratio, Treynor, T2, Jensen Index for 34 flexible and balanced pension funds which operating in Turkey between 2010-2013 periods. The aim of the study was to examine whether pension funds' managers were able to become successful in the market process. As a result of the study, the low performance of the funds were connected to portfolio managers' understanding of the changes in market conditions.

Torresa, Figueroa, Encisob, Montoya (2014) examined the performance of pension funds in Mexico with daily data from January 2002 to May 2013. They use three discrete event simulations of the three indexes or benchmarks (Min variance, Max Sharpe and MV-Max Sharpe) for pension fund performance and they found that the min variance is preferable for the publicly traded Mexican defined contribution pension funds. Selim and Celik (2014) examined the determinants of individual pension funds for 32 OECD countries using panel data regression model for the 2005-2011 period. According to their findings while household consumption expenditure, gross domestic product per capita and the average retirement age of men had significant negative effect; population, health expenditures and employment had a positive effect on pension funds. Filip, Pece and Lacatus (2015) analyzed Romanian mutual funds 2007-2009 period focusing on risk-adjusted performance using both the Romanian market index BET and the ROBOR 12-M series as benchmarks. They estimated Treynor Ratio, Sharpe Ratio, and Jensen's Alpha and as conclusion, they indicate that "during the crisis, Romanian bond funds managed to attain positive HPR and positive risk-adjusted performance". Lippi (2015) investigated the presence of Italian home bias in asset allocation choices made by professional managers in the field of 35 Italian occupational pension funds existing at the end of 2007. He concludes that when the asset manager is Italian, the choice falls on Italian asset classes and, the home bias phenomenon could be considered an element for containing volatility in the prices of government securities, corporate bonds, and equities because of the constant demand created on the market by the asset managers affected by this bias.

Data and Methodology

Within the scope of this paper, 146 individual pension funds, which held by 11 private pension companies were analyzed, existing between 2010-2016 periods in Turkey. The database used in the analyses was gathered from The Capital Markets Board's database. The daily risk-free rate and market return data obtained from Bloomberg data terminal.

In order to understand the changes in performance of the pension fund companies when newly funds added to the existing sample over the period, we created four different research windows (2010-2016; 2011-2016;

2012-2016; 2013-2016). In this way, we have included as much as possible pension funds to the study. Another aim of the study is to evaluate the performance of each individual fund companies over different window sizes, in order to see the changes in ranking positions them. The number of funds for each company and descriptive statistics for different research windows are shown in Table 2.

Table 2. Descriptive Statistics of Different Windows

Pension Fund Companies	Sample Windows	2010 - 2016	2011 - 2016	2012 - 2016	2013 - 2016
AEGON EMEKLILIK VE HAYAT A.S. (AEGON)	Mean	0.0003	0.0002	0.0003	0.0002
	STD	0.0047	0.0048	0.0047	0.0050
	Max	0.0235	0.0234	0.0234	0.0234
	Min	-0.0384	-0.0384	-0.0384	-0.0384
	Number of Funds	6	6	6	6
ALLIANZ HAYAT VE EMEKLILIK A.S. (ALLIA)	Mean	0.0003	0.0003	0.0004	0.0004
	STD	0.0041	0.0042	0.0053	0.0059
	Max	0.0229	0.0229	0.0462	0.0456
	Min	-0.0295	-0.0295	-0.0540	-0.0551
	Number of Funds	9	9	27	29

Table 2. Descriptive Statistics of Different Windows (Continued)

ANADOLU HAYAT A.S. (ANADO)	Mean	0.0003	0.0003	0.0004	0.0003
	STD	0.0047	0.0052	0.0052	0.0055
	Max	0.0249	0.0260	0.0256	0.0254
	Min	-0.0323	-0.0342	-0.0345	-0.0345
	Number of Funds	16	18	21	21
AVIVASA EMEKLILIK VE HAYAT A.S. (AVIVA)	Mean	0.0003	0.0003	0.0004	0.0003
	STD	0.0050	0.0050	0.0049	0.0052
	Max	0.0248	0.0246	0.0243	0.0243
	Min	-0.0368	-0.0367	-0.0355	-0.0354
	Number of Funds	16	17	18	18
BNP PARIBAS CARDIF EMEKLILIK A.S. (BNP P)	Mean	0.0003	0.0003	0.0004	0.0003
	STD	0.0028	0.0028	0.0041	0.0044
	Max	0.0154	0.0153	0.0208	0.0205
	Min	-0.0192	-0.0192	-0.0276	-0.0276
	Number of Funds	7	7	8	8
CIGNA FINANS EMEKLILIK VE HAYAT A.S. (CIGNA)	Mean	0.0003	0.0002	0.0003	0.0002
	STD	0.0134	0.0136	0.0047	0.0050
	Max	0.0612	0.0612	0.0282	0.0282
	Min	-0.1036	-0.1036	-0.0380	-0.0380
	Number of Funds	1	1	7	7
FIBA EMEKLILIK VE HAYAT A.S. (FIBA)	Mean	0.0003	0.0003	0.0004	0.0003
	STD	0.0053	0.0050	0.0050	0.0054
	Max	0.0266	0.0251	0.0251	0.0251
	Min	-0.0373	-0.0350	-0.0349	-0.0349
	Number of Funds	7	8	8	8
GARANTI	Mean	0.0003	0.0003	0.0004	0.0003

EMEKLILIK VE HAYAT A.S. (GARAN)	STD	0.0042	0.0046	0.0052	0.0053
	Max	0.0232	0.0243	0.0263	0.0251
	Min	-0.0317	-0.0333	-0.0371	-0.0352
	Number of Funds	12	15	16	17
GROUPAMA EMEKLILIK A.S. (GROUP)	Mean	0.0003	0.0003	0.0004	0.0003
	STD	0.0044	0.0045	0.0054	0.0058
	Max	0.0228	0.0223	0.0266	0.0266
	Min	-0.0304	-0.0304	-0.0366	-0.0366
	Number of Funds	8	8	9	9
NN HAYAT VE EMEKLILIK A.S. (NN HA)	Mean	0.0003	0.0003	0.0003	0.0003
	STD	0.0034	0.0035	0.0031	0.0034
	Max	0.0183	0.0183	0.0159	0.0159
	Min	-0.0277	-0.0277	-0.0237	-0.0237
	Number of Funds	6	6	7	7
VAKIF EMEKLILIK A.S. (VAKIF)	Mean	0.0003	0.0003	0.0003	0.0003
	STD	0.0042	0.0047	0.0038	0.0040
	Max	0.0256	0.0257	0.0218	0.0214
	Min	-0.0277	-0.0333	-0.0271	-0.0271
	Number of Funds	10	12	16	16

It is widely accepted that performance evaluation should consist of two components: risk and return. In constructing a measure of performance, determination of risk is the first important issue; either the total risk or the systematic risk. The second issue is how to combine risk and return to construct the portfolio performance measure (Moy, 2002: 226). There are three general classes of performance measures dependent on the utilization of risk. The first performance measures based on the total (standard deviation) risk of return. The second class is comprised of systematic (beta or covariance) risk of return. The third class does not require a risk pricing model (Jobson and Korkie, 1981: 890).

In this paper, we applied five different performance measurements, which based on both standard deviation and return (Sharpe and Sortino Ratios, M^2 performance measure) and systematic risk and return (Treyner Index and Jensen Alpha) for each individual pension fund based on four different research sample windows. Definition of each performance measurement ratios are shown in Table 3.

Table 3. Performance Measurement Techniques

Based on standard deviation and return	Sharpe Ratio	$\frac{r_i - r_f}{\sigma_{r_i}}$	r_i : return of fund i r_f : risk free rate σ_{r_i} : standard deviation of i
	Sortino Ratio	$\frac{r_i - MAR}{\sigma_{MAR}}$	r_i : return of fund i MAR : min. acceptable rate of return σ_{MAR} : standard deviation of MAR
	M ² performance measure	$r_f + \text{Sharpe Ratio} * \sigma_{rm}$	r_f : risk free rate σ_{rm} : standard deviation of benchmark
Based on systematic risk and return	Treynor Index	$\frac{r_i - r_f}{\beta_i}$	r_i : return of fund i r_f : risk free rate β_i : Beta of fund i
	Jensen Alpha	$r_i - r_f = \alpha_i + \beta_i(r_m - r_f) + e_i$	r_i : return of fund i r_f : risk free rate β_i : Beta of fund i e_i : error term of i

Source: Korkmaz and Uygurtürk (2007)

In order to examine the funds' performance, the daily return of each individual pension fund calculated as follows;

$$r_{it} = \ln_{V_{it}} - \ln_{V_{it-1}} \quad (1)$$

where r_{it} represents the daily return of fund i , $\ln_{V_{it}}$ is the value of fund i at time t and $\ln_{V_{it-1}}$ is value of fund i time $t-1$.

According to the different techniques, each company's funds have both positive and negative performance ratios. In order to comprehend performances of the companies, the performance ratios of funds are clustered into two groups as positive and negative, and then the averages of both clusters are calculated for each company. In this way, the average performance ratios are created for each sample windows. To evaluate the relative performances of each company scattered graphs are prepared with respect to a number of funds and the average performance ratios. In such a way, a number of positive funds and the average positive performance ratios, as well as a number of negative funds and the average negative performance ratios for each company, are illustrated. Finally, we tried to explore the performance behavior of each private pension fund companies over the sample windows.

Findings

We have calculated five different performance measurement ratios as mentioned above -Sharpe Ratio, Sortino Ratio, Treynor Index, M square, Jensen Alpha- for 146 Turkish individual pension funds which managed by 11 different companies between 2010-2016 period.

The performances of individual pension funds measured for different time horizon and then these measured ratios clustered into two groups: average positive performance ratios and averaged negative performance ratios. All techniques reveal similar performance patterns. For a sample illustration, Sharpe Ratio performance results are indicated in Table 4 and scattered graphs are presented in Figure 2.

The results of positive averages show that AVIVA and VAKIF outperformed other companies in almost all performance measurement techniques whereas, NN HA has the lowest averaged positive fund performance for the first two sample windows (2010–2016 & 2011–2016), FIBA has the lowest averaged positive fund performance for the last two sample windows (2012–2016 & 2013–2016).

In contrast, negative performance values of all companies are varying. While BNB P has the lowest averaged negative fund performance for 2010 – 2016 sample window, CIGNA has the lowest averaged negative fund performance for 2011 – 2016 sample window. ALLIA has the lowest averaged negative fund performance for 2012 – 2016 sample window. ANADO has the lowest averaged negative fund performance for 2013 – 2016 sample window. On the other hand, NN HA has the best average performance ratios in the average negative performance ratios cluster in all sample windows except 2012-2016.

In the study, interestingly, the results of analysis do not illustrate any negative Jensens' Alpha parameter. Jensens' Alpha performance measurement deserves special evaluation, because it has a peculiar framework, such that market indexes are considered as the benchmark to calculate the parameter alpha in the model. We believe that for the performance measures of individual funds, an appropriate index should be formed involving all pension funds outstanding. If it would be applicable, most probably we would have had negative alpha parameters. But this is not an important aspect because the same benchmark index is applied for all calculations in this study in terms performance measurement. When we focused on Jensens' Alpha performance measurement, we are interested in relative performances among the individual pension fund companies. The analysis illustrates almost the same patterns with the other techniques.

Table 4. Sharpe Ratios of Pension Fund Companies

Companies	Sample Windows	2010 - 2016	2011 - 2016	2012 - 2016	2013 - 2016
AEGON	# of positive funds	3	3	3	3
	Average Sharpe Ratio of positive funds	0.0529	0.0733	0.0929	0.1007
	# of negative funds	3	3	3	3
	Average Sharpe Ratio of negative funds	-0.0186	-0.0267	-0.0144	-0.0402
ALLIA	# of positive funds	5	6	21	19
	Average Sharpe Ratio of positive funds	0.0584	0.0605	0.0809	0.0924
	# of negative funds	4	3	6	10
	Average Sharpe Ratio of negative funds	-0.0178	-0.0199	-0.0285	-0.0476
ANADO	# of positive funds	11	11	13	12
	Average Sharpe Ratio of positive funds	0.0592	0.0694	0.0838	0.0785
	# of negative funds	5	7	8	9
	Average Sharpe Ratio of negative funds	-0.0259	-0.0340	-0.0229	-0.0538
AVIVA	# of positive funds	10	10	12	10
	Average Sharpe Ratio of positive funds	0.0946	0.1096	0.1225	0.1473
	# of negative funds	6	7	6	8
	Average Sharpe Ratio of negative funds	-0.0188	-0.0278	-0.0144	-0.0440
BNP P	# of positive funds	5	5	7	6
	Average Sharpe Ratio of positive funds	0.0736	0.0852	0.0857	0.1143
	# of negative funds	2	2	1	2
	Average Sharpe Ratio of negative funds	-0.0642	-0.0202	-0.0178	-0.0370
CIGNA	# of positive funds	0	0	3	3
	Average Sharpe Ratio of positive funds	-	-	0.0926	0.0915
	# of negative funds	1	1	4	4
	Average Sharpe Ratio of negative funds	-0.0221	-0.0349	-0.0258	-0.0493
FIBA	# of positive funds	4	4	5	4
	Average Sharpe Ratio of positive funds	0.0480	0.0650	0.0695	0.0915
	# of negative funds	3	4	3	4
	Average Sharpe Ratio of negative funds	-0.0122	-0.0271	-0.0107	-0.0426
GARAN	# of positive funds	9	8	10	8
	Average Sharpe Ratio of positive funds	0.0599	0.0785	0.0748	0.0941
	# of negative funds	3	7	6	9
	Average Sharpe Ratio of negative funds	-0.0270	-0.0227	-0.0165	-0.0369
GROUP	# of positive funds	5	5	5	5
	Average Sharpe Ratio of positive funds	0.0679	0.0862	0.1102	0.1116
	# of negative funds	3	3	4	4
	Average Sharpe Ratio of negative funds	-0.0196	-0.0279	-0.0147	-0.0377
NN HA	# of positive funds	2	2	4	3
	Average Sharpe Ratio of positive funds	0.0213	0.0194	0.0851	0.1048
	# of negative funds	4	4	3	4
	Average Sharpe Ratio of negative funds	-0.0107	-0.0132	-0.0128	-0.0302
VAKIF	# of positive funds	6	7	10	8
	Average Sharpe Ratio of positive funds	0.0904	0.0942	0.0798	0.1054
	# of negative funds	4	5	6	8
	Average Sharpe Ratio of negative funds	-0.0155	-0.0237	-0.0218	-0.0368

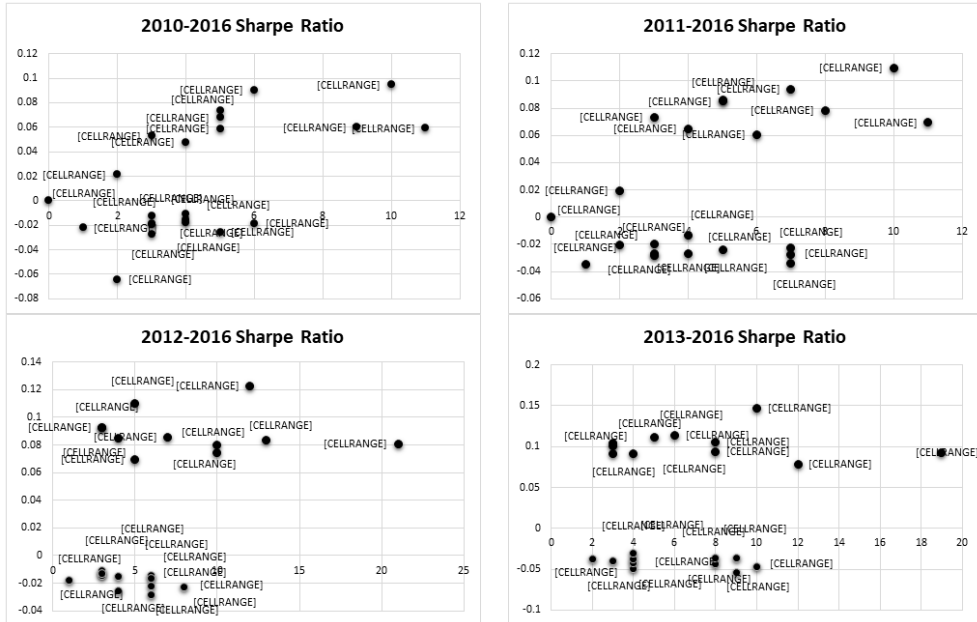


Figure 2. The Average Positive and Averaged Negative Sharpe Ratios for Different Sample Windows

Conclusion

The individual pension funds not only complementary to public pension systems but also an important tool in order to meet the long-term funding needs of economies. The individual pension fund system is managed by private insurance companies and monitored by government authorities in Turkey.

In this paper, the performance ratios of each individual pension funds and the pension fund companies' performances were analyzed for the 2010-2016 period. Due to the new individual pension funds are comprised of different research periods, we create 4 different research sample windows (2010-2016; 2011-2016; 2012-2016; 2013-2016), in order to understand the performance of the pension fund companies.

It is a significant aspect that all individual or institutional investors are interested in selecting the best-performed pension fund company in their investment decisions. Especially, individual investors may have difficulties in distributing their savings into individual pension funds of different companies. This study sheds light on the selection of the best performed private pension fund company by comparing their positive and negative average performance ratios. Therefore, the proposed way of analysis will ease the selection of companies for individual investors. Another contribution of the study is that individual, as well as institutional investors, can benefit to

explore the behavior of companies' performances for different time horizons for a sustainable investment.

In finance literature, almost all studies focus on individual pension fund performances. However, a new methodology is needed to measure the whole body of pension fund companies. For instance, by using risk and return of pension funds of each company an efficient frontier can be created as a new performance benchmark.

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The Relationship Between Psychological Contract Breach and Organizational Cynicism

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Abstract

Psychological contract is composed of employees' beliefs about what they owe to the organization and what does the organization owe to them in return. However, the psychological contract which is supposed to be between employee and employer and exists in employee's mind as mutual obligations; is sometimes broken and damaged. When the employer does not fulfill or delayed in fulfilling some obligations, these obligations being either obviously promised or implied, the employee thinks that psychological contract is breached. Organizational cynicism is seen at the employee who perceives a psychological contract breach as a reaction behavior. Organizational cynicism is defined as the negative attitude of an employee towards the organizations (s)he is employed by; which is composed of believing that the organization lacks integration, negative feelings towards the organization, and consistently, humiliating and hypercritical behavior tendency. Organizational cynicism has three dimensions called cognitive, affective and behavioral. In this context, the objective of the research is to reveal the effects of psychological contract breach which is gaining importance for organizations; on organizational cynicism and its dimensions. The data collection method of the research is determined as a survey, and the universe is restricted as research assistants working in a state university. According to the descriptive analysis results, the level of psychological contract breach and organizational cynicism levels of research assistants are low. According to analysis results, psychological contract breach effects both organizational cynicism and its dimensions. Consequently, organizational cynicism increases while psychological contract breach increases.

Keywords: Psychological Contract, Psychological Contract Breach, Organizational Cynicism

Introduction

Business world whose parties comprised of employees, employers and organization has recently changed. Employers used to commit providing support to their employees in areas such as safety at work, training and promotion and etc. They were expecting loyalty, trust and commitment towards their organizations in the exchange of this. Thus, employer-employee relationships were inter-balanced. However, changes introduced by globalization have also influenced the balance between employer-employee relationships. Changing business relationships have brought about longer shift time for employees, more extensive job definitions, expectancy from them to be more flexible and be tolerant for continuous change and uncertainty. In the exchange of employers' growing expectations, on the contrary, no notable change has been observed with employers' responsibility towards employee apart from sustaining their employment. These changes occurred in employees' employment relationships have resulted in differences in terms of interpretation of changing balance in their minds. It was observed that individuals have developed various attitudes towards their organization for self-defense. Perception of psychological contract breach and organizational cynicism could be considered as employees' answer against this unfair situation based on the self-defense reaction (Naus et al., 2007: 684-685).

In contemporary organization structures, psychological contract, described as the reflection of social contract concept in sociology science to organizations, maintains the relationship between employer and employee, ensures fulfillment of expectations of employees and organization, and guides managers (Isci, 2010: 2). Psychological contract concept has been utilized extensively to comprehend structure of dynamic business relationships and to explain behaviors and attitudes at work (Bal and Vink, 2011: 2795). Psychological contract breach refers the conscious of failing in fulfillment of obligations mandated by psychological contract existing between the individuals and their employer organization (Johnson and M. O'leary-Kelly, 2003: 629). On the other hand, organizational cynicism is considered as an attitude that arises as a reaction among employees against these negative conditions. Organizational cynicism represents employees' disbelief towards organizational decisions, mistrust towards their intentions, and the belief that managers do not reflect their real characteristics (James, 2005: 25). There are studies which investigate the relationship between the two concepts in the domestic and global literature (Andersson, 1996; Abraham, 2000, Delken, 2004; James, 2005; Percin et.al., 2012; Arslan, 2012; Aslan and Boylu, 2014). According to findings reported by aforesaid studies, psychological contract breach is related with organizational cynicism

in general; and psychological contract breach is antecedent of organizational cynicism.

Conceptual Framework

Psychological Contract

Psychological contract concept has recently gained interest in terms of examination of employees' expectations from the relationships between employee and their employer and their organization in the organizational behavior literature (McDonald and Makin, 2000: 84). Contracts are fundamental and elemental structures of organizations. Contracts keep individuals and their organization together and regulate their relationships and allow them to act collaboratively in accomplishing organizational targets (Robinson et al., 1994: 137). Regardless of how comprehensive business contracts are, they could not introduce resolution to all dimensions of business relationship. Psychological contracts reduce individual uncertainties regarding the agreed conditions of business relationship. If employees think that he or she agreed with their employer, they feel safe. This allows management of employee behavior without the need for any administrative supervision. Employees' belief that they would have gaining in the near or far future ensures that they supervise their own behaviors continuously. Thus, psychological contracts lets employees feel that they could make their own destiny in the organization as one of the parties in the contract (Shore and Tetrick, 1994: 93-94). Psychological contract concept, unlike the written formal business contract executed during job entry, is comprised of a series of expectation set that occur between employees and their organization, and which is not set forth in written form.

Psychological contract is one of the concepts which contribute in description of the relationship between organization and employee; and allows investigating employee-employer relationship, the fundamental aspect of organizational life, from new and distinct point of view (Coyle-Shapiro and Kessler, 2000: 905). It is not possible to set all characteristics of employment relationship in the recruitment contract signed by employees. Psychological contract completes this gap between employees and their organization. Another feature of this concept is that it shapes employee behavior. Employees determine their behavior by comparing their obligations towards their organization with their organization's obligations towards themselves (Cihangiroglu and Sahin, 2010: 12).

Psychological contract business is set of mental expectations created by individuals about obligations of employees and organization as well as perception and interpretation of written, verbal, attitudinal and behavioral messages within the scope of relationships (Karcioğlu and Turker, 2010:121). Psychological contract concept is founded on the assumption that

there are two parties in business relationships as employee and management and that both parties have common obligations towards each other. However, these obligations mean more than the written contract executed between both sides (Herriot et al., 1997: 151). In this context, psychological contract concept is unilateral contract considered as individually and which covers obligations of both organization and individual (Walker and Hutton, 2006: 434). The origin of the expectations between employee-employer, and not exhibited in written form but implied allusively are individual beliefs and behaviors of organization. Expectations of individuals within the scope of psychological contract are shaped by organization primarily. In other words, organizations give promises and give incentives to employees so that employees exert their efforts more intensively and to motivate them. Thus, these promises or incentives could either be in an explicit way or in allusive way as it is observed mostly (Bal et al., 2013: 108). Since psychological contracts are subject to individual perceptions, it is not necessary that it should be acknowledged or shared by other members of the individual's group (Morrison and Robinson, 1997: 228).

Dunahee and Wangler (1974) claimed that formation of psychological contracts commences during job interviews. In this process, not only certain conditions such as wage for the designated job description are discussed, but also details and extent of assigned obligations are discussed. Furthermore, psychological contract is formed by employee's perception on the basis of body language displayed by employers, employee's observation with the quality of the organization as well as the certain conditions explained to employees during job interviews (Shore and Tetrick, 1994: 95-96).

Psychological contracts are highly personal. They vary according to individuals, organizations and time period. Two individuals who apply to the same organization at the same time for the same job title would have different psychological contracts (Petersitzke, 2009: 2).

When definitions of psychological contract concept are taken into consideration, it could be seen that some studies emphasize that this concept is comprised of perceptions of managers and employees (Argris, Schein etc.), and some others described as employees' perception of obligations between parties (Rousseau etc.). In the present study, on the basis of the description suggested by Rousseau, psychological contract was considered as employees' perception of reciprocal obligations between themselves and their employer organization because organizations do not have psychological contracts with their employees. Organizations have employment strategies through which they manage the reciprocal relationship with employees and gain an influence on this relationship (Petersitzke, 2009: 143).

Psychological Contract Breach

Psychological contract, which lies on the foundation of the employee-employer relationship, is comprised of obligations believed to be two-sided by employees. However, employees think usually that employers do not fulfill their obligations appropriately. As a result of the study of Robinson and Rousseau (1994) conducted on managers, it was found that 55% of managers fail to fulfill one or more obligations relevant with their relationship with employees in the first two years of employment of workers. This status, whether there is a rationale or not, suggests that employees' feeling such as thrust, job satisfaction, intention to continue working for the organization, and continue to exert same or higher performance at work decrease. Because of aforesaid potential negative impacts, it is substantially important for organizations to determine the conditions which cause breach of psychological contract among employees (Robinson and Morrison, 2000: 525).

In the light of the developments such as reorganization, downsizing or growth experienced by organizations recently, psychological contracts have become a phenomenon that needs attention in employment relationships. The pressure caused by the continuous and fast-paced evolution faced by organizations resulted in a change in employee relationships as well. Sims (1994) stated that long-term job safety provided on the condition of working hard and resulting employee commitment are no longer available. Therefore, organizations need to realize reciprocal obligations between employees and themselves in this new condition faced. Moreover, these changes increase possibility of distraction or breach of existing psychological contract, an abstract set of expectations, between employee and employer (Robinson, 1996: 574).

Psychological contract viewed by Rousseau (1989) as reciprocal obligations set between employee and employer is sometimes disrupted or damaged at certain occasions. Employer's failure or omission in promises and obligations within the scope of the psychological contract gives harm to psychological contract (Buyukyilmaz and Cakmak, 2014: 584). When it is considered that at least one of the obligations that arise as a result of promises made explicitly or implied allusively by employee is not fulfilled, or even fulfillment of these obligations is delayed, employees perceive that psychological contract is breached (Kiefer and Briner, 2006:204). When an imbalance felt by employees between what they sacrifice for their work and promises made to them by employer arise, employees think that this contract imagined in their mind is breached (Aslan and Boylu, 2014: 36).

Differences noticed by employees with their expectations from their organization and the benefits supplied by the organization to them are viewed as breach of psychological contract. However, breach status differs

subject to the benefits fundamental reason of the breach. For instance, employees attach more importance to benefits which could have more direct impact on their lives; and finally, the breach that arise is perceived more laud and clear. Moreover, since benefits are concrete and tangible things which allow that they could be discussed and assessed rationally, negative respective actions of organization could easily be recognized by employees. Therefore, unconformity perceived by employees with the awarding practices of their organization increases their perception of breach further with respect to other circumstances (Turnley and Feldman, 1999: 369).

Psychological contract breach is an abstract concept made up of perceptions of employees owing to its subjective nature. However, there could be an evident breach at some occasions. For instance, if the person authorized for recruitment process declares to employees that they will be promoted at the end of the third year even though this was not included in the job contract, and if this promotion is not given to them at the end of the period, then, there is an explicit status of breach. Employee broke the word given at the beginning. In some occasions, information provided during recruitment process could be ambiguous. Using ambiguous expressions such as “Employees could gain promotions in the first three years without any hindrance” could be understood as a promise to be promoted in their first three years during recruitment process. If this promised promotion does not take place, employee would then feel the breach. However, the breach felt at this point is result of the controversy between employee and employer. Controversy emerges when there are different understanding between employee and employer concerning a promise made in terms of whether there is an obligation, or content of a promise made. In both cases, the difference between what is understood by employees on the basis of what was told to them and what was realized would result in perception of contract breach (Robinson and Morrison, 2000: 526-528).

One of the most important differences between obligation and expectation concepts, which arise in employees’ minds and which could not be differentiated clearly, is the potential consequences that may arise when they are not fulfilled. Guest (1998) reported that reactions of employees against the unsatisfied expectations would be reflected on organizational consequences more severely and detrimental. Indeed, Robinson (1996) reported the similar supporting result which indicates that contract breach causes unsatisfied expectations. However, unsatisfied expectations will not bring consequences of contract breach about on its own (Shapiro and Kessler, 2000: 905-906).

Organizational Cynicism

Cynicism concept has been point of interest since the foundation of the cynic school in the 5th Century during the Ancient Greek period. Cynicism emerged in Ancient Greek as a philosophy and a life style; and relevant studies predicated this concept to the Greek philosophers such as Antisthenes and Diogenes members of a philosophy sect called cynics (Brandes, 1997: 7). Cynics were of the opinion that ‘virtue’ which states that human being is the sole ‘good’. The single way of acquiring this virtue is to avoid defects by mostly addressing others’ defects which could be obtained through self-control mechanism. On the basis of this opinion, contemporary cynics are known as “nitpicking persons” (Barnes, 2010: 10).

Today, cynicism is an acknowledged concept. Cynicism does not only influence the society, it is also seen extensively with members of organizations considered as product of society; and it emerges as a paradigm within the framework of organization (Dean et al., 1998: 341). Cynicism has recently come to prominence as an attitude towards a certain targets such as organizations while it has traditionally been for a person or it has social focus (Neves, 2012: 966).

Whereas “cynic” person is described as the one who observes only their personal interests and who considers everyone as self-seeker, the ideology explaining this concept is referred as cynicism. The fundamental belief with cynicism is that honesty, justice and sincerity principles are sacrificed to the personal interests. Although cynicism has similar meaning with words of “skepticism”, “incredulity”, “distrust”, “disbelief”, “pessimism”, and “negation”, in its contemporary version, individuals’ “nitpicker, picky, assailer” meanings prevail (Erdost et al., 2007:514, Polat and Meydan, 2010: 151).

Cynicism concept applied to organizations by academicians and practitioners after the end of 1980s. Awareness towards organizational cynicism concept raised as result of the book in which a national study of Kanter and Mirvis (1989) conducted on American employees was published. This was followed by the study of Bateman et al. (1992) in which organizational cynicism was described as negative and insecure attitudes against authority and organization. Organizational cynicism concept is described as negative attitude developed by an employee towards organization. It is reported that there are three dimensions of humiliating and critical behavior towards organization in conformity with the belief and affections that organization lacks honesty, negative affection towards organization (Dean et al., 1998:345). Negative attitudes could be against all of the employer organization as well as only against a department of it (Naus, 2007: 25). When employees believe that their organization lacks honesty, accordingly organizational cynicism emerges among employees.

The perception that basic expectations relevant with moral, justice and honesty are breached lies under the foundation of the perception of employees that organization lacks honesty. Organizational cynicism is conceptualized as a quality for future; and it is claimed that it represent “learned idea” (Johnson and M. O’leary-Kelly, 2003:629).

Structures of organizational cynicism and general cynicism concepts are different. While general cynicism is described as determined and innate personal characteristic which reflects mostly negative perceptions of individuals, organizational cynicism is described as negative attitude which covers affective, cognitive and behavioral dimensions that emerge in a person against his/her employer organization. While general cynicism is comprised of reasons originated from innate personality of a person, the cynical attitude among employees, referred as organizational cynicism was result of structural and organizational factors (Abraham, 2000: 270).

Organizational cynicism refers an attitude which could be associated with many object and which allow generalization from one target to another and a learned belief developed as a result of an experience. In this line, organizational cynicism concept is related with attitudes towards employer organization formed by behaviors relevant with negative beliefs, affections, feelings and behaviors of individuals; and as an answer to history of social and personal experiences open to evolution by environmental factors (James, 2005: 7). Organizational cynicism concept means that there is belief that organizations could progress on the condition that this is an insignificant possibility. When this concept is examined, it could be seen that two dimensions of organizational cynicism are emphasized. Whereas the first dimension implies that adverse attitudes would increase because of personal mistakes, the second dimension includes the belief that organization could progress (Brandes, 1997:18).

Organizational cynicism concept includes beliefs and affections relevant with the inclination to exhibit “negative affection”, “humiliating” and “critical” behaviors against organization. Organizational cynicism is described as negative beliefs, negative affections and severe either deliberate or latent criticisms drawn against organization. Organizational cynicism is a negative attitude with three dimensions comprised of belief that organization lacks integrity, negative affection against organization, and inclination of humiliating and critical behavior against organization, which is in conformity with aforesaid belief and affection. These dimensions are given as follows (Dean et al., 1998: 345-346);

1- Cognitive Dimension: This is the belief that organization and its employees lack honesty. Organizational cynics are of the opinion that organization practices betray principles such as justice, honesty and sincerity. They could believe in that such principles could be sacrificed for

personal interests and this is an ongoing norm within the organization. Furthermore, cynics do not tend to regular logic of organizational decisions made because they believe that there is a latent cause undisclosed lying underneath of all actions.

2- Affective Dimension: This dimension is comprised affections of individuals with cynic attitude towards their organization. Cynicism is not only a judgment containing discontent against organization, but also it includes strong affective reactions. It involves affective reactions such as disrespect, rage, nuisance, and shame. Cynic individuals might feel humiliation and fury against organization; or they might feel pain, disgust or shame when they think of organization. Cynic individuals, in spite of their negative affections, might have tacit pleasure from these negative affections ironically. Finally, organizational cynicism also involves a series of negative affection as well as the beliefs of employees with their organization.

3- Behavioral Dimension: This group employees exhibiting cynic behavior in employer organization tend to make pessimistic predictions about incidents that occur within the organization. For instance, they might foresee that the organization sacrifice quality of products as soon as manufacturing costs rise. They might exert humiliating behaviors against others frequently. The most evident behavior of cynic individuals is their severe criticism against organization. Sometimes employees display behaviors of complaint, teasing and criticism about their organization. Additionally, non-verbal behavior types might be displayed to express cynic attitudes. These non-verbal behaviors might include “I-know” kind of implicative gazes, eye-rolling, grinning and sneering.

Research

Purpose and Scope of the Research

When descriptions of psychological contract breach and organizational cynicism concepts are considered, it could be observed that essence of two concepts are based on social exchange in employment relationships. In other words, both concepts display a nature as a reaction against their unsatisfied expectations in the context of employment relationships. However, there are points in which both concepts differ. Psychological contracts involve promises which are thought to be made by employees especially for them. When employees believe that the promises made to them were not fulfilled by their employers, psychological contract breach occurs. There is a belief under the foundation of psychological contract breach, which implies that these promises made were not fulfilled. On the other organizational cynicism is based on wide variety of unfulfilled expectations rather than promises unsatisfied. Moreover, cynicism may not be result of personal experiences of employees. It could be influenced by

experiences of others regarding the organization (Johnson and M. O'leary-Kelly, 2003: 630). Great disappointment that emerges as a result of unsatisfied promises, unfulfilled expectations felt among employees lies underneath cynicism. When employees believe that the promises made to them were not fulfilled, psychological contract breach takes place and accordingly the negative affections that would arise would trigger them to adopt a cynical attitude towards the organization (Ucok and Torun, 2014: 236). In other words, employees who think that the promises made to them adopt an adverse attitude towards their organization which paves the way for organizational cynicism. According to the studies so far, a significant positive correlation was determined between the two concepts. The purpose of the present study is to determine the relationship between research assistants' perceptions towards their institutions regarding psychological contract breach and organizational cynicism. In this context, the main and sub-hypotheses of the research were given below:

H: Psychological contract breach has a positive impact on organizational cynicism.

- H_{1a}: Psychological contract breach has a positive impact on cognitive cynicism.
- H_{1b}: Psychological contract breach has a positive impact on affective cynicism.
- H_{1c}: Psychological contract breach has a positive impact on behavioral cynicism.

Research Methodology

The universe of the study was comprised of research assistants at Pamukkale University. In this scope, 450 survey forms were distributed to all research assistants. Some of the research assistants were not able to be reached due to their reluctance for participation in the study, holiday, busyness or health issues. Totally 350 research assistants (RAs) were distributed survey forms and 97 forms were completed and collected back for analysis. Finally, 93 surveys were included in analysis because 3 of the collected forms were not found reliable. When it is considered that return rates of applied researches differ in the range of 20% to 40% of the main body (Ogut, 2003), the 26.5% return rate of survey forms was considered as acceptable for further analysis.

As the data collection tool in the study, the scale with 5 expressions, commonly found in the literature, developed by Robinson and Morrison (2000) to measure psychological contract breach perception and the scale, comprised of 17 expressions and with 3 dimensions, developed by Brandes et al. (1999) to measure organizational cynicism were employed.

Findings

Results of the reliability analysis conducted to determine internal consistency of the scale were exhibited in Table 1. Whereas reliability of the psychological contract breach scale with 5 expressions was found as 91.2%, reliability of the organizational cynicism scale with 13 expressions was determined as 86.2%. Reliability levels of dimensions were determined for cognitive cynicism, affective cynicism and behavioral cynicism as 91.2%, 93.2% and 81.1%. Based on these results, it was observed that internal consistency of scales was ensured.

Dimensions	No. of Expressions	Cronbach's Alpha (α)
1. Psychological Contract Breach	5	.912
Organizational Cynicism	18	.862
2a. Cognitive Cynicism	5	.912
2b. Affective Cynicism	5	.932
2c. Behavioral Cynicism	4	.811

Table 1: Results of the Reliability Analysis

Table 2 exhibits demographical information of participant 93 RAs. In terms of gender distribution of the participants, percentages of male and female participants were 55.9% and 44.1%. In terms of participants' age distribution, percentages of age groups of 20-24, 25-29, 30-34, and 35 and older were 14%, 52.7%, 25.8%, and 7.5%, respectively. It was notable that majority of participants were in the age group of 25-29. While 44.1% of participants were married, 55.9% were single. According to their service period duration, percentages of RAs from groups of 0-2 years, 25 months -4 years, and 4 years and longer were 38.7%, 30.1%, and 31.2%, respectively. In terms of their work place, their percentages were determined as Engineering Faculty, Faculty of Business and Administration (FBA), Faculty of Education, Faculty of Natural Sciences Literature (FNSL) and other faculties were 25.8%, 23.7%, 22.6%, 23.7% and 4.2%. In terms of employment status distribution percentages of RAs, 33/a status, Faculty Member Training Program (FMTP), 50/d status, and 35th clause status were 34.4%, 34.4%, 22.6%, and 8.6%, respectively.

N

Percentage

Gender Distribution	Male	52	55.9
	Female	41	44.1
Age Distribution	20-24	13	14
	25-29	49	52.7
	30-34	24	25.8
	35 and older	7	7.5
Marital Status	Single	52	55.9
	Married	41	44.1
Service Period Distribution	0-2 Yrs.	36	38.7
	25 Mns.- 4 Yrs.	28	30.1
	49 Mns.-6 Yrs.	9	9.7
	6 and Longer	20	21.5
Faculty	FBA	22	23.7
	Education	21	22.6
	Engineering	24	25.8
	FNSL	22	23.7
	Other	4	4.3
Employment Status	33/a	32	34.4
	50/d	21	22.6
	FMTTP	32	34.4
	35 th Article	8	8.6

Table 2: Demographical Information of Participants

Table 3 exhibits descriptive analysis results obtained from the answers given by participant RAs to the expressions in surveys prepared for measuring psychological contract breach perceptions and organizational cynicism levels. According to the mean and standard deviation values in the table, mean perceived psychological contract breach score and mean organizational cynicism score were estimated at 2.52 and 2.44, respectively. In terms of organizational cynicism dimensions, mean behavioral cynicism dimension was estimated at 2.68 and it was found that it was higher with respect to other dimensions. According to the results, it is possible state that RAs' psychological contract breach perceptions and their cynic attitudes towards their organization were at low level.

	(\bar{x})	S.d.	Level*
1.Psychological Contract Breach	2.52	.920	Low
2.Organizational Cynicism	2.44	.983	Low
2a.Cognitive Cynicism	2.59	.854	Low
2b.Affective Cynicism	1.99	.884	Low
2c.Behavioral Cynicism	2.68	.801	Medium

* \bar{x} =1-2.59; Low \bar{x} =2.60-3.39; Medium \bar{x} =3.40-5; High

Table 3: Average and Standard Deviation Values of Collected Data

The results of the correlation analysis which indicate the relationship between variables and their constituent dimensions were exhibited in Table 4. It was found that all relationships between psychological contract breach perception and organizational cynicism variable and organizational cynicism dimensions were statistically significant. Medium level correlation was observed between dependent variable of the study, organizational cynism and dimensions of organizational cynicism and independent variable, psychological contract breach. The most significant relationship 0.455 ($p < 0.01$) was found between psychological contract breach perception and cognitive cynicism. This relationship was found to be medium level and positive. The least significant relationship (0.317) was found between psychological contract breach perception and behavioral cynicism ($p < 0.01$), which was at medium level and positive.

	1	2	2a	2b	2c
1. Psychological Contract Breach	1				
2. Organizational Cynicism	,405**	1			
2a. Cognitive Cynicism	,455**	,867**	1		
2b. Affective Cynicism	,427**	,865**	,644**	1	
2c. Behavioral Cynicism	,317**	,775**	,448**	,563**	1

**Correlation value at 0.01 significance level

Table 4: Correlation Values Among Variables

In order to test research hypotheses, a linear regression analysis was conducted. Table 5 exhibits the results of the analysis. According to analysis results, psychological contract breach levels of RAs have positive ($\beta = 0.483$) and significant ($p < 0.05$) effect on organizational cynicism level. In other words, one unit increase in RAs' perception levels of psychological contract breach towards their organizations will increase their cynic attitude towards their organization by 0.483 units. According to the estimated variance value, it could be understood that psychological contract breach perception could explain 22.5% of the organizational cynicism attitude. Finally, hypothesis of the study is accepted and the research model is supported. According to the regression results of the sub-hypothesis, it was found that psychological contract breach was positively and significantly ($p < 0.05$) effective on sub-dimensions of organizational cynicism. According to β coefficients, the most significant relationship was found between psychological contract breach and cognitive cynicism ($\beta = 0.473$). Thus, sub-hypotheses of the study were supported.

Dependent Variables	Independent Variable	Beta (β)	t	p	Explained Variance R^2
Organizational Cynicism	Psychological Contract Breach	.483	14.300	.000	.225
Cognitive Cynicism		.473	14.300	.000	.199
Affective Cynicism		.411	14.300	.000	.173
Behavioral Cynicism		.313	14.300	.000	.091

Table 5: Regression Analysis Results

Results of the variance analysis conducted to determine whether contract breach perception levels of research assistants with respect to their employment status, in which one way Anova test was applied, were exhibited in Table 6 ($p < 0.05$). Accordingly, psychological contract breach levels display significant difference with respect to organizational cynicism levels. According to average values, psychological contract breach perception ($\bar{x} = 2,85$) of RA with 33/a employment status and their organizational cynicism level ($\bar{x} = 2,71$) were higher in comparison with the RAs with other employment statuses.

	Employment Status	Average	Standard Deviation	Sig(p)
Psychological Contract Breach	33 rd Article	2.85	.8163	.000
	50/d	2.04	.7427	
	ÖYP	2.53	.7528	
Organizational Cynicism	35 th Article	2.40	.8830	.000
	33 rd Article	2.71	.7980	
	50/d	2.25	.5875	
	ÖYP	2.26	.5897	
	35 th Article	2.50	.7972	

Table 6: Variance Analysis Results According to Employment Status

Conclusion

Psychological contract breach refers that employees get the idea that their employer organization has not fulfilled one or more obligations towards them although employees have made contributions to their organization. On the other hand, organizational cynicism is described as beliefs of employees that their organization lacks honesty and their negative considerations about their organization and their tendency to exhibit humiliating and critical behaviors against their organization in conformity with aforesaid belief and thoughts. In the present study, the relationship between these two concepts was tried to be revealed. In the light of hypotheses set forth in this context, the effect of perception of psychological contract breach on organizational

cynicism and on its dimensions of cognitive, affective and behavioral cynicism were investigated. According to the obtained findings, RAs' psychological contract breach levels and organizational cynicism levels were estimated at $\bar{x}=2.52$ and $\bar{x}=2.44$, respectively. Thus, both values are in proximity of median value. However, it is possible to state that they are found at low level. When dimensions of the organizational cynicism are considered, behavioral cynicism level was found at medium level ($\bar{x}=2.68$).

RAs work at different types of employment statuses at universities. Their expectations from organizations or what is promised to them legally differ according to these employment statuses. The employment status with highest job security is the one referred as 33/a article. On the other hand, the least secure employment status is the one referred as 50/d article because they will be discharged from the university unless their position is assigned by the Higher Education Council at the end of their doctorate education. In terms of psychological contract breach and organizational cynicism levels, RAs exhibit significant difference with respect to their employment statuses. On the basis of findings, psychological contract breach levels and organizational cynicism levels of the RAs employed subject to 33/a status providing the highest job security were higher with respect to others. Our findings supported the research hypotheses. In other words, psychological contract breach perception is significantly and positively effective on organizational cynicism. As one of the substantial obstacles before organizational performance, cynic behaviors could be prevented not only by written contracts made with employees, but also by remaining loyal to promises and commitments made at all levels and the must be fulfilled on timely manner. Moreover, in order to prevent misunderstandings among employees, organizations, managers and organizational practices are required to be explicit as much as possible.

Both concepts may not be a positive characteristic for organizations. However, they are influent on individuals and on their professional lives. Managers and employers are required to assess natures and dynamics of psychological contract breach and organizational cynicism, their influence on employees' behaviors and attitudes accurately.

In the present study, only a public university was investigated for research purposes. By including other universities into the scope of the study, it is possible make generalizations across the country. Furthermore, private universities could be analyzed as well so that RAs from both types of organizations could be compared. Another limitation of the study is that the study universe was confined with RAs in a public university. Further studies could expand the universe as faculty members and even administrative personnel could be included to reach more comprehensive conclusion about the university. The study is comprised of analysis of qualitative and

quantitative data. Hence, it could be supported by qualitative studies to investigate concepts more profoundly.

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The Environmental Responsibility of Two Major Oil Companies in Romania

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Abstract

The present study is a descriptive-analytic investigation and research of social responsibility and its environmental component in the case of two important Romanian companies: OMV Petrom and KMG International (Rompetrol). The aim of the research is to present the way in which two of the most important Romanian oil companies have built up the environmental component of their corporate social responsibility policies, as well as their projects concerning the environment. The selection of the companies was based on their size, as we sought to present major companies that have a high degree of involvement in the field of environmental responsibility. Our approach relies on data featured in the official reports issued by the two companies and also on information that can be found in reports published by audit firms and professional services companies in the field. For each company, we analyzed the components of the environmental responsibility that are established in order to reduce environmental impacts, as well as any projects aimed at increasing the involvement of the general public in protecting nature. From our analysis, we can say that the environmental constituent of the corporate social responsibility policy in the case of Romanian companies is structured in two parts. The first one focuses on internal policies and actions seeking to reduce the environmental impact of a company's activities. The second one consists of policies dealing with the interactions between the company, the external environment and the community where it operates, trying to support its development.

Keywords: Social responsibility, environmental responsibility, OMV Petrom, Rompetrol, Romania

Introduction

The present article is the third part of a series dedicated to social responsibility and its environmental component. In our first article, we made a brief historical analysis of the evolution of social responsibility and its environmental component at an international level, presenting at the same time the organizations and programs involved in the development of the concept and the actions through which it is implemented (Manoiu and Gadiuta, 2016). The second part investigated the way in which some of the most important companies in Romania have built up the environmental component of their social responsibility policies and the projects that they implemented in this area (Manoiu and Gadiuta, 2017). For each company, we took a quick look at the components of its environmental social responsibility policy implemented in order to reduce the environmental impact of its actions, as well as to the projects undertaken to increase the public's involvement in the protection of the environment (Manoiu and Gadiuta, 2017).

The aim of this paper is to perform a descriptive-analytical investigation of environmental responsibility for two of the major oil companies in Romania: OMV Petrom and KMG International (Rompetrol). Our work updates and expands the body of information provided by the two previous articles on the same topic.

The paper focuses on two main issues: 1) the components of the environmental policy of social responsibility undertaken by each of the two companies; 2) the projects implemented in order to involve the general public in the area of environmental protection.

The present analysis was performed using a data base consisting of various official reports of the two companies and also on the basis of information provided by the reports of audit and professional service firms in the oil and gas industry.

Background

The concept of social responsibility in Romania emerged with the increase in the number and strength of multinational companies operating in the country. In the organizational culture of these foreign businesses, the notion of social responsibility had already taken shape and as the Romanian branches of multinationals appeared and expanded, the policies of social responsibility began to be implemented locally (Manoiu and Gadiuta, 2017).

In the first stage, major companies started their involvement by sponsoring various projects and by carrying out philanthropic actions. At this early moment, it was not yet possible to speak of a conscious social responsibility policy, but these actions signaled their opening to various social projects (Manoiu and Gadiuta, 2017).

This financial involvement received a legislative support with the appearance of a law on sponsorship. The first such regulation entered into force in 1994 (Law no. 32/1994) and was subsequently amended. In its current form, a portion of the taxes that a company pays can be redirected in the form of donations and sponsorships for social causes (Manoiu and Gadiuta, 2017).

According to the study titled “How do NGOs and SMEs (small and medium enterprises) see the sponsorship law?” issued in 2015 by HOSPICE Casa Sperantei, the Association for Community Relations and EY Romania (HOSPICE, 2015), and by corroborating this study with data submitted by companies to the National Fiscal Administration Agency (ANAF), the total amount of tax money that was redirected by businesses towards projects in the non-profit area through donations and sponsorships in 2014 was approximately 1.412.412.395 lei, or 318 million euros (Ernst & Young, 2014; HOSPICE, 2015).

Nevertheless, only 16% of companies (30.651) chose to make sponsorships, totaling 523 million lei, or approximately 22% of the maximum potential. The number of companies that have resorted to these financing mechanisms has increased over time, from 29.317 (13%) in 2011 to 30.651 (16%) in 2013 (Ernst & Young, 2014).

This data shows us that there is still a massive financial potential which can be used by companies in the area of social responsibility without incurring additional costs.

Looking back as far as 2004, with the first Corporate Social Responsibility report in Romania which was issued by Orange (Orange Romania 2003 SR Report), we arrive in 2013 at a total of 69 CSR reports belonging to various companies (KPMG 2013 Survey of Corporate Responsibility Reporting).

After January 1st 2017, EU Directive no. 2014/95/EU requires companies with more than 500 employees or those that are considered to be of public interest, including in Romania, to elaborate and publish impact reports on their activities. According to the CSR Agency (CSR Report website, 2015; CSR Agency website, 2016), a consultancy firm in the areas of sustainability and CSR, at least 722 local companies (which have more than 500 employees) will have to publish such reports.

At the same time, in the year 2006, the first Romanian on-line portal dedicated to providing information about CSR was launched: www.responsabilitatesocială.ro (Social Responsibility website). It represents a source of knowledge on the principles of social responsibility. The portal was launched by the founded “Selenis” Agency, in partnership with JTI Romania.

All these actions illustrate a multifaceted development of the social responsibility concept in Romania.

2015 witnessed the creation of the Global Compact Network Romania, part of the United Nations Global Compact, the largest social responsibility project to date. The official launch took place on May 15, 2015 (Global Compact Network Romania website). Until now, 27 companies have joined the national Global Compact Network (Global Compact Network Romania website).

The Environmental Responsibility of Two Major Romanian Oil Companies – Results and Discussions

In this chapter, we shall present the strategy chosen by the two major Romanian oil and gas companies to build up the environmental aspects of their social responsibility policies, as well as the most important projects that they have undertaken in this area.

The choice of companies was based on their size (we sought to take into account the largest such entities) and the degree of their social engagement, as we tried to investigate companies that are deeply involved in society.

For each of the two companies, we analyzed the environmental components of their social responsibility policies that are implemented in order to decrease the impact of economic activities on the environment and also the projects which aim to involve the general public in the protection of nature.

OMV Petrom

OMV Petrom is the largest integrated oil and gas company in South-Eastern Europe, with activities in the fields of exploration, extraction and production, refining and petrochemicals, natural gas, marketing and energy generation (OMV Petrom website). In 2013, the company had a turnover of 24.185.000.000 lei and 19.619 employees (OMV Petrom website).

By its size and the scope of its activities, the actions of OMV Petrom have a significant impact on the natural environment.

OMV Petrom is one of the most deeply involved companies in the area of CSR, being the first Romanian enterprise that in 2011 committed itself to the principles of the UN Global Compact Network.

In 2012, OMV Petrom released its first sustainability report, covering the previous year (2011). This was followed by subsequent reports covering the years 2012, 2013 and 2014 (OMV Petrom 2011-2014 Sustainability Reports).

The 2013 report is the most recent one covering OMV Petrom's national actions, as the 2014 document deals with its international activities.

The OMV Petrom policy is based on an original concept: “Resourcefulness” (Fig.1). It was launched in 2011 and places sustainability at the heart of the company’s activities. The 2013 report highlights that “our approach is to implement initiatives in areas such as environmental management, new energy sources, education and development, security, diversity, business ethics, human rights, the involvement of stakeholders and communities in a single holistic strategy.” (OMV Petrom 2013 Sustainability Report).



Figure 1. The Structure of OMV Petrom Concept of Resourcefulness
(Source: OMV Petrom 2013 Sustainability Report)

The environmental component of OMV Petrom is based on three principles:

Eco-efficiency

Through this concept, OMV Petrom attempts to institute the best available practices in the management of environmental issues, with a focus on carbon emissions, water management and energy efficiency. As the company develops, it uses increasing amounts of energy, which in turn makes energy efficiency ever more important for supporting future growth.

In 2013, the company set itself the target of reducing the carbon intensity of its operational assets by 2% compared with 2012. This goal was exceeded, as OMV Petrom managed a reduction of 3.4% (OMV Petrom website; OMV Petrom 2013 Sustainability Report).

Also in 2013, OMV Petrom SA and all the activities of OMV Petrom Gas SRL received an ISO 50001 certification for their supply, marketing and trade activities. This certification ensures that the goals of energy use, performance monitoring and improving efficiency are all met in the field of energy (OMV Petrom website; OMV Petrom 2013 Sustainability Report).

Approximately 11 million EUR have been invested in eight Gas to Power and Combined Heat and Power Cogeneration projects, achieving a reduction of energy consumption and, at the same time, a decrease of CO₂ emissions of 13.000 tons (OMV Petrom website; OMV Petrom 2011-2014 Sustainability Reports).

The efficient use of water was another focus of the company's efforts in 2013. OMV Petrom invested in cutting edge water treatment plants and the waste water treatment station at the Petrobrazi oil refinery was modernized. These actions offered positive results, as the company experienced an 8% reduction in the total water consumption compared to 2012, adding up to an amount of 24.2 million cubic meters. In 2013, 11.29 million cubic meters of waste water were adequately treated (OMV Petrom website; OMV Petrom 2013 Sustainability Report).

The exploration and production activities of OMV Petrom involve massive amounts of water that are used in oil and gas extraction, which amounted to 36.4 million cubic meters in 2013. More than 96% of the water generated through various activities was re-injected into the oil and gas deposits after undergoing a treatment process. The remaining water was cleaned and evacuated in surface water courses, in accordance with the environmental authorizations (OMV Petrom website; OMV Petrom 2013 Sustainability Report).

Over the course of 2013, all the operational sites of OMV Petrom were included in waste prevention and reduction plans. The company performed waste management audits and planned actions aimed at improving performance on all operational levels. The total amount of waste generated in 2013 declined by 20% compared to 2012. This is due primarily to a reduction in demolition activities and to the completion of a biological rehabilitation program targeting the silt settling tanks of the Arpechim refinery. Around 50% of the total waste resulting from OMV Petrom's activities has been recycled (OMV Petrom website; OMV Petrom 2011-2014 Sustainability Reports).

Eco-innovation

This concept refers to the research activities that seek to identify and apply new technologies that are as environmentally friendly as possible. At the same time, the company investigates alternative energy sources that could replace traditional fossil fuels in the future.

Education for development

OMV Petrom encourages and promotes educational projects for developing skills and abilities for both its employees and stakeholders. In the communities where the company is active, education is supported through projects in the areas of environmental protection, energy and entrepreneurship.

For its employees, there are continuous training programs and internal communication activities that ensure the spread of the best available practices in the area of environmental management. The focus of these communications in 2013 was water resource management.

Thus, OMV Petrom started a campaign throughout the entire group, titled “Efficiency in the use of water: Show that you care!” More than 2.700 employees were involved through various communication channels and a network of 14 ambassadors of the program was set up, along with an idea contest that took place during a series of workshops and meetings. Out of 177 ideas received, 62 were applied by the company (OMV Petrom website).

The three winning ideas were: “Measures for recovering energy from steam in the Exploration and Production Division”, “Reducing water losses in the Refining and Marketing Division (Cristian village Oil Storage Facility)”, “Reducing water losses at the cooling towers of the Gas and Energy Division (Petrom City power plant)” (OMV Petrom website).

Another important aspect of the environmental responsibility policy is the prevention of environmental accidents.

A wide range of actions with the goal of preventing or reducing the environmental impact of hydrocarbon leaks are being implemented. The company has created a map of hydrocarbon leaks risk, which provides detailed information on the hazard and potential impact of a leak at specific locations along the pipelines. 60% of OMV Petrom’s exploration and production assets are included on this risks map, which presents the entire network of pipelines and highlights any “critical points” where the threat of a leakage is at its highest. This knowledge is then used to enforce preventive action plans and to prepare effective measures in case of a spill (OMV Petrom website; OMV Petrom 2011-2014 Sustainability Reports).

In 2013, the company performed risk assessments for 4.400 pipelines and 12.000 static pieces of equipment. More than 600 installations have been classified according to their degree of risk, including storage tank parks and compression stations (OMV Petrom website; OMV Petrom 2013 Sustainability Report).

With the help of a loan from the European Bank for Reconstruction and Development (EBRD), OMV Petrom carried out a reconstruction and rehabilitation project for the insulation of important pipelines, which will result in a more energy-efficient hydrocarbon transport system with a lower

risk of experiencing damaging leaks. The program includes several projects that target small and medium sized pipelines which are managed at a local level (OMV Petrom website; OMV Petrom 2011-2014 Sustainability Reports).

Another policy that has been undertaken by the OMV Petrom group is the attempt to create and distribute products that have a lower environmental impact. As such, the gasoline and diesel fuels produced at the Petrobrazi refinery are sulfur-free (a content of sulfur of less than 10 ppm) (OMV Petrom website; OMV Petrom 2011-2014 Sustainability Reports).

Once more in 2013, the company began to produce compressed natural gas (CNG), which generates 20% less CO₂, 80% less CO and virtually no particle emissions compared to other fuels. Liquid petroleum gas (LPG) and CNG have been offered at 236 of the 785 gas stations operated by OMV Petrom, covering around 30% of the company's gas stations (OMV Petrom website; OMV Petrom 2013 Sustainability Report).

The “Țara lui Andrei” Program (Andrei’s Country Program)

Not limiting itself to implementing environmental responsibility policies targeting its own activities, OMV Petrom has also created projects that involve the communities where it operates and the general public. Beginning with 2009, such projects have been consolidated in a platform called “Țara lui Andrei” (Andrei’s Country).

In 2013, this platform received the „Best on-line community in Europe Award” from Digital Communication Awards (OMV Petrom website).

The actions that make up this social responsibility platform can be split into two categories:

- Projects undertaken by OMV Petrom itself in partnership with various NGOs.
- Projects funded by OMV Petrom after annual project competitions.

One of the most important projects organized by the ”Țara lui Andrei” platform involves tree plantings which take place in an organized manner, with the goal of combating various problems affecting local communities, such as landslides, desertification or blizzards during winter. These events bring together as volunteers company employees and people from the benefiting communities.

Other actions involve both employees that volunteer to participate and members of the local communities that are the focus of these rehabilitation actions. For example, in 2013, there were two ecological restoration actions in rural areas, and, as a result, approximately 3.200 kilograms of rubbish and waste were collected (OMV Petrom 2013 Community Involvement Report).

In 2014, the total budget for all community social responsibility actions organized by OMV Petrom was 3.8 million euros, the highest among Romanian companies (OMV Petrom 2014 Community Involvement Report).

KMG International (Rompetrol)

Rompetrol is the best-known brand of KMG International, under which the company runs its fuel production and distribution operations in Romania, the Republic of Moldova, Bulgaria, Georgia and France. In 2013, the company had a turnover of 11.748.666.980 lei and employed more than 7300 people (Rompetrol website).

KMG International (Rompetrol) is a founding member of the Global Compact Network in Romania, and has thus agreed to the principles of social responsibility promoted by the program.

Its first and so far only social responsibility report was published on August 18, 2015. It presents the company's activities in 2013 and 2014 and was elaborated using the G4 Sustainability Reporting Standards established by the Global Reporting Initiative (GRI).

The main environmental goal of KMG is "to develop its activities in full compliance with the environmental legislation of each country where the Group operates, applying the general principles of environmental protection through practices aimed at achieving sustainability and conserving natural resources" (KMG International 2013-2014 International Sustainability Report).

In the 2008 – 2015 interval, KMG allocated 600.000.000 US dollars for environmental management activities (KMG International 2013-2014 International Sustainability Report).

In order to reach this objective, KMG International has developed a strategy that focuses on several areas of interest, which are all closely related to the activities and operations of the group. The main avenues of these actions are (KMG International 2013-2014 International Sustainability Report):

- Aligning its activities and operations with national and international regulations in the field of environmental protection;
- Minimizing environmental incidents;
- Minimizing the consumption of natural resources;
- Reducing the total volume of waste generated, especially with regards to dangerous waste;
- Optimizing the operations and technologies in order to improve energy efficiency and decrease various polluting emissions, particularly those of greenhouse gases;
- Improving the certified environmental management system (ISO 14001) that is implemented by each entity of the group;

- The continuous training of the employees;
- Ensuring an excellent communication both within the Group and in the relationship with various stakeholders.

In 2013, the Petromidia refinery successfully completed a transition period for aligning its production facilities with existing European environmental regulations (Rompetrol website; KMG International 2013-2014 International Sustainability Report). The same year, Petromidia received a new integrated environmental authorization from the Constanta County Environmental Protection Agency, which has a 10 year period of validity (Rompetrol website; KMG International 2013-2014 International Sustainability Report). This serves as recognition of the fact that the production installations of the Petromidia platform operate at the highest standards of performance and environmental protection. Also, the new authorization sets the conditions and parameters that have to be met by the company (levels of atmospheric emissions, water and soil quality, waste management actions).

In 2014, the authorizations for greenhouse gas emissions were revised for Rompetrol Refining (RRC) Petromidia (the refining and petrochemical units) and the company received allocations for the new installations. The completion of the investment program resulted in a higher degree of energy efficiency for the Petromidia refinery, which now produces only Euro 5 fuels (Rompetrol website; KMG International 2013-2014 International Sustainability Report).

Furthermore, KMG International carried out a number of rehabilitation projects (Rompetrol website; KMG International 2013-2014 International Sustainability Report):

- “Rehabilitating and development of the terrain” where the acid tar and oil residue sumps of the Rompetrol Rafinare – Vega Ploiesti refinery are located.
- “Emptying Pit no. 3” of the Petromidia refinery, an action that continued in 2014.

Also in 2014, Rompetrol completed the project of “Installing a particle emission reduction system at the catalytic cracking installation – Electrostatic precipitator”, thus complying with Decision no. 379/05.06.2012 of the Constanta Environmental Protection Agency (Rompetrol website; KMG International 2013-2014 International Sustainability Report). The goal of the project was to equip the above-mentioned installation with a system for removing dust generated by the catalyst of the burned gases. The solution that was identified and applied consisted in installing an electrostatic filter on the gas pipes, in order to catch solid particles and prevent them from reaching the atmosphere, thus completing an investment with a positive effect on nature.

2014 also saw the granting of a water management authorization for the Petromidia refinery (with a validity period of 2 years) and for the Vega refinery (with a one year validity period) (Rompetro website; KMG International 2013-2014 International Sustainability Report).

All the fuels that are sold by Rompetrol Refineries are certified by the Romanian Automobile Registry, and the company has maintained its certifications for management quality, environmental protection and health and safety in 2013 and 2014 (Rompetro website; KMG International 2013-2014 International Sustainability Report). Another significant aspect for an oil and gas company is the risk of accidents and the manner in which hazardous situations are managed. The refineries belonging to the KMG International group have operated at maximum capacity in 2015, without any accidental or planned shutdown (for a total of 365 days), processing an average of 13.800 tons of raw material per day. The total amount of processed raw materials in 2013 reached 240.553 tons, out of which 238.694 tons at Petromidia and 1.859 tons at facilities that do not belong to the group (Rompetro website; KMG International 2013-2014 International Sustainability Report).

In 2014, the volume of processed raw materials rose to 254.410 tons. In 2013, 0.4% of the above-mentioned volume (or 16.915 tons) came from recycled raw materials (oil muds) that were used in the primary production and in fueling various services required by the company. In 2014, for the first 10 months of the year, the company used 15.975 tons of recycled oil muds, representing once again 0.4% of its total volume of raw materials (Rompetro website; KMG International 2013-2014 International Sustainability Report).

According to its policies, the operations of each company belonging to KMG International must apply an efficient management of energy in their business plans and must evaluate, prioritize and implement technologies and systems that improve the efficiency of energy consumption.

As a result of all these continuous efforts, the production activity has become more energy efficient over the past years.

The structure of energy consumption was also impacted by the investments and upgrades carried out at the Petromidia refinery. Nevertheless, there is still room for improvement, mostly by optimizing the consumption of electricity and heating (gas and steam). Starting with 2012, there was a positive evolution of the energy indicators, following the investment package and the various measures and projects targeting energy efficiency at Petromidia. The reduction in operational costs, which was accompanied by an increase in the mechanical and operational availability of the installations, allowed a significant improvement of the Energy Intensity indicator of the Petromidia refinery, which reached its best value yet

(Rompetrol website; KMG International 2013-2014 International Sustainability Report). The Energy Intensity indicator of the Vega refinery on the other hand experienced a negative evolution starting from 2012, explained by the expansion of the hexane production facility and a decrease in the flow of products (Rompetrol website; KMG International 2013-2014 International Sustainability Report). However, following the implementation of new projects and measures meant to make energy consumption more efficient at the Vega refinery, the indicator has begun a positive evolution after 2014.

Due to the permanent improvement of production and management processes and the significant investments made in new technologies, KMG International has successfully aligned itself to the national and European environmental requirements in the areas of atmospheric sulfur and nitrogen oxides emissions. In regard to climate change, KMG International fully complies with EU regulations. In 2013, sulfur dioxide emissions were cut by 90.63%. Greenhouse gas emissions created by the group's activities were also within the parameters set for 2013 (Rompetrol website; KMG International 2013-2014 International Sustainability Report).

Another goal of KMG International is to maintain energy and natural resources consumption under control, and, as a result, through its environmental policy, the group pledges to reduce resource consumption by using them in an efficient manner (KMG International 2013-2014 International Sustainability Report).

Going beyond the social responsibility policies by which KMG International strives to reduce the impact that its activities have on nature, the company has also launched a program for financing social responsibility projects that seek to develop communities.

The national program "Together for Everyone", launched in 2009, aims to involve local communities in initiating, sustaining and implementing projects in the areas of healthcare and environmental protection (Rompetrol website, "Together for Everyone" project; "Together for Everyone" project website).

As of 2015, 1.5 million dollars' worth of financing has been offered, which helped support 101 development projects in communities across Romania and the Republic of Moldova. Funds were distributed evenly between healthcare and the environment (Rompetrol website, "Together for Everyone" project; "Together for Everyone" project website).

The main goals of these environmental projects were: ecological restoration actions, preserving and improving environmental conditions at local scale, waste management systems, the rehabilitation and enhancing of degraded lands and other innovative projects with environmental applications.

Conclusion

Seen from an environmental perspective, the concept of corporate social responsibility is becoming ever more important, as the pressures exerted on nature by economic activities increase. In Romania, the change brought about by the 1989 Revolution was accompanied by a period of economic and social opening towards the international trends and ideas. As the social and economic interactions of Romania with the outside world increased, the concept of corporate social responsibility emerged as an important notion.

Following our analysis of the two leading oil and gas companies of Romania, OMV Petrom and KMG International (Rompetrol), we can draw a number of conclusions concerning the common features of the environmental component of their corporate social responsibility policies. The first one is the fact that the environmental CSR policies have a two-part structure. The first elements deal with internal policies and actions for reducing the environmental impact of the economic activities. The second part consists of those policies implemented by the companies for managing their external relationships with the communities where they operate and whose development they try to support.

The activities of these two major companies have a significant impact on the environment, but this is balanced by a strong awareness of this impact among the leaders of the two companies and a firm commitment towards environmental policies and actions. Both companies have issued sustainability reports and have focused their efforts on projects dealing with issues such as air and water pollution, improving waste management and energy efficiency. OMV Petrom and KMG International (Rompetrol) are some of the most active Romanian companies in the CSR sphere. They support research projects and promote educational initiatives that seek to protect nature and involve local communities.

CSR is not a fad or a trend, but a conscious and rational behavior that brings benefits not just to companies but also to local communities and, of course, to the environment.

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Modeling and Linearization of DFIG Based Wind Turbine

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Abstract

Usage level of wind units in power systems is increasing rapidly. There are different kinds of wind turbine generator. The Doubly-Fed Induction Generator (DFIG), is one of the most widely used electrical machines in the megawatt-class wind turbines. In a DFIG-based wind turbine, the stator is connected to grid directly while the rotor is connected a back-to-back converter via slip rings. Current sensor fault diagnosis for renewable power of wind turbine based on DFIG has gained serious importance. In this work, mathematical modeling of DFIG is presented. Nonlinear state equations are linearized with Takagi-Sugeno (T-S) Local Models for current sensor fault diagnosis. Modelling error between linear and nonlinear model is minimized by heuristic approach on membership functions. A bank of observer-based residual generator system for fault diagnosis is created, so additive and gain faults of stator current sensors can be detected and isolated.

Keywords: Doubly Fed Induction Generator, Modeling, Linearization, Fault Diagnosis

Introduction

In recent years, considerable concernment is given to renewable energy sources and number of power generation plants which depends on renewable energy source is increasing rapidly. Wind energy is a one of the renewable energy sources obtained with wind turbines which is the highest growth in modern power systems, has minimum negative effect on environment. This is why reliability of wind turbines becomes an important topic in research and industry.

Usage level of wind units in power systems is increasing rapidly. There are different kinds of wind turbine generator. The Doubly-Fed Induction Generator (DFIG), is one of the most widely used electrical

machines in the megawatt-class wind turbines (Hansen et al.,2007). In a DFIG-based wind turbine, the stator is connected to grid directly while the rotor is connected a back-to-back converter via slip rings, so both stator and rotor are connected to the grid (Leonhard,2001). The preferred configuration for wind turbine generator is DFIG which can be seen in Figure.1.

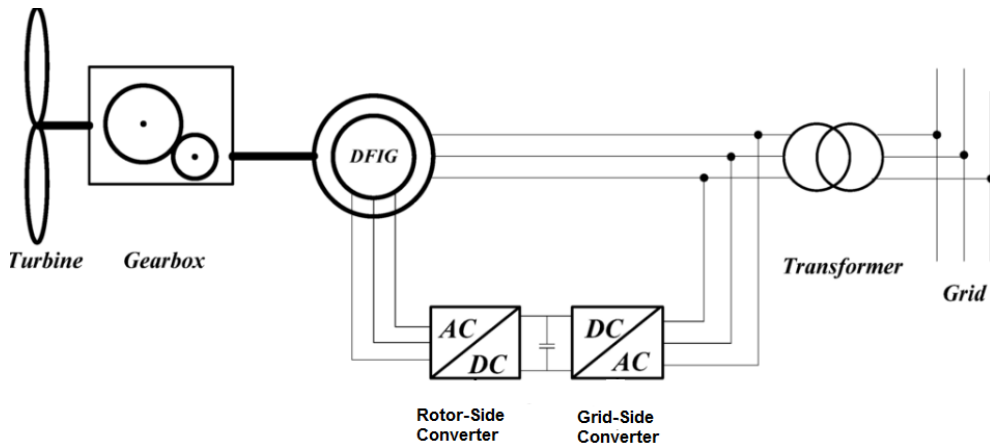


Figure 1: Schematic of DFIG Wind Power Generation System

Many wind farms use doubly-fed induction generator (DFIG)-based on wind turbine to allow variable rotor speed. Because of its various advantages over the other generators, DFIG has gained more interest (Shilpi, 2013). These advantages can be listed as follows: first, as the rotor circuit is controlled by a power electronics converter, the induction generator is able to import and export reactive power, in situations such as low voltage allows the machine to support the grid. Second, when the wind turbine speed varies, in order to remain synchronized with the grid frequency, rotor currents and voltages of DFIG can be controlled. Third, the cost of the inverter is cheaper than other generator and efficiency of DFIG is more competitive with respect to its counterparts.

The safety and reliability of DFIG is a critical issue for recent literature, fault diagnosis of these machines very essential to improve power quality, reduce the down time, and minimize the maintenance cost. There are several types of fault such as current sensor faults, voltage sensor faults and speed sensor faults which may be occurred in DFIG (Chen et al.,2010). When these faults occur in a sensor, it reduces the overall system performance, may cause uncertainty and can cause serious damage to the generator (Najafabadi et al.,2011)

In a DFIG, varied fault diagnosis approaches were proposed in recent literature. The researchers have presented: a novel scheme for current sensor faults diagnosis in the stator of a DFIG described by a T-S fuzzy model in

(Samir et al.,2016), the problem of fault detection and isolation (FDI) design for nonlinear Takagi-Sugeno (T-S) models with measurable premise variables that is easily formulated in terms of Linear Matrix Inequalities (LMI) problem, based on Lyapunov theory in (Ouyessaad et al.,2013), a Fuzzy Dedicated Observers (FDOS) method using a Nonlinear Unknown Input Fuzzy Observer (UIFO) with a Fuzzy Scheduler in (Kamal et al.,2012), an online monitoring system based on mathematical logic algorithms for fast fault diagnosis in power generators in (Ramirez-Nino et al.,2009), a new simple algorithm was developed based on an improved current observer to detect both soft and hard faults in current sensors for a DFIG in (H.Li et al.,2014), classifying the condition of small fault like sensor offset or drift in a DFIG accounting for parameter variations in (Manuel Gálvez-Carrillo et al.,2010), using the methods based on artificial neural networks (ANNs), process the massive data and automatically provide accurate diagnosis result in (Feng Jia et al.,2015), the main purpose was to analysis the current sensors faults in the stator, fault diagnosis for a Self-Excited Induction Generator (SEIG) based on in (Attoui et al.,2014), to isolate the detected faults in the stator and the rotor, an algorithm for fault identification has been designed in (Rothenhagen et al.,2009). A considerable research also has been done on the modelling, control and diagnosis of wind turbines with DFIG (Chitti et al.,2010, Odgaard et al.,2009).

The rest of paper is organized as follows: the modeling of DFIG-based wind turbine is presented, nonlinear model and proposed linearized model are introduced, an Ackermann based observer for residue generation is proposed. The proposed linearized model and bank of observer system results are shown in simulation section. Finally, conclusion section concludes the proposed work.

Modeling of DFIG-based Wind Turbine

Wind Turbine Basics

The maximum power extracted from wind turbine is limited to 59.3% of the available wind power which called as Betz Limit (Betz A,1966). The power extracted by wind turbine P_a is expressed as

$$P_a = C_p(\lambda, \beta)P_w = \frac{1}{2}\rho\pi R^2 C_p(\lambda, \beta)v^3 \quad (1)$$

where $C_p(\lambda, \beta)$ is aerodynamic efficiency, λ and β are tip-speed-ratio and blade pitch angle respectively, ρ denotes air density, R is the rotor radius and v represents wind speed (before interacting with turbine).

The tip-speed-ratio is defined

$$\lambda = \frac{\Omega R}{v} \quad (2)$$

where Ω and v denotes rotor angular speed and incoming wind speed respectively.

The DFIG Model

The electrical model of DFIG can be considered as wound rotor induction machine in synchronous reference frame. The modelling equation can be expressed as;

$$V_{ds} = R_s i_{ds} + \frac{d\phi_{ds}}{dt} - w_s \phi_{qs} \quad (3)$$

$$V_{qs} = R_s i_{qs} + \frac{d\phi_{qs}}{dt} + w_s \phi_{ds} \quad (4)$$

$$V_{dr} = R_r i_{dr} + \frac{d\phi_{dr}}{dt} - w_r \phi_{qr} \quad (5)$$

$$V_{qr} = R_r i_{qr} + \frac{d\phi_{qr}}{dt} + w_r \phi_{dr} \quad (6)$$

with

$$\phi_{ds} = X_s i_{ds} + X_m i_{dr} \quad (7)$$

$$\phi_{qs} = X_s i_{qs} + X_m i_{qr} \quad (8)$$

$$\phi_{dr} = X_r i_{dr} + X_m i_{ds} \quad (9)$$

$$\phi_{qr} = X_r i_{qr} + X_m i_{qs} \quad (10)$$

where V stands for voltages (V), i stands for currents (A), R stands for resistors (Ω), ϕ stands for flux linkages (V.s). Indices d and q indicate direct and quadrature axis components, respectively, while s and r denotes stator and rotor quantities respectively, w_s and w_r are the stator and rotor speed of the generator, X_r , X_s and X_m are the rotor inductance, the stator inductance and the magnetization inductance respectively (M.G.Simoesand et al.,2007)

The relationship between stator and rotor angular velocities and the electromagnetic torque (T_{em}) for P number of poles machine, are expressed by;

$$w_r = w_s - P\Omega_m \quad (11)$$

$$T_{em} = \frac{PX_m}{L_s} (\phi_{qs} i_{dr} - \phi_{ds} i_{qr}) \quad (12)$$

Linearization of a nonlinear DFIG Model

Since the back EMF (electromotive force) depends on the rotational speed of the generator, induction generator has a nonlinear dynamic model. This leads to a state matrix A that depends on rotational speed of generator (A is the nonlinear matrix).

Nonlinear state-space model of DFIG

The nonlinear state-space model of the DFIG obtained from both the stator and rotor voltage equations according to following assumptions:

Inductance saturation, skin effect, iron losses and bearing friction are neglected.

$$\frac{dx(t)}{dt} = A(w_m(t)) + Bu(t) \tag{13}$$

$$y(t) = Cx(t) \tag{14}$$

where;

$$x(t) = [i_{ds}(t) \ i_{qs}(t) \ i_{dr}(t) \ i_{qr}(t)]^T \tag{15}$$

$$u(t) = [v_{ds}(t) \ v_{qs}(t) \ v_{dr}(t) \ v_{qr}(t)]^T \tag{16}$$

$$y(t) = [y_1(t) \ y_2(t)]^T = [i_{ds}(t) \ i_{qs}(t)]^T \tag{17}$$

where $x(t)$ is the state vector with stator currents and rotor currents components, $u(t)$ is the input vector which consists of the stator and rotor voltage components, $y(t)$ is the output vector.

$$A(w_m) = \frac{1}{\sigma} \begin{bmatrix} -(R_s X_r w_b) & -(X_m \delta + X_r X_s w_s) & R_r X_m w_b & -(X_r \delta + X_m X_r w_s) \\ X_m \delta + X_r X_s w_s & -(R_s X_r w_b) & X_m X_r w_s - X_r \delta & R_r X_m w_b \\ R_s X_m w_b & X_s \delta + X_m X_s w_s & -(R_r X_s w_b) & \frac{X_r X_s \delta}{X_m} + X_m^2 w_s \\ X_s \delta - X_m X_s w_s & R_s X_m w_b & \frac{X_r X_s \delta}{X_m} - X_m^2 w_s & -(R_r X_s w_b) \end{bmatrix} \tag{18}$$

$$B = \frac{w_b}{\sigma} \begin{bmatrix} X_r & 0 & -X_m & 0 \\ 0 & X_r & 0 & -X_m \\ -X_m & 0 & X_s & 0 \\ 0 & -X_m & 0 & X_s \end{bmatrix} \tag{19}$$

where $\sigma = -X_m^2 + X_r X_s$, $\delta = X_m (w_m - w_s)$, w_b is the base angular frequency, R_s and R_r are the stator and rotor resistance respectively.

The given state-space model of DFIG is nonlinear and time-variant because of generator speed. So, we need to linearization of nonlinear model of DFIG to approximate its behavior.

Proposed model for linearization of DFIG

Linear models are easier to understand and are necessary for most control system design methods. Induction generator nonlinear model can be linearized using various approaches such as Kalman Filter and Takagi-Sugeno (T-S) fuzzy model (Eric A et al.,2000, Johansen et al.,2000).

With nonlinear membership functions, the T-S fuzzy model approximates nonlinear model and gives satisfactory results. In figure 3 simulink implementation of DFIG modeled with T-S fuzzy can be seen. In this section, we focus on a region (region 2) which has variable wind speed between minimum and maximum wind speed thus generated power is

variable, this is because when the wind speed is lower than required wind speed (region 1), there is no generated power in this region, likewise when the wind speed is higher than required wind speed (region 3), it is max wind speed and variable power isn't generated, see in figure 2. Using membership functions, nonlinear model of DFIG is linearized in region 2 (Varzaneh et al.,2014).

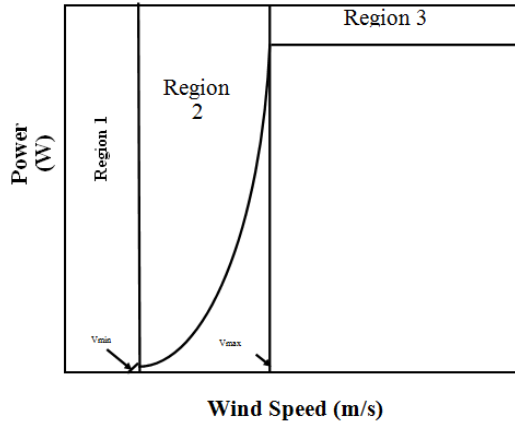


Figure 2: Operation Regions of DFIG

Simulation Result

Nonlinear modeling, linearization and observer design are performed Matlab Simulink software. The states of output equations (i_{ds} , i_{qs}) are obtained for each simulation. Firstly, nonlinear system is constructed with T-S local linear models, comparison of stator current in three phase, i_{abc} , is shown in Figure 5 where solid line shows nonlinear model output while dotted line shows T-S local linear model output. According to result, it can be concluded that output of local linear model was completely identical with output of nonlinear model.

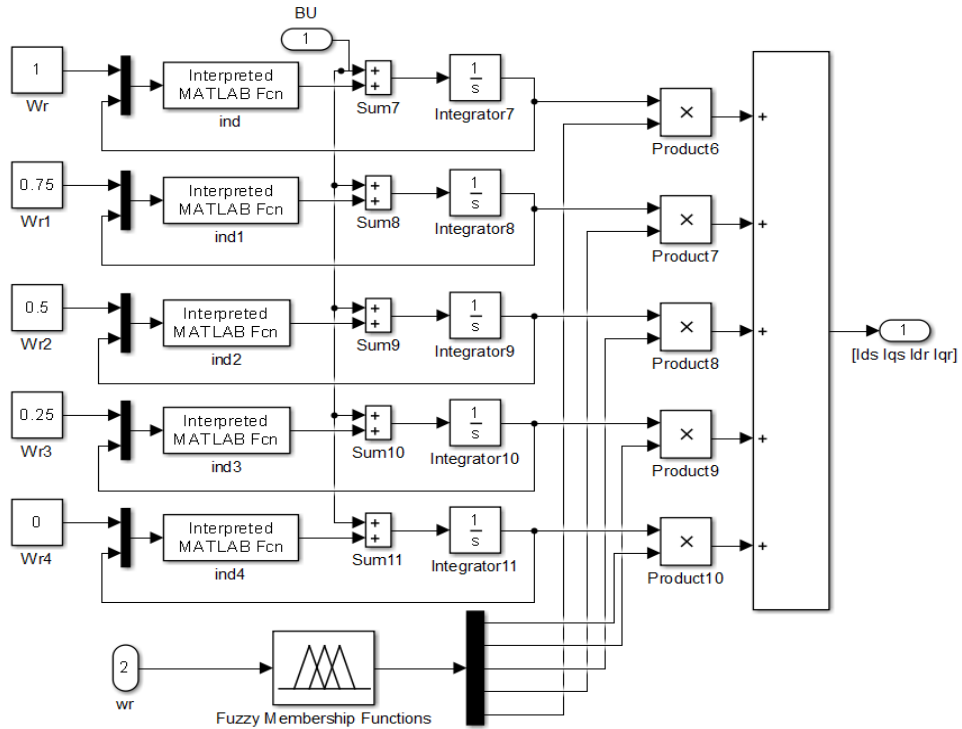


Figure 3: Simulink implementation of DFIG modeled with T-S Linearization

Ackermann Observer Design

The dynamics of the state estimation error

$$\tilde{x}(k) = x(k) - \hat{x}(k) \quad (20)$$

$$\begin{aligned} \tilde{x}(k+1) &= Ax(k) + Bu(k) - A\hat{x}(k) - Bu(k) - K[y(k) - C\hat{x}(k)] \\ &= (A - KC)\tilde{x}(k) \end{aligned} \quad (21)$$

and then

$$\tilde{x}(k) = (A - KC)^k(x(0) - \hat{x}(0)) \quad (22)$$

The dynamics of the state estimation error:

$$\frac{d\tilde{x}(t)}{dt} = (A - KC)\tilde{x}(t) \quad (23)$$

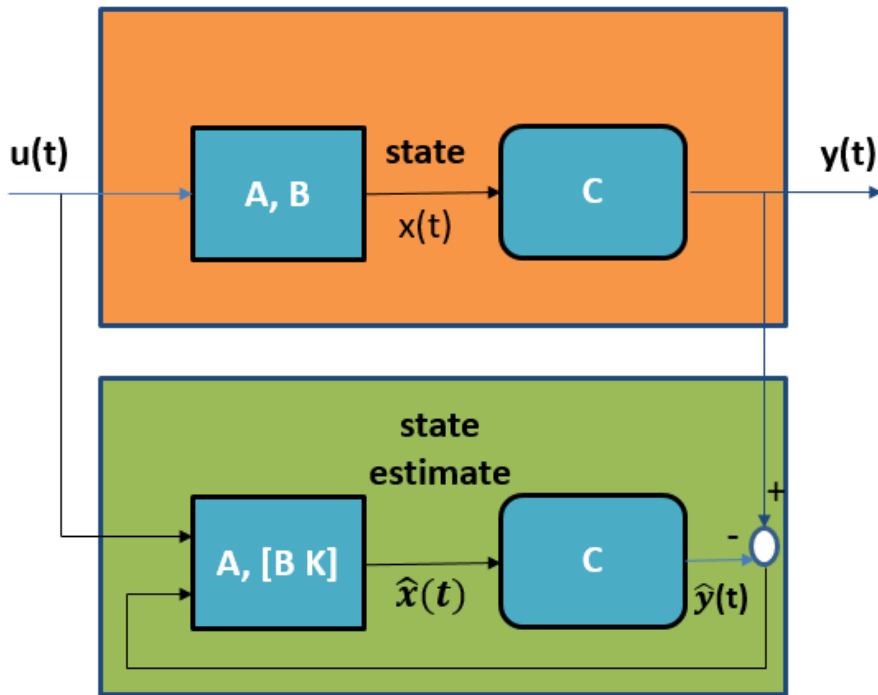


Figure 4: Block scheme of observer

In order to detect abnormalities in linear model with in any fault situation, states of system can be observed via an observer block. The difference between observer and local model outputs is called as residual. In fault free case, the residue approaches to zero as shown in Figure 6.

Conclusion

In this paper, the mathematical modelling of doubly-fed induction generator based wind turbine has been presented. Nonlinear state equations are linearized with Takagi-Sugeno (T-S) Local Model for current sensor in the stator of a DFIG based wind turbine. Using a heuristic approach on membership functions, error between nonlinear and linear model is minimized. A bank of observer based residual generator system is created for fault diagnosis, therefore additive and gain faults in the stator current sensor of DFIG can be detected and isolated for feature works.

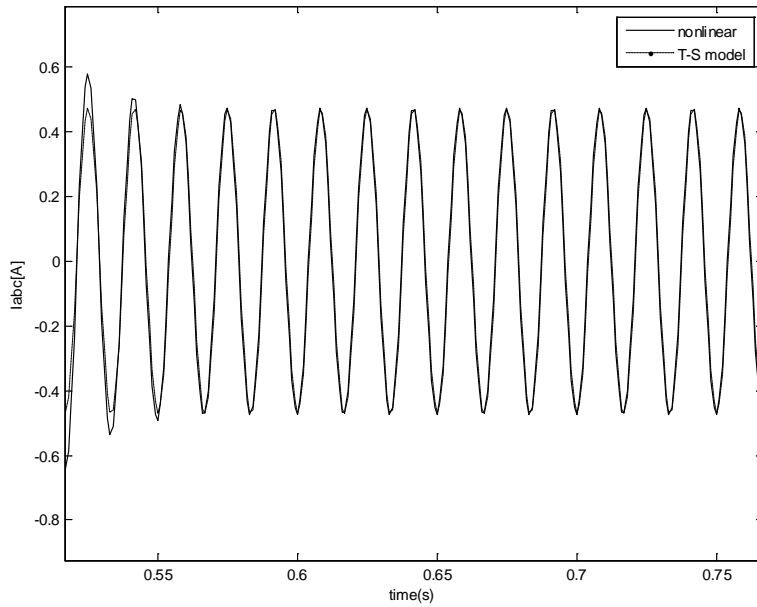


Figure 5: Comparison between the 3-phase stator current of the nonlinear system and T-S linear model

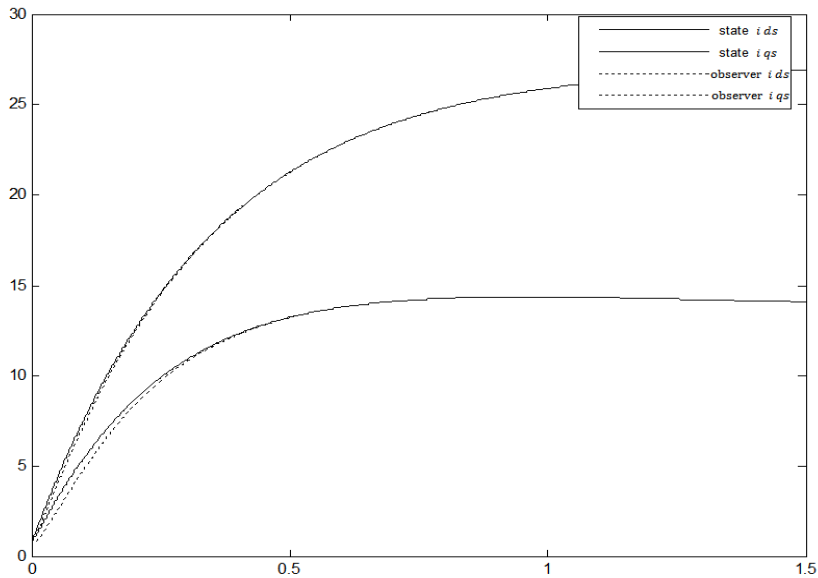


Figure 6: Comparison between the states of the linear system and observer

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Treatment of Textile Wastewater Using Nanofiltration

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Abstract

The discharge of the synthetic dyes in textile industries is considered to be a major environmental problem due to aesthetically undesirable in receiving waters. Therefore, treatment processes for removing of dyes from textile effluents have become important. Nowadays, removal of dyes is carried out generally by physical and chemical methods. In this study, synthetic textile wastewater was prepared using cationic dye (Methylene Blue) and with addition of other chemicals. The treatment of textile wastewater in the cross flow membrane system was investigated. Flat sheet polymer type nanofiltration membrane (NF) at constant working pressure was used to remove COD (chemical oxygen demand), color, turbidity and conductivity from effluents. Removal efficiencies of COD, color, turbidity, conductivity of samples at 15 bar were found to be 98%, 98%, 100%, and 95%, respectively. Membrane processes can be used to treat textile wastewater and reuse of treated wastewater in the process as process water can be achieved as advanced treatment.

Keywords: Synthetic textile wastewater, methylene blue, COD, color, nanofiltration

Introduction

Textile industry is one of the biggest industries of Turkey and it consumes some amount of water. As there are several methods and technologies used in this sector due to the different raw materials and various chemicals, the wastewaters obtained vary related to the products produced (Fersi et al, 2005).

The textile industry wastewaters discharges contain many types of organic dyes, common inorganic salts, heavy metal ions and solvents and can cause harmful effect to the aquatic ecosystems. Several chemical and biological treatment methods such as adsorption, coagulation, advanced oxidation and biodegradation have been used for removal of these type of wastewater (Yagub et al., 2014; Huang et al., 2014). However, adsorption

and coagulation usually generate huge amount of sludge, and oxidation and biodegradation are invalid to the heavy metal ion and inorganic salt removals. Thus, effective technology for textile wastewater treatment can be preferred over conventional treatment methods.

Membrane processes are alternative separation technologies to the conventional separation techniques such as distillation, adsorption, absorption and extraction. Membranes can be made of polymer, glass, metal or liquid, and can be porous/nonporous, symmetric/asymmetric or composite. Membrane processes provide several advantages such as high selectivity, low energy consumption, moderate cost to performance ratio and modularity. Nanofiltration (NF) as an environmentally-friendly membrane technology has gained much attention for some industrial applications including food, pharmaceutical, petrochemical industries and wastewater treatment (Ong et al., 2014). Generally, it is much more efficient than ultrafiltration (UF) with regard to rejection and also shows the higher permanence than reverse osmosis (RO) (Gozálvez-Zafrilla et al., 2008; Alcaina-Miranda et al., 2009). NF membranes are especially suitable for dealing with positively charged solutes such as cationic dyes and metal ions from textile wastewaters due to electrostatic repulsion.

The aim of this research was investigated using cross flow NF membrane to treat synthetic textile wastewater containing cationic dye (methylene blue) and with addition of other chemicals. Flat sheet polymer type NF membrane at constant working pressure (15 bar) was used to remove COD, color, turbidity and conductivity from effluents (Sathian et al., 2014).

Materials and methods

Chemicals and membrane

Methylene blue (cationic dye) was supplied by Sigma-Aldrich (Belgium). Fig.1 shows the chemical structures of this dye. NaCl and Na₂SO₄ (analytical grade) were obtained from Sigma-Aldrich (Belgium). All the chemicals were used without any further purification.

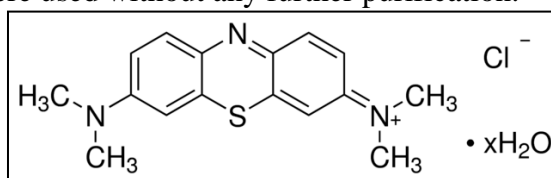


Fig. 1: Chemical structure of Methylene blue dye (Sarioglu and Atay, 2006).

Methylene blue is a cationic dyestuff, the chemical formula is “C₁₆H₁₈N₃SCl”, the molecular weight is 373,9 g mol⁻¹. It is used for coloring in textile industry and also for preventing fungus reproduction in fish

breeding farms. The spectrum of the wavelength scanning in the spectrophotometer is given in Fig 2. The λ_{\max} value according to this scan is 663 nm.

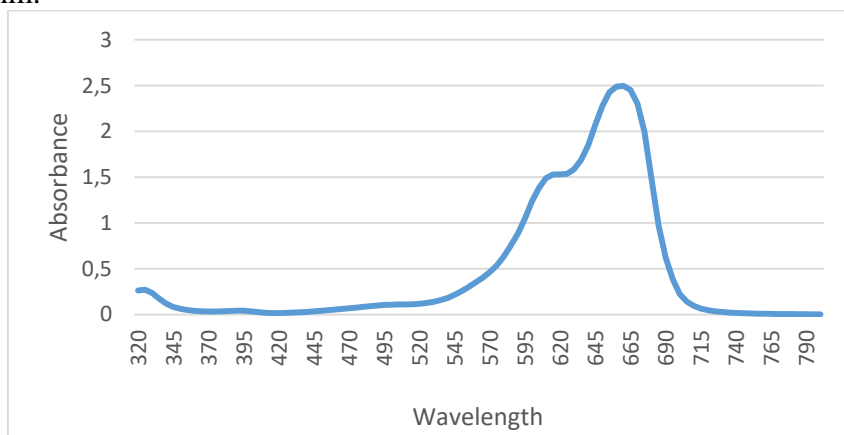


Fig. 2: The λ_{\max} value of methylene blue.

Synthetic textile wastewater was prepared using methylene blue (100 mg/L) dye with addition of chemicals (Table 1).

Table 1: Synthetic influent composition

Component	Concentration (mg/l)
$C_6H_{12}O_6$ (glucose)	1000
NaCl	22
$CaCl_2 \cdot 2H_2O$	22
$MgSO_4 \cdot 7H_2O$	0,075
$(NH_4)_2HPO_4$	0,05
K_2HPO_4	67

Table 2: Properties of NF membrane used in this study^a

Membrane	GE osmonics
Thin film (DL)	NF
MWCO ^b	150-300 dalton
Pure water pressure	220 psi (25 C)
pH	2-10

a Data provided by the manufacturer.

b Molecular weight cutoff (MWCO)

Membrane experiments

Cross-flow filtration was performed with a flat membrane module (SEPA CF Cell) presented in Fig. 3. The membrane area was 0,014m². The membrane module was equipped with a temperature control system and the temperature was kept at 18±20°C. The volume of the feed solution was 6-6.5 L. In this study, organic polymer thin film NF membrane (150-300 dalton

molecular cutoff weight) was used. The experimental set-up is shown in Fig. 4.

Crossflow Filtration

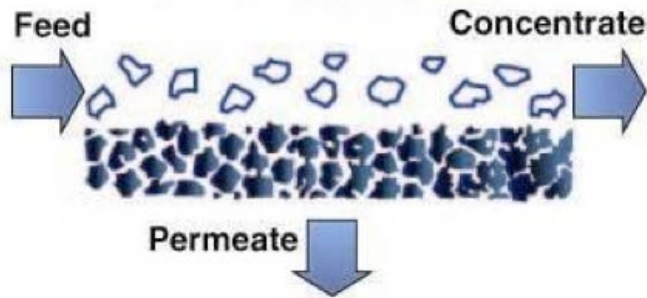


Fig. 3: Cross flow filtration mechanism

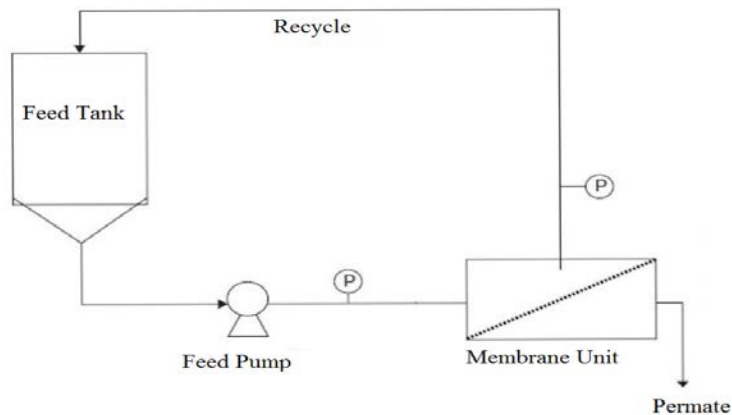


Fig. 4: Cross flow membrane unit

The rejection coefficients (R) for the NF membrane were calculated from the measured feed (C_f) and permeate concentration (C_p) using the following equation:

$$R (\%) = (1 - C_p/C_f) \times 100 \quad (1)$$

In cross-flow membrane filtration experiments, permeate flux was monitored by measuring the time at which a known amount of permeate was collected in a graduated cylinder. Permeate flux measurements were periodically done till steady state by simply measuring the volume of filtrate collected per unit time and dividing it by the membrane surface area. COD, color, conductivity and pH parameters were measured in each timely taken filtrate samples.

The sample was analyzed for color, COD and turbidity. COD analyzes were carried out by closed reflux titrimetric method according to

APHA standard methods (APHA, 1995). The color values of the samples were measured by a Shimadzu UV-spectrophotometer. According to the measured values, the color removal efficiency is calculated with the help of Equation 2. Conductivity evaluated with a Benchtop Conductivity Meter. Turbidity was measured using Turbidimeter.

$$\text{Efficiency} = \frac{C_0 - C}{C_0} \quad (2)$$

C_0 is the initial dyestuff concentration, C is the dyestuff concentration of the sample.

The filtrate flux (J_w) was calculated from the time to collect a fixed volume of permeates.

$$J_w = V/A.t \quad (3)$$

where V is the volume of permeate collected during the time interval t and A is the effective membrane area. The observed rejection (R_s) of dyes was calculated as:

$$R_s (\%) = ((C_{f,s} - C_{p,s}) / C_{f,s}) \times 100 \quad (4)$$

where $C_{f,s}$ and $C_{p,s}$ are the solute concentrations in the feed and permeate, respectively.

Results and discussion

NF membrane performance

After preparing of synthetic textile wastewater, wastewater characteristics were determined. In this study effect of pressure on removal efficiency was ignore. Constant maximum pressure (15 bar) was selected for determining of performance of this NF membrane unit. Cross-flow membrane filtration experiments were carried out in two modes; a) total recycle b) concentration mode. In this study, in order to determine removal efficiencies of pollutant parameters (COD, color, pH, conductivity, turbidity) experimental results of concentration mode was given. The second mode of cross-flow tests were in concentration mode at which the retentate is returned to the feed vessel but permeate is withdrawn from the system (Figure 4). Fig. 5 shows the profiles of flux as a function of time (h). The flux starts to become constant after 4 h working time. As expected, the clean water permeability decreased with running time.

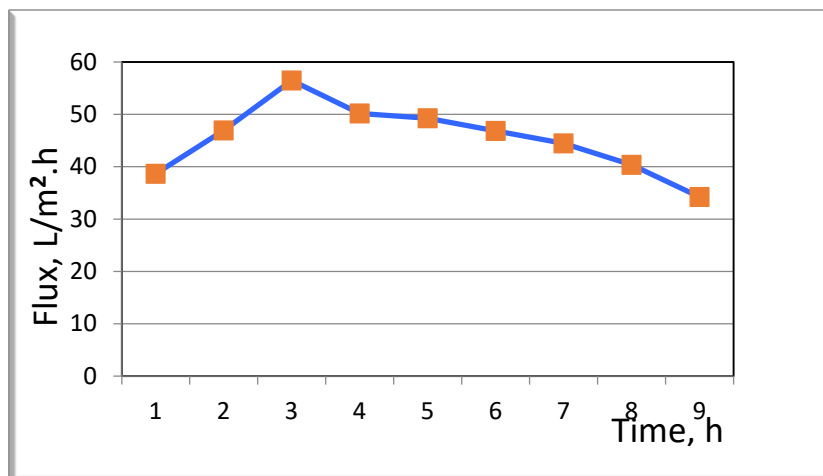


Fig. 5: Flux for NF membrane as a function of time (pressure: 15 bar)

Initial and effluent of cross flow NF membrane (permeate) samples were analyzed for COD, color, conductivity, turbidity and pH. Results was given in Table 3.

Table 3: Synthetic wastewater NF membrane system influent and effluent values

Parameters	Feed	Permeate
COD (mg/L)	2300	50
Color (mg/L)	100	2,30
pH	5	5,15
Conductivity (μ S)	125,5	22,3
Turbidity (NTU)	3,40	0,01

Nanofiltration (NF) membranes have been used previously for the recovery of dyes, salts, and water from textile wastewaters with high salinity. This NF membrane allows for high permeation of salts and organic compounds. Thin film NF membrane was proposed as an alternative to ultrafiltration for the separation of aqueous mixtures of dye/ Na_2SO_4 . Similar comment was given in literature using tight ultrafiltration membrane (Saffaj al., 2005).

Conclusion

The results of this study demonstrate that textile wastewaters containing COD and color can be removed in cross flow NF membrane system Flat sheet polymer type NF membrane at constant working pressure (15 bar) was used to remove COD, color, turbidity and conductivity from effluents. Removal efficiencies of COD, color, turbidity, conductivity of samples at 15 bar were found to be 98%, 98%, 100 %, and 95%, respectively. Membrane processes can be used to treat textile wastewater and

reuse of treated wastewater in the process can be achieved as advanced treatment.

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Analysis of the Contribution to Professional Knowledge of the Job Training Within the Student Perspective in the 3+1 Education Model - The Example of Honaz Vocational School

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Abstract

A well-educated and qualified workforce is one of the most important outputs in vocational and technical education. Vocational schools constitute the last circle in Turkey for the preparing students about the vocational and technical education in order to meet the need for the intermediate staff needed by the labor market. The educational model which called 3 + 1, allows the period of training to be carried out in enterprises in order to make up for the students lack practice and skills in the vocational schools which criticized for lack of internship period and ineffectiveness. The purpose of this research is the student perspective analysis of the contribution to student's professional knowledge of job training (internship) in the 3 + 1 education model. This research was conducted on 234 students with 6 hypotheses. According to the results of the research, some variables are significant differences in the occupational contribution from the model. These variables are the program being studied, the monthly spending level of the student, the attitude developed against the vocational higher school and the place where the student lives. Gender of the student and academic achievement do not have significant effects on the professional contribution.

Keywords: Job Training, Vocational Training, 3+1 Education Model

Introduction

Vocational training is one of the active labor market policies that provide qualifications for individuals (Karadeniz et al., 2013:11). The development of the countries is possible by educating qualified professionals who have the knowledge and skills and have acquired work habits. One of the institutions that have contributed to the training of qualified professionals

is vocational schools. Today, vocational schools have been established especially for industry, commerce and service sectors in order to train intermediate staff with sufficient knowledge and skills in their fields. Vocational schools constitute the most important component of vocational and technical education system (Alkan et al., 2014). There is a gap between the vocational and technical educational institutions that provide education at undergraduate level and the employment fields targeted by secondary education institutions. Vocational schools also fulfill this gap (Şahin and Findik, 2008). The main objective of the vocational schools is to train qualified professionals who are competent enough to meet the needs of the business world. However, due to the organized educational system, vocational schools educate and graduate students who are far away from the practice (Gümüş, 2016). This situation creates a dispute about demanded level of skill between vocational school graduates and labor market. This incompatibility causes the rise of unemployment rate by increasing vacant jobs (Aktaş, 2016:61).

To create a student profile with the qualities demanded by the business world, the universities usually have internship applications at the end of the II. and IV. semesters to offer the opportunities for students applying the theoretical knowledge they have educated. The main objective of the internship is explained by YÖK⁶ : “ ... to ensure that the students who are studying at vocational schools reinforce their theoretical knowledge and experience they have gained during their education, to develop their skills and experiences in laboratory and workshop applications, their responsibilities at workplaces where they will work, their relationships, the organization and the production process, and the identification of new technologies” (Yarcı and Alpman, 2015; YÖK, 2002).

3 + 1 Education Model

Description

The 3 + 1 education model brings the students to reach the level of the quality of the labor market after the graduation at four-semester teaching activities in vocational schools. For this purpose, students are educated through both learning and working in the workplace environment, including active occupational practices for one semester of four-semester teaching activities. In this model, the implementation activities in the workplace environment are called as “internship” or “on-the-job training”.

In this model, under the name of professional practices course, vocational school students have the opportunity to reinforce their knowledge and experience they have earned during their education with practical

⁶ Higher Education Council of Turkey.

training in public / private institutions and organizations (Sarıbıyık, 2013). In this way, it is aimed to establish the education-employment relation more strongly and to adapt the graduates to the qualified intermediate member profile.

Application of 3+1 Model

In practice, students usually take the theoretical training for the three-semester classroom environment, as in the traditional higher education model. In the second year, the students who have completed the first year of education, are separated the two groups and one part's job training/internship opportunities are provided for the third term and the remaining is for the fourth period. Then the students are sent to selected workplaces for on-the-job training. The aim of the job training is to provide both the employees and the students with the knowledge, especially skills and work habits, necessary in the real business environment (Yeşil, 2015:38).

Advantages and Disadvantages of the 3+1 Model

The model creates advantages for all interested parties. For students, benefits of the model are described below:

- It provides a clear understanding of their working life for students (Karadeniz and Kumaş, 2016:750).
- It eliminates the disadvantages of traditional short-term internships ranging from 3-6 weeks (Çetin, 2005); The internship students are able to recognize the sector, gaining teamwork skills and develop their academic education into a real life experience which are achieved positive gains in internship practices
- Adaptation to work, difficulties communicating, long working hours, working on improper fields, being seen as a cheap workforce, and inadequate training which are disadvantages in their internship practices. Çetin (2005) has specified that students are less motivated to pursue a career in the industry and are not warming up to work in the industry because of the negativities they encountered in the internship.
- The students, who in the program have more professional experience than the ones not covered by this program in terms of professional knowledge.

On the other hand, this model benefits not only for the students and labor market but also for the lecturers and the universities (<http://www.pau.edu.tr/hmyo/tr/sayfa/genel-bilgiler-42>).

Although internship practice plays an effective role in adapting to business life after graduating, it is not sufficiently in terms of controllability, measurability, and duration. For this reason, universities have expressed at the workshops that it is not enough to transform students' theoretical

knowledge into practical exercise with the course of internship practice in curricula. Universities pointed out in the workshops that a more comprehensive project was needed both in terms of content and duration in internship applications and started to work on the subject. In 2014, on the basis of University-Industry cooperation, Pamukkale University - Honaz Vocational School (HVS) began implementing the 3 + 1 model, which aims to educate their students for their future careers and employment opportunities.

Methodology

The Purpose and Importance of the Study

The purpose of this research is to evaluate the effectiveness of the 3+1 education model in terms of student perceptions and identifying the differences of perception among programs and to investigate their causes. In the evaluation of this program, the level of contribution to the professional knowledge of the students, the linear relationship between the work in the job and education in schools, the status of establishing healthy communication between students with the contributions provided by the unit responsibilities in the workplace and the level of employees' attitudes and behaviors towards students being friendly and helpful were examined.

The results obtained from this research are important in terms of providing a basis for the inclusion or non-inclusion of other programs not included in the 3 + 1 education model in the Honaz vocational school where the research was conducted. In addition the results of this survey would enlighten the other vocational schools for implementing 3+ model.

Operation Mode and Application

The research was performed at Pamukkale University within the HVS, the only vocational school applying the 3 + 1 education model. In the scope of research, all students in the HVS where the model was being applied for four semesters were accessed and the data was collected via the question form. The questionnaires were distributed to the students and collected back 2 days later. The number of students in this application and participating in the questionnaire is 234.

Method and Analysis

A non-experimental quantitative research design was used in the research. The data, which were collected during the research, were analyzed within descriptive and comparative methodology. Five hypotheses have been developed for analyzing the real the purpose of the research. In the descriptive methodology, frequency analysis and average model were used. In the comparative method, Kruskal-Wallis H test and Mann-Whitney

U test were used for the nonparametric techniques. For data collection; seven questions, which has the demographic variables, added to the 5-questions questionnaire which has five points Likert response component. The encoding of the five points Likert response component was done in the range of 1-5.

Constraints

The questionnaire was made at all semesters between the 6th week and 10th week that include the 16 weeks of on-the-job training. The perceptions of participant students about the 3+1 model's effectiveness may change after the end of the 16-week program. Since it is not possible to take account of this change in our research, hypothesis tests were carried out with the assumption that the perceptions of the students who applied the questionnaire would remain the same at the end of the internship period.

Hypotheses

The six hypotheses tested in the research are given below.

H₁: There is a significant difference between the programs of the students in the on-the-job training system and the contributions to their professional knowledge.

H₂: There is a significant difference between the gender of the students in the on-the-job training system and the contribution made to their professional knowledge.

H₃: There is a significant difference between the monthly spending levels of the students in the on-the-job training system and the contribution made to their professional knowledge.

H₄: There is a significant difference between the academic average of the students in the on-the-job training system and the contribution made to their professional knowledge.

H₅: The attitude (positive/negative) developed by the students in the on-the-job training system towards HVS constitutes a significant difference in the contribution to their professional knowledge.

H₆: The place of residence of students in the on-the-job training program makes a significant difference in contributing to the professional knowledge of the students.

Analysis and Findings

Reliability Test

Cronbach's Alpha method was used for the reliability test of collected data. The Cronbach's Alpha coefficient was calculated for responses obtained from five questions in the Likert response component of the questionnaire. The Cronbach's Alpha value used to measure reliability was

0.843. When Cronbach's alpha coefficients range from 0.80 to 1.0, then the test have high reliability (Alpar, 2011). Since Cronbach's Alpha coefficient is within the given range, statistical analyzes can be applied to the data obtained from the questionnaire.

Normality Test

The basic criteria in determining the statistical techniques to be used in the studies is determining to use parametric tests or non-parametric tests in the analyses. In order to be able to use parametric tests, some assumptions must be tested at first. One of these assumptions is the assumption of normal distribution. For the parametric tests to be applied, the H_0 hypothesis, which is established as “the data are normally dispersed” must be accepted. If the hypothesis is not accepted, non-parametric tests should be applied instead of parametric tests. Both graphical and analytical methods are used for testing the normality assumption. Looking at the literature, it can be seen that the Single Sample Kolmogorov-Smirnov test statistic is more preferred than methods which we mentioned above. In this research, The Single Sample Kolmogorov-Smirnov test was applied to the answers obtained from the questions which prepared to measure the students' risk tolerance levels in order to determine the normal distribution of the data. The H_0 hypothesis, which was established as “the data are normally dispersed” because of the p values of the test statistic being 0,000, was not accepted because the calculated p values had a lower value than the 0.05 significance level. For this reason, the result is that the non-parametric tests should be applied to the data (Aksit et al., 2016). For this reason, the Kruskal-Wallis H test will be applied in the hypothesis tests.

The Kruskal-Wallis H test is used when the independent variable is categorized more than once. The test, which is the nonparametric shape of one-way analysis of variance, determines that there is a significant difference between the average rank numbers of two or more categories for the variable being studied. Kruskal-Wallis is a test based on the approximate chi-square distribution. For this reason, the decision to reject the hypothesis H_0 is given as the result of comparing the calculated value with the chi-square table value. (Ozdemir, 2013; Aksit et al., 2016).

Hypothesis Test Findings

Hypothesis tests and findings are explained on the basis of the hypothesis in below.

H₁: There is a significant difference between the programs of the students in the on-the-job training system and the contributions to their professional knowledge.

The difference between the level of contribution of the students to the occupational knowledge accumulation of the internship which is measured by the Kruskal-Wallis H test. The difference, which is the level of contribution of the students in the 3 + 1 educational model programs to the occupational knowledge accumulation of the internship was measured by the Kruskal-Wallis H test.

The test results are shown in Table 1.

Table 1: Vocational contribution level perceptions in programs within 3 + 1 model

Programme	N	Mean Rank	Chi-Square	df	p
Foreign Trade	82	136,17	18,729	3	0,000
Logistic	66	94,55			
Marketing	16	143,14			
Business Administration	70	111,24			

Source: Fieldwork-based calculations of authors

According to the table, the highest rank average was obtained in the Marketing Program and the lowest rank average was obtained in the Logistic Program. This difference between the programs is level to reject the hypothesis H_0 , in other words, the difference between the sequence averages is statistically significant ($p=0,000<0,05$). The H_1 hypothesis was accepted for this reason.

According to this result, the internship application in the 3 + 1 education model contributes to the professional knowledge of the students, but this difference shows that the application does not provide sufficient contribution in some programs. In the 3 + 1 education model, the contribution of the internship application to the professional knowledge accumulation will be discussed in general, then the differences between the programs will be assessed.

In Table 2, all students, who participating in the 3 + 1 educational program, the perceptions of contribution to professional knowledge are seen with frequencies, mean, standard deviation, mod and median values according to the five-point Likert scale.

Table 2: Perceptions of Contribution to Vocational Knowledge Accumulation of the Students Covered by the Model (General)

The on-the-job training system contributes to the accumulation of professional knowledge.							
	N	%	%	Mean	S.D.	Mode	Median
I never agree	30	12,8	17,1	3,825	1,352	5	4
I don't agree	10	4,3					
No Idea / Undecided	27	11,5	11,5				
I agree	71	30,3	71,3				
I totally agree	96	41					
TOTAL	234	100	100				

Source: Fieldwork-based calculations of authors

According to the table, the average response of the participants is 3,825. Because of the coding in the 1-5 range from five points Likert scale, a width of 4 points emerges. This width can be divided into five equal parts to facilitate interpretation. According to (Yürekli and Kalfa, 2016), this range is “very low” between 1,00-1,79, “low” between 1,80-2,59, “medium” between 2,60-3,39, “High” between 3,40-4,19 and “very high” between 4,20 and 5,00 (http://www.istatistikanaliz.com/faktor_analizi.asp). According to this, it can be said that the contribution of occupational education in the 3 + 1 education model of the students to the professional knowledge accumulates in high. This situation is supported by the frequency and percentage analysis results.

71.3% of the participant students think that the 3 + 1 model contributes to the knowledge accumulation of the occupational education, 11.5% of the students do not report positive or negative opinions. Only 17.1% of the participants think that the program does not contribute to their knowledge. This data indicates that the 3 + 1 education model is adopted by the students. It is estimated that if the post-graduate employment situation is investigated, these students will have a significant employment advantage compared to the students who are outside the model.

Table 3 summarizes the contributions of the occupational training in the 3 + 1 education program to the occupational knowledge accumulation of the students on a program basis.

Table 3: Perceptions of Contribution to Professional Knowledge Accumulation on Program Basis

PROGRAMME	Foreign Trade		Business Administration		Logistic		Marketing	
	N	%	N	%	N	%	N	%
No contribution	3	3,7	16	22,9	21	31,8	0	0
No Idea	9	11	6	8,6	10	15,2	2	12,5
Contributed	70	<u>85,4</u>	48	<u>68,6</u>	35	<u>53,2</u>	14	<u>87,5</u>
TOTAL	82	100	70	100	66	100	16	100

Source: Fieldwork-based calculations of authors

Table 3 summarizes the contributions of the 3 + 1 model of occupational training in the context of the programs involved in implementation. It is understood that the highest contribution to professional knowledge is obtained in Marketing Program and Foreign Trade Program students. The similar result is supported by the row averages in Table 1. The Marketing Program students are able to find internship opportunities both in the manufacturing industry and in the services sector. On the basis of this, the Marketing Program students are able to find internships in the most suitable enterprises for them, then it may have provided the highest contribution to professional knowledge. In the same way for Foreign Trade Program students, this rate may have come out because all export-import

companies are suitable for an internship. According to the data of Turkish Exporters Assembly, the fact that Denizli is the eighth largest export volume in Turkey supports this prediction (<http://tim.org.tr/tr/ihracat-rakamlari.html>).

Business Management Program students are also one of the programs with the greatest choice in terms of preference for 3 + 1 internship, due to the suitability of management departments of all enterprises. Nevertheless, the lack of high-level contribution to professional knowledge, because of the students are not adequately employed in departments related to their field. In addition, the teaching and application area of the business management program is quite extensive. This program can be freely assessed by the firms within the scope of all managerial applications such as accounting, administrative assistant, etc. However, in the perceptions of the students, it may be that only managerial activities will contribute to the accumulation of vocational knowledge because it is a “management statement” in the name of the program. A higher contribution to professional knowledge can be obtained if the relevant program students are employed instead of the management program students for accounting, executive assistant, etc.

As can be seen, the suitability of the internship place for Foreign Trade Program, Marketing Program, and Business Management Program is not dependent on any sector. The perceptions of professional knowledge accumulation contribution of the Logistics Program’s students are significantly lower than other programs. This may be that students are not employed in firms related to their fields or that they are not employed in departments that will contribute to their professional knowledge even if this requirement is met. On the other hand, A high number of 3 + 1 internship place options that apply to other programs does not apply to this program. Even if the number of firms in the logistics sector is high, the surplus option that applies to other 3 + 1 programs and that arises due to sectoral independence is not possible for this program. For this reason, if the 3 + 1 internship of the students in the Logistics program is meticulously selected or because of the lack of choice, appropriate companies should be selected from other cities. In other words, a national-scale placement should be made by abandoning the local model applied in the provision of students' internships. When doing this, student preferences should be taken into account.

H₂: There is a significant difference between the gender of the students in the on-the-job training system and the contribution made to their professional knowledge.

In Table 4, the contribution of occupational education in the 3 + 1 education program to the professional knowledge of the students is analyzed on the basis of gender variation.

Table 4: Perceptions of Professional Knowledge Accumulation According to Gender

Gender	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	p
Man	126	113,9	14352	6351	14352	-0,16	0,873
Woman	102	115,24	11754				

Source: Fieldwork-based calculations of authors

The difference between male and female students' level of contribution to professional knowledge was measured by the Mann-Whitney U test. According to Table 4, male and female students have equal contributions to occupational knowledge accumulation of occupational education. The fact that there is no difference in the professional knowledge according to the gender of the students requires acceptance of the H_0 hypothesis. Accordingly, the H_2 hypothesis was rejected and it was concluded that there was no significant difference between the contributions to professional knowledge accumulation by gender ($p=0,873>0,05$).

Karadeniz and Kumaş (2016:750), in their studies exploring the role of 3 + 1 programs in increasing employability, they stated that female students' perceptions of occupational education were more positive than male students.

H₃: There is a significant difference between the monthly spending levels of the students in the on-the-job training system and the contribution made to their professional knowledge.

The effect of monthly expenditure levels of occupational education program students on their professional knowledge accumulation is shown in Table 5.

Table 5: Perceptions of Professional Knowledge Accumulation by Monthly Expenditure Amounts of Students

Expenditure Amount	N	Mean Rank	Chi-Square	df	p
500 TL and below	77	113,46	8,353	3	0,039
501-750 TL	72	109,58			
751-1000 TL	47	128,26			
1001 TL and above	27	86			

Source: Fieldwork-based calculations of authors

The level of contribution to the accumulation of professional knowledge according to the monthly spending amounts of the students was measured by the Kruskal-Wallis test. According to Table 5, the monthly spending amounts of the students are significantly different on the level of occupational knowledge accumulation ($p=0,039<0,05$). Accordingly, the hypothesis H_3 was accepted.

The lowest spending group, which is 500 TL or less, do not have a low level of contribution to professional knowledge accumulation.

According to this, as the amount of monthly expenditure of the student decreases, there is no decrease in the contribution level to the professional knowledge accumulation. In fact, there is a small increase in the contribution level to the professional knowledge accumulation. This cause is may be a greater awareness of the difficulties in working conditions or the difficulty of finding a job.

It is understood that the students with monthly expenditure more than 1000 TL contributed less to occupational training than the other groups. Because of the income from the family or other sources, students can have a level of economic strength that avoids working in the field where they are studied the under-graduation. It may be that the students with monthly expenditure more than 1000 TL contributed less to occupational training than the other groups. Another reason for this situation is that the student does not want to establish an employment relationship in the field and/or other areas where the student is taught after graduation.

The contribution to professional knowledge accumulation is the highest in the students who have monthly expenditure in the range of 751-1000 TL, which we can define as middle-income expenditure group. According to this, until the end of the expenditure period, the current budget isn't the reason for anxiety to have a problem for the needs and/or students who do not have the additional budget to make extra expenditures are those who provide the highest professional knowledge accumulation in the program. If income support is provided for low-income students to reach this spending level, then the most benefit can be obtained from the program.

H₄: There is a significant difference between the academic average of the students in the on-the-job training system and the contribution made to their professional knowledge.

According to the academic average of the students, the results of measurement of contribution levels to occupational knowledge accumulation are shown in Table 6.

Table 6: Perceptions of Contribution to Professional Knowledge Accumulation by Academic Average

Average	N	Mean Rank	Chi-Square	df	p
1,80-1,99	17	119,29	1,192	3	0,755
2,00-2,29	73	109,25			
2,30-2,79	65	102,72			
2,80 and above	60	109			

Source: Fieldwork-based calculations of authors

According to the academic average of the students, the level of contribution to professional knowledge was measured by the Kruskal-Wallis test. The academic average of the students is assessed as 4 points and it is

expected to reach the average grade of 2.30 so that they can get graduation right (PAU-Associate Degree, Undergraduate Education and Training Regulation, Article 35/2). According to the table, the group that maximizes the level of contribution to professional knowledge accumulation is the group with the lowest achievement level. According to this, it is understood that the students who are not able to contribute professionally enough for their education during the classroom education are closed during the on-the-job training. Students with an average of 2.80 and above have more intense theoretical knowledge than other groups before the on-the-job training. This theoretical capacity is related to and reinforced by the student's knowledge and practice, the contribution to the accumulation of professional knowledge in this group may be increased.

This difference between the groups is not statistically significant ($p=0,755>0,05$). For this reason, rejection of the hypothesis H_4 is necessary. According to this, it is reached that the students who are on-the-job training, regardless of the level of their academic achievements, have obtained a contribution close to their professional knowledge.

H₅: The attitude (positive/negative) developed by the students in the on-the-job training system towards HVS constitutes a significant difference in the contribution to their professional knowledge.

The positive or negative attitudes of the students towards HVS are measured by the yes / no responses they answer to the question whether they recommend their school after the on-the-job training program. In this way, the level of expectation of HVS, including the student's on-the-job training and other teaching processes, is considered, then contribution perceptions to professional knowledge accumulation are predicted. The results of the measurement are shown in Table 7.

Table 7: Occupational Knowledge Accumulation Perceptions According to Students' Attitudes Towards HVS

	N	%	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	p
Yes	169	73,2	133,10	22494	2349	4302	-6,769	0,000
No	62	26,8	69,39	4302				

Source: Fieldwork-based calculations of authors

The attitudes of the students towards HVS have been measured by the Mann-Whitney U test on the contribution to professional knowledge accumulation. According to the measurement results, three of every four students against the HVS develop positive attitudes (%73,2). The averages of the contributions of the students who develop positive attitudes to their professional knowledge are significantly higher than those of the other students. The difference between the two groups is statistically significant and the adoption of the hypothesis H_5 is necessary ($p=0,000<0,05$).

In vocational schools, when the rate of meeting increase for the student's needs and expectations, then the student satisfaction will increase. Students, who are satisfied, can develop positive attitudes towards the educational institution which they are studying. According to the accepted hypothesis, it is expected that the activities carried out by the students to develop positive attitudes towards the educational institutions will also increase the professional contribution they receive from the occupational training. According to this result, it can be expected that the studies for establishing quality systems in higher education institutions will make a positive contribution to the 3 + 1 education model.

H₆: The place of residence of students in the on-the-job training program makes a significant difference in contributing to the professional knowledge of the students.

HVS is 22 km away from Denizli's city center. HVS students usually prefer Denizli city center and Honaz town center for residence. The internships of HVS students are generally located in the Denizli Organized Industrial Zone (DOIZ). This area is about 20 km away from Denizli center and 11 km away from HVS. Workplaces in DOIZ provide service to employees in Denizli center.

Table 8 shows the test results of differences in occupational knowledge accumulation according to the centers where the students reside (Denizli, Honaz or other districts).

Table 8: Perceptions of Contribution to Occupational Knowledge Accumulation According to Occupied Students

Place of Residence	N	Mean Rank	Chi-Square	df	p
Honaz District	122	99,84	19,094	2	0,000
Denizli Province	91	137,3			
Others	16	103,72			

Source: Fieldwork-based calculations of authors

The level of contribution to occupational knowledge accumulation by the resident center was measured by the Kruskal-Wallis H test. According to the measurement results, the highest contribution to occupational knowledge from occupational training constitutes the residents of Denizli city center. The level of contribution of the students who reside in Honaz district to their professional knowledge is the lowest. The difference between the 3 groups was statistically significant ($p=0,000<0,05$). The H₆ hypothesis proposed for this reason is accepted. Despite their geographical proximity, the contribution of the residents of the Honaz district center to their professional knowledge has been low. This may be that no service is provided to the Honaz district for workplaces. There is a public transport line between Honaz district center and DOIZ. Due to long periods of travel and long arrival times, job training has low satisfaction. Low satisfaction from on-the-

job training has resulted in lower professional contributions. According to this result, it is understood that for the students, the distance between the place of residence and the place of work is not the first problem, but the transportation is prioritized. The transportation has to be faster travel between these two places.

Conclusion

At vocational schools, occupational training programs are designed to ensure that students are trained as graduates with the qualifications demanded by the labor market. It is a model that is implemented as internship practice in essence. It is one of the most important expectations of the model that students can make the maximum contribution to their professional knowledge in this application. The thought that the contribution is high from the student's perspective, then it can give the student a high degree of self-confidence. In this way, it is possible for both the student to find jobs in what is called smooth work and to meet the high performance/efficiency expectation of the employers.

The score that students, who participating in the on-the-job training program, give for the contribution to the professional knowledge of this program is determined as 3,825 on the five-point Likert scale. This score corresponds to a high/good score. According to this, it is possible to say that the 3 + 1 model has the qualified graduate that will meet the expectation of the labor market.

The contribution that the on-the-job training program provides to professional knowledge accumulates different results on different programs in HVS. Levels of participation in Marketing program and Foreign Trade program are quite high from Logistics program and Business Management program. In terms of the Business Management program, it is thought that there is a multidisciplinary structure in reality, but it is thought that the students' perceptions are a program thought to contain only managerial activities. On the other hand, the multidisciplinary structure provides great advantages in that the program can find suitable workplaces. The reason for the low contribution to the Logistics program is that the program students only need to do an internship in these sectors unlike the other programs, but there is an inappropriate workplace-student match because of the lack of workplaces.

The gender of the students does not make a significant difference on the contribution to professional knowledge accumulation. This may be that students continue their vocational education in vocational high schools in the same area or this can result from a conscious professional preference for students who do not come from a professional program.

Monthly spending levels of the students are also significant variables in contributing to professional knowledge accumulation. The level of contribution is the lowest for students with a spending level above 1000 TL. This may be that students may not plan to work in this area after graduation or that they do not have the right professional preference. The students, who are in the 751-1000 TL expenditure group, have the highest professional contribution. These people in the medium spending level group reach the highest contribution and if the economic support is provided to the students in the low-income group, the outputs of the program can reach a further level.

The academic averages of students do not play a decisive role in contributing to professional knowledge. It is important for the students with the low theoretical capacity to obtain high contributions in order to demonstrate the usefulness of the model.

The attitude developed against HVS plays an important role in contributing to the accumulation of professional knowledge. Students who develop a positive attitude towards HVS provide greater benefits from on-the-job training. Accordingly, policies, that will increase students' commitment to the school, will play an important role in contributing to their professional knowledge.

The place where the students reside plays an important role for the professional accumulation. The contribution of residents in the Honaz district is lower. The Honaz district is closer to the industrial area where the on-the-job training is conducted than the Denizli province center. This indicates that geographical proximity is not an important factor in occupational contribution. The transportation which is from home to work provided by the workplace is more important than the geographical proximity for contributing to the accumulation of professional knowledge.

In the future research, it is proposed to compare the level of qualification and practical knowledge and skill acquisition to the students who are the main aim of the model. This comparison can be done in several ways which are contribution capacity of the model, duration of employment opportunities with non-model students and evaluation of the performance of graduates in the working environment.

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Learning to Learn with Blended Learning

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Abstract

This study investigates Blended Learning implementation into the challenging educational environment, characterized by limited time of face-to-face interaction of the teacher and the learners, and by an extrinsic motivation of the learners. The feedback elicited from the focus group of learners and the teacher has been analyzed using methods of systematization, calculation and description. The findings reveal that the positive features of Blended Learning appear to be relative ease of use; availability and accessibility of learning and teaching materials; achievement of certain learning and teaching goals; enhancement of learning strategies and learners' self-organization; increase of learners' autonomy and independence; inspirational nature of the learning content; growth of learners' motivation; improvement of learners' language competence. In summary, the most meaningful outcome of Blended Learning implementation proves to be the fact that the Blended Learning technology helps learners to learn how to learn: how to remember, review and recycle foreign words and collocations; how to plan the pieces of writing; how to use instructional, model and reference materials independently; how to search for information and find it; how to gain knowledge on their own; how to organize their own learning process; how to become responsible for their own education and development.

Keywords: Blended learning, extrinsic motivation, learners' autonomy, learning strategies

Introduction

Nowadays, Blended Learning is being successfully implemented into learning and teaching contexts worldwide. As an educational technology, Blended Learning is described as “a combination of face-to-face delivery with eLearning activities” (Arshavskiy, 2013, p. 6); “face-to-face teaching and learning supplemented by an online component delivered through a learning management system” (Grgurović, 2014, p. 156); “a combination of

face-to-face and computer assisted learning in a single teaching and learning environment” (Neumeier, 2005, p. 164); “a combination of standard face-to-face teaching with e-learning” (Hubackova et al., 2011, p. 281). It seems indisputable that the Blended Learning technology has revolutionized both teaching and learning processes in recent decades. Such features of the Blended Learning technology as “round-the-clock and round-the-world availability and accessibility of training materials, ease of usage, enhancement of learning strategies and self-organization, increase of learners’ autonomy, eco-friendliness” (Andreeva and Ostroverkhaia, 2016 p. 65) are almost unanimously recognized as beneficial by the pedagogical community (Neumeier, 2005; Hubackova et al., 2011).

The experiment on Blended Learning implementation was carried out at Immanuel Kant Baltic Federal University (Kaliningrad, Russia) during the academic year of 2015 – 2016. The overall goal of the experiment is to find out whether Blended Learning can be a fruitful educational tool in a challenging environment characterized by limited time of face-to-face interaction of the teacher and the learners, and by an extrinsic motivation of the learners.

This study demonstrates the findings based on the performance of the focus group comprised of 22 non-linguistic students whose specialization is Chemistry; whose level of English skills is low intermediate (A2 according to the CEFR); whose motivation for language learning is absolutely extrinsic because the learners “are inspired by external drivers and are aimed at getting certificates and good grades rather than acquiring skills” (Arshavskiy, 2013, p. 32). The learners were taught by Dr. Irina Ostroverkhaia, an experienced teacher-practitioner, PhD in Linguistics, a C1 certificate holder, a TKT (Teaching Knowledge Test) exam certificate holder.

The Blended Learning “Touchstone 3 (2nd Edition)” course by Michael McCarthy, Jeanne McCarten, Helen Sandiford, published by Cambridge University Press, was used as the basic instructional material. The Cambridge learning management system (LMS) served as a platform for online activities. According to the university curriculum, the focus group had only one face-to-face English class equal to 80 minutes per week. The experiment started on 15 October 2015 and finished on 15 May 2016. From 15 December 2015 to 15 February 2016, there was an interval in studies because of the learners’ academic session and winter holidays. All in all, there were only 25 face-to-face lessons, during which six units of the “Touchstone 3” course were covered. At the end of the academic term, the learners passed the final exam. Upon completion of the experiment, questionnaires were given to the learners and the teacher. The questions included into the questionnaires made it possible to reveal beneficial and vulnerable issues of Blended Learning implementation into a single

educational environment. The feedback elicited from the learners and the teacher has been analyzed using methods of systematization, calculation and description. The results are presented in this study.

Advantages of Blended Learning for the learners

Ease of use

All the learners, taking part in the Blended Learning experiment, have not got any previous experience of learning online or taking any online course. In spite of the absence of such an experience, all the learners have managed to learn how to use the interface of the www.cambridgelms.org site within a fortnight without any special training course. Only one hour of instruction on the LMS platform navigation was given to them. The respondents wrote, "Navigation on the LMS is not a problem for me" (Respondent Vitaly); "It was quite easy to learn how to use the LMS site" (Respondent Anastasia)".

Promotion of the learner's autonomy and independence

In the Blended Learning environment, learners have an opportunity to learn at their own pace because the online Workbook is easily accessible 24 hours a day, 7 days a week, from any point having access to the Internet. Each learner is fully supplied with all support materials including downloadable audio files, PDF files containing Language Summary for every lesson of the unit, keys for all exercises, and model answers for writing tasks. Besides, the learners have an unlimited permanent access to the Self Study section which is not controlled by the teacher so that any section of any unit of the course is available to any learner any time irrespective of the class timetable. The respondents wrote, "Thanks to the LMS, I can manage my time and do the tasks when it is convenient for me" (Respondent Evgenia); "The positive side of the experiment is numerous downloadable files. For example, I can download the audio file onto my PC and listen to it whenever I want to" (Respondent Mikhail); "If a person really wants to master the English language, this experiment is efficient for the independent development" (Respondent Tatiana).

Increase of the learner's learning time

The Blended Learning technology increases the time spent by learners on language learning regardless of their motivation. The amount of learning time spent on doing homework is shown in the Gradebook of the online Workbook. The mean time spent by one learner on the online workbook is equal to approximately 37 hours per control period. The respondents wrote, "Last year, I used to spend only half an hour a week on doing my English homework. And now, I devote much more time to it

because I must do many compulsory exercises online” (Respondent Alina); “It’s unbelievable, but this year, I spend a lot of my free time on the computer doing my English tasks for the next lesson” (Respondent Eva); “This year, it takes me twice as much time to do my English than it took me before” (Respondent Veronika).

Priority improvement of the writing skill

In the conditions of the limited weekly face-to-face interaction, the Blended Learning experiment turned out to be the most powerful tool for enhancing such a productive skill as writing, which testifies the certain level of the learner’s confidence in foreign language acquisition. The skill of writing is intensively practiced through writing tasks accompanying almost every lesson of the unit, additional tasks on blog writing, and tasks on article preparation. The total amount of writing tasks per focus period is equal to 27 separate pieces. The feedback, elicited from 18 (82%) out of 22 respondents, highlights that the skill of writing appears to be the most widely trained skill of all. The respondents wrote, “Frankly speaking, I have never done so many writing tasks before this experiment. Now, I have to print exercises, blogs and articles for my every lesson!” (Respondent Yana); “I think that writing tasks are a very good practice because they supplement the textbook and help to consolidate the knowledge gained in the classroom” (Respondent Vlada).

Effective training of the listening skill

According to the feedback received from 16 (73%) respondents, the listening skill appears to be the second best trained skill in the Blended Learning experiment, because listening exercises are done by the learners not only during the face-to-face classes but also in the online Workbook as a part of their homework. Moreover, 4 (18%) respondents consider the listening skill to be the most intensively trained one. The respondents wrote, “As for me, listening tasks are the most interesting and useful” (Respondent Alina); “The experiment helps me to train the aspect of listening because there are numerous listening tasks” (Respondent Ekaterina); “Thanks to the experiment, I improved my listening skills. I’m glad that there are many interesting listening tasks in the course” (Respondent Evgenia).

Enhancement of the active vocabulary knowledge

About 600 words have been learnt and recycled by the learners for the control period. The obvious positive point of the Corpus based “Touchstone 3” course is that it is aimed at teaching, learning and practising frequent, natural, real-life and useful words, expressions and collocations. All the respondents unanimously admit that their active vocabulary has increased considerably during the Blended Learning experiment. The

respondents wrote, “In this year, I have learnt a large number of useful English words” (Respondent Mikhail); “The experiment gives us many words which we need for communication” (Respondent Eva); “My level of English has become higher because I have learnt many new words and constructions” (Respondent Rafiali).

High motivating potential

The Blended Learning “Touchstone 3” course proved to be an effective motivating tool thanks to the interesting content of topics which allow learners to practise natural language in authentic context. Such multicultural topics as “Experiences”, “Wonders of the World”, and “Food Choices” stimulate learners for language learning. All the 22 (100%) respondents feel positive about the content of the course and regard it to be inspirational. The respondents wrote, “In my opinion, the units of the course are very interesting because they address our personal experience. When I write or speak about my own trips and adventures, I feel confident about my English language skills” (Respondent Viktoria); “My motivation for learning English has increased since I started this course. It is because the themes are contemporary and enjoyable” (Respondent Ostap).

Effective training of learning strategies

One of the most meaningful results of the current Blended Learning experiment is that it has helped the learners to train learning strategies. They have learnt how to make topical vocabulary lists, how to use reference material given in the Language Summary, how to remember, review and recycle words and collocations, how to plan the pieces of writing, how to search the Internet for specific information, how to use language models and patterns, etc. Owing to the experiment, the learners have become more responsible for the process of their own learning. The feedback received from 15 (68%) respondents states that the Blended Learning “Touchstone 3” course makes it possible for them to learn without the teacher’s help and to improve their ways of learning. The respondents wrote, “Before the experiment, the teacher was the only source of information for me, but now I can gain knowledge myself” (Respondent Vlada); “I’ve learnt how to learn successfully. Firstly, I make a list of all tasks which I have to do for the next lesson. Secondly, I go through the theoretical material given in the Language Summary. Thirdly, I work with the active vocabulary of the Unit. Fourthly, I do the tasks. Fifthly, I use the keys and clear the wrong points. Sixthly, I redo all the exercises in the online Workbook” (Respondent Ekaterina); “I have made the alphabetical lists of new words for every Lesson of the Unit. These lists are very helpful” (Respondent Arina); “I’ve printed

communication questions on separate cards, and I use these cards for speaking to my classmate” (Respondent Anastasia).

Improvement of the learner’s self-organization

In their feedback, 19 (86%) learners noted that the Blended Learning experiment teaches them to meet deadlines for completion and to manage their time more rationally. The respondents wrote, “To tell the truth, I’m completely disorganized by nature, but the experiment helped me to become more organized, because I had to do the tasks in the online Workbook during the limited period of time after which the tasks became closed” (Respondent Arina); “My self-organization increased because I had to meet deadlines and prepare all tasks in time” (Respondent Alina).

Improvement of the learner’s computer skills

The Blended Learning technology implies a certain degree of the user’s computer literacy, without which any meaningful results cannot be obtained. In the course of the current Blended Learning experiment, the learners’ computer skills have improved. This positive effect was mentioned by 10 (45%) learners in their questionnaires. The respondents wrote, “The experiment helps to improve computer skills if you are not very good at them” (Respondent Narmontas); “I used to type very slowly in English. After the experiment, my typing skills improved” (Respondent Rafiali); “This experiment helps to master writing with the keyboard” (Respondent Anton).

Advantages of Blended Learning for the teacher

Efficiency of monitoring learners’ performance

The online Workbook is supplied with an option of constant and immediate reflection of learners’ performance and progress in the electronic Gradebook. The teacher wrote, “The online Workbook is absolutely teacher-friendly in terms of observing the learners’ performance: it is possible to see the status of each learner’s progress on a particular activity; the volume of the covered material is available per lesson, per unit and per course; the total time spent by the learner on doing tasks of the online Workbook is automatically shown.”

Powerful methodical support

The obvious positive point of the Blended Learning “Touchstone 3” course is its step-by-step provision with authentic control materials. The teacher wrote, “The teaching support kit is incredibly practicable: assessment quizzes are available for each unit; progress tests are intended for checking a number of units; all control materials can be both photocopied and downloaded onto the classroom computer stations.” More than that, the

“blended” layout of the Teacher’s Edition assists the teaching process considerably. The teacher wrote, “The five-in-one Teacher’s Edition is extremely well-developed as it combines real pages of the Student’s textbook, notes for the teacher for every lesson, keys for the Workbook tasks, the list of the most frequent words, and scripts for audio files.”

Effective achievement of teaching goals

The Blended Learning technology has allowed the teacher to achieve such teaching goals as educating the learners irrespective of their motivation and teaching the learners to organize their own educational process because each learner has to meet weekly short-term deadlines in order not to fall behind their classmates. The teacher wrote, “As an educator, I am completely satisfied with Blended Learning because even the least motivated learners are obliged to learn a certain portion of material in a set period of time and to fulfill particular tasks to meet fixed deadlines. The learners of this focus group have learnt to become responsible for their own learning process and to manage their time effectively.”

Disadvantages of Blended Learning for the learners

Ineffective training of the speaking skill

On condition that there is only one face-to-face (contact) class per week, such a productive skill as speaking appears to be the least trained skill during the current experiment. All 22 (100%) learners of the focus group consider the skill of speaking to be the most important skill for the person’s language competence, but the limited amount of face-to-face lessons prevents them from mastering this skill in full extent. The respondents wrote, “I find the aspect of speaking to be the most difficult one, but we have too little time to master this skill” (Respondent Mikhail); “During the lesson, our teacher does her best to answer our questions about correct constructions and the right order of words. It takes much time, so very little time is left for other activities especially for speaking” (Respondent Evgenia); “It’s a pity that we experience the dramatic lack of time for oral activities, group work, discussions, exchange of views and ideas” (Respondent Narmontas).

Disappointment because of technical problems with the LMS

Technical problems with the LMS operation have turned out to be the obvious demotivating factor of the Blended Learning educational environment because learners get annoyed and even frustrated when technical difficulties interfere with their studies. According to the questionnaires, 12 (55%) respondents are irritated at the slow navigation on the LMS; 9 (41%) respondents have had log-in problems more than three times because the LMS does not accept their logins and passwords from the

first attempt; 8 (36%) respondents underlined that the LMS did not save the results of their work and they had to redo the tasks in the online Workbook more than once; 5 (23%) respondents reported the unexpected closing of the online session; 2 (9%) respondents have had difficulties with submitting their writing tasks to the LMS; 1 (4.5%) respondent tried to log in while the LMS was being upgraded. The respondents wrote, “The negative moment of the experiment is that the LMS platform is often buggy. It’s really annoying if you have to redo the tasks online because your results are not saved” (Respondent Viktoria); “The disadvantage is that because of the failure of the site I had to type my answers once again. And it’s very irritating” (Respondent Mikhail); “I become irritated because there are drawbacks in the elaboration of the site. It sometimes gets buggy, crashes and doesn’t save the results” (Respondent Veronika).

Inconvenience of getting the teacher’s online feedback on writing tasks.

The most inconvenient feature of the current Blended Learning experiment seems to be the option of getting the teacher’s feedback on learners’ writing tasks in the online mode. After the content of the lesson becomes locked according to the timetable, it is not possible for the learners to get access to their writing products and to the teacher’s comments in order to view their vulnerable points. Besides, it will be impossible for the learners to use their writing tasks for reviewing purposes after the expiry date of the class. All 22 (100%) learners are unanimous in considering the teacher’s online feedback to be the least productive characteristic of the Blended Learning experiment. All the learners prefer to get the teacher’s feedback in a traditional paper format. The respondents wrote, “When the teacher corrects my mistakes online, it’s not very useful because I can’t get access to my weak points constantly” (Respondent Anastasia); “I’d like to have the teacher’s comments in my paper notebook because the teacher’s online comments and corrections are not user-friendly for me. It’s very difficult to use these comments if you want to discuss your drawbacks in the classroom” (Respondent Yulia).

Disadvantages of Blended Learning for the teacher

Inconvenience and ineffectiveness of online grading learners’ writing tasks

Online grading learners’ writing tasks has appeared to be the most ineffective, time-consuming and tiresome part of the current Blended Learning experiment. The Teacher wrote, “It is difficult and sometimes even impossible to correct all the learners’ mistakes and typos in the online mode. Typing comments and correcting learners’ mistakes online takes a lot of time, but its educational value is minimal because learners have limited

online access to the teacher's feedback. In order to cope with this difficulty and make the feedback permanently available and useful to the learners, I have to print out their writing tasks and correct them in a traditional way using a red pen. Then I make my learners compose a Portfolio of their writing tasks for the further use. Thus, Blended Learning becomes even "more blended". Furthermore, the current level of the learners' skills very often prevents them from correct interpreting my comments, so they need to make hard copies and ask me for clarification of the confused points at our face-to-face lessons."

Relative stressfulness caused by the LMS operation

In the course of the current experiment, there have been several occasional troubles with the LMS navigation. Such troubles represent the stressful factor and interfere with the productivity of the teaching process. The Teacher wrote, "I have experienced several really upsetting and distressing situations connected with the teacher's role on the LMS. Since the experiment started, the algorithm of tasks scheduling has changed on the LMS platform. It took me a considerable amount of time to learn how to place the forthcoming tasks onto the notice board of the What-to-Do-Next section though the learner's interface did not change. More than that, when I wanted to use the option of opening or closing all the units at once, my laptop hung and I had to perform a cold reboot of the computer. It goes without saying that such incorrect operation is very annoying and even frustrating."

Prospects for further investigation

The Blended Learning technology seems to provide a good basis for further research. Investigation of advantages and disadvantages of Blended Learning implementation into different educational contexts may lead to significant findings. Thus, it would be interesting to study the results of Blended Learning implementation into the following educational environments: (1) an educational environment characterized by sufficient contact hours of the teacher and learners (at least 3 lessons per week) and learners' extrinsic motivation; (2) an educational environment characterized by limited number of contact hours of the teacher and learners (1 lesson per week) and learners' intrinsic motivation; (3) an educational environment characterized by sufficient contact hours of the teacher and learners (at least 3 lessons per week) and learners' intrinsic motivation.

Conclusion

The experiment on Blended Learning implementation into the challenging educational environment, characterized by limited time of face-

to-face interaction of the teacher and the learners, and by an extrinsic motivation of the learners, has revealed both advantageous and disadvantageous characteristics. The positive features for both the learners and the teacher are relative ease of use; availability and accessibility of learning and teaching materials; achievement of certain learning and teaching goals; enhancement of learning strategies and learners' self-organization; increase of learners' autonomy and independence; inspirational nature of the learning content; growth of learners' motivation; improvement of learners' language competence. The most problematic issues are relative inconvenience and ineffectiveness of the teacher's online feedback; the feeling of failure at the possible incorrect LMS operation; ineffective training of the speaking skill.

In summary, it should be noted that the advantages of Blended Learning implementation undoubtedly outweigh its disadvantages. The most meaningful outcome of its implementation proves to be the fact that Blended Learning helps learners to learn how to learn: how to remember, review and recycle foreign words and collocations; how to plan the pieces of writing; how to use instructional, model and reference materials independently; how to search for information and find it; how to gain knowledge on their own; how to organize their own learning process; how to become responsible for their own education and development. The effectiveness of Blended Learning implementation even into a challenging learning and teaching context can be best described in the teacher's feedback, "A well-known proverb, reflecting the essence of education in a non-blended environment, says, "You can take a horse to water but you can't make him drink". Things are completely different with Blended Learning. This technology revolutionizes the educational process. Thus, the classical reading of the proverb can be paraphrased. Now, it seems to read as follows, "With the help of Blended Learning, you can take a horse to water and you CAN make him drink". Even the least motivated learners are obliged to learn a certain portion of material in a set period of time and to fulfill particular tasks to meet fixed deadlines".

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Intertextuality in Scientific Texts

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Abstract

Any text is indebted to other texts, and there is nothing new in the space of intertextual meaning. Every text is inherently intertextual: it incorporates elements of other texts for a specific purpose. Intertextuality considers the text as a fabric or a network, a field where texts that come from very different discourses are crossed and ordered. On the surface of the scientific text the intertextuality has a set of markers that are also analyzed in the article that follows. The subject of the research is analysis of Spanish scientific articles and dissertations defended at the Faculty of Natural Sciences of the Autonomous University of Madrid (Spain).

The methodological base of the research is leading to modern linguistics, discursive and communicative approaches. The topic of the investigation gets in line with trends in the development of modern linguistics in the context of a new scientific paradigm. The results demonstrate that in the academic discourse intertextuality is the universal principle to create a scientific text at the level of content since any text is retrospectively and prospectively linked to other research.

Keywords: Intertextuality, Spanish scientific text

Introduction

The history and background of the theories of intertextuality come from the following theoretical approaches:

1. Semiotics and the semiotic theory of culture based on the ideas about culture as a system of signs as well as about culture and text (Barthes 1970; Bakhtin 1979; Derrida 1972; Fairclough 1970).

2. The theory of semiosphere dedicated to the philosophical conceptions of dialogism against monologism (Buber 1950; Lotman 1973).

3. The theories of the French literary theorists and philosophers who formed the transition to post-structuralism and studied the text as an open text system produced in intertextuality (Barthes 1970; Derrida 1972; Fairclough 1970; Genette 1970; Kristeva 1967).

4. The investigations of the Russian formalists (Shklovsky 1930; Tinianov 1930; Tomashevsky 1920) and the structuralists of different national schools (Jacobson 1930; Riffaterre 1970). The contribution of their literary scholarship lies in the fact that it focused sharply on the basic problems of literary criticism and literary study, first of all on the specificity of its object, that modified the conception of the literary work.

5. The extensive investigations of the problems of intertextuality from the literary and linguistic points of view (Grivel 1978; Jung 1970; Van Dijk 1978).

Intertextuality has been recently studied in the texts of various communicative spheres, in particular, intertextuality in scientific communication in different languages such as Russian, English, German, Spanish text (Bazhenova 2001 Chernyavskaya 2009; Litvinenko 2008; Luzon, 1997; Marinkovich 2010).

The concept of intertextuality

In order to work out the concept of intertextuality it is necessary to place special emphasis on that it is analyzed from different points of view.

There is a great variety of conceptions of intertextuality which in general terms can be summarized in two groups: *the broad approach*, where intertextuality is a universal property of the text, and *the narrow approach*, positing that it is a specific property functionally conditioned by different types of discourse.

The term intertextuality has its origin in the theory developed by Bakhtin on the dialogical or polyphonic utterance.

In 1967 Julia Kristeva published her article "Bakhtine, le mot, le dialogue et le roman" in which, starting from the ideas of M. Bakhtin on "others' words" and "dialogism" (Bakhtin 1979), she introduced the concept of intertextuality that up to date enjoys great popularity.

According to Julia Kristeva "any text is constructed as a mosaic of quotations and is the absorption and transformation of another text" (Kristeva 1997:3).

Texts are inherently intertextual: they enclose elements of other texts for a specific purpose. Intertextuality considers the text as a fabric or a network, a terrain where texts that come from very different discourses are crossed and ordered.

There were two main concepts distinguished in the theoretical discussions on the topic of intertextuality (Chernyavskaya 2009):

- the global model of poststructuralism, that considers any text like a part of a universal intertext, which conditions it in all its aspects;
- more precise structuralist or hermeneutic models, which find the concept of intertextuality to be restricted to conscious, intentional or marked

references between a text or groups of texts. Both models have their own cognitive potential and their assumptions in terms of language theory, text theory and knowledge theory.

Discussion

In the academic discourse, intertextuality is the universal principle of the scientific text construction at the level of content since any text is linked retrospectively and prospectively with other research. According to the law of the knowledge continuity, each new scientific text is connected with a complex mechanism that carries out the storage of knowledge as well as communication between the people who produce this knowledge. The interpretation of the text depends on the knowledge one has of other texts. The intertextuality activates the reader's knowledge stored in the memory while text recipients have to be armed with previous information to be able to understand the new texts.

On the surface of the scientific text the intertextuality has a set of markers capable of identifying the knowledge provided within the new scientific knowledge, and it is very important to point out that the academic discourse requires the use of explicit markers.

The methods of intertextual representation within the scientific text are the following:

1. Intertextual inclusions that reproduce the borrowed fragment on the surface of the new text structure - quotation (complete and reduced), indirect style, inclusion of "others' words" or combination of words:

El Institute for Cultural Landscape Studies de la Universidad de Harvard dice que son "aquellos paisajes que han sido creados, usados, modificados o protegidos por las personas, desde los jardines históricos y los parques urbanos a las reservas para la conservación, los vecindarios, las granjas y los bosques"

Según Feynman, "Los principios de la Física, hasta donde yo puedo ver, no indican nada en contra de la posibilidad de que se puedan manipular cosas átomo por átomo"; simplemente era necesario con buscar y encontrar los métodos y las técnicas que permitieran llevarlo a cabo (Valbuena 2006:1).

The cited fragments are usually marked by the quotation marks, as well as by way of changing character font, italic type.

2. Intertextual inclusions that are references and do not reproduce borrowed fragments within the new text structure, but refer the reader to the source of information, to the previous pretext. Formal markers of references are parentheses, brackets, numbers of different registers, symbols:

Sin embargo, la organización Mundial de Salud considera que el agua potable suele ser la principal fuente de nitrato en la dieta de lactantes (Mompo y Armentia, 1993) (Sarmanho 2008:14).

Para Zhang y col.³⁸ la temperatura de irreversibilidad en láminas delgadas formadas por partículas de níquel sigue una dependencia exponencial a campos bajos (Jiménez Villacort 2007:47).

3. Intertextuality may manifest itself by changing verbal system:

Una vez expuesta la fotoresina se pasa al revelado sumergiendo la muestra en una disolución de revelado “developer” durante un minuto (Suárez 2007:6).

In this case the marker of intertextuality is the verbal identity, i.e. usage of other verbal system. The formal marking of the quotation in the scientific text is obligatory whereas the marking of the references is obligatory only for its bibliographic variety.

In Spanish scientific text we observe citations, references, intercalations, inclusions in English, for example: *Esta técnica de deposición se conoce con el nombre de “spinner coating” (Suárez 2007:62).*

There are some English intercalations translated into Spanish:

Esta fragmentación de la molécula principal se conoce como “cracking pattern”, o fragmentación, que será el término utilizado en este trabajo». «Stragglings: Fenómeno de dispersión de energía de las partículas incidentes (en principio mono-energéticas), al interaccionar con la muestra». «Resultan sumamente útiles las llamadas “scoring functions” o funciones transformadoras, obtenidas a partir del establecimiento de límites críticos y su correspondiente escala de calidad» (Quiñones 2006:332).

English acronyms are observed in the texture of the Spanish scientific text, for example:

Otros métodos también utilizados en la solidificación de óxidos, como EFG (Edge Defined Film Fed Growth) o Micro pulling down, utilizan crisol y extraen el fundido (Merino 2006:52).

There are some cases of English acronyms translated into Spanish, for example:

Para los suelos agrícolas se ha definido la Capacidad de Carga de Metales Pesados (LCASHM: Load Capacity of Agricultural Soils for Heavy Metals) (Chen et al., 2001) (Rodríguez Jordá 2009:6).

Also in the Spanish structured texture there may be an English acronym expanded in English, for example:

“Dichos trabajos conllevaron a la aparición de nuevas técnicas o al desarrollo de anteriores ya conocidas, tales como la Espectroscopia de Fotoemisión Resuelta en Ángulo (ARPES del inglés «Angle Resolved Photoemission Spectroscopy»)” (Valbuena Martínez 2006:12).

Notable aspects of scientific terminology include the use of Latin terms, for example:

Para la extracción del DNA genómico de D. melanogaster, D. simulans y D. mauritiana se utilizaron...(Méndez 2008:32)

Symbolic relations represent a variety of intertextual links in Spanish scientific texts being used different systems of symbols (signs), namely: formulas, diagrams, graphs, drawings, and so on (Dolzich 2012).

Latin phrases and locutions are often used to navigate through the scientific text. For example, Et. Al (and others): when we quote a text with more than one author; Supra: Up; Infra: Down; Op. Cit: Citing work; Idem: the same; Ibid. = *Ibidem*, that means "in the same place".

Conclusion

We may therefore conclude that intertextuality is the universal principle of the scientific text construction, which is connected retrospectively and prospectively with other research, has a set of intertextual markers and is open to a wide discourse space.

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Study of the Tour Guide Interactive Quality's Impact on the Tourist Re-travelling Intention based on the Tourist's Perceived Value: A Case Study of Bali Travelling

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Abstract

In recent years, the number of Chinese people travelling abroad is becoming the number one in the world. However, Chinese tourists surprisingly has lower customer perceived value and satisfaction. This paper took Bali Island travelling as a case study. It investigated 260 tourists and got 206 effective samples. The study shows that tour guide interactive quality has a positive impact on the tourists' perceived value. This value consists of economic value, affection value, social value, and epistemic value. Perceived value has taken on the part of mediating the effect of re-travelling and also gave recommendation. Travel companies, however, should give more importance to the tour guide training and the travel itinerary designing based on the tourists demand. Also, they should provide more information and knowledge to the tourists to satisfy their epistemic requirements. In addition, they should improve their willingness of re-travelling and recommendation.

Keywords: Tour Guide Interactive quality, Customer Perceived Value, Re-travelling Intention, Recommendation Intention

Introduction

Recently, the number of Chinese people travelling abroad has increased rapidly. According to the government statistics, this increase is about 10.8 times compared to the year 1998. In the meanwhile, the satisfaction level of travelling abroad is still in the low level, just 76.98%. Subsequently, Chinese tourists mainly complain about the tourism product and service quality, Chinese information service, and security. In addition, they give low evaluation of some destination's public transportation and modernization level.

Basically, most tourism companies just focus on the price and economic value, and neglect the customer values. With the increase in the income of Chinese people, they prefer personalized travelling service and not just cheap price. As a result, it is not smart for travelling agencies to just emphasize price instead of service quality and customer satisfaction.

This paper analyzed Chinese tourists customer perceived value and provide some suggestions to the travelling agencies on how to improve Chinese tourist's affection value, social value, and epistemic value. In addition, it aims to increase tourists re-travelling and recommendation intention.

Literature Review

Literature Review of the Customer Perceived Value

Zeithaml (1988) and Philip Kotler (2011) stated that customer perception (delivered) value should consider both the customer benefits and costs. Wang Zhaohui (2011) concluded that the tourist customer perceived value is the subject based on cognitive evaluation to the gains and pains during the process of travelling. Good customer perceived value is the base of good word of mouth, which can affect tourists positively

Holbrook (2006) opines that customer value is “a kind of experience of preference which can be influenced by each other.” He stated that the customer value consists of economic value, social value, entertainment value, and altruistic value. Taking college students as the research sample, Martina G. Gallarza and Irene Gil Saura (2006) chose economic value, entertainment value, and social value as the customer perceived value. On the other hand, they choose monetary value, time, energy, and risk as the customer perception cost. Lee C.K. (2007) shows that customer perceived value can be divided into functional value, general value, and emotional Value.

Sheth (1991) elaborated that customer value includes societal Value, emotional Value, Functional Value, Epistemic Value, and Conditional Value. Societal value can be defined as promoting social communication or acquiring higher personal reputation. Emotional value can be from customer subjective experience and the level of happiness. Epistemic value was decided by the differences in tourists' geographic conditions, humanity environment, and living style. Therefore, the research of such kind of customer value is quite a few in China.

Research of Tour Guide Interactive Quality's Impact on Re-travelling and Recommendation

Li Jia (2009) pointed out that tourists cannot know the quality and risks before travelling. As a result, the travelling agency should provide

higher customer perceived value which can persuade customer to go. This is due to inseparability. Also, customer and tour guides have a lot of interactive behavior. These behaviors, however, influences customer value and companies' competitive ability.

Cronin and Taylor (1992) put forward service quality concept model which consist of interactive quality, physical evidence quality, and outcome quality. Interactive quality can be measured by attitude, behavior, and professional skills. Based on the Brady and Cronin's model, Martínez and Martínez (2008) stated that interactive quality can be evaluated by behavior (attitude and act), professional skills, and problem solving.

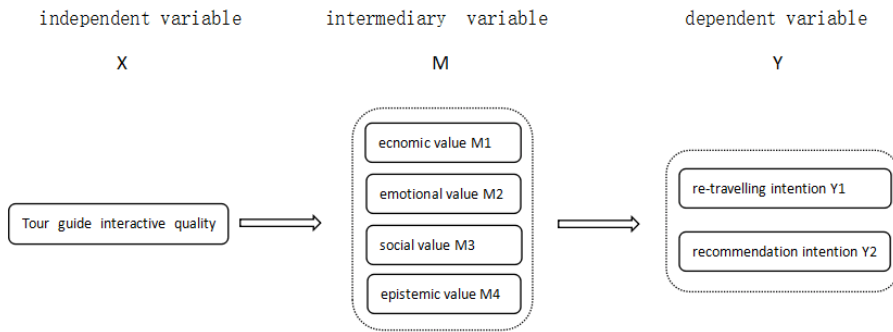
Chen Yongchang (2011) stated that tour guide arrange tourists travelling activities, provide introduction services, and deal with all the problems during the travelling process. As a result, they are the most important element which directly affects tourist's satisfaction level, customer perceived value, and perception risks. Chowdhary and Prakash (2005) explain that interactive quality improvement has a significant impact on the customer's value. In addition, it is the most influential element of service value and performance.

Sanchez (2006) indicated that service professional skills have a positive impact on the economic value. Also, service staff's communication ability influences customer value too, such as Rafaeli and Sutton's research. If service people was smiling, whether the smile is sincere or not, customers would give the company a high evaluation. Xie Lishan (2009) stated that service people's attitude and behavior influenced customer perception fairly. Also, it has a significant impact on the customer satisfaction and repurchase. Zhang Mingli (2014) studied the automobile service center, and found that interactive activities between company and customers have great positive impact on the customer entertainment customer perceived value. Also, the customer perception entertainment value partly has a mediating effect between the personal connection and customer satisfaction.

Research Design

Research Model and Hypotheses

Through literature review and analysis, this paper constructed research model and hypotheses.



Exhibition 1. Research Model

Hypotheses : Tour guide interactive quality has a positive impact on the travelling customer perceived value including economic value, emotional value, social value, and epistemic value. Also, travelling customer perceived value has positive mediating function to the re-travelling and recommendation.

Research Samples and Variables

This paper chose the people who went to Baili as the research sample, about 260 tourists. Finally, we collected 206 questionnaires. The collecting rate is 79.23%, age is mainly between 26 and 45 years old, and monthly income is mostly between 3000 and 5000 Yuan. Also, female shows 59% while male was 41%. However, this paper developed the variables according to the present theories and tourism service features as follows:

Table 1. Research Variables

Variables	Questions	Resources
Tour guide interactive quality X1	Guide is very friendly and polite	Sheth, Newman & Gross (1991), Duman (2002), Sweeney & Soutar (2001)
	Guide is reliable and keeps to time	
	Guide is considerate for the tourists	
	Guide communicate with tourists	
	Guide is quick responding to the tourists request	
Social value M1	Tourists communicate with each other	
	Tourists make some new friends	
	Friends are more likely to communicate with me	
	This tour enlarge my social group	
Epistemic value M2	This tour increase my knowledge	Yin Hong (2004), Meng Qingliang, Han Yuqi, Chen Xiaojun (2005)
	This tour is more interesting	
	This tour satisfy my curiosity	
Emotional value M3	This tour makes me happy	Sheth, Newman & Gross (1991), Duman (2002)
	This tour makes me comfortable and relaxed	
	This tour is romantic	
Economic value M4	This tour is worthwhile	Holbrook (2006)
	Service quality is high	

Re-travelling intention Y1	I am willing to be here again	
	Next time, I will use this time's travel agency	
	I will never come here. *	
Recommendation intention Y2	I will recommend this place to my friends	
	I will recommend her through wechat and microblog	
	I will recommend this travel agency	
	I won't recommend this place*	
	I won't recommend this travel agency*	

Reliability and Efficiency Test

Using Cronbach's Alpha to test the reliability, all the Cronbach's Alpha is greater than 0.74. This means the research data has better reliability, and the value of KMO is greater than 0.7. Bartlett test equals zero. This means efficiency test is good.

Table 2. Reliability and efficiency test

Variables	Reliability test	Efficiency test	
	Cronbach's Alpha	KMO	Bartlett
X1	0.847	0.772	0.000
M1	0.870	0.794	0.000
M2	0.831	0.752	0.000
M3	0.866	0.737	0.000
M4	0.846	0.500	0.000
Y1	0.780	0.717	0.000
Y2	0.889	0.832	0.000
Total	0.962	0.894	0.000

Correlation Analysis

Each variable's mean, standard, and correlation values are shown in Table 3. According to the data, we can find independent variable, intermediate variables, and dependent variables which have significant relations. Since each variable has a higher correlations value, we test their VIF. Each VIF is between 1 and 3. This means the regression data does not exist and there are no multicollinearity problems.

Table 3. Variables correlation analysis

Variables	Mean	Std	X1	M1	M2	M3	M4	Y1	Y2
X1	1.7888	.54298	1						
M1	1.8100	.55387	.738**	1					
M2	1.6854	.51635	.668**	.745**	1				
M3	1.8285	.65991	.706**	.780**	.782**	1			
M4	1.8592	.76003	.669**	.749**	.657**	.824**	1		
Y1	1.9709	.74351	.634**	.714**	.690**	.737**	.653**	1	
Y2	1.8272	.74076	.538**	.637**	.634**	.748**	.664**	.808**	1

(notice : *** means $p < 0.001$, ** means $p < 0.01$, * means $p < 0.05$)

Test on the Customer Perceived Value Intermediary Effect

According to the Baron and Kenny's theory, this paper measured the customer perceived value's mediating effect through four regression equation. Consequently, it test the relationship between tour guide interactive quality and customer perceived value, the relationship between tour guide interactive quality and re-travelling intention and recommendation intention, and customer perceived value's impact on the re-travelling and recommendation. If these three hypotheses were all tested to be true, we will continue to test if the tour guide interactive quality has a positive impact on the customer perceived value, re-travelling intention, and recommendation. If the effect was not significant or it decreased, this means customer perceived value's intermediary effect is true.

Table 4. Tour guide interactive quality—social value—re-travelling/recommendation intention

Variables		social value		re-travelling intention			recommendation intention		
		model1	model2	model3	model4	model5	model6	model7	model8
Constant		1.150	-.015	1.448	.139	.149	1.469	.309	.320
Controllable	Gender	.082	.083	-.013	-.013	-.068	-.082	-.082	-.141
	Monthly Income	.167***	.098***	.243***	.166***	.101**	.120*	.051	-.020
	Education	.060	.071*	.005	.018	-.029	.082	.094	.042
Tour guide interactive quality			.718***		.806***	.331***		.714***	.196*
Social value						.663***			.722***
R ²		0.108	0.590	0.112	0.449	0.546	0.031	0.296	0.412
ΔR^2		0.108	0.482	0.112	0.337	0.434	0.031	0.265	0.381
F		9.243***	74.667***	9.636***	42.699***	50.381***	3.178*	22.515***	29.775***

Model1 and model2 tested tour guide interactive quality's impact on the social value. Model1 takes the controllable into the regression mode. Also, it turned out that monthly income has great impact on the social value (B=-0.167, P<0.001). Model2 takes the tour guide interactive quality into regression mode, and it influenced social value a lot (B=-0.718, P<

0.001). Consequently, the other variables' impact on the social value and tour guide interactive quality could explain 48.2% variance of the social value. This means tour guide interactive quality has a positive effect on the social value.

Model3, model4, and model5 verified social value's intermediary effect between tour guide interactive quality and re-travelling intention. Model4 take the tour guide interactive quality into regression equation. Thus, it stated that tour guide interactive quality has a positive impact on the re-travelling intention ($B=-0.806$, $P<0.001$). Model5 adds social value into the regression equation. However, it shows that the tour guide interactive quality still has great effect on the re-travelling intention ($B=-0.331$, $P<0.001$). Thus, social value has the mediation between the tour guide interactive quality and re-travelling intention.

Model6, model7, and model8 estimated that the mediation of social value is between tour guide interactive quality and recommendation intention. Model7 puts tour guide interactive quality into regression equation. It shows that tour guide interactive quality influenced recommendation intention positively ($B=-0.714$, $P<0.001$). Model 8 adds social value into the regression equation. Furthermore, tour guide interactive quality still has effect on the re-travelling intention ($B=-0.196$, $P<0.05$). As a result, social value takes mediation effect between tour guide interactive quality and recommendation intention partly.

Table 5. Tour guide interactive quality—epistemic value—re-travelling/recommendation intention

Variables	epistemic value		re-travelling intention			recommendation intention			
	Model	model2	model3	model4	model5	model66	model7	model8	
Constant	1.577	.567	1.448	.139	-.251	1.469	.309	-.124	
Controllable	Gender	.079	.079	-.013	-.013	-.068	-.082	-.082	-.142
	Monthly income	.099**	.039	.243***	.166***	.139***	.120*	.051	.022
	Education	-.084	-.074*	.005	.018	.069	.082	.094	.150**
Tour guide interactive		.622***		.806***	.378***		.714***	.240*	
Epistemic value					.688***			.763***	
R ²	0.042	0.458	0.112	0.449	0.570	0.031	0.296	0.446	
Δ R ²	0.042	0.416	0.112	0.337	0.458	0.031	0.265	0.415	
F	3.982**	44.229***	9.636***	42.699***	55.407***	3.178*	22.515***	34.057***	

Based on the analysis of Table 4, we can conclude that the tour guide interactive quality has a positive impact on the epistemic value. Also, monthly income influences epistemic value greatly ($B=-0.099$, $P<0.01$). Model3, model4, and model5 test epistemic value's mediation effect between tour guide interactive quality and re-travelling intention.

Table 6. Tour guide interactive quality—emotional value—re-travelling/recommendation intention

Variables		emotional value		re-travelling intention			recommendation intention		
		model1	model2	model3	model4	model5	model6	model7	model8
Constant		1.326	-.009	1.448	.139	.145	1.469	.309	.317
Controllable	Gender	.085	.085	-.013	-.013	-.064	-.082	-.082	-.154*
	Monthly income	.178***	.099***	.243***	.166***	.106***	.120*	.051	-.032
	Education	-.007	.006	.005	.018	.014	.082	.094	.089*
Tour guide interactive quality		.822***		.806***			.714***		
Emotional value				.602***			.847***		
R ²		0.072	0.517	0.112	0.449	0.584	0.031	0.296	0.568
Δ R ²		0.072	0.445	0.112	0.337	0.472	0.031	0.184	0.537
F		6.276***	55.915***	9.636***	42.699***	58.626***	3.178*	22.515***	54.993***

Based on the analysis of Table 4, we can conclude that the tour guide interactive quality has a positive impact on the epistemic value ($B=-0.822$, $P<0.001$). Also, monthly income influences epistemic value greatly ($B=-0.178$, $P<0.01$). Model3, model4, and model5 test epistemic value's mediation effect between tour guide interactive quality and re-travelling intention.

Table 7. Tour guide interactive quality—economics value—re-travelling/recommendation intention

Variables		economics value		re-travelling intention			recommendation intention		
		model 1	model2	model 3	model4	model5	model 6	model7	model8
Constant		1.282	-.144	1.448	.139	.188	1.469	.309	.388
Controllable	Gender	-.022	-.021	-.013	-.013	-.006	-.082	-.082	-.070
	Monthly income	.241**	.157***	.243**	.166***	.112**	.120*	.051	-.034
	Education	.032	.045	.005	.018	.002	.082	.094	.069
Tour guide interactive quality		.878***		.806***			.714***		
Economics value				.507***			.544***		
R ²		0.108	0.490	0.112	0.449	0.508	0.031	0.296	0.451
Δ R ²		0.108	0.382	0.112	0.337	0.396	0.031	0.265	0.42
F		9.267*	50.332***	9.636**	42.699***	43.366***	3.178*	22.515***	34.747***

As discussed before, we can find that the tour guide interactive quality has a positive impact on economic value. Also, monthly income influence epistemic economic mediation effect between tour guide interactive quality and re-travelling intention.

Conclusion

Taking the customer perceived value, including social value, emotional value, epistemic value, and economics value as the intermediary variables, this paper analyzed the relationship among tour guide interactive quality, re-travelling, and recommendation intention.

Consequently, we concluded through analysis of research data, firstly, that tour guide interactive quality has positively influenced tourists re-travelling and recommendation intention. Secondly, social value, emotional value, epistemic value, and economics value has great impact mediation effect on the tourists re-travelling and recommendation intention. As a result, travel agency should not focus on the customer economic value. Thirdly, tour guide interactive quality has positive impact on the customer perceived value, particularly on the social value, emotional value, and epistemic value. Fourthly, customer perceived value has significant positive impact on the re-travelling and recommendation, in particular emotional and social value. Epistemic value influenced re-travelling and recommendation which cannot be talked by some other professionals. Finally, income as the controllable strength shows a significant effect: the higher the income, the greater the effect.

Existing experts mainly discussed economic value and functional value. Nevertheless, they are very important. People will give more importance to the experiences, especially the experience of quality of freedom for mind and body. This, however, signifies the spirit value perception, including emotional value, social value, and epistemic value. This paper analyzes tour guide interactive quality's impact on the perception value, especially spirit perception value. It put forward the training work of tourism companies, and not just some professional skills training. This is good to improve economic value. Also, it needs empathy and communication training work which are the key to improve tourists' emotional and epistemic value.

Future Research Directions

Firstly, this paper mainly discussed emotional value, social value, epistemic value, and economics value. However, it did not analyze altruistic value, such as some tourists green behavior during travelling. With the development of volunteerisms, and more importance on the tourism responsibility, altruistic value should be discussed as the main dimension in the tourism.

Secondly, we can discussed different customer value perception of different tourist groups, such as the different customer perceived value before and after the travelling, different tourists motivation, customer expectation's impact on the customer perceived value and so on.

Acknowledgements

I would like to express my sincere gratitude to all those who helped me during the writing of this thesis. My deepest gratitude goes first and foremost to my family.

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Women on Boards of Directors: Is It Possible to Exist in Old Boys' Club?

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Abstract

Women are not/cannot be represented sufficiently in managerial positions in business world in Turkey and around the world, and we can state that the ratio of women representation on boards of directors is even lower. In line with the idea that companies should be managed in a more corporate way, issues of gender diversity and women members of boards of directors have started to be discussed more and more in recent years, leading both legal and voluntary works to come into effect. Various studies on the presence of women members on boards of directors in the world and in Turkey reveal that the representation of women is not at the desired level for an effective board of directors. Focused on some studies and reports in the world and in Turkey, the present study aims to reveal the condition of female members on boards of directors in quantitative terms and generally discuss the contributions that more female members would make to boards of directors. Although some countries including Turkey have relatively good ratios of female members on boards of directors and have made a little progress in the subject, the numbers are still quite insufficient in terms of the effective board of directors and good governance. Women can bring different points of view than men can to the board of directors and thus to the company management, and it is not only a need but also a necessity to conduct more work, on legal and voluntary basis, in order to benefit from women's knowledge, skills and insights.

Keywords: Board of Directors, Women Directors, Gender

Introduction

We can say that being elected or appointed as a member of the board of director of a company means the climax of one's administrative career. Because board positions are very attractive in that they often generate high income and the potential to exert strong influence on management decisions (Hansen, 2013:102). Being as a member of the board of director of a

company is not quite difficult for men, as it is the case with business sectors as well as other administrative positions. While men with sufficient competence and qualifications can easily attain the position they wish in the business world, the same is not the case with women. In general, it is not easy for women to advance through administrative positions and it is even more difficult to take place on boards of directors. With very low representation at administrative bodies, women's presence on boards of directors is less as the latter can be considered as top positions. Therefore, women's presence in and contributions to boards of directors, in quantitative and qualitative terms, have drawn attention in recent years in many different countries like the United States, Canada, United Kingdom, France, Australia, Spain, Norway, and Turkey, and many studies have been done in the subject (Isidro and Sobral, 2015; Kılıç, 2014; Nekhili and Gatfaoui, 2013, Ramly, Chan, Mustapha, Sapiei, 2017; Richardson, Taylor, Ranis, 2017). The topics and studies approached with the perspective of gender diversity on boards of directors indicate the importance and effectiveness of female members to ensure good general and corporate governance. However, it is a crucial fact that the ratio of women representation in companies' boards of directors is still very low, and this requires further examination in the subject.

Based on the information given above, this study aims to reveal whether women take place in the "old boys' club" in Turkish companies' boards of directors and to give information about why women should be represented more on boards of directors and in what ways this representation can contribute to the board of directors. To this end, the study will provide general information about women's conditions, in quantitative terms, on boards of directors in Turkey and in the world, and their contributions to boards and thus to companies will be evaluated.

When Turkish companies' boards of directors are considered, women appear to be represented still insufficiently in Turkey as in the world. Compared to some countries, female members in Turkey have better conditions in quantitative terms, but these results from the fact that Turkish companies are founded and operated mostly as family businesses. Thus, most of female members on boards of directors are composed of family members. Although this situation is better than the non-existence of female members on boards of directors, it is safe to say that women are still away from the ratio of representation they deserve. When examining the publicly-traded companies, we observe that while there are plenty of companies whose boards of directors are composed solely of men and some companies who have symbolically a female member (see Public Disclosure Platform, www.kap.org.tr), there are few companies whose boards of directors are composed solely of women. Our intention here is not the proposition that boards of directors should be comprised solely of women, but there are

studies which suggest that boards of directors who have, in terms of gender diversity, at least three female members will be more effective. It can be said that effective board and thus good governance is possible not with a board composed solely of men but with one in which men and women are represented equally.

Board of Directors

Corporate governance can be defined in a most general sense as a system by which companies are administered and controlled (Cadbury Report, 1992). Corporate governance involves all rules and practices, written or not, which entail power sharing and direct relationships among various partners of a company that have stakeholders, board of directors, managers, creditors, suppliers, employees, and customers (Pauly and Reich, 1997; OECD, 2004; Rezaee, 2008).

Corporate governance is essentially based on three feet as shareholders, managers (company's administrative body), and board of directors, and it involves a set of relationships among them (Van den Berghe and Carchon, 2003; Du Plessis and Luttermann, 2007). Shareholders comprise majority in the dispersed shareholding while they comprise minority in the concentrated type. While they own the company, they do not manage it. By contrast, while directors (company's administration) manage the company, with the capacity of using its assets, they are not its owners. At this point, it can be said that board of directors serves as a bridge or a buffer between shareholders and management as board of directors is elected by shareholders, and the former hires managers who would manage the company. Board of directors seems to serve as a guardian in respect to the effective and efficient use of the company's assets by managers on behalf of shareholders. Board of directors attempts to establish a balance between the two sides, as they are accountable to both shareholders and the company for proper management of the company. To this end, board of directors should check the company's management for its performance (Rezaee, 2008). Therefore, board of directors signifies a group of people who are commissioned by shareholders through deputation and who both administers and inspects the business accountably on behalf of them (Arslantaş, 2012). In Turkey, according to the provisions of the Turkish Civil Code No. 4721, boards of directors are regarded as corporate organs that are responsible for the company's management and representation (Dedeagaç and Sapan, 2013). Members of the board of directors are accountable to shareholders, the company and other stakeholders, within the framework of a certain principle of accountability and of powers conferred by the company, in regard to the works done by themselves or by the third parties they authorize, until they are dismissed by the company or they resign. The existence of an effective

board of directors is extremely important for a company to discharge the cited responsibility. At this point, one may raise the question, “What makes a board of directors effective?” This question is extremely critical in terms of successful management of a company. The answer may involve the following actions (Rezaee, 2008):

- (1) Providing an open and appealing boardroom setting
- (2) Making the maximum use of the time dedicated to the company by board and creating clear definitions for each position within the company structure
- (3) Detecting information needs of the board and briefing them in a well-planned schedule
- (4) Allocating necessary time to develop strategic plans
- (5) Developing an executive payment procedure that is clear, precise and reliable
- (6) Managing the CEO succession plan actively
- (7) Reaching the powerful management skill sets of the company
- (8) Following up the enterprise risk management system

These and similar actions are surely necessary and important for an effective board of directors, but the “freedom of the board” is more critical as this principle underlies the successful practice of these actions. The qualitative and quantitative existence of the independent members is very important for the freedom of a board of directors. In a theoretically and fundamentally independent board of directors, it is sufficient for independence that the members are not in a conflict of interest with the administration, though it does not provide a sufficient evidence for the opinion, “An independent board is also an effective board” (Adams, Hermalin, and Weisbach, 2010). We can at least state the following: if an independent board is structured as an “Old-Boys’ Club” with no room for women, it can be discussed that this independent board is or may be ineffective (Adams, 2016). For an effective board structure, it seems more reasonable and meaningful to ensure all kinds of diversity including gender diversity while electing the members of the board. Company scandals having great impacts on corporate management's

gaining significance to this extent and the concept of “old-boys’ club” on company boards playing a big role in such scandals (see, Enron scandal) makes us think that the lack of women on boards of directors should be considered more and that some actions should be taken on the issue.

Gender Factor in Diversity on Board of Directors: Women’s Representation on Boards of Directors in Turkey and in The World

The concept of governance in corporate governance, unlike that of management, brings forth a new understanding that emphasizes mutual and

cooperative administration. Rather than a relationship in which one side administers the other, the concept signifies a transformation in which reciprocal interactions and relationships stand out (Toksöz, 2008:7). In this regard, various persons, groups and institutions who take place in the greater picture of the company but do/may not participate in management contribute to the administrative functions for the sake of mutual benefits. Constituting the essence of corporate governance, this understanding is also significant for board of directors, which represents the most important organ to ensure good governance. To ensure diversity on board of directors, it is extremely important to reserve room in the board for persons with different cultures, origins, colors, background, and genders, instead of monotype, like-minded persons as in the example of “old-boys’ club.” Diversity of board of directors can be defined as the ratio of women and minorities with different races, origins, and colors on board of directors (Carter, Simkins and Simpson, 2003:36). Gender diversity is one of the topics most discussed and studied regarding the diversity of board of directors, and it means to recognize equality between men and women in a company and to treat them equally (Diversityjobs.co.uk, 2016).

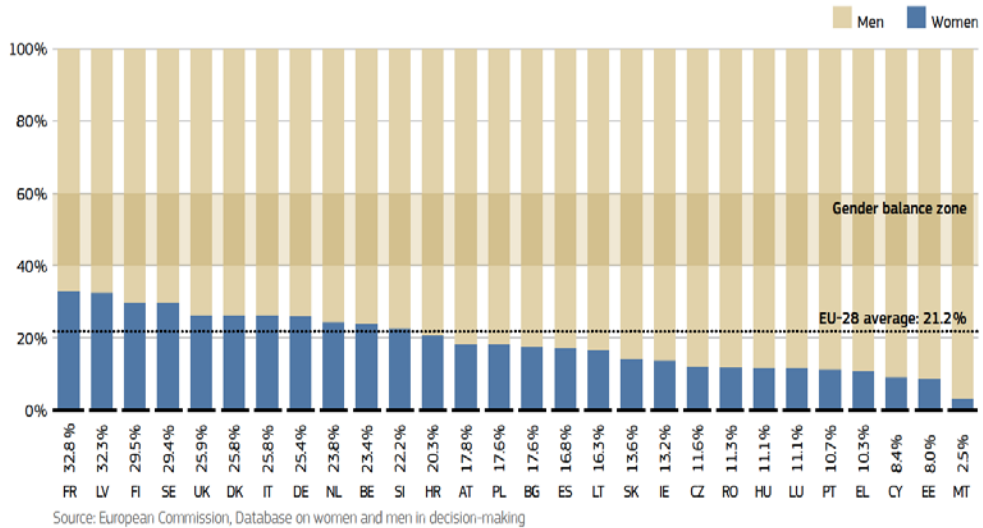
It is safe to say that many global asset owners and other corporate investors are increasingly paying attention to gender composition on boards of directors (Lee, Marshall, Rallis and Moscardi, 2015). In recent years, women’s representation on boards of directors, as in many other areas, has been slowly increased all around the world, although the rate is far below the desired and targeted levels. Thus, it has been a topic, both in Turkey and in the world, that draws attention of academics (Hillman, Shropshire and Cannella, 2007; Burgess and Tharenou, 2002), policy makers and legislators (OECD, 2009; SPK, 2011), and practitioners and civil society (Catalyst, 2007).

Below are the data about the ratios of women’s representation on boards of directors in Turkey and in the world:

In the United States, the ratio of female members on boards of directors, in the scope of S&P 500 companies, was 19.9% while it has risen to 26.9% with new appointments. In the European Union, the ratios of the same years are 23% and 28.1% respectively, concerning STOXX 600 companies.

For the year of 2015, the ratios of representation of men and women on boards of directors in EU countries are as shown in Figure.1. In average, 21.1% of boards of directors are occupied by women in the EU countries.

Figure 1. The ratios of representation of men and women in the large companies in the EU
 ■ Representation of women and men on the boards of large listed companies in the EU, April 2015



Source: European Commission, 2015.

Diagram 1 indicates the change in the ratios of the presence of women on boards of directors in Europe from 2011 to 2015. While the ratio was 13.9% in 2011, it advanced to 25% by 2015. Although this change does not signify a high rate of representation, this progress within only four years can be considered as promising for women.

Diagram 1. Proportion of Women on European Boards (2011-2015)



Source: European Commission, 2015.

When Turkey is considered, BIST hosted 410 companies in 2016. The number for 2015 was 417. As shown in Table 1, the total number of chairs in boards of directors in 2016 was 2813 while it was 2916 in 2015. The average size of a board is about 7 persons. The general decrease in the number of chairs can be said to have resulted from the increase in the number of independent board members, both men and women. The proportion of independent board members in 2012 was 24% in 2012, while it advanced to 29.3% in 2016.

Table 1. Total Number of Chairs on Boards of Directors in 2016

Overview of Total Board Seats in 2016	
Total number of board seats	2813
Independent directorships	823

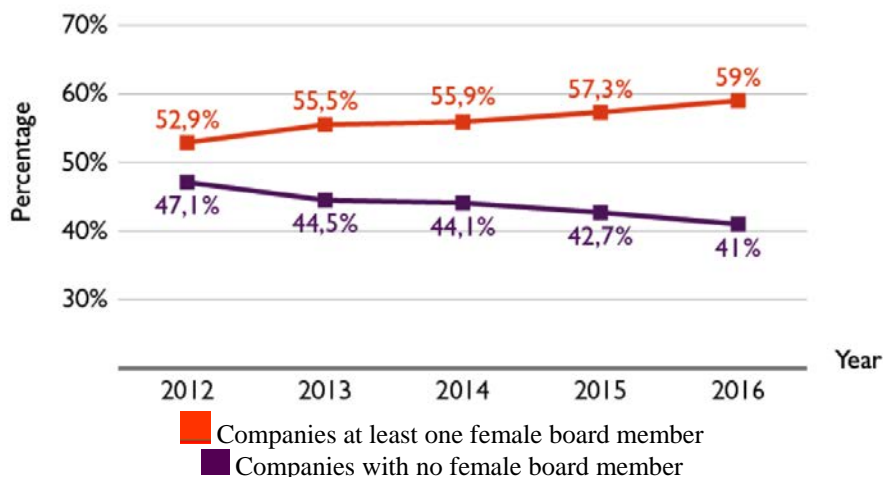
Table 2 indicates the number of BIST companies which have women on their boards of directors in 2016. According to the chart, in 168 out of 410 companies, boards of directors are solely composed of men, thus revealing the reality of old boys' club. The number does not indicate a pleasant result in regard to effective boards of directors and company administration.

Table 2. Number of BIST Companies with/without Female Directors in 2016

Number of BIST Companies with/without Female Directors in 2016

Companies with female directors	242	% 59
Companies without female directors	168	% 42
Total BIST companies	410	% 100

Chart 1 indicates the change that the companies whose boards of directors are solely composed of men and those having at least one female member underwent between 2012 and 2016. According to the chart, the proportion of the companies whose boards of directors have female members has increased while that of those composed of men has decreased. This is a pleasant situation as it indicates that the conception of old boys' club has started to change even though it happens in a slow manner.

Chart 1. Overview of BIST companies with female directors and all male boards between 2012-2016

Source: Ararat, Alkan, Aytekin, Independent Women Directors Project, 2016.

Table 3 shows the change of female members on the boards of BIST 100 companies between 2012 and 2016. Accordingly, one may speak of a little increase in the proportion of women on boards of directors, while the number of companies whose boards have only one female member has not changed in the last three years. Thus, it would not be wrong to say that the companies have not exerted much effort to increase the number of female board members. Besides, the number of companies having three female members on their boards is quite low, although effective board of directors is said to require three female members at least.

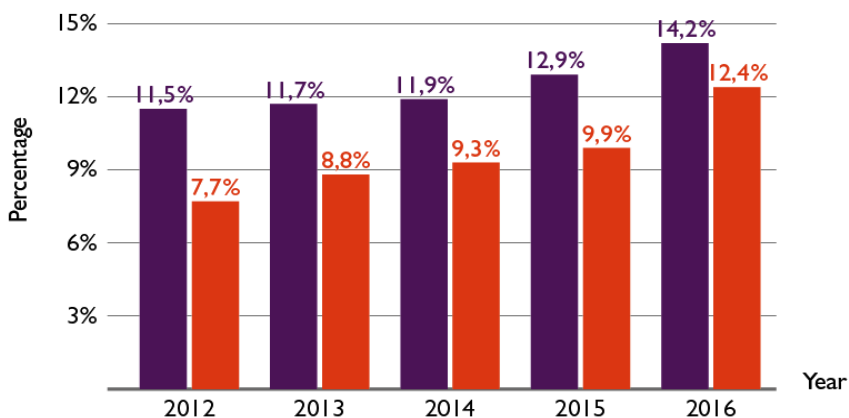
Table 3. Changes in the ratio of women in BIST 100 companies between 2012-2016

	2016	2015	2014	2013	2012
Women on Boards	11.7%	11.34%	10.32%	11.25%	10.02%
Companies with at least 1 female member	62	62	62	63	54
Companies with at least 3 female members	8	10	6	9	6
Companies with no female members	38	38	38	37	46
Companies with female chair	7	8	7	7	7

Source: Ararat, Alkan Aytekin, Independent Women Directors Project, 2016

Chart 2 presents the percentage of all female directors and percentage of independent female directors over the years. In 2016, 399 women were elected to the boards of companies listed on BIST. In parallel to the increase in the ratio of women on boards, the ration of independent women directors has also significantly increased to 12.4 per cent.

Chart 2. Overview of Female Directors and Independent Female Directors between 2012-2016



Source: Ararat, Alkan Aytekin, Independent Women Directors Project, 2016

Presence of Female Members on Board of Directors and Their Contributions

Before all, studies suggest that the organizations which value and respect gender diversity draw attention, persist as institutions with high performance, and can improve their operational performances (Workplace Gender Equality Agency, 2013). The same is true for boards of directors, but the understanding of “let’s have a female member” in the name of diversity in companies’ boards of directors may be misleading. This is not what is meant with diversity, and the subject is not that simple. When considering the existing structure of boards of directors, since the dominant structure and understanding is shaped by men, symbolic representation is not the case with men; but women are seated at a single chair on the board almost like a symbol or a decoration plant. In this case, the board theoretically gets out of the concept of old boys’ club, but the presence of one woman practically does not mean much for the men on the board. Neither the female member can make her voice heard thoroughly, nor is she acknowledged by the men much enough. Nonetheless, academic studies (Kramer, Konrad & Erkut, 2006; Jia and Zhang, 2013; Torchia, Calabro and Huse, 2011) suggest that the presence of at least three female members has a critical significance in

that they will make equal contributions to the decisions of the board. Thereupon it is more likely that three or more female members will make their opinions be noticed and the dynamics of the board of directors will demonstrate changes in terms of sustainability. Taking into consideration the physical, mental and emotional differences between man and woman, it can be said that the latter will bring dynamism and positive change to the board thanks to their distinct opinions, understandings, and points of view. How can women change a board? The following can be mentioned in this regard (Liswood, 2015):

- Enhanced dialogue
- Better decision making, including the value of dissent
- More effective risk mitigation and crisis management, and a better balance between risk-welcoming and risk aversion behavior
- Higher quality monitoring of and guidance to management
- Positive changes to the boardroom environment and culture
- More orderly and systematic board work
- Positive changes in the behavior of men
- Not only do they better address the concerns of customers, employees, shareholders, and the local community, but also, they tend to focus on long-term priorities
- Women directors are likely to be more in tune with women's needs than men, which helps develop successful products and services
- Female directors serve as role models, and therefore, improve female employees' performance and boost companies' images

Conclusion

Considering that companies have been more significant both on macro and micro basis in the globalized world, it gets clear that the economy of countries and the prosperity of societies depend on whether companies are managed efficiently. In this regard, although freedom is essential in company management, this freedom is viewed as being limited with effectiveness and accountability. For it is suggested that corporate governance, as the system that determines organizations' administration and inspection, requires that everybody who is affected by the organizational decisions should be able to intervene the organization's operations and inspect the decisions taken (Işık, 2003). Therefore, the limitation based on accountability in companies denotes the essence of corporate governance (Du Plessis and Luttermann, 2007:235). When effectiveness, accountability, transparency, and responsibility are concerned, it is board of directors that should implement these values by taking all stakeholders into account. A well-organized board of directors is the "best corporate mechanism of administration" to overcome the problem of representation in company and protect the benefits of

stakeholders (Kula, 2006:35). The effective and efficient operation of the board of directors is the primary condition for companies to gain a corporate structure and be administered better. However, this effectiveness and efficiency may not be ensured always in the male-dominant administrations that are fed by opinions created by like-minded and monotype persons. Examples of this problem are company scandals that took place in recent years and created sensations. In fact, top managers are elected to determine the future of companies and thus of countries and the world, and when they come from the same cultural background and have the same mentalities, this causes suggested opinions and the ideas of solutions being away from diversity and novelty. At this point, the male-dominant business world has started to discover the significance of its complimentary part, which stands next to it, for effectiveness. Indeed, gender diversity brings variety of benefits to companies thanks to the different backgrounds and opinions of different individuals. Moreover, collective reasoning will bring about better outcomes as a result of cooperation of the two genders. Nevertheless, in Turkey and in the world, women are still not represented sufficiently on companies' boards of directors, as in any other areas. It is a big loss for the business world, economic growth and social prosperity not to benefit from women who comprise half of society, receive necessary trainings, and have competence of knowledge and skills. Thus, it is not a choice, but a necessity, for boards of directors to get rid of the structure of old boys' club. Nor is it proper to have only one female member symbolically, for the presence of at least three members should be taken into consideration in terms of forming more effective boards. To this end, some countries introduce quota practices for female board members through legal and voluntary initiatives. Such quota practices are not a topic of discussion in Turkey yet. However, the Capital Markets Board's principles of corporate administration (2014) had the following recommendation: "The company will determine a target proportion and a target timeline for the female board members to be at least 25% and will make policies to attain these targets. The board of directors will yearly evaluate the progress made toward these goals." This principle at least encourages companies to act for the subject. Companies are supposed to explain, in the corporate governance compliance report, whether they comply with this advisory principle. Nonetheless, it is observed that some BIST companies provide no information about the principle although they have no female members on their boards. Some other companies which have less than 25% female members on their boards declared that they intended to increase this proportion, but no change has been observed in the following years.

Consequently, opening more space for women on boards of directors will change the boards' dynamics and corporate structure in positive way.

And this will mean stronger companies, stronger economies, and thus stronger societies.

Acknowledgements

The author of the paper expresses her appreciation to Scientific Research Projects Coordination Unit, Pamukkale University for their support (Project No: 2017KRM002-013).

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The Relationship Between Performance and Loneliness at Workplace: A Study on Academicians

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Abstract

The objective of this study is to determine the relationship between workplace loneliness and performance. The sample of the study consists of 109 academicians in total, 64 males (58.7%) and 45 females (41.3%) who are working at Manisa Celal Bayar University. The study data were gathered through face-to-face and online questionnaires. Workplace loneliness scale by Wright, Burt and Strongman was used as a scale in the study. When the collected data were analyzed, it was found that there was a significant relationship between workplace loneliness and various demographic factors, while there was a negative relationship between workplace loneliness and performance.

Keywords: Loneliness, Workplace, Performance, Academicians

Introduction

Changing environmental conditions, new conditions that arise as a result of the rapid progress of technology, and the fact that information can be reached more quickly by humans have led to the change of human needs. One of the needs of human beings that have remained the same in this process is the need for socialization that is the result of human's nature. Humans have long been trying to satisfy their needs for socialization by establishing healthy relationships with other humans around them. Psychological and physical problems may arise if humans can not establish healthy relationships with other humans around them. It is true that the emergence of such problems will affect people's lives. According to Peplau and Perlman (1982), loneliness is defined as a feeling arising from the fact that the relationship between human and other people does not occur as expected and that human's expectations in this regard are not met. For this

reason, one can find himself in a sense of loneliness without a visible reason. The individual's experiencing this feeling in the workplace is described as loneliness in the workplace. Workplace loneliness should not be confused with the individual's need for loneliness when a quiet working environment is required, when doing a job which requires intense mental effort. In such situations, the individual's desire to be alone is about using his/her creativity and keeping his/her concentration at a higher level.

Performance is something that businesses are sensitive to. The continuity and development of the workplace is related to the performance of the employees. Good performance often means achieving goals, while poor performance means not achieving goals. Workplace loneliness, a factor that can affect the performance concept that is important to businesses, is therefore an important issue for businesses.

Loneliness

Humans live in a wide network of social relations. Changes in life (moving, divorce, leaving home, death of close relatives, etc.) can sometimes lead to significant changes in quality and sometimes in quantity of these social relations. Moreover, there may sometimes be differences between the expectations of individuals and the quality and quantity of social relations. Significant social changes and personality traits (demographics, shyness, lack of self-esteem, etc.) cause this difference to gradually open up and eventually lead to a painful, distressing mood called loneliness (Çakır and Çakır 2011). Therefore, social relations are important for all ages.

All humans need to communicate and interact with others throughout their lives. Nowadays, interpersonal relationships deteriorate due to many reasons and a rapid increase is observed in the number of people deprived of close relationships. Andersson (1993) defines loneliness as the lack of relationships in the person's private life and social life and as the dissatisfaction with these relationships. According to Ponzetti (1990), loneliness is a psychological condition based on the unpleasant thoughts and feelings of the individual arising from the inconsistency between the social relationship the individual has and the social relationship he / she wants to have.

Loneliness is an unpleasant feeling and is accompanied by negative emotions such as sadness, distress, anxiety, and helplessness. However, loneliness is defined as the least understandable among all psychological phenomena (Eldeleklioğlu, 2008). It is a universal, powerful, and quite common emotional experience (Duck, 1991). Although these are the general beliefs about loneliness, exceptions can be seen. For example, if the individual is having problems with someone in his or her social life, this may cause the individual to feel negative feelings (Tilburg, 1985). This is not

regarded as loneliness because the source of the problem is not the entire social life of that person but his/her problem with that individual (Gesten and Jason, 1987).

In his study, Weiss (1973) stated that loneliness consists of two dimensions, emotional and social loneliness. Emotional loneliness can be defined as the absence of someone to feel close to and to be attached to, the decrease in the level of one's emotional affinity, the absence of someone to have an emotional relationship and the feeling of emptiness (Öksüz, 2005; Kılınç 2005; Erözkan 2004). In another definition, emotional loneliness can be defined as the absence of an object of love in an individual's life (Mullins et al., 1989). Social loneliness emerges as a result of lack of a social network of friends where one can share one's interests and activities (Weiss, 1974). Such loneliness is possible when individuals are involved in a new social atmosphere and change their environment (Russell et al., 1984). Social loneliness can be defined as the individual's feeling himself/ herself alone in the society, isolating himself/herself from the society, reluctance to communicate with other people in the society, his inability to find a place and establish healthy relationships in the society.

When the individual feels lonely in the workplace, either socially or emotionally, this is called workplace loneliness. Loneliness is a feeling with harmful consequences, and it is important to identify the sources of loneliness and identify the right way to overcome them. Workplaces can have a structure that pushes people to loneliness and makes them feel lonely (Wright, 2005). Loneliness in the workplace is different from other loneliness concepts. Loneliness in the workplace means being isolated and separated from the social environment and being left alone. On the other hand, workplace loneliness can also emerge from one's individual characteristics (Wright et al., 2006). The loneliness of the individuals in the workplace can be affected by certain values. Values that affect individual preferences can help us to understand the characteristics of the individual in other areas. These values can affect the individual's loneliness in the workplace (Yılmaz, 2011).

Performance

The word performance deriving from the Latin *forma* (Müller, 1867) is defined as "*başarım-* success-performance" in Turkish (TDK). It is difficult to make a definite definition of performance. It may have different meanings depending on different processes. At the same time, it is multi-dimensional and the factors that influence performance vary. Since every definition can exclude some contents and scopes, it is difficult to make a complete description of performance. However, in terms of human resource management, performance can be defined as the result of interaction between

individual's integrity and organizational goals (Çalık, 2003). Performance is also defined as the extent to which a job is performed according to specified conditions or the behavior of an employee. In other words, performance is the total of "the outcomes that an employee achieves by performing the task assigned to him within a certain time frame" (Bingöl, 2003). Performance is the quantitative and qualitative expression of the extent to which an individual, a group, or an organization is able to reach the intended goal. In short, it is the degree of success in any job (Özer, 2009).

In literature, performance is generally examined under two headings, individual and organizational. There are two important types of individual performance behaviors. These are task performance and situational performance. Task performance behaviors include professional and technical skills and activities of a person. Situational performance behaviors include factors such as helping colleagues, making extra effort and improving the organization (Gül, 2007). Organizational performance is the performance arising from achieving or not achieving the goals set by the business in line with its goals (Drucker, 2011). In general, performance refers to the level of success of employees in fulfillment of the task in various dimensions. In other words, it is the employee's performing the work in accordance with the identified characteristics and capabilities.

Study Methodology

The study was applied to 109 academicians working at Manisa Celal Bayar University. The scale laid down by Wright, Burt and Strongman was used as a measure of loneliness in the workplace. In the scale, it is stated that the workplace loneliness has two dimensions. One of the dimensions is "Emotional Deprivation" while the other dimension is called "Social Friendship". The scale consists of 16 questions. The first 9 questions were used to measure the "Emotional Deprivation" dimension and the next 7 questions were used to measure the "Social Friendship". The 5th, 6th, 10th, 11th, 12th, 14th, 15th and 16th questions in the scale were reverse coded in the computer. While the high scores in the scale show increased loneliness in business life, the low scores in the scale show that the level of loneliness experienced in business life is low. The last 9 questions in the questionnaire were designed to determine the effect of workplace loneliness on performance. 1st, 2nd and 5th questions were reverse coded in the computer. The high scores in the scale indicate that absence of loneliness in the workplace positively affects the performance, whereas the low scores indicate that the performance is negatively affected.

Objectives and Hypotheses of the Study

The objective of the study is to examine the relationship between workplace loneliness and performance. In this study, the effect of workplace loneliness on workplace performance, i.e. the positive or negative effects on workplace performance, will be investigated. While the hypotheses of the study were being put forward, the literature was examined and hypotheses were established that there could be a significant relationship between age, marital status, and title and workplace loneliness. The last hypothesis of the research was formed by considering that the effect of workplace loneliness on performance would be negative, and that high-level workplace loneliness would cause disruption in employees' carrying out their tasks, lack of teamwork, and low performance. There are studies supporting this hypothesis in the literature (Özçelik and Barsade 2011).

H₁: There is a significant relationship between workplace loneliness and age.

H₂: There is a significant relationship between workplace loneliness and marital status.

H₃: There is a significant relationship between workplace loneliness and academic titles.

H₄: There is a significant relationship between workplace loneliness and performance.

Study Findings

41.3% of the participants were women and 58.7% were men. 11% of the participants were in the age group of 25 and below, 47.7% of them were between the ages of 26-35, 24.8% of them were in the age group of 36-45, and 16.5% of them are in the age group of 46 and above. 67.9% of the participants included in the sample of the study were married, 24.8% were single, and 7.3% were divorced. 11% of the employees in the study were professors, 18.3% were associate professors, 25.7% were assistant professors, 33% were research assistants and 11.9% were lecturers.

When the internal consistency of the scales used to measure workplace loneliness and performance in the study is examined, it is recognized that Cronbach's Alpha values are 0.938 for workplace loneliness and 0.878 for performance. The emerging values indicate that the internal consistency of the surveys is reliable.

Table 1. Workplace Loneliness Scale Score Ranges

1-1,8	Very Low
1,81 - 2,60	Low
2,61 – 3,40	Medium
3,41 – 4,20	High
4,21 – 5,00	Very High

When the workplace loneliness and its subscales were examined, it was seen that the average of the emotional deprivation dimension was 2.34, the average of social friendship dimension was 1.8 and the average of workplace loneliness was 2.1. Considering the scores from the sample, it is possible to say that the workplace loneliness is low in the sample, the employees in the sample have good friendship relationships with other employees, they can find people to spend time and communicate with in the workplace, they have a group of friends in the workplace, they do not have difficulty in communicating with others in the workplace, they can find people to share their feelings with in their workplaces and they usually feel comfortable and peaceful in the workplace.

When the relationship between age and workplace loneliness is examined, it is seen that there is a significant difference between workplace loneliness of age ranges of 26-35 and 46-above. When the scores of these age groups are examined, it is seen that 2.29 for 26-35, and 1.6 for 46-above. In this case, Hypothesis 1 is accepted. It is possible to say that the individuals who are at the beginning of their business lives have not fully established friendship relationships. It takes time that people develop friendship relationships in the workplace and create a group which they feel they belong to. Another finding of the study, the relationship between workplace loneliness and employees' titles supports this end result. There is a significant difference between researchers and professors' workplace loneliness. While researchers' workplace loneliness scores were 2.42, professors' scores were 1.57. In this case Hypothesis 3 is accepted. Considering the titles and age groups of the people making academic career, it is possible to say that they feel that they belong more to the workplace in the later stages of career, they can establish meaningful relationships for themselves, form friend groups, and that they feel very little and maybe no workplace loneliness as the number of the people they share their feelings and thoughts increase.

When the marital status of employees, another variable of the survey, was examined, a significant difference was found between married, single and divorced persons' workplace loneliness. The workplaces loneliness scores of the married are 1.96, the singles' are 2.15, and the divorced ones' are 3.23. In this case Hypothesis 2 is accepted. According to the results, divorced people feel lonely in the workplace. The emotions resulting from divorce can lead to these people's experiencing various difficulties in trusting people, in the sincerity of friendship relations, and in feeling attached to a group. Other employees at the workplace may have taken a stand against these people and kicked them out of their groups, restricted communication with them and reassessed their ties with them. The viewpoint of society against divorced people can also be effective in the outcomes.

Table 2. Workplace loneliness Performance

	Performance	Workplace loneliness
Performance Sig.	1	*-0,432 0,000
Workplace loneliness Sig.	*-0,432 0,000	1

When the relationship between workplace loneliness and performance are examined, it is seen that there is a negative relationship between workplace loneliness and performances of employees'. In this case Hypothesis 4 is accepted. It is an expected outcome that the performances of employees who do not feel themselves belong to a group, who cannot share their thoughts, who cannot establish friendship bonds and who can connect themselves to the workplaces will decrease. Team work in the workplace, cooperation and sharing tasks are the factors that affect performance. With the sense of loneliness one feels in the workplace, he will not be able to conduct his/her task in the workplace properly. He will never be able to fulfill his role in team work as long as he does not feel himself belonging to the group. Since it is very difficult to understand an employee who does not share his feelings and thoughts, it is possible that he or she may experience communication disruptions with other employees. As this situation will affect the performance of the workplace, the employee may end up losing his/ her job.

Conclusion

In conclusion, there was a significant relationship between workplace loneliness and age, marital status and titles. One of the remarkable outcomes is that divorced people feel themselves lonelier in the workplace than other groups. The structure of society, the spiritual and physical states of divorced people may be the cause of this conflict. It was also observed that academicians formed closer friendships in later years of their careers, and that they share their feelings and thoughts easily in their own friend groups, and that older age leads to a decrease in workplace loneliness. It was also seen that there is a negative relationship between workplace loneliness and performance, and that the workplace loneliness negatively affected employees' performances, that is to say, there was a high level of belief that performance will increase when workplace loneliness decreases. It is a natural desire of a person who is a social entity to establish relationships with people around him/her, and to be around people s/he will spend time with. It will not be hard to imagine that this desire will also arise in the workplace if we think that the individual now spends most of his/her time at work.

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Company Performance Measurement by Sample Budget Application

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Abstract

Today, the competitive environment of the trade companies, the gaining of the economic scale of the firms and the deepening of the globalization in economic sphere have made the future more ambiguous for trade companies. This complex environment has led companies facing profit to face serious risks on the other hand.

In Turkey, we can often refer to a structure that is severely depressed by family businesses. Most of these companies are not institutionalized, especially in the small to medium-sized ones. The concept of institutionalization is often perceived as the execution of jobs by professionals. In this regard, however, the company's board of directors is reluctant to transfer authority and does not transfer its authorities to professionals. It is not possible for institutionalization to take place in this form of a profound structure. As a result, it is unfortunate that these firms deserve concepts such as future planning, strategic planning, financial planning and budgeting.

Implementing business budgets, a tool that helps strategic planning and the company achieve its future goals, has a vital proposition in terms of businesses. Because if you do not have a goal, it is unclear where you will be in the future. As a result, in this paper it is expected that more than one sample budget to be prepared in different scenarios will contribute to the evaluation of firm performance.

Keywords: Family Companies, Institutionalization, Strategic and Financial planning, Budgeting

Introduction

Factors such as intensive domestic and international competition environment caused by globalization, company profitability under pressure of competition, significant volume of company mergers and acquisition and emerging giant economic size companies, and recent global economic crises

experienced have decreased predictability of financial performances of companies. In an environment surrounded by threats and with less ambiguous future, it is now more important to adopt more proactive strategic understanding with budget planning for survival of companies. External environment bearing threats and uncertainties lead companies to face serious risks unintentionally as they maintain profit-oriented planning activities.

Except some certain large-sized companies, majority of companies are in “family business” form in Turkey. Managerial decisions made in family companies are usually based on personal and instinctive characteristics of business owners. Although there are some companies striving for institutionalization, these efforts do not pass beyond recruiting some senior professionals at administrative positions. However, the essence of institutionalization is to set business goals explicitly, setting growth plans in line with targets and to take measures against all risks that could threat company in the future. The most substantial tool that could be utilized by companies to that end is Annual Budget prepared within the outline of certain strategic plan.

Strategic planning is a process that could enable companies put all methods, applications and paths which facilitate acquiring projected position of the company in practice (Kulaç and Çeliktürk, 2016: 200). Budget, as an essential constituent of strategic planning, is tool which enable companies to foresee precautions that would be taken against different future circumstances or breakthroughs. Companies could be prepared for future opportunities or threats by setting different scenarios against awaiting constriction in resources, economic crises, financial and manufacturing bottlenecks, supply/demand fluctuations, new competitors in the industry, and eliminated competitors beforehand. Budgeting and budget-based reporting systems relying on these different scenarios are significant performance evaluation tools for companies.

In the first section of the present study, the concept of budget structure in businesses will be studied. In the second section, constituents of the budgeting process will be handled. In the third and the last section, projected income statement of a company operating in textile and agriculture produce industry in Denizli will be investigated within the scope of example budget structure prepared in Excel format; and factors effective on successful budgeting will be evaluated.

Budget Concept and Strategic Planning

In today’s intensive competitive and dynamic environment, it is in evitable for managers who are in an effort to shape companies’ future to utilize from planning and auditing tools for strategic planning and management. At this point, senior managers of companies undertake active

role in setting future plans. Financial plans, growth plans, creating innovative product, entry into new markets and internal auditing plans could be given as examples prepared within this scope (Ritson, 2013:8). Budgeting, element of planning process, could be considered as a planning for businesses concerning where to find resources and how and when to uses these resources effectively for period of time a year or less (Lazol, 2004: 259)

In the contrary to past habits, businesses are required to employ various methods for success and survive in a competitive environment in globalizing world. Ever-changing conditions and transition into information society have differentiated these methods and elevated their significance. Budget, one of the tools preparing companies for future, could be considered as an executive plan prepared for effective usage of resources of a business and increasing their profitability (Tanç and Dikicioğlu, 2012: 138). Various functions of businesses such as sales, manufacturing, procurement and finance, require managers to make various decisions on daily and future activities of business. Irrelevant and discrete decisions would result in serious losses for business. In this sense, budget is a quantitative planning and auditing tool which handles different activities of business together, melts different administrative decisions in a single pot, and gives an idea about future activities of the business (Drury, 2001: 279).

Operating Budget

Today, businesses make budget for their various different needs. “Operating Budget” is considered as the one used by businesses for planning of their short-term activities. Operating Budget is an executive plan reflecting short-term activity predictions of businesses in quantitative form (Büyükmirza, 2005: 663). In other words, Operating Budget is a strategic planning activity which indicates targets set by a business for its different departments for a certain time horizon as well as the financial position, cash flows and profitability foreseen to be acquired at the end of the budgeting period relevant with whole business.

Although preparing operating budgets requires laborious effort, they have functions making significant contribution into businesses (Dickey, 2010: 7).

a) *Planning Function:* Budget is essentially a planning tool. Therefore, the objective of making budget is to set targets that would allow businesses to gain best results and the all relevant methods to be utilized in accomplishment of these targets (Yılmaz, 2001: 73).

b) *Auditing Function:* Budget is the most concrete auditing tool in businesses (Dickey, 2010: 7). Within the specific budget period, figures in the designated budget and the ones realized are compared so as to determine whether the business could accomplish its targets. During these comparisons,

problematic subjects could be determined so that corrective measures could be taken against those determined problems which allow business could acquire period-end targets.

However, all authorities and responsibilities across a business are required to be designated and declared explicitly so that budget could be utilized as an auditing tool. Furthermore, policy, target and standards in a business are required to be determined in an inter-related fashion. Briefly, operating budget is fundamental plan of a company and covers a fiscal year usually. Operating budgets also include all income and expenditures relevant with the covered fiscal year (Barr, 2002: 35). Operating budgets are classified with respect to the subjects, the way of handling problems, their objectives, technical structures, scopes, initial figures and quantitative quality.

Budgeting Process in Businesses

Fundamental Constituents of Budgeting Process

For successful budget practices in a business, existing processes need to be defined clearly and managed carefully. In this context, foundation of divisions responsible for budgeting process within the organization, such as budget department or budget committee; provision of support to the relevant divisions by the senior management; and scheduling a budget calendar are considered necessary (Büyükmirza, 2005: 670). This project will be governed by a team established by members from each department of the organization body, whose responsibilities will be defined adequately and notified to the respective individuals.

The senior management is required to set its business vision and business targets relevant with the foresight period and notify the budget team. After this step, budget team needs to expose current status of business. Finally, budget targets and assumptions are required to be set and all respective divisions need to be notified (Kaygusuz and Dokur, 2005: 147). Basic components of the budgeting process are budget department, budget calendar, and budget period.

Budget Department

Participation of all departments across the business is substantially important for effective budgeting process and for realistic applicable results. The factor that needs to be taken into consideration basically during foundation of the budget division is that all departments that will contribute into the process should be competent in establishing communication and coordination for the process (Büyükmirza, 2005: 670).

Essential task of the budget division is to determine all procedures and methods that will be used in budget process; and to determine and obtain

respective tools. The second task is assisting to resolution of issues related with technical, procedure and methods that could be encountered by any department in the organization. The third task is ensuring keeping up with the pace in preparation of estimations and predictions reported by all departments; combining budgeting studies reported by all departments so as to create general budget. Finally the fourth and the fifth tasks are performing comparisons between projected and realized budget items after the general budget is approved by the top management; and to prepare budget reports to submit top management and to the relevant departments (Büyükmirza, 2005: 670).

Structure and size of the budget division might differ from one business to another. Whereas it could be a crowded crew directly reporting to Board of Directors, CEO or General Chair in the large-sized businesses, it could be a chief division nested in accounting directorate in mid-sized businesses, or it could only be an accountant in small-sized businesses. However, regardless of the business size, they will be responsible for fulfilling all tasks mentioned above.

Budget Calendar

Budgeting activities are not implemented by a single department. Since they require participation of all departments across the business, delays caused by any point at any stage in the process would adversely influence the whole process. Therefore, budget process needs to be planned and scheduled thoroughly (Büyükmirza, 2005: 671).

The first step to be in budget calendar is determination of budget parameters. That is, environmental and business-inherent factors that could affect all budget predictions such as currency rates, inflation rates, growth rate and management's business expectations for the relevant budgeting period business are required to be determined and the relevant departments should be notified.

As the second step, if this is the first budgeting period of the business, technical budgeting infrastructure and providing training to the associated users are needed. In the succeeding step, sales estimations, that is, sales budget needs to be made and other sub-budgets comprising o the general budget are to be made accordingly. After all budget estimations are drawn, budget estimations should be compared for evaluation pursuant to necessary corrections and amendments so that conformity among all budget items could be acquired. Coordination should be maintained continuously until evaluation and general budget are completed. Upon approval of the Board of Directors, the calendar will end for the budget period (Gökbulut).

Budget Period

Operating budgets are made as they cover certain time period. The length of this time interval depends on some variables such as type of business, utilization purpose of budget, specific conditions of the industry of the business and general conditions of the economy in which the business is operated. Prominent factors in determination of budget period are the Legal Accounting Period, economic stability, business policy and strategies, seasonal impact, associated risks with the business, finance, manufacturing and inventory control structures, structure and accessibility of available statistical data (Ataman and Hacırüstemoğlu, 1999: 351). If it is considered that legal accounting period of businesses in Turkey is one year and that majority of statistical data used in budget process is prepared for a year, it could be seen that the most common budget period is one year duration (Haftacı, 2005: 23).

Setting Operating Budgets

Operating budgets, or general budget, represent expectations of business management from the business for a certain period of time. These expectations include sales, manufacturing volume, all expenditures, all financial operations and value added. Budget could be assessed as a business plan for a certain period of time. Afterwards of this period, it becomes an effective tool to evaluate business performance (Shim and Siegel, 2005: 77).

Certain processes are involved in projection of operating budget; estimation of budget parameters (currency rates, interest rates, inflation rates, GDP growth rates and etc. relevant concerning the Budget Period) preparation of sales budget, procurement budget, investment budget, manufacturing cost budget, inventory budget, operation expenditure budget, cash flow budget and finally projected income statement and projected balance sheet (Shim and Siegel, 2005: 77).

Projected Income Statement and Projected Balance Sheet

In the present study, an example application will be presented for the Projected Income Statement and the Projected Balance Sheet prepared as a result of all other budget estimations (sales, procurement, inventory, department expenditures, investment, and cash flow budgets). The rationale lying behind this approach is that evaluation of the projected income statement and the projected balance sheet of a company will be adequate to assess performance of this company.

The projected income statement and the projected balance sheet could be considered as reflection of financial results of activities planned by a business for a certain budget period. They are important as a tool for predicting the extent of success associated with accomplishment of targets

set by the business management in the beginning of the budget period (Ataman and Rüstemoğlu; 1999: 397). The projected income statement represents the operations targeted by the business management for a fiscal budget period. However, it is influenced by the results of the activities performed in the former periods. In parallel with the management needs, projected income statements could be prepared and reported quarterly or semi-annually (Shim and Siegel, 2005: 89).

Data summarized in the projected income statement constitutes foundation for the projected balance sheet, the terminal point of budgeting process. Balance sheet reflects both balance sheet values in the beginning of the period together with the figures as result of the concerned period (Ataman and Rüstemoğlu, 1999: 404). According to another description, projected income statement exhibits only expected incomes along the budget period. Projected balance sheet exhibits changes that could observed with the prepared budget and with assets and liabilities as a result of planned operations along the fiscal period. Therefore, contributions of business partners and/or owners to business assets and liabilities, return rate of the investment, could be estimated on the basis of projected balance sheet (Schaffer, 1988: 99).

Benefits of preparation of projected income statement and projected balance sheet could be enumerated as follows; allow adverse financial circumstances with businesses to take timely precaution; provide tool for quantitative confirmation of prepared budgets and accuracy of reports; allow various analyses such as profitability rate; and finally provide competency to foresee unexpected opportunities that could arise in the future (Shim and Siegel, 2005: 90).

Preparing Budget Report in Excel Form

In the beginning of the budgeting process, businesses are required to determine appropriate and valid budget parameters which could be described as estimations of future incidents with multiple event chance and result of non-business factors. Correct estimation of these variables that depend on environmental factors is significantly important for acquiring budget targets. Associated data could be classified in three main groups: parameters related with macro-economic - legal and social environment; industry-related parameters; and technology-related parameters.

Parameters related with macro-economic, legal and social environment include inflation rate (fluctuation in purchasing power of money), fluctuations in currency rate, changes in interest rates of loans, changes in interest rates of saving accounts and in return rates of investment funds, changes in taxing rates, legal changes that could influence business, potential changes in foreign trade policies, fluctuations in the GDP,

demographical changes, and changes in government's investment and incentive policies and fluctuations in market demand. Parameters related with the industry include changes in market share of competitors, investment and growth policies of competitors, and their sales strategies. Finally, parameters related with technology include technological trends in the industry, reflections of these technological advancements to the country and new technology usage inclination of competitors (Güvemli, 1990: 114-116).

Of these parameters, the ones that could be measured quantitatively (currency, inflation rates, etc.) must be estimated monthly as budget parameter. Qualitative factors are required to be estimated accurately while determining budget targets and relevant business policies and strategies. Different targets and policies must be set for different scenarios. For instance, changes in demographical structure, that is, population increase and movements would affect consumer behaviors or employment conditions. In such framework, developing different strategies according to different population movement scenarios would play significant role in budget success (Güvemli, 1990: 116).

The company selected as the case for the purposes of the present study is in business of trading agricultural produce and manufacturing and trading of cotton yarn in Denizli, a significant agriculture and industrial city located in the Aegean Region. Due to the high environmental risks associated with the nature of agricultural sector and necessity of strategic planning and budgeting against these risk, this company was selected as a sample subject. The company's budget planning for 2007 and its realization rate were taken into consideration.

Table.1.

Cotton Sale Amount (1000 kg)	570	750	50	Bin \$			1000 USD			Net Sales of %			Reel %
	2006 Actual	2007 Projected Budget	2007 Actual	2006 Actual	2007 Projected Budget	2007 Actual	2006 Actual	2007 Projected Budget	2007 Actual	F/F			
DECEMBER													
1000 TL													
Net Sales	1.644 ¹	1.997 ¹	547	1.153 ¹	1.264 ¹	466	100%	100%	100%	-69%			
Domestic Sales	1.644 ¹	1.997 ¹	547	1.153 ¹	1.264 ¹	466	100%	100%	100%	-69%			
Cost of Sales	1.655 ¹	1.841 ¹	460	1.161 ¹	1.169 ¹	392	101%	92%	84%	-74%			
Gross Profit	-11 ¹	156 ¹	87	-7 ¹	95 ¹	74	-1%	8%	16%	-875%			
Marketing, Selling Expenses	24 ¹	28 ¹	20	17 ¹	18 ¹	17	1%	1%	4%	-19%			
General Administration Expenses	106 ¹	100 ¹	85	74 ¹	64 ¹	72	6%	5%	15%	-25%			
Operating Profit	-141 ¹	28 ¹	-18	-99 ¹	13 ¹	-15	-9%	1%	-3%	-88%			
Financial Expenses	-6 ¹	0 ¹	51	-4 ¹	0 ¹	44	0%	0%	9%	-974%			
Income from other operations	13 ¹	22 ¹	-34	9 ¹	13 ¹	-29	1%	1%	-6%	-342%			
Ordinary Profit	-122 ¹	49 ¹	-104	-85 ¹	27 ¹	-88	-7%	2%	-19%	-19%			
Extraordinary Income and Profit	0 ¹	-	2	0 ¹	-	1	0%	-	0%	3793%			
Profit for the Period	-122 ¹	49 ¹	-102	-85 ¹	27 ¹	-87	-7%	2%	-19%	-21%			
Amortisation Expenses	15 ¹	21 ¹	19	11 ¹	13 ¹	17	1%	1%	4%	20%			
Net Fund Amount	-106 ¹	70 ¹	-83	-75 ¹	40 ¹	-71	-6%	3%	-15%	-26%			
EBITDA	-125 ¹	48 ¹	1	-88 ¹	26 ¹	1	-8%	2%	0%	-101%			

Conclusion

The company set budget targets for 2007 on the basis of realized 2006 financial data. However, a serious deviation was experienced with budget targets at the end of 2007. The basic cause for this deviation was failure to consider all internal and external factors during preparation of a realistic budget.

The selected company is family business incorporated in Denizli. All decisions in family companies are taken with respect to their experience with the industry and their instinct. Although professional personnel are recruited in recent years, the last call is made by the business owner. In spite of the efforts spent by the examined company for institutionalization, these efforts have not gone beyond employment of some professionals at senior management level. Nevertheless, core objective of institutionalization is to ensure companies to gain a target-oriented structure so that it could be resistant against the risk threaten its persistence by means of planned growth. Budgeting, as a substantial and indispensable constituent of strategic planning, is the tool enables them to foresee precautions or breakthrough that could be encountered by companies in the future. For this purpose, the most important tools available for companies are strategic planning and appropriate budgeting. Companies could be prepared for future opportunities and threats such as resource depressions, crisis, monetary contraction, fluctuations in supply/demand, manufacturing bottlenecks, new players in competition, competitors gone out of business and etc. by utilizing from various scenarios.

Yet, decisions taken within the body of the family business in 2007 were not conforming to the strategic planning and budgeting techniques; and this situation resulted in serious deviations in budget targets. The company usually procures its raw material of cotton from farmers in the Aegean Region. The management of the company who lacks strategic vision has failed to realize the contraction in cotton farming in the region over the years and decrease in cotton harvest so they failed to prepare an accurate budget in line with the observed contraction. While average amount of cotton yield in the Aegean region was 150,000 tons in the period of 2004-2005-2006, it fell to 116,000 tons by 2007. This decrease was observed gradually since 2001 (the cotton harvest figures were 227,862 tons, 218,809 tons, 194,556 tons, and 167,605 tons in 2001, 2002, 2003 and 2004, respectively). Accordingly, the company management adopted a mistaken strategy by ignoring this negative development.

As it was observed with the company case, budget which does not include strategic planning dimension accounting for environmental factor and risks would be prone to deviations. In a successful budget preparation process, it is fundamental that objective and targets of company are required

to be adopted by all employees, strategic planning must be institutionalized at all departments as the company culture. Therefore, budgeting process should not only include senior managers but also all employees are included in.

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Applications of Marketing Information System in Banking Sector: A Study on VakıfBank

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Abstract

Marketing managers have discovered importance of information and information-based marketing system for a long time. They have realized that information is a tool which can change the competition conditions. Companies may gather required information by itself or outsourcing. It is known that many problems have been occurred on information gathering and using process. The purpose of this study is to examine concept of Marketing Information System by literature review and to reveal issues of banking sector applications on information gathering and using. Semi-structured interviewing which is one of the qualitative research methods was used in this study. Implications are discussed and recommendations are given for the banking sector.

Keywords: Marketing Information System, **Information-based Marketing**, Banking Sector

Introduction

In the periods when manufacturer and consumer populations were relatively small, businesses were capable of gathering all sorts of information about their customers and competitors conveniently. However, in parallel to globalization, as numbers of consumers and competitors have increased, companies experienced more difficulty with reaching information and they further in need of information. Recent developments in economic, socio-cultural and technology necessitated more detailed market analysis and thus intensified the need for information. Evolving marketing understanding steered businesses to monitor their customers and changes in consumers closely; and to orientate the competition creating a loyal consumer profile. Now that, the more accurate and current information available for companies, the great competitive advantage they

acquire and succeed to persist loyalty of their customers and avoid losing them to their competitors.

According to the Turkish Linguistic Society (TDK, 2017), information is described as “i) the whole of phenomenon, fact and principles that could be comprehended by human beings; ii) Reality and datum that could be acquired through learning, research or observation”. It is observed that information is described differently in the relevant literature. Koza (2008:57) describes information as data compiled, classified, organized, analyzed for interpretation, transmitted to the relevant parties for effective decision making, processed for providing more meaningful and valuable form by means of various methods; an which might be influent on decisions and behaviors.

According to Drucker (2001), future societies will be referred as information societies; information will be fundamental resource and knowledgeable employees will be dominant group in professional life. Information travels effortlessly, it will be borderless and easy to gain via formal education, so the success and the failures in work life will not depend on pure knowledge. In our contemporary time, as it was foreseen by Drucker, dominance of knowledgeable employees at organizations has evolved management understanding of administrations and information has started to be seen as a fundamental manufacturing factor. Especially the fact that today’s managers need to make fast and accurate decisions in the face of problems encountered has increased significance of information.

Leonidou and Theodosiou (2004; 12) summarized the factors contributing in significance of information in decision making process are reported in the marketing research literature (Churchill, 2001), (Tull and Hawkins, 1993), (Zikmund, 2000) as follows:

- For better understanding of competitors in the core market of the company,
- Monitoring changes in market conditions evolving with great pace,
- Designing reliable marketing plans and strategies,
- Resolving certain marketing problems such as introduction of new products to market, price change, establishment of distribution channels, and adoption of a promotion methods,
- Enhancing monitoring of marketing strategy and implementing marketing control by evaluating company performance more accurately.

In parallel to changing management understanding, information has been put in prominent place especially with decisions on marketing. In businesses, according to Kotler et al. (1996: 210), a marketing manager should be aware that “they need to manage future so that they could succeed in business management; and managing future requires them to manage information”. Knowledge is critical for the marketing function, in recent

years, with the launch of information technologies the way marketing is done and customer information management is changed. Availability of huge volume of data about customers created competitive advantage for companies (Shaw et al. 2001: 127). Porter and Millar (1985: 149,150) emphasized that information revolution is inevitable wave that no company can escape and explained how information technologies are changing the way companies operate and entire production process. Narver and Slater (1990) describe information as a substantial resource which could increase competition advantage; and state that information acquired by a company about their customers and competitors are so valuable in development of company's market orientation (Keh et al., 2007; 597). Contemporary marketing managers have better realized the importance of gathering information as much as possible and establishing a marketing system based on this information.

Today, having substantial amount of information is not enough for companies alone. They need to have systems to fetch information sooner as possible so that they could utilize information adequately. What needs to be done at organizations is to create the most adequate information system that would answer companies' unique needs through research and development (R&D) efforts and to develop associated information memory (Hasiloglu, 2013:358). Especially, technological advances have allowed companies to establish necessary marketing information systems (MIS) for collecting target information and their proliferation.

The preliminary description of MIS was drawn by Coxan and Good (1967) as series of procedures and methods developed planned analysis and presentation of information in a certain order for assisting to marketing decisions. Brien and Stafford (1968), Smith et al. (1968) and Buzzell et al. (1969) have further expanded aforesaid description and they classified marketing information in groups of control, planning, and research-based information. According to their descriptions, objective of marketing systems is to collect, sort, analyze, evaluate and share the right information at the right time for planning, application and control activities for marketing managers (Talvinen, 1995;10).

Long-term marketing decision of companies considers which products to be launched, target markets, how to transfer their products to consumers and how to convince consumers to buy their products. MIS allows today's companies to make these strategic decisions in fast and accurate manner. Of course these systems are not only for manufacturers; it is known that they are exploited in service industry to enhance service quality extensively. Especially with the banking industry, necessity of establishing MIS for gathering detailed information about customers and

competitors for building banking applications based on this information is undeniable.

Marketing Information Systems in Banking Industry: the VakıfBank Case

As customer-oriented marketing understanding has progressively been dominating across banking industry, the need for collection, storage and analysis of all sorts of information of customers such as their demographic and economic information as well as their expectations, requests and complaints has emerged. To that end, customer data bases have become prominent data resource at the point of building customer profile for banking institutions. Shaw et al. (2001: 133) enumerates the characteristics that could be utilized by marketing experts in building up customer profile as follows; frequency of purchase, amount purchased, the last purchase date, characteristics of customer groups, life-long values of customers, purchasing patterns of customers, and results of marketing programs. Keeping log of these information in bank data bases and their regular update allow bank managers to make market-oriented decisions.

Banking institutions utilize numbers of methods in building a data base. Customer information are collected by means of sales represents using advanced technological infra structure. It is known that majority of banking institutions in the industry use personal information forms for gathering information from individuals in private banking. This method allows collecting information on both new customers and current customers. Data included in customer information forms submitted to customers in banks for filling in and which aim to collect information about them are considered as primary data as well. Banks also collaborate with many other institutions for sharing existing data bases as secondary data. Customer information logged by the Republic of Turkey Central Bank and their credit risk information maintained by the Bureau of Institutional Records are considered important especially for recognizing commercial customers. Moreover, data bases maintained by Chambers of Commerce, Industry, Organized Industrial Zones, Unions of Exporters, Agricultural Credit Cooperatives, and R.T. Ministry of Development are utilized.

Method

It is common that banking institutions encounter various problems in terms of collecting information and using them in line with their objectives. The purpose of the present study is to investigate MIS through reviewing the relevant literature; and especially to determine the prominent problems encountered with the applications in the banking industry by managers in terms of gathering and utilizing information.

Government-subsidized banks experience considerably less moderate customer anxiety in comparison with private banks owing to the sense of trust

created among customers. This situation might result in experiencing more marketing problems. VakıfBank (VakıfBank) determined by purposeful sampling method was included in the scope of the present research since it is member of group of publicly-capitalized banks and it is ranked among the 10 largest banks in Turkey in terms of their current equity size by the Turkish Union of Banks in 2015.

In this study, semi-structured interview method, one of the qualitative research methods, was employed. Interviews were held in person with İzmir District Marketing Manager working at the VakıfBank Directorate of Marketing and Coordination, and with the employees at the same branch. In these interviews, 20 questions determined through review on the relevant literature for gathering detailed information on operation of MIS of the bank and the problems encountered with the system were employed. Additional questions were added onto the semi-structured interview form during the appointments in order to determine how the necessary system was established and used for more efficient use of marketing resources of VakıfBank.

Findings

VakıfBank first classifies bank customers for purposes of building customer data bases. In this customer classification, which could be referred as market segmentation, customers are grouped in two fundamental groups: Private and Commercial Customers. Customers from the private banking group are distributed in sub-groups on the basis of their earnings as public sector employees, private sector employees and VIP customers. On the other hand with the Commercial Banking group, customers are grouped in SME, Commercial Institution and Agricultural on the basis of their net gross sales. VakıfBank, in line with this classification policy, reaches out these customers by means of Private Portfolio Managers and Commercial Portfolio Managers.

VakıfBank organizes its marketing activities through the market segmentation and differentiate marketing mix offered to customers as well. When product and service mix preferences adopted by banking institutions are taken into consideration, a remarkable resemblance among them could be observed. Particularly in the banking industry, organizations could easily follow each other closely and thus their product and service mix displays significant similarities among each other. Like other banking institutions, VakıfBank offers its products and service to customers through its extensive branch network and alternative distribution channels such as ATM, internet, mobile and phone banking tools.

Whereas VakıfBank utilizes from primary data for building private customer data base, utilizes from secondary data in building commercial customer data base. VakıfBank is capable of collecting all sorts of information by means of its comprehensive customer data base. Information collected through customer

information forms relying on voluntary personal information declaration are transferred into the relevant data base.

On the first page of customer information forms, there are usually descriptive information about customer such as identity number and tax number. Customer information forms also include demographic information of customers. Detailed information about customers such as income level, marital status, profession, education level etc. are contained in the data base. In order to determine income statuses of bank customers, their profession, monthly earnings and properties owned are also contained in data base. Information concerning customer income level is exclusively important. Along recent years, banking institutons adopt another classification on the basis of their earnings and VIP-Private Banking services have emerged; and special branches offering private banking services have been launced lately.

Another data collection way for private customers is records individuals who work for real and legal commercial entities, members of the public institutions and organizations whose employees' salaries are paid by established banking system on the basis of bonus payment agreement. Moreover, this allows salary account holders' information associated with their current credit accounts from the data base of the Bureau of Credit Registry.

Partnership structure, income statement and financial statements of commercial customers are considered important by VakıfBank as well as information concerning the government incentives that they are awarded and their investment plans. Additionally, non-financial information, numbers of employees, assets, investment plans and variety of credit that they have been utilized so far, purchasing and sales preferences, foreign trade information such as export and import preferences of all commercial customers subject to credit rating are stored in data bases.

Besides, information such as payment capacity history of commercial customers, credit limits and risk – assurance levels, commercial registry logs, affiliated professional chambers, their position in their sector/industry, their competitive strength and etc. are followed. VakıfBank's own records, cash flows of customers, their wire transfers and swifts, financial balance sheets, their customers either suppliers or distributors, re-sellers and collection of checks and bond are considered most prominent information resources.

VakıfBank maintains an information pool referred as customer behavior module in which customers' expenditure, payment, cash flow, sector, gross sales etc. information kept logged. Additionally, there is a scoring system which evaluates customers' financial and non-financial information of customers in order to assess their credit rankings. This data base expands further through addition of new information available. Furthermore, each customer's file includes a micro-sized Swot Analysis concerning the relevant customer and their sector, whose information is collected through customer interview forms.

VakıfBank information system is capable of storing all information utilized in the industry. All sorts of information such as legislative regulations, decree and communications of the bank, customer proficiency, product matrixes, sector-wide analyses, risk analyses, customers' fundamental information (security and communication details etc.) are recorded into the data base. Information collected and stored in data bases is used in marketing process of bank products and services for VakıfBank's customers. For instance, branch sales divisions are notified about customers who could be potential for foreign trade products offered by VakıfBank on the basis of data indicating a foreign income in that specific customer's income statement.

At the VakıfBank General Directorate, continuous research and development activities are implemented on data base applications and current system is enhanced in light of these efforts. As of 2014, owing to transition to the information system called as "VakıfBank Innovative Transformation" (VIT), new information entry into the current data base is governed by means of single software. Managers are of the opinion that information technology difference between VakıfBank and its competitors has now been closed by the VIT project. Data memory tree will be established through the information entered into the system over the time. This system also allows determining their product utility rates and profitability as well as the basic information about them.

At VakıfBank, in order to expand commercial customer population, district directorates and intelligence directorate conduct researches about newly founded businesses and new business areas and affiliations of current VakıfBank customers by means of especially branches and all marketing divisions. Any data available from chambers of commerce and industry, professional chambers, development agencies, and media are screened on continuous base. The intelligence department collaborates with media surveillance centers that collect current information from media and press. Company news, developments in sectors, and commodity price fluctuations are gathered and reported to the system.

Potential development strategies created in parallel to developments in sector are applied on companies continuing their active operations in the relevant sectors. During assessment of financial and credit rankings of companies, potential developments in the respective industry are taken into consideration. VakıfBank develops marketing strategies by focusing on sectors sensitive to new legal regulations. Especially, it concentrates on sectors that could be influenced by seasonal and regional differences. There are also specific researches on regions where VakıfBank's market share is relatively low and where new branches are opened. As a result of these researches, new products and promotion campaigns are organized.

Market share development status concerning the sectors and products focused on in the previous periods are investigated regularly. Moreover, comparative analyses on profitability, product sales and market share with respect

to competitors in the same sector are reported on continuous base. Strategies for preserving and developing position of VakıfBank in the market are developed in line with these reports. In case, the resulting development is not at satisfactory level, marketing strategies in effect are re-evaluated.

During setting marketing strategies, data stored in the information system is utilized; and the strategies adopted by competitors are also taken into consideration before deciding on the specific products and services to specific customers. MIS is utilized in both service and product differentiation and organization of promotion campaigns. For instance, information on professions of customers are sorted in terms of special days such as teachers, nurses and doctors so that relevant promotions could be organized and announced according to their communication preferences. Additionally, credit card spending data obtained from customers are employed in determination of consumption behaviors of private and commercial customers and to structure promotion campaign details.

Marketing departments, district directorates and all branches are actively participating in information collection process and they are constituents of an effective intelligence system. These divisions submit collected information to branch sales departments so as to conduct customer interviews. As a result of these interviews, the sales team provides feedback to the relevant data base about customers; thus, data base is continuously updated and expanded with new entries.

Again at VakıfBank, the information supplied by the Banking Coordination and Marketing Department at the Head Office to the district directorates concerning current or potential customers are assigned to Branch Portfolio Managers through the data base system. These assigned data is taken into consideration by Branch Portfolio Managers through the online system and these data reviewed once again during customer visits or phone interviews.

VakıfBank managers indicate that the most substantial problem is acquiring the accurate information for them. For banking operations, financial statements and account balances of customers are considered important since they are useful tools for assessing credibility of customers as well as determining which products are used by customers. Existence of off-the-book economy in Turkey prevents accessing accurate information about customers. Unreliable and useless information increase risk perception in the industry and hinders marketing efforts.

VakıfBank describes competitor term as follows: *“banks which has long history in the industry with similar characteristics in terms of number of customers and credit volume in the market”*. Managers indicated that customers have negative view of banks due to overcrowded banking industry and intensive marketing activities in the industry; and therefore, they sometimes experience difficulty in explaining themselves to customers. On the other hand, they think

that existence of VakıfBank in the market for long time is advantage and positive references of current customers reduce hindrances before gaining new customers.

Because of fragile structure of banking industry and substantial dynamic nature of economic developments, frequent updates are necessary on data base. VakıfBank evaluates adequacy and sufficiency of existing data bases continuously on periods of daily, weekly, monthly, quarterly, semi-annually, annually and 5-year subject to frequency and quality of information updates.

When the operation of the VakıfBank's MIS is assessed, it was observed that data collection and analysis criterions for all departments were not standardized or associated with a procedure. Non-standardized structure of information used by all marketing departments across the bank, difficulty in accessing these data, various formats of collected data result in different practices in interpretation and usage of information. Moreover, lack of necessary guidelines concerning update periods limits applicability of MIS across the VakıfBank in general.

Results

As conventional banking understanding is replaced by the modern banking practices in the banking industry, competition among banking institutions have intensified and accordingly they have tended to be more customer-oriented. Customer satisfaction and customer loyalty could be enhanced in banking institutions especially by determining customers' needs, expectation and offering relevant products and services for them. Information and technology have become inseparable competition factors in banking industry. In parallel to advancements in technology, bank institutions have made significant amounts of investment in technology to provide superior customer service by building up information systems. Advancements introduced by technological developments such as telephone and internet banking, ATM allowed customers to reach banking operations regardless of spatial and temporal boundaries.

In this study conducted on VakıfBank, one of the prominent actors in Turkish banking industry, it was found that the bank has recently increased its investments on required infrastructure for establishment of MIS. These investments are related with data collection on customers, data analysis, and determining marketing strategies in line with acquired information. Not only customer information, but also changes on legal regulations, declarations and decrees are followed and included into the system on continuous base. Owing to the data supplied by the MIS, service differentiation and promotional activities could be maintained in planned fashion.

The launch of VIT (VakıfBank Innovative Transformation) System in 2014 was remarkable step for VakıfBank in terms of efficiency of the information system, which assigned a single computer software interface for

data and information entry and access. Although introduction of this system closed the gap the difference between Vakıfbank and its competitors in terms of information technology, numbers of problems were encountered with application of the system.

Effective usage of bank information system is limited by fragile structure of the banking industry, risk undertaken by the banking industry and fluctuating variables in the sector. Existence of off-the-book economy in Turkey constitutes hindrance for acquiring accurate information about customers and elevates risk perception. Because of the competition in the industry, oppressive marketing efforts and negative attitudes of customers against them are considered as difficulties experienced in information collection process. VakıfBank succeeded to overcome these issues by means of acquired customer satisfaction level and customers' advises.

In order to maintain its competition advantage resulted from its public-subsidized nature, VakıfBank first need to invest in its technological infra-structure for further advancements. These investments should not be limited with the financial resources spared for system and software development, in-service training activities are required to be supported adequately in order to ensure their efficient usage. Since personnel training on information collection, analysis and interpretation would allow efficient usage of MIS.

It is substantially important to found "General Directorate of Information System" within the body of Head Office and outline authority and task of this department. Standard procedures regarding data collection, compilation and analysis are required to be introduced and put in practice in the shortest period of time. Standardized data fed by marketing departments is to be stored by a single department and be shared by whole organization so that all managers and personnel find opportunity to access them.

Finally, establishing MIS for an organization from the banking industry would not be adequate on its own. Such systems are expected to have high practicability; that is, they need to be systems allowing users to access desired information on momentarily. MIS system would also contribute into reduction of costs associated with marketing efforts and prevent poor marketing campaigns while managers gain leverage with valuable data stored and continuously updated in the system in their marketing decisions.

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Effects of Business Education on Consumer Awareness and Conscious Consumption

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Abstract

Consumer awareness and conscious consumption are well known concepts that gained higher value in time. Increased communication networks and tools let people to reach information sources about products and companies easier and faster. Consumer mind is affected by many other factors indeed. Education itself has pretty much effect on these concepts since it begins at very young ages and continues for many years. Most of the students have standard classes until the end of high school but when it comes to the college all of them have different professions according to their departments. While some of the departments are significantly related to the consumption and consumers, some of them are not even close to these topics. Business education is one of the departments in college which focus on consumer in all ways. These students gain different perspective and knowledge, become more informed consumers at the end of business education.

This study aims to reveal effects of business education that comprises many consumption and consumer related classes as marketing, brand management, production management etc. on consumer awareness and conscious consumption. Two different student groups will be surveyed for this study. One of the groups consists of first grade students who are brand-new to business education and mostly have general classes. The other group consists of students who are last grade and succeed many consumption and consumer related classes. The data will be analyzed statistically and two groups of students will be compared. This study is important for revealing effects of business education knowledge on consumer awareness and consciousness.

Keywords: Consumer Awareness, Conscious Consumption, Consciousness

Introduction

Nowadays knowing consumers who are defined as target market by companies, is very important than before to manipulate their behavior. Not only companies need knowledge but also their consumers demand information about companies, products, working process and relationship with environment. Especially increase in communication tools boosted consumer knowledge and resulted with increase in aware customers and conscious consumption behaviors which mean radical changes are essential for all industries.

Consumer awareness and conscious consumption is strongly related two concepts that affect framework of consumption patterns. They are two main determinative of how deep and strong consumer mind is. This kind of knowledge is very valuable for the whole companies in any sector. They are also main factors that shaping what consumers want and need. This precious knowledge is most likely a window that has different point of view which cannot be ignored for the sector. Conscious and awareness are under the influence of many factors. Education has pretty much effect on these concepts since it begins at very young ages and continues for many years. In this study specific college education's effect, education of business will be examined. Business education contains many consumption and consumer related classes as marketing, brand management, production management etc. Education is already a strong factor for knowledge, so business education should be more effective.

Consumer Awareness and Knowledge

Knowledge is main figure in determining consumer awareness and conscious consumption. Product knowledge is mostly overlooked topic within the consumer behavior literature. Marketing strategists able to target customer groups with all tools of the marketing mix if they have consumer knowledge based insights (Vigar-Ellis et al. 2015: 684).

Consumer knowledge can be described in simple terms as “what a consumer knows”. It has always been important factor in marketing strategies. Consumer knowledge is important in whole purchase decision process, from the first stage to the post-purchase phase. (Vigar-Ellis et al. 2015: 680).

According to Vigar-Ellis et al. (2015) early consumer researchers have realized the importance of consumer knowledge but they considered objective, subjective and experiential knowledge as they are similar to each other. Some researchers distinguished the meaning of consumer knowledge with their studies (Vigar-Ellis et al. 2015: 680). While objective knowledge can be described as accurate information about the product class, subjective knowledge depends on perceptions of what consumers know about the

product (Park et al. 1994: 71). Objective knowledge tend to be measured with right and wrong answers, subjective knowledge should be measured with scales that indicate consumer perceptions of how much they know about particular product (Vigar-Ellis et al. 2015: 680). Subjective and objective knowledge are largely independent. What consumers think they know is not actually what they know, also consumer disappointment with their purchase is related to their selection on what they think they want (Vigar-Ellis et al. 2015: 684).

The knowledge or information about a product class is not always main factor in shaping behavior. According to Park et al. (1994: 79) knowledge assessment is more based on product related experience in information search, product usage and ownership behavior than product class knowledge.

Students, as a target group of this study, have great mobility in accessing all kind of information with their insane adaptation speed to the new technologies. Internet usage makes all kind of information available and ready to use for users. According to study of Şahin and Kor (2009) consumers who are college students or graduate has shown the highest consumer right conscious. It is all about the accessing process to the information.

Consumer awareness is concerned with the rights and responsibilities of individual consumers during exchange process at the marketplace (Rousseau and Venter, 1995: 18, Makanyeza, 2015: 169). When consumers are aware of their rights and responsibilities, they make informed purchase decisions and getting protected against exploitation by companies (Makanyeza, 2015: 168). In many developing countries consumers are ignorant about basic consumer rights and quality & safety of the products. (Rousseau and Venter, 1995: 19). Rousseau and Venter identified five distinguishable characteristics of consumer awareness. They are bargain hunting, general consumer knowledge, product knowledge, information search and price consciousness (Rousseau and Venter, 1995: 18).

Consumers are powerful and can influence marketplace (Ibarra and Revilla, 2014: 75). Knowledge has productive role for the sake of community. Companies operate in market with mix of aware and unaware consumers about their products which may contain harmful substance. Companies does not disclose all their information if the level of the harmful substance is high (Li et al. 2016: 222). Such abuses forces consumers to be more aware and conscious on market. As consumer awareness increase, they became a strong force on companies (Makanyeza, 2015: 170). Consumers, who are aware of their rights and responsibilities, can make informed purchase decisions, pressure companies to produce more appropriate products, and protect themselves against exploitation (Makanyeza, 2015:

171). Informed consumers are the most effective guarantee of quality, their choice boosts efficiency of production by stimulating competition among companies (Baldwin and James, 2000: 140).

When consumers are not informed enough about their rights, they cannot force traders to act in compliance with consumer protection rules. It may result to consumer abuse (Mazlan et al. 2014: 450). This loop goes forever, and the one who acts unconcerned will absolutely be detrimental. It is clear that knowledge is in the center of this circle and keeps its importance for both sides.

Increased food based diseases and food scandals made many consumers worry about their health and lose their trust in foods (Bektas et al. 2011:470). According to Bektas et al. (2011) older consumers are more careful to their health, so their presence increases the level of knowledge and awareness about sensitivity to food safety of household. But awareness does not always affect the relevant behavior change in consumption, for example while consumers want to consume less salt, it is hard for them to estimate how much salt they consumed (Zandstra et al. 2016: 377). Also dangers of smoking are well known issue but not all consumers change their consumption patterns. According to the study of Yılmaz and Kulaç (2016), consumers tend to smoke more and prefer higher priced cigarette brands when their wage is increased. It is an exceptional, rare situation, but it doesn't change the truth that knowledge may be ineffective on changing consumption behavior.

Conscious Consumption

Carr et al. (2012) indicated that conscious consumption has been defined by scholars as “any choice about products or services made as a way to express values of sustainability, social justice, corporate responsibility, or workers' rights and that takes into account the larger context of production, distribution, or impacts of goods and services”. Mayer (1976) claims that consuming with an environmental thought, conservation of scarce resources and social justice became a new way for middle class liberals' progressive and humanitarian proclivities. Conscious consumption comprises of social, environmental, health and many other concerns. Most of the concerns are related to socially conscious behavior. Socially conscious behavior stands for the greater good of society, so it is indirectly linked to both environmental concerns and health concerns as a result.

Personality variables explain socially conscious consumers better than demographic and socioeconomic variables (Webster, 1975: 188). Anderson and Cunningham (1972) described socially conscious consumer as pre-middle age adult of relatively high socioeconomic status and occupational attainment. Compared to the less socially conscious

counterparts, they are tend to be more cosmopolitan but less dogmatic, less conservative, less status conscious, less alienated and less personally competent. Socially conscious consumers are member of upper middle class (Webster, 1975: 196). Social consciousness tended to vary directly with socioeconomic status, occupational status and inversely with age of household head (Anderson and Cunningham, 1972: 30). The socially conscious consumers are not likely visible on measures or attend to community activities, rather they are willing to purchase with the sense of responsibility without criticizing what others do (Webster, 1975: 195, 196). According to Brooker (1976) higher level of self-actualization indicates psychologically health of a consumer; these consumers not only care themselves but also benefits of society. Self-actualizing trait positively related to socially conscious consumption (Brooker, 1976: 111).

Consciousness mainly depends on consumer decisions which may be used for competitive advantage for companies (Süle, 2012: 213). Study of Mayer (1976) described socially & ecologically conscious market segment as large and, despite serious difficulties in reaching it efficiently, is well worth the effort. Brooker (1976: 107) also mentioned that a socially conscious consumer whose action improves quality of life in society become part of a new market segment. It is clear that their foresights and results were successful, conscious consumers are still part of high populated market segments. Environment conscious consumers are also considered in a growing market segment (Fraj and Martinez, 2006: 141).

Environment conscious consumers have a self-fulfillment feeling which courage them to improve themselves and take actions for new challenge (Fraj and Martinez, 2006: 141). Ay and Ecevit (2005)'s study on college students reveals the relationship between environmental conscious consumption behavior and social political subjects. According to Kaynak and Ekşi (2014) environmentally conscious consumers may also have anti consumption attitudes.

Consumer awareness to economic activities which cause environmental degradation is increased in recent years (Gil-Moltó and Varvarigos, 2013: 486). Various ecological and social problems cause decline in concept of life quality. Many consumer products which have deleterious effects exist in marketplace so products that alleviate some of these problems gain importance (Brooker, 1976: 107). Consumers tend to leave consumption and direct their sources to environmental activities after increase in pollution. This demand reduction pushes companies to adopt the clean technology (Gil-Moltó and Varvarigos, 2013: 501). As a result, companies which are perceived as socially and environmentally responsible are more favored by consumers (Dach and Allmendinger, 2014: 410). Also

many companies use green marketing as viable competitive strategy (Oyewole, 2001: 239).

There are various studies focused on environmentally conscious behavior of different consumer groups for various industries since ecological problems increased in recent years. Higher environmental behavior was found on consumers who most value ecological matters (Fraj and Martinez, 2006: 141). Psychographics variables are more effective than demographics in explaining environmentally conscious consumer behavior of college students (Straughan and Roberts, 1999: 570).

Companies must be very sensitive and careful about giving environmentally or socially promises. Consumers who have strong environmental consciousness are very sensitive to hypocrisy; they can be upset about companies which do not fulfill its promise to be environmentally or socially (Lin et al. 2015: 149). Hypocrisy or its perception may lead to serious consequences such as low purchase intention and losing customers (Lin et al. 2015: 152).

Education Effect on Consumer Awareness and Conscious Consumption

Consumer education which is related to fairness to all, equity and truth has important role to provide harmonious and civilized society. Being informed about their rights and responsibilities is the best protection for consumers (Ibarra and Revilla, 2014: 75). Educated consumers will be more responsible towards their own consumption and environment. It makes manufacturers and marketers to be more responsible (Mazlan et al. 2014: 448). Consumer behavior may be formed and shaped through social learning (Süle, 2012: 213). Schools and colleges are also interactive socialization areas where students spend most of their time.

Education starts at very early ages. Nowadays students are also consumer and customers for many market segments. Süle (2012) suggested that consciousness for critical thinking and problem-solving stages must be started earlier and be part of a lifelong process. Education is an important variable which influences levels of consumer awareness (Rousseau and Venter, 1995: 19). Bektas et al. (2011) pointed out that food safety awareness is positively linked to the education. To increase food safety knowledge, education level must be increased. Rousseau and Venter (1995) found different results among primary, secondary and tertiary education levels. Consumer with college education level has highest mean factor scores on general consumer knowledge and product knowledge. Most price conscious scores belonged to participants with primary school education. Educational level effects positively consumer awareness (Rousseau and Venter, 1995: 23, 24). Education of reference groups and family also affect

consumers. According to Ersoy and Nazik (2016)'s study, adolescents whose parents have higher education level, had shown more conscious behaviors.

In this study, business education in college is investigated. Consumer education literature is mostly pay attention to consumer education programs instead of general education system which includes education from primary school to higher education. Ibarra and Revilla (2014) have suggested that consumer education programs are necessary to ensure informed community about their rights. According to Mazlan et al. (2004) it is governments' responsibility to provide legal protection to consumers, even though consumer campaigns which is organized by government are successful, public knowledge about consumerism is still low in Malaysia. Consumer protection education establish more conscious consumer attitude (Süle, 2012: 213). But Mazlan et al. (2004) emphasizes that government itself will never be enough to educate consumers, non-government aligned organizations are also needed to fill consumer education gap.

Research Design and Analysis

This study aims to reveal effects of business education that comprises many consumption and consumer related classes. Two different student groups were surveyed. One of the groups consists of first grade students who are brand-new to business education and mostly have general classes. The other group consists of students who are last grade and succeed many consumption and consumer related classes. Hypotheses as;

Ha: There is a significant difference between first and last grade college students' attitude on general consumer knowledge

Hb: There is a significant difference between first and last grade college students' attitude on product knowledge

Hc: There is a significant difference between first and last grade college students' attitude on information search

Hd: There is a significant difference between first and last grade college students' attitude on price awareness

He: There is a significant difference between first and last grade college students' attitude on ecology dimension

197 business students were surveyed. Rousseau and Venter (1995)'s consumer awareness scale was adopted and translated in Turkish. General consumer knowledge, product knowledge and information search dimensions were used as original, price consciousness and bargain hunting dimensions were merged without discount related items. Also four items were used to measure ecology behavior. Short form of Maloney and Ward (1973)'s ecological attitude-knowledge scale were used in survey, this version of items were taken from the study of Maloney et al. (1975). Consumer and company related items were picked. The total survey consisted of 24 items.

Cronbach's alpha values are 0,705 for consumer awareness and 0,663 for ecology in this study. Reliabilities can be considered as high. Also data distribution is normal for this study. T-tests were used to test hypotheses. The results will also be checked with eta squared values to see the effect size.

Table 1: Paired-Samples T-Tests

		N	\bar{X}	SD	t	P	Levene's Test
Product knowledge	1 st Grade	89	4,35	0,439	-1,524	0,129	0,893
	4 th Grade	108	4,44	0,419			
Price awareness	1 st Grade	89	4,15	0,676	0,131	0,896	0,163
	4 th Grade	108	4,14	0,611			
Information search	1 st Grade	89	4,05	0,529	0,688	0,492	0,182
	4 th Grade	108	4,00	0,508			
General consumer knowledge	1 st Grade	89	3,75	0,486	-2,96	0,003	0,765
	4 th Grade	108	3,95	0,486			
Ecology	1 st Grade	89	3,56	0,711	-0,277	0,782	0,105
	4 th Grade	108	3,59	0,827			

According to T test results, there is only one significant difference exists. P=0,003 value of general consumer knowledge is lower than significance level 0,05. Only Ha hypothesis is supported. Effect size is $\eta^2 = 0,0427$ low for the general consumer knowledge. There is a significant difference with low effect size between first and last grade college students' attitude on general consumer knowledge.

Table 2: Means of Student Groups

	1 st Grade \bar{X}	4 th Grade \bar{X}	Total \bar{X}
Total Survey	3,97	4.02	4.00

Total survey results show that last grade students have higher mean points than first grade students, but it is not significantly different. With the 4 point mean of total survey, it can be said that students think their consumer awareness and conscious behaviors are relatively high. As mentioned before, it is subjective knowledge which depends on their opinion. Results do not include 2nd and 3rd grade students.

Conclusion and Suggestions

This paper tried to reveal consumer awareness and conscious consumption degrees of business students who are at the beginning and at the end of the education. It is expected that comparisons of the first and the last grade students would give some important clues because of two reasons. First of all, high education is strong factor for consumer awareness and

conscious consumption. Last grade students can be considered as graduated which means they are expected to act more conscious in all kind of behaviors. And the second reason is about the nature of business education which is mainly related to consumer and consumption. According to results, only one dimension, general consumer knowledge, is significantly different with low effect size, last grade students have higher point than first grade students for the general consumer knowledge. Contrary to expectations, it can be said that business education has very slight effects to awareness and consciousness for the consumer behavior perspective. It is clear that business education is not enough to change conscious and awareness of students.

There are several estimations to explain this result. Present-day college students were borned in more consumption-oriented world that made them customers at very early ages. Being active in marketplace caused their consumption patterns and market knowledge to be shaped in very early ages, long before college education. It can be recommended that conscious consumption should be topic for primary education to provide more conscious community in the near future.

When it comes to knowledge based subject, Internet cannot be ignored. Internet usage is not only very common but also the main source for knowledge based activities. An ordinary student can search for consumer rights, product information, substitutions, nearby stores and best prices in a few seconds. Also every product can be bought, all kind of opinions can be seen and every company can be complained via Internet and social media. It can be said that this powerful tool is removing the conscious and knowledge level between low and high educated consumers.

Survey technique which was used for this study has a disadvantage that would affect the result. The technique is asking consumers about their conscious and knowledge level, which means it was asked participants how much they know but while doing so, it was ignored the truth about what they really know. Simply what consumers think they know is not always what actually they know. They may be unaware of their knowledge and mislead the study. To overcome this limitation, in-depth interviews should be conducted with open ended questions. Also Semi-structured surveys may be a good choice to reveal degree of knowledge.

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The Evaluation of the Effects of Participation of the Spouses to the Expenditures of Marriage Union and Financial Contributions to Each Other During Marriage to the Regime of Participation in Acquired Property

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Abstract

Through marriage, spouses start sharing a common life. The fact that spouses begin to live together by combining their lives causes monetary relations between them to emerge as well as moral relations (Ülker,1973; Acabey, 1998). The legislator has regulated the monetary relations between the spouses under various provisions. In our study, we will evaluate the spouses' participation in the expenditure of the marriage union (TCL Art. 186/III) and the financial contributions of the spouses to each other in terms of the participation to acquired property regime (TCL Art. 218 - Art. 240). In the first part of our study, we will give a brief description of the participation to acquired property regime. In the second part we will refer to the obligation of the spouses to participate to the expenditures of the marriage union and the financial contributions of the spouses to each other. In the last part, we will evaluate the spouses' participation in the expenditure of the marriage union and the financial contributions to each other in light of the participation to the acquired property regime.

Keywords: Marriage Union, Property Regime, The Regime of Participation in Acquired Property

Introduction

Monetary issues are often ignored between spouses before marriage and during the non-problematic times of marriage. Spouses work together to make a living, contributing money or labor without even thinking about compensation. For the spouses, the sacrifices made for each other are for the future of their shared family (Sarı, 2007). However, when problems begin to arise in the marriage union, the financial issues between the spouses begin to

come to the fore. Taking this into consideration, The legislator has regulated the monetary relations between the spouses under various provisions (Sarı, 2007).

The legislator has regulated the monetary relations between the spouses under various provisions. The obligation to participate in the expenditures of the marriage union (TCL Art. 186/III) in the general provisions of marriage, and the marriage union property regimes (TCL Art. 202 - art. 281) which regulate the rights of the spouses on their assets, are the provisions governing the monetary relations between the spouses.

In our study, we will evaluate the spouses' participation in the expenditure of the marriage union and the financial contributions of the spouses to each other in terms of the participation to acquired property regime which is accepted as the legal regime in the Turkish Civil Law.

The Participation to Acquired Property Regime

In the participation to acquired property assets, the property assets of each spouse are separated into two groups, being the acquired property assets and personal property assets (Turkish Civil Code Art.196) (Hausheer, Geiser and Kobel). While the personal property assets are excluded from apportionment when the property regime is terminated, the acquired property assets are apportioned between the spouses.

The participation to acquired property assets contemplates each spouse to enjoy title to the respective personal property thereof throughout the maintenance of the property regime as is the case with the partition of property. Each spouse may, within legal limits, individually manage the personal property assets and the acquired property assets under the title thereto, benefit the same and dispose of the same also within the participation to acquired property regime (Turkish Civil Code Art.223/I) (Sutter and Kobel, 2009). Hence, the participation to acquired property regime is based on the partition of property system (Zeytin, 2008; Sutter and Kobel, 2009).

When and if the property regime is terminated, the acquired property assets and the personal property assets of the spouses are separated from one another (Sutter and Kobel, 2009). In the participation to acquired property regime, the acquired property assets are defined by Section 219 of the Turkish Civil Code as the property assets, which the spouses may acquire against certain considerations as of the institution and throughout the maintenance of the property regime. The second paragraph of the same section lists examples of certain acquisitions of the spouses in five subparagraphs. Accordingly;

- Acquisitions gained in consideration of labour,

- The payments by social security or social welfare institutions and agencies or the funds established for relief to employees and the like entities,
- Damages paid due to the loss of capability to work,
- Income derived from personal property, and
- The assets that substitute acquired property assets are considered as the acquired property assets. The items listed are not of restrictive but of exemplary nature.

The items listed under Section 220 of the Turkish Civil Code are, legally, the personal property items. Such personal property items are:

- Any item that is intended solely for personal use of either of the spouses,
- The property assets, which the concerned spouse owned at the time of institution of the property regime, those acquired through inheritance or those acquired through outright gains,
- Moral damages receivable,
- Assets that substitute personal property assets.

All properties of spouses which are not proved to be personal property are acquired properties (Hegnauer and Breitschmid, 2000).

In the case of liquidation of the property regime, the debts and obligations in respect of the acquired property of each spouse are deducted from the value of the acquired assets (Acabey, 1998). Each spouse is entitled to claim on the half of the value of the acquired property assets of the other spouse. Such claims are, thus, net off.

Participation of Spouses to Conjugal Union Expenses

Conjugal Union expenses are the expenses made to satisfy the needs of the family (Gürpınar 2013). Spouses are obliged to participate in the expenses of the union in proportion to their labor and assets pursuant to the principle of equality of spouses (Gürpınar 2013).

Primarily the monetary contribution of the working spouse comes to mind when meeting the expenses is considered. However, the labor of the spouse who doesn't work outside of the home and do the housework takes care of the children or who works in other spouse's business without payment is also regarded as a contribution to expenses of the union (TCC Article 196/II) (Dural, Öğüz and Gümüş, 2013; Gürpınar, 2013; Kılıçoğlu 2216).

The liability of participating in the conjugal union expenses is in effect over the course of marriage for both spouses. This obligation continues even if the spouses live in separate homes (Dural, Öğüz and Dural, 2013).

A. Conjugal Union Expenses

The concept of union expenses includes the basic needs of the family and conditionally, personal needs of family members. To begin with, expenses related to home (expenses like rent, mortgage loan installments, heating, electricity, and water), health expenses, social security expenses, tax expenses and social and cultural expenses of the family fall into union expenses. Besides that, personal basic needs of spouses and children are also included in conjugal union expenses. Personal basic needs of family members included in union expenses can be personal care, health, education, transportation, sportive and cultural activity expenses (Gürpınar, 2013).

Family members of the elementary family are primarily father, mother, and children. Nevertheless, the children from previous relationships of any spouse who live in the same house and relatives who the spouses are liable to look after are also regarded as family members and their needs are met from the family budget (Gürpınar, 2013).

B. Agreement between Spouses Regarding Participation in Expenses of Conjugal Union

Spouses may enter into an agreement regarding participation in expenses of conjugal union. This agreement made between the spouses is not a formal one (Dural, Öğüz, Gümüş, 2013; Gürpınar, 2013; Kılıçoğlu, 2016). Mostly this agreement is made via implicit declaration of intent. In case the spouses cannot reach to an agreement in terms of participation in expenses, they can request judicial intervention (Gürpınar, 2013; Kılıçoğlu, 2016).

C. Applicable Sanctions in Case of Nonparticipation

Either one of the spouses may apply for compulsory execution to claim his/her bad debt due to nonparticipation in expenses of conjugal union (Dural, Öğüz and Gümüş, 2013; Gürpınar, 2013). Compulsory execution can be imposed on the other spouse provided that monetary contribution is not received. However compulsory execution cannot be imposed on a spouse who fulfils his/her debt to participate in expenses by way of labour such as taking care of kids and cleaning the house. Therefore if the spouse who participates in expenses of conjugal union by way of labour neglects to do this, judicial intervention might be demanded (Gürpınar, 2013).

D. Prescription

Receivables with regard to participation in expenses are subject to common ten-year prescription period regulated in Article 146 of Turkish Code of Obligations as of the date they become due (Dural, Öğüz and Gümüş, 2013). However prescription period ceases as long as the conjugal

union of spouses continues pursuant to Article 153 of Turkish Code of Obligations.

E. Determining the Contribution of Spouses to Conjugal Expenses and Assessing in Terms of Marital Property

In compliance with the principle of equality of spouses, both spouses shall meet the conjugal union expenses together. But pursuant to the expression of “in proportion to their labor” stated in Law, the rate of contribution for each spouse shall be determined by considering their incomes, personal skills, and roles they have undertaken in the family. Spouses can freely make an agreement regarding the participation to union expenses. If the couples cannot mutually agree on this matter, the court determines the monetary contribution of each spouse upon application of one of the spouses goes to law. The labor of the spouse who does the housework, takes care of children or who works in other spouse’s business without payment shall also be taken into consideration (TCC Article 196/II). If the spouses are living together, the monetary contribution of each to meet the conjugal union expenses can only be requested from the court for the previous year and for future years (TCC Article 196/III).

Pursuant to Turkish Civil Code, the participation of spouses to union expenses in proportion to their labor or assets and spouses’ right to claim half of the value of acquired property due to the regime of participation in acquired property complete each other in terms of establishing the equality (Zeytin 2008). Thus the monetary return of the labor of spouse who exerts themselves to do the housework and take care of children is recognized (Zeytin 2008).

In accordance with the regime of participation in acquired property, the contribution receivable of each spouse arising within the period of the regime of participation in acquired property is included in the acquired property of spouses (Gümüő, 2008).

Material Contributions of Spouses to Each Other During the Marriage

Material contributions of spouses to each other during the duration of marital property regime without being rewarded for their efforts can be regarded as donations or appreciation increase of value) share receivable pursuant to the regime of participation in acquired property.

If the gratuitous contributions of spouses to each other with the intention of donation, this contribution is included in personal assets in accordance with the regime of participation in acquired property. Pursuant to marital property regime, none of the spouses can claim any receivable from the other spouse in terms of property (Zeytin, 2008).

On the other hand, the receivable that each one of the spouses becomes entitled to collect due to the contribution they made to the other spouse regarding the acquisition, improvement or maintenance of a property or without getting a proper return is called appreciation share receivable.

The usual gratuitous financial and moral support received by each spouse to other in the conjugal union in contemplation of being a family is regarded as a contribution to fulfilling the obligations arising from the conjugal union in the regime of participation in acquired property. Therefore without any necessity to prove the contribution made to conjugal union each spouse will have a contribution receivable amounting half of the surplus value of the other spouse. In terms of appreciation share, on the other hand, it is required the contribution of spouses to each other should be an extraordinary contribution and this contribution should be proven by the claiming spouse (Zeytin 2008)

In accordance with Article 227 of Turkish Civil Code; increment value share stated in the regime of participation in acquired property is the right-to-claim of one of the spouses holds due to his/her contributions without getting any or proper compensation to acquisition, improvement or protection of a property belongs to other spouse. In this sense, increment value claim in the regime of participation in acquired property represents a different right to claim than receivable due to participation (Zevkliler, Ertaş, Havutçu and Gürpınar, 2012). In order for one of the spouses to have the right to claim, the following conditions should be sought:

- Primarily one of the spouses should have been contributed to acquisition, improvement or protection of a property which belongs to other spouse (Sarı, 2007; Dural, Öğüz and Gümüş, 2013; Öztan 2015). Contributed property could be acquired property or personal property (Hausheer, Geiser and Kobel, 2000; Sarı, 2007; Zeytin, 2008). This contribution might be monetary as well as performance of works (Hausheer, Geiser and Kobel, 2000; Hegnauer and Breitschmid, 2000; Sarı, 2007; Dural, Öğüz and Gümüş, 2013).

- Either one of the spouses should not have the intention of granting when he/she contributes with a personal or partnership property (Sarı, 2007; Zeytin, 2008; Dural, Öğüz and Gümüş, 2013; Öztan, 2015). If the contribution of one of the spouses to other spouse's property is granting pursuant to Turkish Code of Obligations, increment value is out of question (Zeytin, 2008).

- Contribution should be gratuitous in part or in whole (Sarı, 2007; Öztan, 2015). Pursuant to Article 227/I of Turkish Civil Code; one of the spouses should contribute to a property of other spouse without getting any or proper compensation.

- There should be an increase in the value of the contributed property during the liquidation of matrimonial property (Dural, Ögüz and Gümüş, 2013). However the increment value of property should be due to the changes in supply and demand equilibrium in the market. Increment values arising due to the efforts of the spouse cannot be regarded as increment value debt within the scope of liquidation of matrimonial property (Dural, Ögüz and Gümüş, 2013). If there is a loss of value during liquidation, the initial value of contribution is grounded on (TCC a. 227/I). In case the property is disposed before liquidation, increment value share to be paid to other spouse shall be justly appraised by judge (TCC a. 227/II).
- Increment value share should not have been waived (Sarı, 2007; Öztan, 2015). In accordance with Article 227/III of Turkish Civil Code; “Spouses can waive the receipt of increment value share by a written agreement or change the rate of share”. Waiver might be limited with only a certain property or with regard to all contributions during the period of marital property regime (Sarı, 2007) In case one of the spouses don’t claim a counter action for his/her contribution, this cannot be regarded as waiver of increment value share, unless it is mutually agreed on otherwise by the parties (Dural, Ögüz and Gümüş, 2013).
- It is necessary for the marital property regime to be expired and liquidation should be requested (Sarı, 2007). Because the right-to-claim based on contribution of one of the spouses without getting any or proper compensation to acquisition, improvement or protection of a property belongs to other spouse can be alleged during the liquidation. Increment value share cannot be claimed during the continuation of the regime of participation in acquired property (Sarı 2007).

Conclusion

When it is assessed in terms of the regime of participation in acquired property, the debt of participation during conjugal union falls within acquired property category. Therefore the due receivables arising from participation in expenses of conjugal union are subject to sharing between the spouses as acquired properties during the liquidation of matrimonial property.

In case financial contributions of spouses to each other during the marriage are accepted as grants within the frame of Turkish Code of Obligations, they are regarded as personal property and fall outside of sharing during the liquidation of matrimonial property.

In accordance with the regime of participation in acquired property, if the contribution of a spouse to other is made without the intention of granting and without getting any or proper compensation to acquisition, improvement or protection of a property in the regime of participation in acquired property, it is regarded as increment value debt. Debt of increment value share is a right-

to-claim for the contributing spouse that he/she can collect during the liquidation of matrimonial property.

Acknowledgements

The author of the paper express their appreciation to Scientific Research Projects Coordination Unit, Pamukkale University for their support (Project No: 2017KKP015)

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The Role of Civil Society in the European Integration Process in Kosovo: EU Mechanisms and Instruments for NGO Sector Development

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Abstract

European integration is one of the most demanding processes for Kosovo institutions and society. While citizens of Kosovo overwhelmingly support membership in the European Union, assessment reports specify that Kosovo and its institutions still need serious reform to achieve this goal. The integration process offers mechanisms that civil society namely NGO sector can use in order to monitor and give direct contribution for this process, which could also impact to transform Kosovo institutions and society. The Annual Progress Report of the European Commission requires from governments and institutions of countries aspiring for integration to the EU to pursue sound governance practices that allow civil societies to have an impact on policy and decision-making processes. Relying on this requirement, NGOs can use the process as a way to shape the organization and function in their society and institutions. At this stage the role of Kosovo NGO's whose focus is political activism that tends to increase demands for democratic participation in the political system is more than needed. These NGO's apart from monitoring role towards the Government, they can become one of the main partners for EU Integration Process, especially to the European Commission (EC). The aim of this paper is to analyze the role of NGO's as part of civil society in the whole process of EU integration and current possibilities for improving their capacities and contributions towards the public policy and decision making process.

Keywords: NGO Sector, EU Integration in Kosovo, Kosovo Institutions, Decision Making

Introduction

It has been observed in various EC reports that civil society organizations in Kosovo are weak. The European integration process needs civil society organizations as its partner, and the EC is committed to

developing and supporting it. This is the reason why the EC included provisions for civil society support in its enlargement strategy papers and financial frameworks. In most cases, the European integration process and civil society organizations are natural allies and need each other to progress through the process. Civil Society Organizations in Eastern Europe have used instruments and financial resources provided from EC to design projects for their active participation in defining policies and strategies that have raised public awareness for the EU integration process. The integration into the EU has been the main factor in affecting a transformation of civil society in the Baltic States (Spurga, 2005).

Kosovo participates in the European integration process via the Stabilization and Association Process (SAP)—the central mechanism driving EU relations with the Western Balkans as they work towards accession. The Annual Progress Report of the European Commission mainly evaluates authorities. As the Commission only evaluates the level of development of civil society, it cannot control or regulate civil society as that depends on national authorities (KHDR, 2008). However, NGO sector should secure a better role of the civil society on evaluation of effect of particular laws, public policies and strategies. In general, experience of the South-East European countries has proved that support and participation of the civil society organizations is very important for the accession process. NGO sector in Kosovo through their civic and political activism can and should ensure increased democratic participation in policy making during the EU Integration process, thus increasing monitoring capacities of civil society organizations towards the Government. Besides active participation in the process NGO's can play an important role in monitoring. The monitoring process entails several EU instruments. NGOs can use European Partnerships as instrument to influence the EU integration process.

This paper will analyze the impact of the NGO sector for the EU Integration process in Kosovo starting from their role in defining citizen needs, analysis of policy making process, control and evaluation of effect of particular laws and EU compatibility check of the approved laws and their assistance in designing public policies by using EU mechanisms and instruments.

Government – Civil Society cooperation

The Kosovo Government has not established institutional mechanisms or a policy for developing relations with NGO sector in order to facilitate the inclusion of NGOs in the policy making process. The law on NGOs does not restrict participation of NGOs in the decision-making process however it doesn't regulate government-civil society cooperation and the institutional forms it could take (LAW NO.03/L-134, MPS, 2005).

The role of the NGO sector as part of civil society should be to actively provide citizens a trustworthy channel through which to respond to state outputs and influence state decision-making by conveying citizen's stands and inputs. Organized and coordinated NGO networks can provide this trustworthy and reliable communicating channel of citizen's wants and needs to the state. If this voice is not seriously heard from state institutions in Kosovo, it will lower the motivation of civil society for advocacy. The level of factual democratization in Kosovo carried out after transition of competences from UNMIK to Kosovo institutions from 2002 onwards is manifested most clearly through the level of civil society development. On the other side the state authority is manifested through marginalization of civil society respectively NGO sector (Sterland, 2006). Recent experiences in Kosovo show that the existence of political parties, of the elected Government and parliament and the media are not sufficient preconditions for the active role of NGO sector as part of civil society in decision making process as long as there is no strategy and mechanisms for cooperation. Government officials cooperate with a very restricted range of known and trusted NGOs, rather than engage in the more politically challenging process of communicating with more NGO leaders, thus allowing more space for NGOs to influence decision making process...' (TACSO, 2010).

Before the declaration of independence the Agency for Coordination of Development and European Integration (ACDEI) was another mechanism of institutional cooperation between the government and civil society. The ACDEI has been transformed into the Ministry for European Integration, MEI. The MEI is the government body charged with managing Kosovo's activities towards achieving integration and for coordinating EU support to Kosovo. Other attempts at the central government level to institutionalize a substantive role for civic participation in policy dialogue appear to have been unsuccessful. Although the government superficially recognizes the importance of NGO sector as an important part of civil society, it has no clear vision of helping NGOs to develop because Government structures want to keep more power for themselves (Progress Report for Kosovo, 2009). International Community sponsored mostly NGOs oriented towards providing services as opposed to those interested in direct political activism. Kosovo's Government is not interested in either of them. This is primarily a consequence of highly centralized political party structures in the Government, which prevents most of the NGOs from having greater access to the policy process. On the other hand, there is a very small number of NGOs that actually have explicit and well formulated policy goals which they can actively lobby for' (KIPRED, 2005). The passive role of the NGO sector towards the government sometimes reminds us of the culture of peaceful relations between the two during the 1990s, although at that time

the goal of cooperation was a united front and coordinated strategy against the Serbian regime. Consequently, the communication channels between the government and NGO sector remain weak. Much of it is dependent on individuals. If an individual in a government institution has had experience in the NGO sector that can help foster a positive approach towards NGOs. In other situations the cooperation might work if an individual is a member of a NGO that supports certain government policies. In the current Government we have many individuals who were appointed as high governmental officials (mostly as deputy ministers). Before they joined to PDK (political party that won last elections) they mostly use to work within the NGO sector. Still, there are ad hoc meetings between the government and the NGOs but they lack elements of genuine cooperation. Compared to the government, the cooperation between the parliament and NGO groups is little better. The cooperation of the parliament with NGOs has steadily improved over the years, and now NGOs regularly participate in the activities of the parliament. Representatives of NGOs believe that there is much more room for cooperation.

Kosovo institutions are not the only one to be hold responsible for this weak relationship with the NGOs. Because of its historical roots, Kosovar NGO sector is fragmented. There is a lack of cooperation and solidarity between NGOs and lack of understanding of the broader role that NGO sector should play within the institutional socio-political context. Most of them have proved short-lived and ineffective with few exceptions. Over the years only few NGO's have established more effective networks of cooperation for lobbying and monitoring different projects related to important issues of public interest. (Kipred, 2005).

However, not all civil society experts think that situation is completely black. Some of them see significant improvements in the relationship between the two sectors with the fact that in recent years (before and after the independence) several ministers, members of parliament and political advisors came from the civil society, respectively NGO sector. Numerous people have left NGOs and joined political parties or the government. The shift from civil society to government is perceived positively, as people who have learned key concepts about management and networking in civil society bring their experience to the government. Although this might be seen as positive step, there is the risk that as NGO elites want to keep the opportunity to become government officials, there will be less pressure from NGO sector towards the government. In general, since the establishment of Kosovo provisional institutions in 2002 and onwards, institutionalized cooperation between the civil society, respectively NGO sector and the Government remains weak. The European Commission's Progress Report for Kosovo 2008 stated: 'Government does

not have a strategic approach for cooperation with civil society organizations” (Progress Report for Kosovo, 2008). Unfortunately still in 2016 this reflects the essence of the problem.

EU mechanisms for NGO sector

Due to Kosovo’s unresolved political status, in 2003 a special instrument called the Stability Tracking Mechanism (STM) was designed to enable Kosovo to participate in SAP. Although the STM did not answer the question of contractual relations between Kosovo and EU, it still provided a framework for Kosovo to engage individually (separate from Serbia) in the process (KHDR, 2008). After the declaration of independence, Kosovo moved from the STM process to SAP. But this was difficult, due to the fact that five EU member states have not yet recognized Kosovo’s independence, putting the European Commission in a difficult situation and also making negotiations on the Stabilization and Association Agreement (SAA) difficult. However, the SAA between the EC and Kosovo is signed in 2015.

One of the main instruments within the SAP that can be used from NGO sector in order to influence the integration process is the European Partnership priorities document. This document was initiated in the Thessaloniki European Council in 2003. The Council has stated that the European Partnerships are a means to materialize the European perspective of the Western Balkans and medium-term reforms which the countries need to carry out, to serve as a checklist against which to measure progress, and to provide guidance for programming of EU assistance (Council Decision of 30 January 2006). European Partnership document is based on the state of play of each country and addresses that country’s needs and the actions it needs to undertake in order to move closer to the EU. All actions and recommendations in the Partnerships are based on short-term (one to two years) and medium term (three to four years) reforms that countries need to implement.

European Partnership document requires from the designated country an action plan containing detailed measures, timetables and budgets for implementing them, in order to respond to the priorities of the partnership document. The implementation of the action plan is evaluated annually by the Commission and the progress will be monitored by SAP mechanisms. For example, if access to information is a concern for NGO sector, they should appeal to the European Commission to address this concern within the European Partnership. Consequently, the EC has a huge bargaining power in the process and will address issues regularly with national authorities, and follow up whether the government has implemented their recommendations and report accordingly in the progress report. The fact that EU assistance is based on recommendations in the European Partnership

document gives another tool to NGOs to lobby both the EC (in Kosovo, the European Commission Liaison Office) and with national authorities as they complete annual programming. Once their concerns are incorporated into the European Partnership document, NGOs have the right to insist that the measure receives EU financial assistance through the Instrument for Pre Accession (KHDR, 2008).

The influence of NGO sector through EU instruments

If NGOs want to promote their agendas, they need to actively take part in the EU Integration process although this can be a complex and demanding task. 'One of the well-known obstacles to enhancing the EU's support to civil society in [candidate] countries is posed by the bureaucratic procedures of aid programs' (Raik, 2006). The timeframe for conclusion of Stabilization Association Agreement (SAA) and membership negotiations (accession) is not known, however it is expected to take considerable time. While SAA is mainly trade related, membership negotiations cover all of the criteria described above and NGOs will be invited to actively take part in this final stage of the process. Experience from Eastern European countries that have joined the EU shows that in countries where civil society has been better informed, the more influence it had on this process (Sterland, 2006).

One of the most significant instruments to monitor the process is the European Partnership Action Plan (EPAP), as a public document and the basis in most of the meetings within the process. EPAP covers subjects that are previously listed in the European Partnership document. NGOs can use it to monitor the implementation of the plan. Experience has shown that countries in the early stage of integration lack the capacity to implement policies and strategies, and Kosovo is no exception to this. Thus, policymaking is another aspect of the process to be monitored, especially if the laws are enacted on time, as EPAP will require a number of new laws. Specifically, the NGOs should cooperate with the EU agencies in the country responsible to ensure that each draft law passes an EU compatibility check. Another way to monitor and take part in the integration process is to ask that NGOs participate in the Committee for European Integration in the National Assembly. In general, the role of the NGO sector for the EU integration process in Kosovo is neglected both by the Government and many NGO representatives although NGOs dispose several mechanisms by which it can achieve particular goals and results in a faster and more effective way (USAID, 2008).

Conclusion

The role of NGO sector in the process of the European integration should be focused on initiating and conducting a more intensive public

dialogue on joining of Kosovo to the EU. One of the main goals of these public debate supported from local media should be to inform the public on the process of the European Integration. Public campaigns will also help define citizen's needs. Involvement and activities of the NGOs in the process of reforms and monitoring using EU mechanisms and instruments should be increased. It is also important to define their agendas and build constituencies. Thus, a better cooperation between the Government and NGOs could be established. It is the duty of the Government to create a favorable climate in order for NGOs to become more functional. Because the Government is dominated by rigid party structures it is not expected that they will be the first ones to start this reform. If communication between Government and civil society representatives brings no results NGO representatives could use EU Integration as a process in order to address this concern within the European Partnership instrument.

NGOs are among the most important actors in the complex constellation of stakeholders in the EU Integration process. As the integration process develops in the future, Western Balkan countries will continue working to secure and/or improve present positions with regard to their European agendas. This ultimate goal continues to be challenging and it will call for an action from multiple society layers, whereas NGOs as an important part of civil society can contribute to the quality of and public support for pre-accession related reforms. NGOs could play an indispensable role in sustaining democratic development and good governance, especially against the background of historical complexities and challenges of transition in Kosovo. The leadership of both Kosovo institutions and NGO sector in cooperation with international actors involved in Kosovo should prepare a strategy in order to strengthen the role and participation of NGOs in the European integration process. There are several instruments that NGOs can use to participate in the process. Kosovo needs to develop a sustainable triangle between the government, the EU and civil society relations. NGOs need also to reach out more often to their target groups in order to create stronger networks between them. It is important to shun the individualistic and narrow interests when it comes to networking, and see the benefits of NGO joint action, which is ultimately a more powerful force compared to their individual capacities. They need to reach out more to their target groups and apply a more focused approach in their mission, rather than opportunistically shifting towards donor priorities.

NGOs interested in impacting state policies should look for the instruments and mechanisms that will help reshape and improve their cooperation with the Government structures. In order for this to happen a contribution from both NGO sector and of the state is needed. Only when this happens will the new generations of Kosovo NGOs see the state as their

protector, and political leaders will see civil society representatives as their supporters rather than a threat to themselves, only then, will a truly vibrant civil society be able to develop in Kosovo. However, this is not an easy mission.

The Republic of Kosovo, in its ninth year as an independent state is facing significant challenges in addressing international and domestic events. Kosovo made global headlines when the International Court of Justice declared that Kosovo's unilateral declaration of independence did not violate international law. The country's image in the international arena was seriously tarnished when a member of the Parliamentary Assembly of the Council of Europe, Dick Marty, came out with a report on alleged criminal activities of the Kosovo Liberation Army during and after the war. Kosovo failed to become member of UNICEF but succeeded to become member of UEFA and FIFA. The dialogue between Kosovo and Serbia may improve regional stability and cooperation, but as EU does not have a unified position on Kosovo independence, it may face similar problems also when it concerns the outcomes of the dialogue. With BREXIT on one side the Western Balkans enlargement process might slow down. Consequently, the role of pro-European governments (most of them highly corrupted) could fade and this is another opportunity for the euro-skeptic and nationalist parties to come back on stage. In the meantime, the Kosovo Government will continue to struggle for a stable coalition, and their main challenge will be to rally the political potential in order to fight organized crime and corruption. Attempts to vote the demarcation process with Montenegro (in order to get visa liberalization) and the establishment of the Association of the Serbian Municipalities may bring back the oppositions tear gas in Kosovo parliament as it happened for several months in a row in 2015 and 2016. Consequently, the coalition will face with serious difficulties in order to manage and implement fully their executive mandate, specifically in the northern municipalities, in order to build a state with a functional rule of law.

Within this context, NGO sector as part of civil society can play a positive role and contribution in determining the parameters and the quality of governance while Kosovo's society goes through the complicated state building and EU integration processes.

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Integrated Management Model for Jerusalem: The Peace of Center for War Center

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Abstract

Jerusalem is one of the world's oldest cities and is considered as the center of the World. The city is considered holy in three great divine religions. "Many things that are sacred to Judaism and Christianity, is based in most of the sacred and common holiness of Jerusalem to Islam". Coexistence of different religious groups in the city, causes the fight to ensure the domination. Core reason of inability for sharing Jerusalem: Christian, Jewish and Muslim neighbourhoods and they can not be distinguished sharply from each other sanctuary. While the aforementioned three religions basically take peace and reconciliation as a basis, Jerusalem has become a center of war, blood and suffering throughout its history. No culture or religion could achieve complete control. This situation causes that the important sacred religious heritages of the three religions remain under threat. And even when dominance has been achieved for a while, the threat continues. The powerful ones will not respect for the sacred values of others. The city is considered as one of the city's in World heritages in danger by UNESCO and being in this status is not sufficient for the protection of this most important holy city in the World. Ensuring and sustaining absolute peace for Jerusalem is required. Jerusalem must be a city of peace. This can be achieved with common sense and an integrated management. In this study, it is emphasized that Jerusalem can be the center of the world peace and an integrated management model is proposed

Keywords: Jerusalem, Holy City, Integrated Management

Introduction

Jerusalem located in the Middle East is the oldest city in the World. It lies between the Mediterranean Sea and the north boundary of the Dead Sea. Israel and Palestine claim Jerusalem as their capital. In 2017 Jerusalem with East Jerusalem has a population 890.000 or above 1.000.000 and its area is

125. 1 km (<http://worldpopulationreview.com/countries/israel-population/>). Mediterranean climate reigns in the city. The most important problem of the city subsequent to the ongoing wars throughout its whole history is the water scarcity. Old Jerusalem became one of the World Heritage Sites in 1981. The city is on the list of “World Heritages in Danger”.

A city called “Rušalim” is mentioned in the texts of the Kingdom of Egypt and In old Hebrew this city is known as Jerusalem (Yerushalayim) (Lapierre and Collins, 1994:32). Jerusalem is mentioned as 'Urušalimin' in the Amarna Letters which are the most important samples of “cuneiform scripts culture” of the Old Near East in the 14th century BC. In Arabic, (Quds-i Sherif) Jerusalem means “The Holy” or “The Holy Sanctuary”. The Muslims called the city as “Madinat Bayt al Maqdis” (City of The Temple). The city has two parts. East part of it was called as Shalem and west part of it where altar is located was called as Moriah. Abraham named west part of it as “Yiru” (Jeru) meaning awe. When its two parts united, it got the name of JeruSalem. Yerushalayim first appears in the Bible, in the Book of Joshua. The name is a combination of Yireh (God will see to it) and Shalim (The God – Name of the God). The word “Shalim” used as Shalom (in Hebrew) and Salam (in Arabic) also mean “peace” and Yerushalayim means “The City of Peace”.

In Hebrew tablets Jerusalem was stated as “A snake or scorpion injured no one in Jerusalem”. But in this sacred city where snakes and scorpions injure no one, people shed blood throughout the history. No one of the three monotheistic religions (namely Judaism, Christianity and Islam) has ever attain complete domination over Jerusalem which is a commonly holy and important city for them. Today, Jerusalem is the focal point of the Israeli – Palestinian conflict. Capture of Jerusalem by one of them means that the city is under threat. The most sacred values and sanctuaries of each three religions are located in it. The sanctuaries are mixed each other and they cannot be separated. Thus the communities will live together in Jerusalem and achieve the peace together. All the religions advise human beings “the Peace”. If the humankind can't achieve the peace in Jerusalem, the world peace can never be achieved. This is a challenge for the humankind.

From this point of view in this study, a management model based on the peace and coexistence is proposed. Historical background of the city is examined, the problems are analyzed under the four main headings, opinions of the parties and the other nations are included and solution proposals of the international organizations are dealt with. In the light of compiled information, an integrated Jerusalem management model is proposed and in the framework of this model conversion achievability of Jerusalem into a Peace City is discussed.

History of Jerusalem – History of the War

While seeking reconciliation in Jerusalem, 5000-year history of the city must be reviewed. Long history of Jerusalem has essentially become a history of wars, struggles and pain. The city has been completely destroyed twice, occupied 23 times, attacked 52 times and captured 44 times. History of the war must be looked at when the city of peace is designed.

Ancient Period

First human being: It is believed that Adam lived in Jerusalem after he was banished from the heaven. Abraham built an altar to sacrifice his son Isaac. The altar in Jerusalem remained until the Noah's Flood and Noah rebuilt it after the Flood. Jerusalem was inherited by Noah's son Shem. Shem and his descendants lived in Jerusalem. They taught God's orders there. The city expanded and Shem became the king and he was granted the title of "Honest King".

First Settlement: According to the archeologists there was life in the city in the Copper Age and there was settlement in the city in the Bronze Age. First settlement was in 4000s BC. In the late Bronze Age, the city was an Egyptian vassal city-state. This Egyptian garrison developed in the period of Ramesses. In this period Canaan Region formed part of the Egyptian Empire.

The First Temple Period: In 10th century BC, King David united the twelve tribes and established the United Kingdom of Israel and he captured Jerusalem which then he made it the capital of the Kingdom. Solomon, son of the King David, built the Holy Temple in 970 BC. The First Temple was the most important center of Jewish worship. Upon Solomon's death the Kingdom of Israel split. Jerusalem remained as the capital of the Kingdom of Judah for more than 400 years. Jerusalem was invaded by Assyrians in 722 BC and by Babylonians in 587 BC. Babylonians destroyed Jerusalem and they expelled the Jews from Jerusalem.

The Second Temple Period: In 538 BC the Persians captured the city and allowed the Jews to return to Jerusalem to rebuild the Temple. In 516 BC, Jerusalem resumed its role as the center of Jewish worship. The city was conquered by the Macedonians under the command of Alexander the Great and then Jerusalem and Judea came under the control of the Hellenic Kingdom. In 198 BC, Jerusalem turned into a Hellenized city-state. In 168 BC, Hasmonean Kingdom was established and it made Jerusalem its capital.

Roman Period: In 63 BC, Romans captured Jerusalem (Aytürk, 2011: 100). Judae remained between the Roman Empire and Parthian Empire. As Rome became stronger, Jerusalem became an affiliated kingdom of Jerusalem, the Temple was expanded, the city developed and it became the capital of the Roman province. In AD 70, the second Temple was destroyed

in Jewish revolt. Hadrian, the Roman Emperor, recaptured the city and renamed it as “Aelia Capitolina”. Jews could enter the city once a year.

Middle Ages

Byzantine Period: The Byzantine Emperor made Jerusalem a Christian city in 4th century CE (Aytürk, 2011:103). Even if the Jews were prohibited from entering the city, the population of Jerusalem reached 200.000. The Byzantines ruled the city for a long time, Jerusalem remained between the Byzantine and the Persians for a while and the Sassanians captured Jerusalem for a short time. But Byzantine recaptured the city each time (629 CE)).

Early Islamic Period: The Muslims captured Jerusalem from the Byzantine (620 CE), Jews were allowed to enter the city and the Caliph Umar assured that Christians and their holy places would be protected⁷. Al-Aqsa Mosque, the first mosque of the city, was built. The Dome of the Rock with its grandeur dome was built in the late 7th century CE. The city was captured by various tribes and Jerusalem’s prominence gradually diminished.

The Crusaders and The Ayyubids Period: The Fatimids expelled Christians from Jerusalem. Thus the crusades started (1096 – 1272), The Crusaders who made an extensive massacre established the Kingdom of Jerusalem. In 1187 the city was captured from the Crusaders by Saladin Ayyubid who allowed Jews and Muslims to return to the city. Although the Ayyubids constructed new buildings, Jerusalem’s prominence vanished. Jerusalem was captured and sacked by Khwarezmian Tatars. Then the city was recaptured by the Ayyubids. From 1250 to 1517 Jerusalem was ruled by the Mamluks and they fought with the Crusaders for the city for many years.

New Era

The Ottoman Period (1517 – 1917): The Ottomans captured the city and ruled it for 400 years (Ataöv, 1980:34). The city was again an important center of worship. In 1744 Jerusalem became the capital of Palestine. The period of Suleiman the Magnificent rule was the “Peace Period”. The Ottomans brought many innovations: the city developed and many historical buildings were built, walls and roads constructed and a postal system was formed. With the annexation of Jerusalem by the Egypt in 1831, the Arabs revolted and the revolt was suppressed and in 1840 the Ottoman rule was reinstated. In 1850s the international powers started to influence the minorities⁸. Christian population increased, 5000 – 6000 pilgrims visited the

⁷ The caliph Umar refused to pray in the church so that Muslims would not request conversion of the church to a mosque.

⁸ In the 19th century European Nations opened consulates to protect the holy places and churches and to increase their influence on Jerusalem.

city each year, new neighbourhoods emerged outside the Old City, the Russian Compound was founded. In 1860 in Palestine the first colony called as Petah-Tikva was formed. Then the Jewish properties in the region increased after the new colonies were formed and they expanded their territories (Armaoğlu, 1989:25). In 1874 Jerusalem became a special administrative district.

Modern Age

British Mandate Period (1917-1948): In 1917 Jerusalem was captured from the Ottomans by the British troops and then in 1922 it was transferred to the British Mandate by the League of Nations. The city was ruled under the British mandate until 1948 and then left to the authority of the state of Israel. As of 1930s Jewish migration from the Europe to Palestine region increased because of the Nazi policies. This situation caused an increase in the Arab – Israeli conflicts. In such an environment state of Israel was established in 1948 in West Jerusalem after the Second World War. The UN accepted that the State of Israel declared Jerusalem its capital.

The 1947 UN Jerusalem Partition Plan (Corpus Separatum): As a result of the conflicts the UN decided to divide the Palestine territories between the Arabs and Jews under the surveillance of the UN. With the Partition Plan Jerusalem was to be an international city which had specific special laws and a political status and was managed by no nations and organizations except the UN. The Jewish leaders accepted the Plan but the Arabs were opposed to it. Israel declared its independence (1948).

The 1948 Arab – Israeli War: After the State of Israel was created, the Arab invasion started and the war broke out. West part of Jerusalem lay under the control of Israel side and the east part of Jerusalem lay under the control of Jordan side (Khamaisi, 2007: 68) Upon the 1949 Armistice Agreement, Jerusalem was divided. A buffer zone, under the authority of no one, was created between the two territories. Thousands of people deserted their houses and 30.000 individuals became refugees. These two states recognized their mutual “de facto” rights though not officially. The Treaty wasn’t internationally recognized because it wasn’t appropriate for the proposal of “an International City” for Jerusalem. Israel declared Jerusalem as its inseparable part and eternal capital. It relocated all branches of Israeli government to Jerusalem except for the Ministry of Defense residing in Tel Aviv. At the time of proclamation as Jerusalem was divided West Jerusalem was proclaimed Israel’s capital. But the member states of the UN didn’t recognized Jerusalem as its capital and they didn’t move their embassies from Tel Aviv.

Jordan Attack in 1953: On 27 July 1953 The King Hussein of Jordan declared East Jerusalem his “Hashemite Kingdom’s alternative capital”. But

Amman continued to be the capital of Jordan. On 5 June 1967 Jordan troops started to bomb Mount Scopus and Ramat Rahel. After the troops of Hussein opened fire, control of Jordan part of the city was captured by Israel within two days and the city was included by the municipality borders. New Jewish suburbs were constructed at the old Jordan border in the 1949 armistice line (http://www.mefacts.com/cache/html/wall-ruling_/11362.htm). With its Resolution of 1967 (with the UN Security Council resolution numbered 242). the United Nations called Israel to “withdraw from the territories recently occupied” but Israel rejected it.

1980 Jerusalem Law: With Jerusalem Law, included into the Basic Law, Knesset annexed East Jerusalem and declared “United Jerusalem” municipality the capital of Israel sovereignty. The UN Security Council (Resolution numbered 478) didn’t accept the law and noted that “it had to be immediately cancelled because it was contrary to international laws”. Member states of the UN don’t have embassies in Jerusalem to impose sanction on Israel. In 1988 Jordan didn’t recognize the Israeli dominance over East Jerusalem but waived its rights on that territory.

Today Jerusalem persists as the most significant entity of the conflict between Palestine and Israel. In the city, struggles are always confronted and possibility of new battles are always continues

Analysis of the Problems

Protection of the Holy Places

Description of the Holy Jerusalem

Jerusalem is a holy city in the three major Abrahamic religions of Judaism, Christianity and Islam. In a small area in East Jerusalem and the Old City, Jerusalem accommodates adjacently many sites of these three religions such as the Temple Mount, Wailing Wall, al-Aqsa Mosque and Church of the Holy Sepulchre⁹.

Muslims: Jerusalem has been the third holy city for Islam for 1400 years. In Islam, Jerusalem in 610 CE became the first qibla. Al-aqsa mosque in Jerusalem is the third holiest masjid following “Kaaba in Mecca and al-Masjid an Nabawi in Medina” (El-Khatip, 2004: 111). The significance of the city for the Muslims is that the Prophet Muhammad made his Mi’raj Journey there. The stone ,namely the Dome of Rock (Qubbat As-Sakhrah) he stepped on when he ascends to Mi’raj and Al-aqsa Mosque are located there.

Jews: Jerusalem has been the holiest city for the Jews for 3000 years. The first Temple was built there. The Holy Temple: It is the center of Judaism and they visit the temple in Jewish festivals. Wailing Wall is the

⁹ There are 1204 Synagogues, 158 Churches and 73 Mosques in Jerusalem. Jerusalem Statistical Yearbook (2000).

second holiest place following the Temple Mount. The Temple Mount is qibla of the Jews. (Hasanoğlu, 2015: 125-128).

Christians: The city has been holy for the Christians for 2000 years. After his birth, Jesus was brought to Jerusalem and he was crucified there. Also Goldgotha is important for the Christians. In its place there is Church of the Holy Sepulchre today. The church is a sanctuary for pilgrimage.

Problems Related to the Sanctuaries

Throughout Jerusalem history, the crucial reason for war has been the possession of the sanctuaries. This matter is also constitutes the focal point of today's confronted problems. Individuals of different religions don't respect for each other. The community capturing the city expels the other communities of different religions from the site they reside and destroy their houses and villages. The community obtaining the dominance prevents the other groups from easily and safely accessing to their own sanctuaries and from worshipping. Holy days and religious rituals aren't taken into consideration. Especiall the dominant one damages and destroys the others historical artifacts, sanctuaries, sites and cultural structures. Such vandalism has been implemented by all the parties. Thus many unique religious and historical values were destroyed and in their places, modern buildings and squares have been constructed.

Diverse institutions, organizations and non-governmental organizations from each communities make efforts to protect the holy sites and religious & cultural values. But there isn't still an entirely impartial and authorized organization for such an action.

Changing the Demographic Structure of Jerusalem

Demographic structure of Jerusalem has greatly changed throughout its history. Efforts to change the demographic components of the city have been always a matter. Demographic information of the city is inconsistent today. But the population settlement policy continues to be the main reason of the disputes.

From the Middle Ages onwards Old Jerusalem has been divided into 4 parts as Jewish, Muslim, Christian and Armenian quarters. The Kingdom of Crusaders Period: Population of Jerusalem increased to 30.000 (1099). The Greeks, Bulgars, Georgians and Armenians etc. were crowded into the city to prevent the Jews and Muslims from coming to the city. Population censuses pre-1905 included the entire region. Population data of the city depended on the estimates (The American Missioners Reports). These estimates suggested that since the Crusades, the Muslims formed the largest group in Jerusalem until the mid-19th century. As of the second quarter of 1800s the Jewish population started to increase and in 1881 was an important

turning point for the Jews. As of the year of 1881 significant amount of the Jews immigrated to the North America and some of them adopted the Jewish Nationalism after they were expelled from the Russian territories in which half of the Jewish population lived. Between the years 1881 and 1914 the European Jews immigrated to the Palestinian territories (Aytürk, 2011: 100-101). In 1891 Jerusalem population was about 45.000 and its population was composed of the Jews above 30.000 and about 15.000 Muslims and Christians in total (Yılmaz, 2009: 473).

Table 1. Annual Population Proportions of the Entire Jerusalem
(www.jewishvirtuallibrary.org).

Year	Jews	Arabs/Muslims	Christians/Other	Total
1844	7,120	5,000	3,390	15,510
1876	12,000	7,560	5,470	25,030
1896	28,112	8,560	8,748	45,420
1922	33,971	13,411	4,699	52,082
1931	51,222	19,894	19,335	90,451
1948	100,000	40,000	25,000	165,000
1967	195,700	54,963	12,646	263,309
1987	340,000	121,000	14,000	475,000
1990	378,200	131,800	14,400	524,400
2000	530,400	204,100	14,700	758,300
2008	610,400	277,200	16,500	904,100
2011	648,900	302,600	16,400	967,900
2012	660,200	310,700	16,500	987,400

In the UN report issued in 1994, according to Israel population census in 1967, the Jewish population was 74%. (Choshen and et al. 2003: 7) 44,000 Palestinians resided in East Jerusalem and 22,000 Palestinians resided in the annexed territories (United Nations Economic and Social Council, 1994). After the Middle East War in 1967 Israel granted the Arabs in East Jerusalem the right to reside in Jerusalem on the condition that they attended to the census excluding the Arabs not attending to the census. In 1988 Israeli Supreme Court decided that the Palestinians had the right to permanent residence permit as per the “Entry to Israel Law” and Israel granted the citizenship right to the Palestinians who made the loyalty oath to Israel and ceased to be a citizen of Palestine (http://www.btselem.org/jerusalem/revocation_of_residency). But most of the Palestinian population rejected to do so¹⁰. In 1993 155,000 Jews and 150,000 Palestinians were counted in the city (United Nations Economic and Social Council, 1994).

¹⁰In the late 2005 93% of the Arabs in East Jerusalem acquired the permanent residence right and 5% of them acquired the Israeli citizenship.

In 1995s residence right of an individual acquiring the citizenship of another state and residing there was cancelled if the said individual didn't return back to country for 7 years. Residence right of the Arabs who couldn't prove that their "real residence place" were Jerusalem were cancelled. Forfeiture of such status was automatic and even the individual could not sometimes find out it. Thus rights of citizenship and residence over 3000 individuals ended. Many Arabs started to return Jerusalem and when it was noticed Israel cancelled the law in 2000 and ceased the policy of "silent deportation". The Ministry of Interior announced that the residence permit in Jerusalem would be regranted to the Arabs on the condition that the Arabs entered Israel once every three years.¹¹ (http://www.btselem.org/jerusalem/revocation_of_residency).

In 2005 mass Jewish migration from the USA, France, Kanada and former Soviet Union was experienced (Central Bureau of Statistics,2006). According to the opinions of opponents of Israel, restrictions in East Jerusalem are resulted from the Israeli effort for Judaization of the city (Adversaries (like B'Tselem organization) against Israeli government). It is difficult for the Arabs to obtain a building permit in the city. Thus the Arabs move from Jerusalem. Even some of the Arabs move to the neighbour Jewish quarters. Most of them migrated abroad because of the economical crisis accompanying the second intifada (uprising) (Palestinian uprising (Intifada) against Israeli capture of their territories. First uprising (Intifada) was experienced between 1987 and 1993 and the second uprising (Intifada) experienced between 2000 and 2005). Furthermore the secular Jews (31% of the Jews) are abandoning the city owing to the increasing prices of houses, employment problem and strict religious environment and they are moving to the coasts offering more suitable life styles and cheap houses. There is a decrease in Jewish proportion and an increase in Haredi Jews proportion.

In 2007 Government of Israel relocated the official organizations there and constructed new business centers and formed Jewish settlement sites for 25,000 individuals to draw the Jews there. According to the data of 2011 population increase rates were as follows: general population increase rate of Jerusalem was 2,1% (16,300), the Jewish population increase rate was 1,4% (7,200) and the Arab population increase rate was 3,2% (9,200) (Choshen et al. 2013:9)

Economic Instability and Poverty

Obstacle before the establishment of peace in Jerusalem is the economic situation, especially unfair distribution of income. Economy of Jerusalem depends on pilgrims. Holy places of Jerusalem are the most

¹¹ Individuals having residence permit could vote in the municipal elections and pay tax even if they aren't citizens.

popular tourism attractions but still religious tourism revenue isn't sufficient. Although the statistics imply the economic growth in the city, development of East Jerusalem is behind the development of West Jerusalem. 78% of Palestinians in East Jerusalem lead a poor life. Although Israel currently celebrates the 45th anniversary of unification of Jerusalem, it is stated in a new report that 78% of Palestinians in the city and 84% of the Palestinian children lead a life under the poverty line. Poverty is increasing in the city, in 2006 64% of the Palestine population and 73% of children were leading a life at the poverty line (<http://www.haaretz.com/israel-news/report-78-of-east-jerusalem-palestinians-live-in-poverty-1.431384>). Such a situation was attributed to the limited employment opportunities, dramatically exhausted education system and insufficiencies of physical and economic infrastructure. Palestinians attribute the increase in the poverty to the city's political practices and Israeli invasion of East Jerusalem.

The Jewish residents are more visible and active from the socio-cultural aspects. But for the Palestinians constituting 34% of the city Jerusalem is an attractive city because it offers more employment opportunities than West Bank or any city in Gaza Strip. About 2/3 of Israelis consider Jerusalem "an ultra-orthodox city" and nearly half of them also consider it poor and 1/3 of them find it "frighting to live" (<http://www.latimes.com/world/la-fg-orthodox5jun05-story.html>) there. Palestinians in Jerusalem may send their children to the schools under Israeli management. But there is only one school in each quarter. Most of them prefer to the schools managed by the churches or Islamic foundations.

Status Problem of Jerusalem

Status of Jerusalem is a significant reason for today's Israeli – Palestine conflict. Each the two states wish to see Jerusalem as their capital.

Opinions of the Party States

State of Israel: After the British withdrawal from the territory it took the control of West Jerusalem in 1948 which was under the sovereignty of no one and in 1967 took the control of East Jerusalem. It determined the new municipality borders and ensured the free access to the holy places. Even if Israel announced that it didn't annexed the city but it only ensured the municipal and administrative unity, with the resolution of the Israeli constitution court it annexed the east part of the city to Israel. According to Israel, Jordan took the control of East Jerusalem in 1948 when it was under the sovereignty of no one. Israel took the control of East Jerusalem by self defence. It has the right over the city. Israeli Prime Minister Netanyahu remarked that "Jerusalem belongs to the Jews and it will eternally remain under the Israeli sovereignty". According to Israel there is no reason for

requiring the status of Jerusalem to be *corpuseparatum*. No international treaty has been made in this field.

Palestinian National Authority: Palestine wish to make East Jerusalem capital of future Palestine State with the name of “Al Kuds”. Palestine remarks that a peace agreement, not ensuring it, won’t be accepted. West Jerusalem must be an issue of agreement. Even if Palestine recognizes the presence of Israel in West Jerusalem, the conflict originates from the Israeli control of East Jerusalem. Palestine deems that East Jerusalem is under Israeli invasion.

In the Taba Summit, held in 2001, Israel firstly talked over the possibility of East Jerusalem’s being of the Palestine capital. Israel never reviewed the issue again because an agreement didn’t made. Israel proposed Palestine that Abu Dis, close to Jerusalem, become its capital. And then the Palestine Authority established Palestinian Legislative Council and Relations With Jerusalem Office there. Ramallah is the administrative capital of Palestinian National Authority. Israel declared entire Jerusalem its eternal capital.

Opinions and Proposals of the Other Nations

Opinions: There are different national opinions on the status of Jerusalem. Most of the nations recognized Israel when it was established. But most of them didn’t recognize Israeli sovereignty over Jerusalem and Israeli possession of Jerusalem. Some nations recognize the Israeli presence in West Jerusalem but they don’t recognize the Israeli annexation and control over East Jerusalem. Generally, borders expansion of Israel deemed contrary to the international agreements. The borders not agreed by the two states aren’t accepted. They are opposed to the new constructions and such actions are deemed unlawful. The USA President Obama censured the establishment of Israeli settlements and destruction of Palestinian houses in the Palestine region.

Member states of UN don’t recognize Jerusalem Law. Thus the embassies are located outside Tel Aviv or Jerusalem (The UN resolution numbered 478). There are international “*sui generis consular corps*” (https://tr.wikipedia.org/wiki/Kudüs%27ün_statüsü). The nations having embassies in Jerusalem specify that they do so for Palestine. There are consulates of the Greece, the United Kingdom, the USA in Jerusalem to render services to the Palestinians. Jerusalem Office of Holland renders services to Israeli citizens.

Proposals: All the nations advocate that the final status of Jerusalem is settled by an agreement made between the parties. They emphasize that the unilateral actions must be avoided. They believe that the problem will be

resolved as per the UN resolutions numbered 242-338. Generally proposals of the nations fall under 5 categories:

It must be an international city under the authority of UN: The United Kingdom (4th Geneva Convention), the Vatican, the USA, Italy

East Jerusalem must be the capital of Palestine: China, Russia¹²

It must be the capital of Israel: Denmark, Finland, Germany

It mustn't be the capital of Israel: Norway, Saudi Arabia, Japan, Canada, Sweden

It must serve as capital city for both states: France

Inconsistent proposals are being made by the USA authorities. The President Bush's statements were against the new settlements and division of the city; 1990 Senate and 1995 Congress statements were for the Jerusalem's being of Israeli capital and against division of the city, 1991 Minister of Foreign Affairs statement was against the Israeli annexation of East Jerusalem, Clinton stated that the sovereignty hadn't been clearly described, Vice President stated that he deemed the "united Jerusalem" capital of Israel. In the UN Security Council the USA abstain from voting the resolutions on Jerusalem.

Solution Proposals and Opinions of the International Organizations

Proposals and Opinions of the United Nations:

UN has many resolutions and proposals having been made for Jerusalem not only in its General Assembly but also in its Security Council. Within the scope of general framework these resolutions can be summarized as follows:

Six of the UN Security Council resolutions on Jerusalem are related to the recognition of Israeli rights over the city. For example, as per the resolution numbered 242: East Jerusalem is under the invasion of Israel. As per the UN General Assembly Resolution: It deems legislatively and judically imposed laws to Jerusalem by Israel unlawful and invalid and calls for Israel to withdraw these laws. Member States of the UN don't deem Jerusalem capital of Israel¹³ and don't recognize the Jerusalem Law. Member states withdrew their diplomatic representation agencies from the city to react against Israel. No embassies are located in Jerusalem. As per the UN General Assembly proposal numbered 58/292: Palestine has right to sovereignty over East Jerusalem.

The UN General Assembly solution proposal numbered 194: It proposes that Jerusalem is subject to a special international status as "corpus

¹² 2010 Minister of Foreign Affairs "Construction activities of Israel can not be accepted. Such activities may interrupt the peace process".

¹³ Pursuant to the Article 80 of the UN Charter, rights which were granted in San Remo Agreement and League of Nations are still valid.

separatum”. All the member states accept the Plan 1947 proposed by this resolution for Jerusalem and deem Jerusalem an international city. As per the report of The Commission For The Implementation of The Palestinians Non-transferable Rights: It is required that the city remain corpus separatum until reaching a reconciliation for the city. The UN Secretary stipulated in 2009 that Jerusalem serves as a capital city of both states to achieve the peace. Ultimately this is the solution expected by the international platform. 1993 Oslo Accord: It guarantees that the recent status of Jerusalem will be specified on the condition that an agreement is reached with the Palestine authority.

Proposals and Opinions of the European Union

The EU still accepts the Division Plan of the UN. The EU doesn't recognize Israeli sovereignty over the occupied territories and deems Israeli settlements unlawful as per the international law.

Israel was accused of illegal annexation of East Jerusalem by the EU (In the 2009 UN East Jerusalem Mission Report). It was specified in a UN report that Israel increased Jewish population in Jerusalem, weakened the Palestine community, prevented the development of Palestinian city and separated East Jerusalem from West Bank by founding new settlement sites, placing barriers, implementing discriminatory real estate policies, destroying the houses, implementing restrictive permit regime and closing the Palestinian institutions.

EU Ministers of Foreign Affairs requested the EU High Representative in 2012 to issue a regulation on labelling the goods and products of Israeli settlements. It was decided that all the agreements between the EU and Israel couldn't be applied to the territories being occupied by Israel from 1967. A regulation depending on this resolution was issued.

As per the Regulation (The regulation approved in June by the UN Commission and issued by it.), unlawful Israeli settlements in the Palestinian territories as of 2014, West Bank and East Jerusalem can not benefit from the EU aids, funds and scholarships (It includes all the joint EU – Israeli activities including economic, scientific, culturel, sportive and academic cooperation). The EU, announcing that it wouldn't recognize the border changes made on its 1967-borders by Israel, materialized its resolution¹⁴. Israel is required to accept to quit its dominance over West Bank, East Jerusalem and Golan Heights to benefit from the EU 2014-2020 budget donations and joint projects (De Waele, a diplomat responsible for the EU

¹⁴ Netanyahu voiced his reaction against the regulation “We won't accept the external pressure for our borders”.

delegation stated that the EU reflected its discomfort for Israeli settlement activities.) (17.07.2013 BRUSSELS).

2012 EU Report on East Jerusalem: Israeli annexation policy is criticized harshly. Israel is accused of systematically wiping out the Palestinian presence in East Jerusalem and implementing an active annexation policy. In the report it is specified that Jerusalem – Bethlehem line is blocked and two-state solution becomes impossible if expansion of the Jewish settlements in East Jerusalem continues.

In its Declaration of Principles the EU expressed its opinion. The most sound solution is serving of Jerusalem as capital of the both states because of the political and religious concerns of the both states. It was emphasized that sustainable peace wasn't possible without Jerusalem's becoming of the shared capital. It was specified that the State of Palestine to be founded would include West Bank, East Jerusalem and Gaza and borders except for pre-1967 borders wouldn't be accepted unless the both states agreed upon them. It was stated that Israel would divide West Bank into two parts and force the thousands of Palestinians to migrate if Israel created new settlements in the east of Jerusalem. Israeli archaeological excavations in Jerusalem were criticized. It was specified that the excavations made as per the "biased historical documents" in defiance of Islamic holies served the tacit aim of Israel related to making the city eternal Israeli capital without the division of Jerusalem. In the report, members and companies of EU were warned against entering the economical activities that would support Israeli settlements.

As per the EU report published in The Independent, a British Newspaper, (In the report prepared by 25 EU diplomats it is proposed that the EU officials and politicians mustn't visit the Israeli official buildings beyond the "Green Line", when the officials from the Europe visit East Jerusalem, they mustn't use the hotel and transportation services provided by businessmen from Israel) a call is issued to encourage the boycott against Israeli products commercially produced in East Jerusalem and to increase the awareness of people against the products produced in the Jewish settlement. The diplomats request that Israel permits that offices of Palestine Liberation Organization in East Jerusalem, closed in the second intifada (uprising), are opened. The EU diplomats are opposed to the presence of Israeli Security Forces in the Old City and East Jerusalem. Ways to prevent Jewish residents violence in East Jerusalem are sought. It is stated in the report that Israel systematically weakens the Palestinians peresence in Jerusalem, Palestinian neighbourhoods are isolated and the EU has to support the Palestinians. The EU supports the two-state solution.

An Integrated Management Model for the City of Peace "Jerusalem"

An Integrated Management Model

“The integrated management is described as “All the functions which will be formed to plan, organize and control the systems in a manner promoting equilibrium for the opinions, expectations and aims of all segments” (Demirel, 2016: 45). It is a management model which aims at harmonized and mutually-integrated act of more than one social and political actors assembling under the framework of joint conditions. It is a management model where all the segments participate in the management determination in an integrated manner and different opinions are represented. The integrated management is proposed as a management model which gives priority to the sustainable development for the management of geographic areas with various actors and in the axis of integration.

Features of the Integrated Management

Features of the integrated management are as follows:

- a) The integrated management is a wholistic system approach. It considers various issues and problems and their relations.
- b) It requires the coordination between all levels of the state and state organizations.
- c) It aims at long term sustainability and it considers current and future problems, solutions and results.
- d) Management process adopts continuous improvement and development because it is alive.
- e) It is generally requires that the society is educated on their responsibilities because of its crucially important social dimension (Harmancıoğlu et al., 2002: 32).

Steps of the Integrated Management

There steps are proposed for the establishment and action of the integrated management model.

1- First Step: The activity to be made in the first step is to identify the problem. Then diverse aims and choices of the different segments are determined at the local level and within the scope of the integrated management. The integrated management is a complex approach including all the segments of a society, different disciplines and organizations, social, economic, legal and administrative conditions. Thus the abundance of voiced aims makes the work difficult even in the first step.” (Harmancıoğlu et al., 2002: 35). The most important matter in this process is the policy analysis.

2- The second step: This process is the step in which the physical, geographical and technical integration will be realized. In the managements with multiple actors who will have the administrative and financial responsibility may cause disputes. Thus the UN must sustain its presence as

an authority managing the responsibility. This is the mission of the UN and it is the protection of the world peace. The UN must remain as the upper umbrella organization here. The UN must share the authorities and responsibilities among the different segments and ensure the coordination of the management activities.

3- The Third Step: The third step is the step in which the decision-making process and alternative policies can be formed. Risks and uncertainties related to the taken decisions and determined policies for the realization of an effective management must be evaluated sensitively.

An Integrated Management Model for Jerusalem

In this study the integrated management system is proposed for Jerusalem where the three major religions geographically co-exist and the borders of holy places can not be drawn finally and precisely. Decision makers or executors to participate in the integrated management model proposed for Jerusalem: they must be representatives of all religion, local authorities, public professional organizations, non-governmental organizations, universities and research centers and unions and civil society organizations.

Features of the Integrated Management

Strategies for the policy planning and regulation must be dealt with together. Integration of the local organizations will accompany the achievement of the political integration. An integrated political unity is necessary. Integration of the local – regional administrations into the decision-making processes and achievement of official representation of all the political elements at the management level are crucial. To do so, it is required that the different management mechanisms in Jerusalem leave the attitude of identifying each other as the terrorist organizations and meet on a common ground taking the human happiness and human dignity as a basis. Hostility persisting thousands of years must be wiped off. A permanent peace in the international relations must be achieved for the future generations.

From the point of the city culture, it can be ensured that they keep their cultures and values alive by creating Jewish Quarters, Christian Quarters and Muslim Quarters in Jerusalem in a manner of equal settlements as in the traditional Ottoman culture achieving the co-existence of many communities. Such a structure can be achieved with the solidarity, belonging and we-feeling awareness confronted widely in the traditional Turkish cities (Doğan, 2002: 19). A permanent peace can be achieved by developing cultural good neighbourhood relations instead of dominance conflicts

experienced as a result of the inseparable architecture –especially in the holy places- of Jerusalem.

Some problems and disadvantages may be experienced in the establishment of the integrated management and implementation of the model. First of all, not knowing how will be the proposed management model implemented is a significant disadvantage. Presence of multiple actors, multiple aims and their accompanied conflicting aims and policies are the issues making the process difficult. Problem identification process of which realization is proposed in the first step is a difficult step in itself. Problem identification and reaching a solution process is problematic because of the political difficulties and multiple religious borders specific to this issue. Thus aims and policies in the first step must be well-determined. How will be the model stated in the second step put forth in terms of social, economic, administrative and legal aspects hasn't been clearly explained. Such a situation may create a significant handicap for the establishment of the organizations. It is required that smooth information sharing and interactions between the established organizations and current political & social actors are achieved and inconsistencies are eliminated. Division and coordination of responsibilities among the actors is important. The UN resolutions must be considered especially for the achievement of technical and physical integration. Non-infringement of these resolutions by the parties and the actors is crucial. It is required that the harmony among the actors and social harmony are achieved to prepare and implement sound policies in the third step. It is required that awareness of the all decision-makers, society, planners, executors is increased on the life style of the integrated management model. Integrated life style can be emplaced in Jerusalem by education. It will take long time to emplace and accept such a life style and philosophy.

Integrated Management Steps for Jerusalem

1- Evaluation of borders and conditions shaping the policies of different groups and effects of these policies is critical for achievement of the peace and its permanence.

2- Social, geographical, physical, historical, cultural, religious and cultural conditions of Jerusalem must be dealt with in a wholistic approach. Economic, legal and administrative elements must be described and established by considering the holy places together.

While the related organizations of the parties perform their own duties it is required that they undertake the political, economic, financial, technical and cultural responsibilities accompanying the integrated management system.

The UN must preserve its feature of being an umbrella. Existence of an integrated management having multiple actors such as the UN and the EU may achieve the peace. The adaptation of Jerusalem to the integrated management style requires working with more than one actor. This issue should be studied and developed through local actors and UN partnership.

Conclusion

Jerusalem is sacred in the three monothestic religions. The holiest places and values of these religions are located there. Thus each group has wished to acquire the dominance over it throughout its history. The city has always been attacked and all the values of the city, especially its residents, have been destructed and killed many times. Today it continues to be the one of the most risky cities in the world. The city is considered as one of the city's in World heritages in danger by UNESCO because its such a feature.

The human beings must accept that the struggles lead nowhere. Even in some periods different groups or nations gain dominance over the city, the others claims on the city and their seizure efforts always continue and the city will always stay under risk. But these common values of the human beings mustn't be destructed any more. Jerusalem must be a city of world and it mustn't be under control of no state or religion.

Jerusalem is an unsharable city. The reason of it is not only its holiness for each religion and possession passions of each religion but also its physical nondivisibility. Holy places of the city have mixed each other. Also a sanctuary which is holy for a religion is also holy for the other. Al-aqsa Mosque is holy for not only the Muslims but also for the Jews. This is a sign to achieve to live there "in peace". Furthermore the name of the city "Jerusalem" means "peace". All the three religions order to human beings to live in peace. By taking it as a basis, in this study the integrated management model is proposed to ensure that the communities live in peace in Jerusalem.

With the 1993 UN Principles Declaration and 1995 Interim Agreement, Resolutions related the status of Jerusalem delayed to a future time. Status of the city still isn't clear. By the way Israel captured Jerusalem region "de facto" and declared Jerusalem capital. Such an action has caused disturbance in the city. Peace in Jerusalem "must be a real peace achieved between the equals instead of a peace imposed to the weak by the strong by force." (Said, 2002: 61). International community accepts the Israeli control over Jerusalem. However this isn't a solution. In fact, Jerusalem has never been under the sovereignty of a country and the latest dominance over it was the one of the Palestine Mandate of the United Kingdom.

In this study "the international city" proposal for Jerusalem by the United Nations is taken as a basis. This proposal has been developed in the framework of the integrated management system. A management system

reflecting the Jerusalem characteristic with multiple religions and multiple cultures and including all parties and ensuring the decision-participation is proposed. Jerusalem must be a “peace-oriented” city with its autonomous status where each religious and ethnic groups are equally represented. The most successful examples of the integrated management model, the UN and the EU, must undertake active role in the system.

Jerusalem conflict is a sensitive issue. Different individuals perceive Jerusalem in different ways because of their beliefs. Thus the peace is possible only when all the parties, especially the conflicting parties, are satisfied. All the parties must exhibit the required care and effort to achieve a permanent peace. In the management process all the problems are required to be dealt with together by considering sensitivity of the persisting conflicts and suppressed feelings of the past.

Jerusalem must be an “open city”. Call for “open” Jerusalem expresses the requirement for being of Jerusalem a city of everyone. Whatever his/her religion is, everybody may freely enter to the holy places. Holy places and their visitors must be protected against the attacks and disrespectful actions. Worshipping freedom, access to the holy places and protection of them must be assured. Basic beliefs, symbols, rituals and sacred values must be respected and they must be freely performed. Jerusalem having multiple cultures must be told to the communities and understanding on that the city has cultural heritages of the Muslims, Jews and Christians and that they must live there together must be emphasized to the communities. The Jewish – Arabic dialogue must be supported with the joint artistic and cultural activities. In fact the communities co-existing in Jerusalem wish the peace. The Tolerance Monument which is located in the former Israeli-Jordan border is a symbol of the desire of peace.

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Investigation of Removal of Dye from Aqueous Solution by Advanced Treatment

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Abstract

The textile dyeing and finishing industry use a significant amount of water and produce water pollution. Conventional biological treatment processes have some difficulties for degradation of nonbiodegradable compounds. Dye-bearing wastewaters have high COD and colour. In this study, a photo reactor process was used to remove color from aqueous solution. Effects of pH on Reactive Red 4 and cationic dye removal using 1g/L TiO₂, as catalyst were studied at constant initial dye concentration (25 mg/l). Cationic dye removal efficiency is better than Reactive dye removal efficiency for photocatalytic oxidation in this study.

Keywords: Dye, color, photo reactor, wastewater, advanced treatment

Introduction

The textile industry wastewater contains high concentrations of organic and inorganic chemicals and is characterized by strong color and high total organic carbon (TOC) and chemical oxygen demand (COD) values. Treatment of such wastewater by conventional treatment systems is hard and advanced technologies are required. Treatment of textile dye industry wastewater is highly complex due to the presence of color, toxicity, BOD, COD, turbidity, TDS, TSS, etc. Physical and/or chemical processes (coagulation/ flocculation, adsorption, membrane processes and so on) are employed for the treatment of dye-bearing wastewater. But these processes have some drawbacks. Alternatively, advanced oxidation processes have received great attention in recent years for its efficiency and inexpensive.

Textile wastewaters have complex mixtures such as COD, color, salt, toxicity and other chemical compounds. One solution to the disposal problem is on-site advanced oxidation process of such wastewaters, using different systems such as fenton, photo fenton, UV, TiO₂ catalyse with UV (photocatalytic) so on. Advanced oxidation processes (AOPs) have been

used as emerging wastewater treatment technologies for various hazardous organic compounds (Reddy et al., 2016). The photocatalytic decolorization of municipal wastewater contaminated with textile dyes is one of the advanced oxidation process (Souzaa et al., 2016). The TiO₂/UV process has been known to have many important advantages, in particular: a large number of organic compounds dissolved or dispersed in water can be completely mineralized; the reaction is relatively high if large surface areas of the photocatalyst are available; TiO₂ is inexpensive and can be recycled on a technical scale (Farouk et al., 2016).

The aim of the study is to remove color and COD from textile wastewater using lab scale photo reactor with addition of catalyst (TiO₂) as advanced treatment.

Materials and methods

Experimental method

Photocatalytic experiments were carried out with working volume of 400 ml aqueous solutions. The catalyst was added to the dye solution. Then, UV lamps were run and a sample was taken with interval 30 minutes during 180 minutes working time. Catalysts were separated from the sample using a 0,45 micron filters. The sample was analyzed for color, COD and turbidity. COD analyzes were carried out by closed reflux titrimetric method according to APHA standard methods (APHA, 1995). The solution's pH was adjusted initially by adding 0.01N NaOH or 0.01N H₂SO₄. The color values of the samples were measured by spectrophotometer. According to the measured values, the color removal efficiency is calculated with Equation 1.

$$\text{Efficiency} = \frac{C_0 - C}{C_0} \quad (1)$$

C₀ is the initial dyestuff concentration, C is the dyestuff concentration of the sample.

The kinetics of photocatalytic reactions are compatible with 1st degree reactions. The 1 st degree velocity constant was determined using the Equation 2.

$$\ln C = \ln C_0 - k * t \quad (2)$$

k:velocity constant and t:time

Materials: Dyes and catalyst

Methylene Blue (MM) and Reactive Red 4 (RR4) dyestuffs were used in the study. The chemical structures of the dyes are given in Fig.1 and Fig. 2.

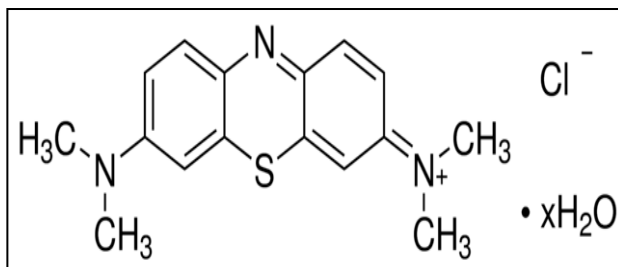


Fig. 2: Chemical structure of Methylene Blue dye (Sairoglu and Atay, 2006)

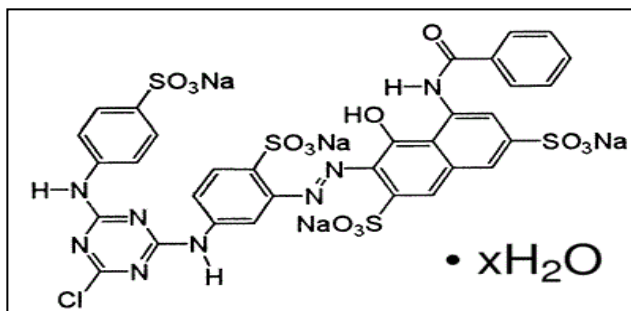


Fig. 2:Chemical structure of Reactive Red 4 dye (Url.1, 2017)

Methylene blue is a cationic dyestuff, the chemical formula is “ $C_{16}H_{18}N_3SCl$ ”, the molecular weight is $373,9 \text{ gmol}^{-1}$. It is used for coloring in textile industry and also for preventing fungus reproduction in fish breeding farms. The spectrum of the wavelength scanning in the spectrophotometer is given in Fig. 3. The λ_{max} value according to this scan is 663 nm.

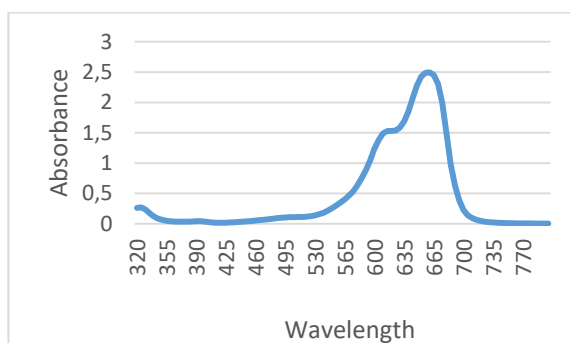


Fig.3: Wavelength scanning of Methylene Blue.

Reactive Red 4 is an anionic group of dyes. The chemical formula is “ $C_{32}H_{19}ClN_8Na_4O_{14}S_4$ ”, the molecular weight is $1000,25 \text{ gmol}^{-1}$. It is a dye used in textile industry. The spectrum of the wavelength scanning in the spectrophotometer is given in Fig. 4. The λ_{max} value is 500 nm.

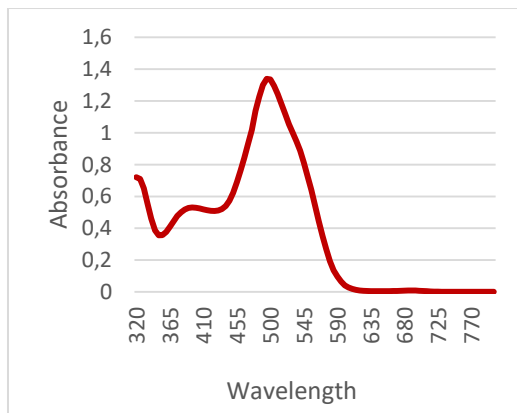


Fig. 4: Wavelength scanning of Reaktiv Red 4.

The anatase TiO_2 was used as catalyst. Table 1 gives features of TiO_2 .

Table 1 Features of TiO_2

Average Primary Particle Size	163,723 nm
Specific Surface Area (BET)	16,00 m^2/g
Pore Volume	0,1847 cc/g
Molecular Weight	79,87 g/mol

Photocatalytic Reactor

. Batch reactor type was used in experimental studies (Fig. 5). The reactor was cylindrical and covered with black material to inhibit light. Six UV-C lamps were placed on the reactor. 8 W fluorescent type UV-C lamps with a wavelength of 254 nm were used. The lamps were placed at equally spaced reactors. A quartz tube was used in the reactor. A magnetic stirrer was used to disperse the powder catalyst in the solution homogeneously.

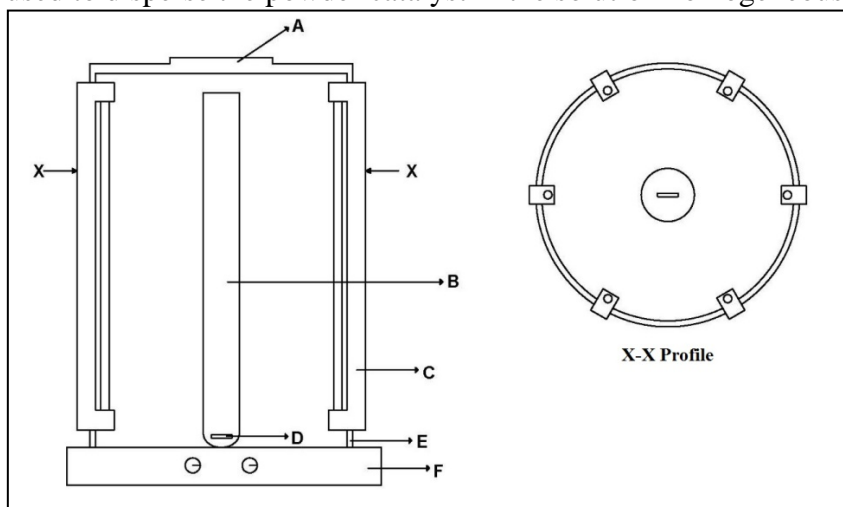


Fig. 5 Schematic representation of the photocatalytic reactor. A: Cap, B: Quartz tube, C: UV-C lamp and socket, D: Magnetic fish, E: Cylinder reactor, F: Magnetic mixer.

Results and discussion

Removal of MM

Surface charge of catalyst is essential because of occurrence of OH radicals on surface (Souzaa et al., 2016).

Optimum pH was determined for studied pHs (2,5, 5,5, 7 and 9) within the 180 min. In this study 1g/L of catalyst, 3 UV-C lamb, 25mg/L of MM dye was kept constant. Fig 6 and Fig 7 show effect of pH on color removal efficiency and first order reaction rate line, respectively. As shown from the Fig.6, maximum removal efficiency was found to be 99,88% for pH 2,5. Kinetic study confirms optimum pH value. If the pH under the isoelectric point of TiO₂ (6,8), surface of catalyst is charged positive (eq.3) and positive charged surface is covered with OH⁻ ions . So production of OH radical increase. If the pH above the isoelectric point of TiO₂ (6,8),OH radical density decrease and so OH production decrease. (eq. 4).

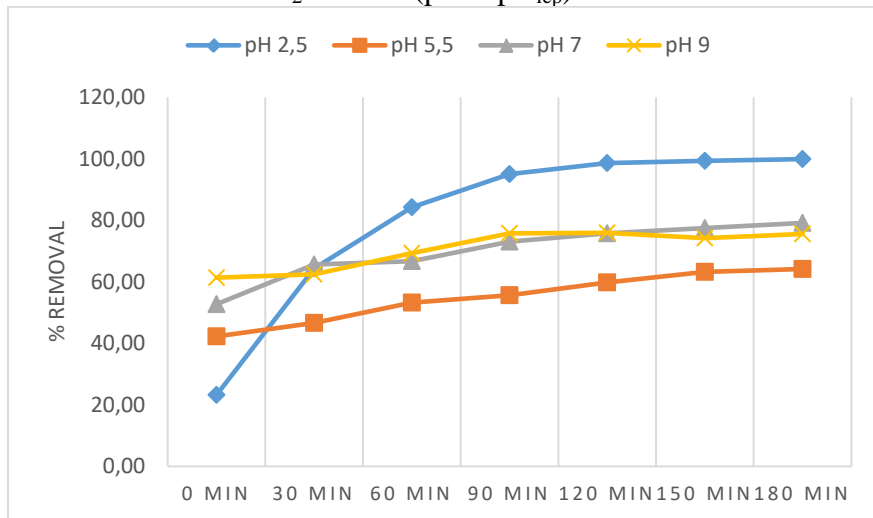
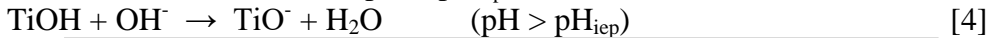
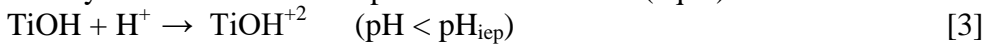


Fig 6. Effects of pH on to color removal

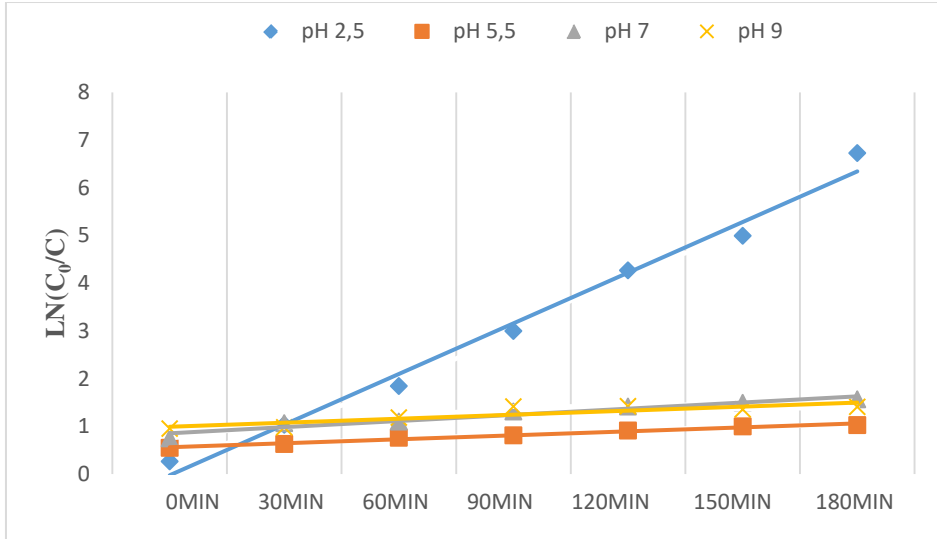


Fig 7 First order reaction rate for different pHs

Removal of Reactive Dye

Reactive Red 4 (RR4) removal study was performed at 25mg/L of RR4, 1g/L of TiO₂, 3 UV-C lamp for pH 2,5 and pH 9s. Fig 8 illustrates color removal efficiencies for studied pHs.

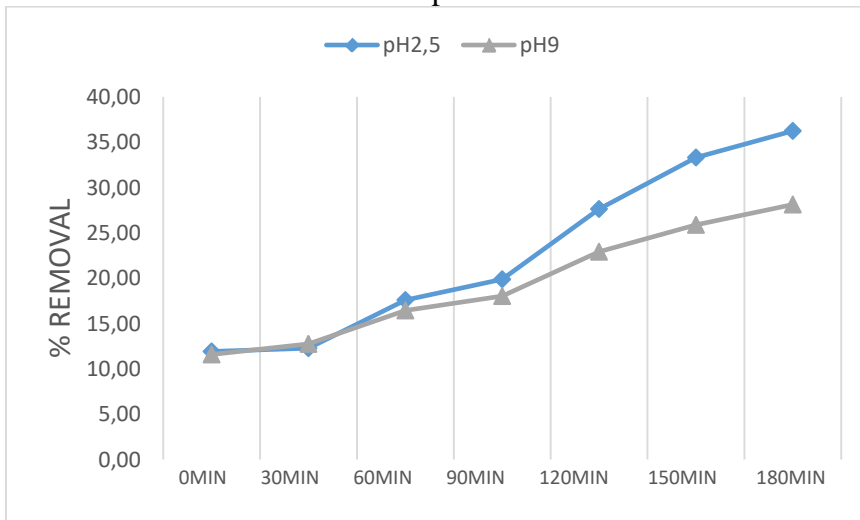


Fig.8 Color removal (25mg/L RR4)

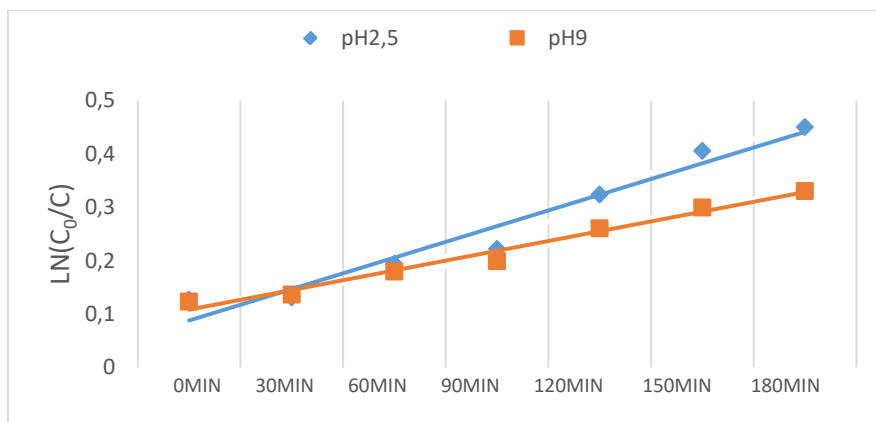


Fig. 9 First order reaction rate for RR4

RR4 dye removal efficiency was found to be 36,24 % for pH 2,5 and 28,14% for pH 9. This value is lower than cationic dye removal efficiency. Cationic dye removal efficiency was better than anionic dye removal efficiency. Turbidity of RR4 solution was observed as high. Increasing turbidity affected the removal efficiency of RR4.

Conclusion

In this study, a photo reactor process was used to remove color from aqueous solution. Effects of pH on Reactive red 4 and cationic dye removal using 1g/L TiO₂, as catalyst were studied at constant initial dye concentration (25 mg/l). Cationic dye removal efficiency is better than reactive dye removal efficiency for photocatalytic oxidation in this study.

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Evaluation of Environmental Management System Implementation in Construction Projects

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Abstract

In this article, implementation of ISO 14001 Environmental Management System Standard in construction plants is evaluated. Standard requirements are examined and implementation elaborated for the selected construction plant (central mall) located in Denizli, Turkey.

Keywords: Environmental management system, construction projects, ISO 14001

Introduction:

In the last three years construction sector has 10% growth and provides significant support on Turkey's national economy and many construction projects are on-going at urban and rural areas of Turkey which have substantial environmental impacts.

Construction projects are being completed very fast and contractors are working in a highly competitive environment with low profit ratios and mostly qualified work force cannot be accessible.

When literature researched among the thesis studies in Turkey, it's observed that implementation of environmental management system evaluated within pharmaceutical, cable, food, glass, plastic, textile and automotive industries however it cannot be seen any direct study conducted regarding implementation of ISO 14001 Environmental Management System in a reference construction plant within construction sector. Main requirements of ISO 14001 are referred in Figure 1.

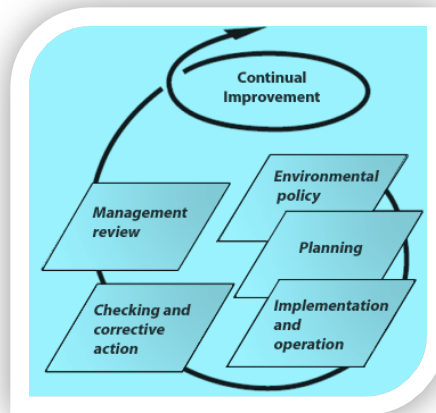


Figure 1 .Continuous Improvement Cycle of ISO 14001

Material and Methods:

In the initial stage quality management systems generally reviewed and ISO 14001 (TSE 2015) is selected for implementation. Standard requirements are examined first and implementation of every standard requirement is elaborated for the selected construction plant in the following stage. Key issues and common problems, gained benefits by execution of this type of international EMS standard are examined.

In the last part of the study, advantages and week points evaluated trough the ISO 14001 implementation experiences on referred construction plants. Reference construction plant is selected from the previous work experience of the author which management system implementation studies are carried Akyürek 2007.

Forum Çamlık Shopping Mall Project is built in Denizli City centre at Çamlık District (Figure 2). The owner of this project is aimed and requested to implement three management system standards in an integrated manner.



Figure 2. A View from Reference Construction Site Denizli, Turkey

During the construction period; ISO 9001 Quality Management System, ISO 14001 Environmental Management System, OHSAS 18001 Occupational Health and Safety Management Systems are established and implemented. Before establishment of the integrated management system, related training courses are provided to the construction plant staff.

In the starting stage, current situation assessment is carried regarding environmental management needs and required implementation steps are planned. For the environmental impact assessment phase, a collaborated study (Table 1) is carried by the staff from every job discipline by inspection of construction work schedule.

Legal requirements and related regulations regarding environmental and health safety issues are inspected and compliance levels are analysed. Environmental targets are defined and environmental management programs conducted. Environmental performance indicators that have to be tracked by the monitoring and measurement plan (see Table 2) is defined and measured by the required intervals.

In order to prevent deviations from environmental targets; operational control criteria is established, implemented with documented methods. Corrective actions are conducted in every phase of the construction period for the non-conformity areas related with legal compliance, management system failures.

Results and Discussion

After identification of environmental aspects that arising from construction activities, some of these are selected that have significant impacts on environment. Environmental management programs are arranged to diminish these impacts by usage of defined resources, workmanship and time. Here are the most common examples from the Forum Çamlık Shopping Mall Construction Plant's (Figure 4) important construction activities their environmental aspects ending with significant impacts;

Construction Works:

- During isolation works (bituminous membrane application with flame gun) fire hazard and its impacts, soil contamination from oil (lubrication) leakages at mobile machinery, environmental complaints for excessive dust, noise, demolishing debris due to exploding and drilling of defective concrete structures (this case also concerned with quality management regarding that poor quality generates more waste)
- In concrete casting process; environmental complaints from nearby inhabitants for usage of night hours and holidays due to lack of time and abnormal daily hot weathers. Noise and traffic jam because of utilisation of heavy concrete pumps with 47 meters boom length, parking of many concrete mixer trucks wait in queue on the main street.

Table 1. An Example Sheet from Environmental Impact Assessment

NO	CONSTRUCTION ACTIVITY	ENVIRONMENTAL ASPECT	Normal (N) Abnormal (AN) Emergency (E)	ENVIRONMENTAL IMPACT	Risk		Legal Req.	Previous Accidents	Effected Environment	SCORE (Before Operational Control)	OPERATIONAL CONTROL / PREVENTION	Efficiency of the Preventive Measure	SCORE (After the operational control)
					Probability	Result							
1	INSULATION WORKS (Waterproofing)	Usage of bitume based membrane	N	Resource usage	5	1	10	0	0	15			15
2		Bitume based lining usage	N	Resource usage	5	1	10	0	0	15			15
3		Waste steel tins	N	Soil Contamination	5	1	10	10	0	25	PR01 Waste Procedure	-2	23
4		Leakage of bitumeous lining and melted membranes	AN	Soil Contamination	2	2	10	10	0	24	TLM09 Chemical Handling and Storing Work Instruction		24
5		Membrane wastes	N	Soil Contamination	5	2	10	0	0	20	PR01 Waste Procedure		20
6		Laying of polyethylene mattress	N	Resource usage	5	1	0	0	0	5			5
7		Polyethylene and PVC wastes	N	Soil Contamination, Waste Recover y	5	2	10	0	0	20	PR01 PR01 Waste Procedure	-4	16

- Before establishment of environmental management system at the construction plant, all wastes and construction debris was collected and disposed in a mixed manner without any separation with significant environmental impact. After implementation of EMS, many subcontractors, suppliers trained for waste management (sample photos, Figure 3), waste separation areas are erected. Recycled wastes are separated and transferred to the licenced waste management companies, construction debris and demolition wastes are transported to licensed Construction Waste Recovery Plant at the Denizli for the recovery of iron, gravel and sand (please see sample tracking form in Table 4).

Table 2. Environmental Monitoring Plan

ENVIRONMENTAL MONITORING & MEASUREMENT	RESPONSIBILITY	MONITORING AND MEASUREMENT FREQUENCY	REMARKS
Noise and Dust Measurement	Health and Safety Engineer-Environmental Engineer	Annual	Will be inspected for every noise resource, in compliance with the regulation.
Exhaust and Flue Gases Emission Measurement	Mechanical Engineer	Annual	Heavy machinery, generator, heating systems etc.
Fuel Consumption	Accountant	Monthly	All vehicles, heating system for camp facilities / Monitoring Chart
Hazardous Wastes Transferred	Site Chief, Environmental Engineer	Every six months	Contractual requirement with IZAYDAŞ Waste Handling Plants/ Monitoring Chart
Office wastes / paper and Plastics	Secretary	Every two weeks	Local Certified Waste Recovery Firm
Sales of Metal Scraps	Site Chief, Site Foreman	Monthly	Separate for iron, copper and aluminium
Recovery Wastes Transferred to the Certified Waste Handling Companies	Site Chief, Site Procurement	Monthly	PVC, PE,PP,PS, paper, steel etc wastes produced in site
Construction Debris	Site Foreman, Site Procurement	Monthly	Transfers to the Municipal Permitted or Certified Construction Debris Recovery Plant
Medical Wastes	Health Technician	15 days	Contract with the Municipal Medical Waste Incineration Plant
Electricity / water and natural gas consumptions	Site accountant, Electrical Engineer	monthly	Monthly bills

- For the expanded and extracted polystyrene wastes with large quantities; in the early stage there was no company recovering this wastes but in the last stage a new factory accepted the collected waste polystyrene for recovery in an another city and transported with trucks.
- For prevention of the oil and gasoline leakages, subcontractors are trained and managed for periodic maintenance, with proven records besides licensed recovery of used oils are tracked by enforcement.

Architectural Works:

- For the masonry works, a study executed for the diminishing of aerated concrete brick and ceramic tile wastes.
- Chemical management procedures are documented and implemented for the paints, adhesives, polishers, thinners and coatings at steel works, insulation, interior decoration, wood works and similar architectural works. Also contaminated boxes and containers of these separated and collected to transport for hazardous waste recovery plants.
- Metal works, precast panels, sheet and deck sheet works, aluminium, suspended ceiling profile works recycling waste impacts defined, recovery system managed, wastes diminished
















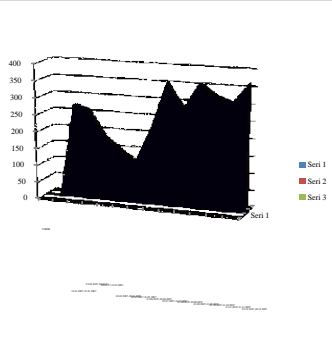
Electrical & Mechanical Works:

- Cable tray, cable, connector, plastic piping wastes, conduit box, plastic piping wastes, thousands of armature packaging wastes,
- Abnormal wastes occurred during the tests and commissioning tests of electrical, mechanical installations, piping network
- Separation and recovery of black steel, galvanised steel pipe wastes erection of water piping, heating cooling, fire installations, during galvanised piping installation; production of contaminated wastes such as oily steel wool, oily rags



Figure 3. Waste management works in the reference construction site (Akyürek 2007)

Table 4: Sample Sheet for Waste Monitoring Charts, Construction Debris (Akyürek 2007)

FR 01 Waste Tracking Form				
FORM REV.NO :0		REV.TAR:02/07/2007		
Unit: Construction site		Responsible : Metin DEMIREL		
PAPER 		PLASTIC 		METAL  Demir  Bakır  Alüminyum
		HAZARDOUS WASTE  Atık Yağ  Atık Filtre  Kontamine  Diğer Tehlikeli Atık		 Kartony / Yıner  Pü  Kontamine Kap, Ambalaj (Boya, kimyasal tenekesi vb)
				DEBRİS 
				WOOD 
				GLASS 
DATE	Waste quantity (m3)	Licensed Waste Management Organisation /		
12.01.2007-31.01.2007	279	AKÇA Hazır Beton San. Ve Tic. A.Ş. Construction Debris Recovery Plant 		
01.02.2007-28.02.07	265			
28.02.07-31.03.2007	192			
01.03.2007-30.04.2007	155			
01.05.2007-31.05.2007	125			
01.06.2007-30.06.2007	227			
01.07.2007-31.07.2007	361			
01.08.2007-30.08.2007	289			
01.09.2007-31.09.2007	363			
01.10.2007-31.10.2007	331			
01.11.2007-31.11.2007	315			
01.12.2007-30.12.2007	372			
	TOTAL WASTE (m3)	3274	TOTAL TRANSFERRED WASTE	3274

- Separate collection and recovery of Waste polyethylene pipe insulation materials, recovery of waste electrical and communication cables during automation installation

In general;

During site supervision studies; implementation of operational control methods such as waste management, chemicals management, periodical maintenance, safety instructions lowered the (both environmental and safety) accidents and increased the environmental efficiency.

Staff from different subcontractors and main contractor workers periodically trained and site works are daily audited for a better awareness on environmental issues, quality management and safety risks.

Examples of most common cases that need corrective actions are; entrance to site and usage of non-approved materials and products with regard to environmental, quality and safety concerns, removal of recycled

wastes to non-licensed commercial companies by sub-contractors, demolishing and more debris from defective reinforced concrete and other failed structure erections, mixture of contaminated wastes with recycled or non-contaminated wastes, excessive illumination by projectors, damages on nearby households by heavy machinery such as mobile cranes, loaders etc., oil leakages and breakdowns on heavy machinery that not have periodical maintenance, non-monitored emission and noise levels on different vehicles etc.

Conclusion:

In this study, management system view and quality management principals are summarized first and standard requirements of ISO 14001 Environmental Management System are conceptually elaborated and implementation of every standard requirement is detailed for the selected construction plant in the following stage.

As can be seen in sample projects, construction projects are being completed very fast and contractors are working in a highly competitive environment with low profit ratios in our country and mostly qualified work force cannot be accessible.



Figure 4. Completed Project Site Denizli, Turkey

Management techniques which is being used in many sector through worldwide has to be adopted in construction sector for the highest quality and increased profit rates. Therefore it's not easy to establish and implement such management systems for the average construction companies with has not adequate back ground and well organised, qualified human resources.

In large scale construction projects there are many work packages which independent or dependent of each other with tens of subcontractors, work areas, various environmental impacts, different raw materials are being used, wastes are derived daily. Therefore coordination of every subcontractor is required a well-established integrated management system (quality, environment, safety), work schedule and material management system. Otherwise environmental impacts, health and safety risk are rising.

Addition to these there are deficits on waste handling and environmental infrastructure for the construction waste and debris. As an example; one of construction company that was implementing ISO 14001 has separated its construction wastes but could not found any licensed waste recovery company to transport these separated wastes at his city, nearby district. In this area public infrastructure is developing in a fast manner with numerous investments however from the initial times for the establishment of environmental management systems, there are still some problems arising.

Also the concept of “construction project management” which is being implemented in successful projects worldwide cannot be implemented except larger projects in Turkey. In case of nonexistence of main management system (quality) implementation of EMSs cannot be managed.

During the studies at the reference construction project, it had been observed that there are many matching points between there management systems such as fulfilment of quality requirements at sample structures also diminishes the wastes, equipment working hours and workmanship losses, increased the efficiency, material losses, safe working methods also ending with prevention of fire, accident, explosion risks, excessive dust, noise and decreased leakages, wastes, environmental impacts.

Hence Turkish contractors with their international large scale projects are rank as the second term at the Engineering News Record List (which ranking world’s first 250 top contractor companies with business volumes) with 42 contractors next to China with 62 contractors at the year of 2014 (ENR 2014).

As a conclusion; main challenges for implementation of environmental management systems at the construction projects in Turkey are; very fast and tight schedules for construction projects and highly competitive environment with low profit ratios for contractors and lower levels of qualified work force in construction sector comparing with other industrial sectors. Addition to this there are deficits on waste handling and environmental infrastructure.

Despite all constraints, EMSs that will be implemented in this industry with commitment of top managements and demand of customers will be an enabling, facilitating tool to determine environmental aspects and impacts of construction sites, will provide higher compliance levels for environmental legislation, to establish best available methods for operational control on waste management, chemicals management etc. and to plan monitoring and measurement, to prioritize environmental aspects for investment schedules and waste management.

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Agribusiness Insurance System in Georgia and its Main Tendencies

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Abstract

Food supply maintenance of the population is a part of global issues and its success is the foundation of the development of any national economy. Georgia is an agricultural country, but the food potential of the country is used only partially. The main determining factors of the problems are the provision of financial resources and specific risk factors. In the given situation, the Ministry of Agriculture of Georgia has developed an agricultural insurance project, which will support and facilitate the adoption of agricultural insurance. Today prospects and problems of the insurance sector are vital issues for agriculture as well as for the economy and employment. In this article, we discussed the performance of agricultural insurance and the necessity of governmental support. On the basis of comparative analysis of the experiences of the current states of The European Union and Georgia, prospects and dangers of the development of agricultural insurance has been detected. Also, based on theoretical and practical analysis, essential recommendations have been designed to eliminate dangers and to promote the development of agricultural insurance in Georgia.

Keywords: Agribusiness, Financial mechanism, Insurance, The European Union

INTRODUCTION

The current situations in the agricultural sector and the economic state of the farmers involved in it are constantly changing for several important reasons. These reasons include the agricultural policy reforms, market liberalization, globalization, and imbalanced relationships between sellers and buyers (http://www.farm-europe.eu/travaux/how-to-tackle-price-and-income-volatility-for-farmers-an-overview-of-international-agricultural-policies-and-instruments/#_ftn6). The other distinguished factors are: exchange rates, prices of energy resources and fertilizers, interest rates,

sanitary measures, animal diseases, climate change etc. (Bielza, Conte, Dittmann, Gallego & Stroblmair, 2006).

Insurance is the most famous risk sharing instrument. In order to carry out risk insurance, it has to be performed simultaneously in two conditions. Firstly, it should mitigate side effects of "asymmetric information." Secondly, it must overcome "systemic risk". Čolović Vladimir and Petrović Nataša Mrvić agreed by giving the opinion of Markovic T. and Jovanovic M. that insurance is the best tool for risk management. Thus, this represents guarantees and stability factors for any production (Čolović & Petrović, 2014).

In a country, only the development of the insurance sector is insufficient to develop agricultural insurance, but targeted state agricultural policy and strategy is essential too. The three main models of agricultural insurance mechanism are:

- The insurance system is managed and controlled by the state - a system which is characterized by a strong state support. Only one unified insurance product is supplied to the market by the state monopoly company;
- The system based on private and public sectors partnership is characterized by a large share of agricultural insurance and a well-diversified portfolio of risks;
- Free market system rather than low share of the agricultural insurance in the insurance sector and the level of risk diversification. This system depends entirely on the insurers' interests to operate on the market, as well as on the current state of agricultural policy (Čolović & Petrović, 2014).

Joseph Stiglitz discusses the legitimate reasons for government intervention in the agricultural markets, as well as what determines allocation inefficiencies of the market. Stiglitz has identified a number of determining aspects: 1) Incomplete markets in insurance future and credit; 2) Public goods and increasing returns; 3) Imperfect information (Government supply of information can be thought of as a type of public good); 4) Externalities; 5) Income distribution (Given the initial holdings of assets, this distribution need not, and often does not, satisfy society's ethical judgments) (Stiglitz, 1987).

Despite the urgency justified with rational reasoning, actually the connection between the state policies and the above-mentioned issues is mostly very small. As a result, measures formed to ensure the increase in farmers' income may actually increase the risk of farmers' income in conditions that a large amount of public funds are spent on subsidizing (Stiglitz, 1987).

Experience confirms that for the development of agricultural insurance and penetration rates growth, only premium-based subsidies are not enough factors. According to The Foreign Policy Initiative BH (Bosnia and Herzegovina), the most successful models of agricultural insurance are those which includes, among other things; high activity of government in the sector by policy and institutional development, risk assessment, and transparent methods of extension promoting.

World Experience

Worldwide agricultural insurance issue has always been important. The number of recently signed insurance policies and the amount of paid claims make it even more highlighted. For example, the volume of gross insurance premiums accumulated by insurers for 2005 equaled 8 billion dollars. By 2014, this figure was 31 billion dollars. From 2005 till 2011, the agricultural insurance premium annual growth was 20%, the penetration rate - 0.83%, and the highest rate the USA had in the year 2014 was 6.49%.

Table 1. Institutional Framework of Agricultural Insurance

Scheme type	Characteristics	Examples
Insurance by the Public sector	The government as the insurance provider and holds monopoly on the market	a. Canada: Ten regional insurance companies that are supported by the Federal Government. b. Cyprus: one governmental insurance company within Ministry of Agriculture.
Commercial insurance without participation of the government	Private commercial based insurance	a) Australia: 15 private companies dominant at the market; b) Argentina: 29 private companies that cover agricultural insurance market.
Private-public partnerships	1. National insurance company makes partnership with leading commercial insurance company.	a) Agroseguro fund in Spain; b) Tarsim Pool (Turkey).
	2. Open market with commercial companies with Government holds certain control level by participation in premiums and policy design.	a) Portugal: SIPAC insurance scheme with participation of 15 private companies; b) The USA: participation of 15 private companies
	3. Open market with commercial companies but lower level of control, and the role of the government is chiefly in subsidizing the premiums.	Brazil, France, Italy, Mexico, Russian Federation.

Source: The World Bank

Among countries and regions in terms of accumulated premiums, the US and Canada are leaders with 55%. Thus, this is followed by Asia with

22% and European countries have third place with 18% share. There is a different perspective in developed and emerging markets as well. Insurance premiums accumulated in emerging markets during 2005 were \$ 1 billion dollars. By 2011, it has reached 5 billion dollars. By 2025, the emerging markets are expected to increase agricultural insurance premium volume up to 19 billion dollars. With regards to the structure of the agricultural insurance, 90% of total signed insurance policies are for crop insurance, while the rest 10% are allocated to other types of agricultural insurance (Čolović & Petrović, 2014).

By itself, in this direction, it is of great importance to share the experience of the EU. The European Union in 1962 has developed the common agricultural policy - (CAP), which is aimed at increasing agricultural productivity and biodiversity, climate stability, and food availability to consumers at reasonable prices in terms of creating normal living conditions for farmers. Through the policy in 28 member countries of the EU, 12 million farmers are operating. In addition, 4 million people were employed in the food sector.

The EU policy has three dimensions; market support, financial aid, and agricultural development. The EU's budget spending on the given direction is 39% of the total budget (about 59 billion euros). In 2009, the EU has included the risk management tools in the CAP, which are as follows (http://www.farm-europe.eu/travaux/how-to-tackle-price-and-income-volatility-for-farmers-an-overview-of-international-agricultural-policies-and-instruments/#_ftn6):

- Financial support to farmers for the **premiums on insurances** for crops and livestock against losses caused by adverse climatic events and diseases;
- Financial support for **mutual funds** to compensate farmers for **production losses** related to climatic and environmental events;
- An **Income Stabilisation Tool (IST)**, mobilising financial support for farmers who experience severe income losses (exceeding 30% of the average annual income).

Based on risk management, instruments from the EU budget have spent only 1,703,604,478 euros. In total, it is 2,699,300,000 euros in the following proportions:

- 1) Premium subsidy - 2,212,500,000 euros (82%);
- 2) Mutual Funds - 357,000,000 euros (13%);
- 3) Income stability tool - 129,800,000 euros (5%).

In total, 633,850 farms were funded. 206,635 farms received premium subsidy, 418,000 farms received assistance in connection with mutual funds, and 10,450 farms benefited from income stabilization instruments. EU premium subsidy program is carried out in 8 countries and 4

regions. However, the other two instruments are available only in 3 countries. The instruments must be fully implemented by the end of 2018.

In the European Union such an attitude towards the agricultural insurance and risk management, also the slow pace of implementation of these instruments is partly due to a pre-existing policy. This policy was directed at direct payments and its focus was on subsidizing the price (a farmer slightly experienced price fluctuations due to guaranteed payment of the subsidy, with no motivation and interest for the risk management instruments to use).

In Europe, the most advanced and sophisticated agricultural insurance system is in Spain. The central and regional government partly covers 20% to 60% of insurance policy premiums. The system is built between the government and private sector by institutional agreement in which the farmers' unions are actively involved. This system was created in Spain in 1978 and from that period, the insured crop areas and species have significantly increased.

In 2005, Poland legislated the new agricultural insurance act under which the farmer, who receives funding from the EU directly (direct payment), has to insure at least half of the area of land under one risk factor otherwise the fine per hectare is 2 euros. The government subsidizes 65% of premium, till 2016, subsidy was 50% of insurance premium. Insurance tariff imposed was on the maximum point of 6%. These approaches have increased insured land areas and the quantity of new insurance policies. In 2006, 10,738 crop insurance policies were sold with total insured land area 311,740 hectares; in 2008, the policies raised up to 87,150 insured area 1,832,036 hectares; and in 2013, 151,101 policies insured area is 3,398,812 hectares (Sulewski https://www.wur.nl/upload_mm/8/8/a/bbf25350-6dd8-47ed-a63a-333bc6576d97 Sulewski Agricultural insurance Poland.pdf). As for the livestock insurance, the picture is not so good at all. In 2006, signed policies reached 318; in 2008 – 220 policies; and in 2013 – 307 policies in total. Subsequently, the cause of this situation is majorly due to a lack of attention and subsidy problems for livestock insurance.

Agricultural Insurance in Georgia

As for Georgia, nearly 85 percent of the land is owned by small farmers who do not produce even accounting. At the same time, relatively large farms due to high cost of insurance do not insure the harvest. Therefore, in September 2014, the Ministry of Agriculture developed and implemented agro insurance project which currently subsidizes insurance premiums within 70 - 80% (according to Agro Insurance Program - Decree # 524 of the Government of Georgia on March 28, 2016). Until 2014, only a few insurance companies were offering agricultural insurance products to

farmers and the agricultural insurance penetration rate in the insurance sector was too low (less than 1%). The high cost of the insurance product and the level of insurance culture among farmers influenced the product formation. It guaranteed unprofitable product for insurance companies. Also, they had to cover for the losses of funds accumulated from sales of other insurance products.

In 2014, the experts group of Spanish company, Agroseguro, studied the details of the rural sector and agricultural insurance with Georgian experts who elaborated recommendations for the development of the agricultural insurance strategy. At the same year, agricultural insurance pilot program was initiated by the Ministry of Agriculture. The program compensates the damage caused by hail, excessive rainfall, hurricanes and the autumn frost. During the first year of the project, the budget was 5 million GEL. Co-financing maximum amount of insurance premium is 30,000 GEL and 50,000 GEL in the case of agricultural cooperatives (<http://news.ge/ge/page/saqartvelos-soflis-meurneobis-saministro>). Today, 5 insurance companies are involved in the project: JSC Insurance Company Aldagi BCI, GPI Holding, IC Group, Ardi group, and Insurance Company Unison.

In 2016, several changes were made in the project. According to the amendments, the beneficiary can insure up to 5 hectares of land (30 hectares instead of 15 hectares in case of cereal culture). Each insurer will receive co-funding which is 70% for all the culture envisaged by the program and 50% for the vine. In case of the land registration in the Public Registry, or insure with the existing cadastral code, co-financing will be 10% excessive. Since 2016, minimum and maximum insurance tariffs have been identified. Also, from this year, insurance compensation and deductions - franchise (unpaid minimum) has been improved and adjusted to customer requirements (<http://apma.ge/newsletter/projects/read/agroinsurance>). The budget for the project in 2016 amounted to 10 million GEL (<http://agrokavkaz.ge/axali-ambebi/agrodazghveva-ganakhlebul-proeqts-phermerebi-etsnobian.html>).

Changes also affected the upper limits of insurance tariffs by insured crops. In addition, certain penalties and sanctions were put in the project for the insurance company violating the obligations under the contract. In the first case, for example tariffs for:

- 1) Grain cultures - increased from 8% to 8.50%
- 2) Leguminous crops - decreased from 8% to 7.20%;
- 3) Vegetable crops - decreased from 12% to 11%;
- 4) Citrus - remained unchanged at 11% and etc.

As for the insurance company's liability for the improper performance of the obligations, we can specify the following paragraphs and fines:

1) The insurance company is obliged to submit reports on the issued policies to the Agency for 20 months from the end of each month. In case the term is broken, the Agency may refuse to pay the insurer the subsidy;

2) 100 GEL for incorrect information in the policies;

3) Incorrect GPS coordinates of insured land - 50 GEL for each policy;

4) In case of impossibility of identifying the amount of money paid by the insurer in accordance with the policy - 10 000 GEL for each policy (according to Agro Insurance Program - Decree # 524 of the Government of Georgia on March 28, 2016). Adding the given points in the project was due to a number of technical or organizational flaws made during the pilot program.

Regarding the State Project, Insurance Company Aldagi has offered customers flexible and simplified conditions with the Bank of Georgia and Microfinance Organization Credo. 50-60% of the Vine Insurance premium will be financed by the state. Therefore, a farmer will have an opportunity to pay the remaining amount with interest-free loan and repay it during the harvest. In case of the destruction of crops or seedlings, the farmer will return the insurance premium back (<http://credo.ge/ka/465/>).

The Project Results: In 2014, 29,514 plots (with 18,498 hectares) were covered by insurance project and totally 12,409,225 Gel premiums were payed, out of which 11,637,013 GEL was subsidized by the state. Also, the insurers paid 18,498 GEL. The largest amount insured by land area was citrus cultures - 12,391 hectares and by payed premiums leading culture was vine with total 5,376,636 GEL premium. (see **Table 2**). As for the territorial distribution, the largest number of insured land plots were located in Kakheti 9,863 plots, while the lowest is 1 plot in Tbilisi (see **Table 3**). During 2014, damage was caused by natural disaster - hail in Guria and Adjara districts. The total loss amounted to 1,879,298 GEL (6,879 insurance claims).

Cumulatively, 2014-2015 under the project covered 40,013 land plots (with 23,667 hectares of land area) (Source: Association of Georgian Insurance Companies). It should be taken into account that in 2015, an amendment was made in the project. This is according to what the state subsidy share in insurance premium which decreased from 90% to 60%. As a result, it caused 64% decrease of insured land number in 2015 compared to the indicator for 2014.

The premiums accumulated by insurance companies during the two years given amounted to 16,031,039 GEL. In 2015, the indicator was defined by 3,621,814 GEL, 71% less than the 2014 results. As for the paid claims, the total amount was 14,178,445 GEL (20,026 claims number) in two years. The loss ratio was 88%, while the frequency of loss - 51%. According to the

insured risks, most cases were caused by hail, 15,334, with total paid claims of 13,414,317 GEL.

The share (penetration rate) of agri-insurance in the entire insurance sector over the last two years is as follows: 2014 - 4.1%. Therefore, this is a good indicator on the background of 1% of the previous periods. In 2015, it still represents 1%. The indicator shows that farmers are not ready to insure the harvest, which, on one hand, is due to financial support problems and low level of insurance culture. On the other hand, it results to distrust towards insurance companies.

Table 2. Policies issued in 2014 under the Agro Insurance Project

Insured risk: hail, excess sediment, hurricane, autumn frost for citrus cultures				
Culture	Number of insured parcels	Accumulated premiums (Gel)	Premium paid by the Agency (GEL)	Insured area ha
Citrus	12,391	2,433,866	2,290,621	3,190
Vine	7,353	5,376,636	5,059,132	5,731
Crockery crops	5,797	1,175,582	1,085,057	2,707
Fruit trees	2,762	2,278,802	2,143,958	1,836
Cereal crops	562	430,819	396,168	4,151
Vegetables crops	347	374,669	352,433	363
Berry crops	147	93,881	82,963	140
Parnished crops	104	186,898	171,688	185
Subtropical crops	31	43,963	41,784	45
Strawberry crops	20	14,309	13,208	150
The sum	29,514	12,409,225	11,637,013	18,498

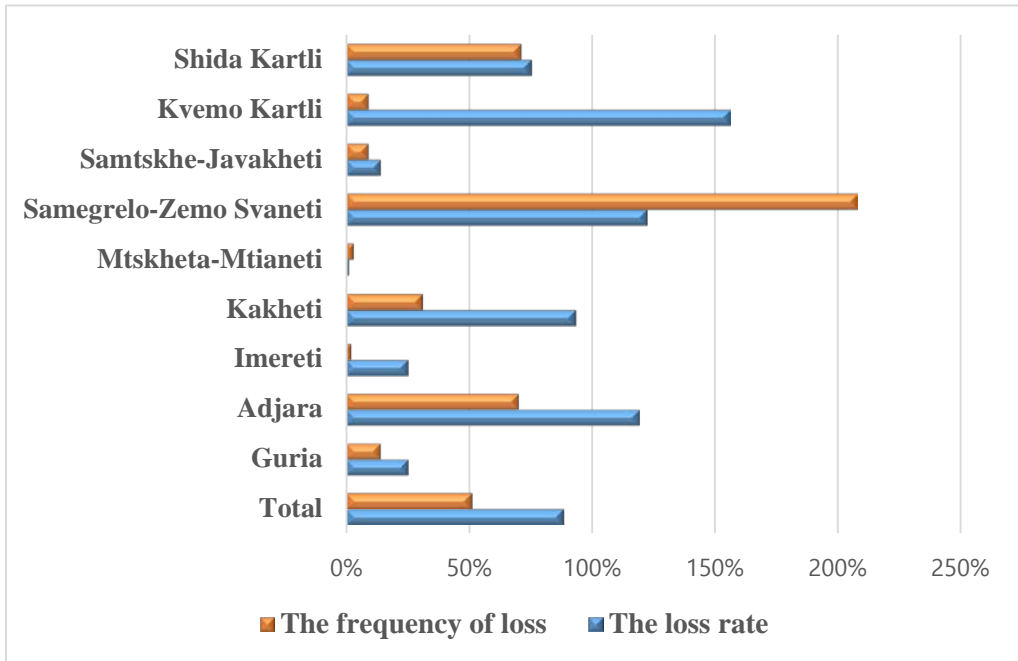
Source: Association of Georgian Insurance Companies

Table 3. Policies issued in 2014 within the framework of the Agro Insurance Project

Insured risk: hail, excess sediment, hurricane, autumn frost for citrus cultures			
Region	Number of insured parcels	Accumulated premiums (Gel)	Insured area ha
Kakheti	8,863	7,218,180	9,469
Adjara	9,037	1,673,030	2,523
Guria	7,575	1,453,837	2,274
Samegrelo	1,554	440,469	1,032
Shida Kartli	1,044	1,042,503	1,306
Kvemo Kartli	415	534,943	1,828
Imereti	15	6,021	11
Racha-Lechkhumi	6	10,736	21
Mtskheta-Mtianeti	4	29,057	33
Tbilisi	1	450	0.22
The sum	29,514	12,409,225	18,497.7

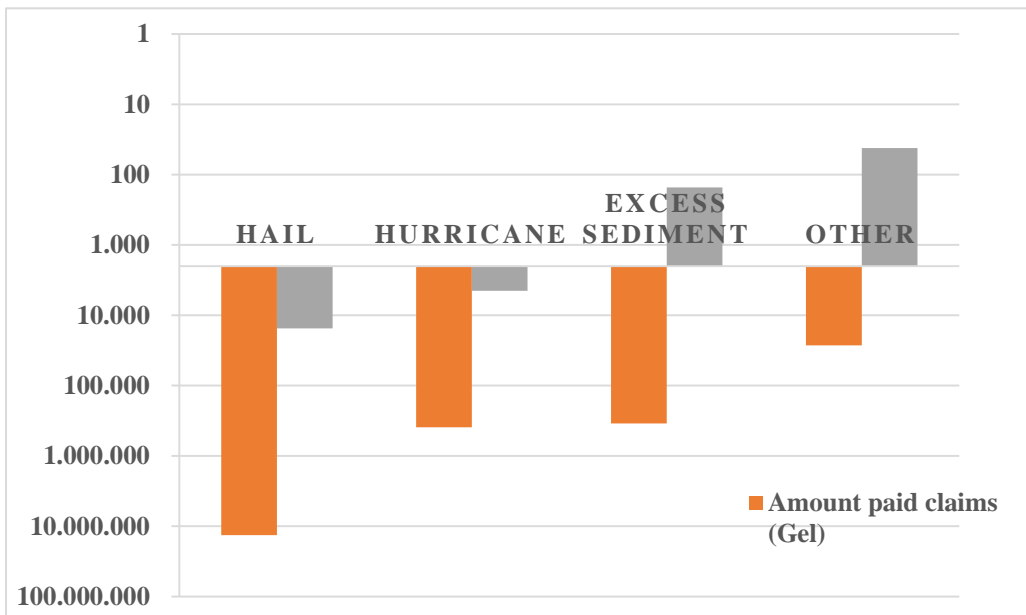
Source: Association of Georgian Insurance Companies

Chart 1. The loss rate and the frequency of loss by regions in 2014-2015



Source: Association of Georgian Insurance Companies

Chart 2. The loss rate and the frequency of loss by natural disasters in 2014-2015



Source: Association of Georgian Insurance Companies

In addition, we should also consider productivity. Recently, the output of annual crops (maize, potatoes, except wheat) and the size of the cultivated land area have significantly decreased. In perennial crops (fruits, citrus, except for grapes), the same decline was observed. This aspect indicates a truly unfavorable trend for agriculture and agro-insurance in Georgia.

Definitely, natural disasters should be considered. Drought is not insured within the program, but considering it as a significant risk factor, it is necessary for it to be taken into account. The drought is observed on the whole territory of the country. In the early periods, the drought was once in every 15-20 years, while in the recent period, it occurs every 6-7 years. In 1995-2008, the damage inflicted by drought on agriculture reached up to 400 mln GEL. In terms of rainfall, Georgia is a contrasting region. In the Caucasus, Guria-Adjara and Kolkheti lowland, rainfall is more than 1000 mm per year. In other regions, the sediments are less than 300-750 mm. That is why the problem of desertification which is the main cause of the drought is actual for Georgia. Furthermore, it is essential that the risk factor should be involved in the insurance program.

CONCLUSION

Based on the analysis and compilation of the above, we can conclude:

1. It is necessary for Georgia to evaluate the risk management system in the EU and set it in the agenda for discussion;

2. Consideration of farmers' attitude towards insurance and their solvency problems. By itself, the state agro-insurance project is a step forward in terms of the development of insurance sector as well as the creation of financial stability of the agricultural sector. However, taking into account the hasty execution of the agro-insurance pilot project and the mistakes made by both parties (agency and insurance companies) in the process of implementation at the initial stage, could have negative impact on farmers' incentives and preparedness to re-engage in the project. In addition, the effectiveness of the project in terms of increasing the level of insurance culture was not the result of the effect that would be expected within the project budget. If we look at the comparison between the data of 2014 and 2015, the trend gives the basis for this conclusion. In 2014, the share of the agri-insurance in the entire insurance sector increased up to 4%; and in 2015, it was only 1%;

3. There is a lot of work to be done in marketing by insurance companies. Also, an educational work is not only the prerogative of insurance companies, but also the effective measures of the government should be strengthened;

4. The trend is observed in the insurance market to operate with only a few types of products. It is necessary to analyze the needs of consumers and take into consideration, further refining of the product or offer a new one. In connection with agro insurance, they can also share western experience, even in terms of novelty, Indexed insurance is an innovation offered on the insurance market based on price and aggregate calculations for the index assigned to the particular region. This insurance product includes; satellite mapping, determining the meteorological risks of regions that are characteristic of regions, and granting them the relevant index. This product helps to differentiate the pricing scale according to the risk level for each region.

For example, if we look at the frequency and loss ratio of the claims in the agri-insurance policy issued in 2014-2015, according to the regions, we should note that total loss ratio amounted to 88% and the frequency of loss - 51%. According to separate regions, Samegrelo-Zemo Svaneti was distinguished with 122% and 208% of the losses and frequency rates when the similar indicators of Mtskheta-Mtianeti were equal to 1% and 3%. To create a complete picture of risk factors for natural disasters and predicting them, it is necessary to establish permanent and sustainable cooperation with the National Environmental Agency. This, however, helps to predict the country's natural hydro meteorological and geodynamic processes and events. In cooperation, according to insurance risk factors, mapping can be done for retrospective and forecast analysis. It will be welcomed to form an information platform for agro insurance. This will unify the information received from the contractors engaged in the system and provide the information materials required for the analysis from the stakeholders;

5. For agro insurance, it is highly important to determine exact coordinates of insured land plot. For this purpose, several methods are used: Extract of the Public Registry indicating the cadastral code of the land, land drawings and GPS coordinates. In Georgia, lack of land plots registered in the Public Registry makes it necessary to use the GPS coordinates recording system when insuring. The formatting of these coordinates data is available in different ways: 1) **Degrees, minutes, and seconds (DMS) - 41°24'12.2"N 2°10'26.5"E**; 2) **Degrees and decimal minutes (DMM) - 41 24.2028, 2 10.4418**; 3) **Decimal degrees (DD) - 41.40338, 2.17403**. Using a different system of coordinate formatting and putting into one particular platform/system, which is customized to another particular format, determines the incorrect final coordinates. As a result, the insurance company has insured a different land from the land plot specified in the policy;

6. Gradually, it is necessary to think about the insurance of livestock sector. The annual increase in the number of livestock is 3%, while the

percentage of the falling rate with reference to the previous years varies from 3 to 30% in the previous year. There is quite a big change and the farmer needs help in this regard. For example, involvement of the product "livestock insurance" developed by GPI Holding in the state program will be a step forward in the initial stage. The annual insurance premium is 30 GEL and it will compensate the damage caused by many risks;

7. Under the Agro Insurance Project, agent's commission is a maximum 20%. On average, a policy commission rates varies by 10%, while maximization of the commission up to 20% may cause distortion of an insurance agent's incentives and reduction of other insurance products sales. Similarly, there is a risk of distorting market incentives for the entire insurance company by the influence of guaranteed subsidized premiums;

8. The physiological and vegetative picture of the plant growth differs by the climatic zones, so that cultural plants should be distinguished by climatic zones, which are related to the specific zone (Georgia is characterized by 11 climatic zones from 14 climatic zones worldwide). Also, there must be defined favorable soil type and region of land for specific crops. This gives the opportunity to reduce the risks of climatic conditions, and to encourage more crop growth in relation to specific crops. Enrolment of existing nuances in insurance policy allows the reduction of the cost of insurance policy according to certain risk factors;

9. When considering the EU agro-insurance system, it is necessary to review EU solvency regulations and gradual approach to it. From the 1st of January 2016, The EU has moved to solvency II which includes new regulations and requires an increase of minimum capital and minimum reserve/guarantee funds, as well as supervision and risk margins. The insurance sector in Georgia is still far from these regulations. Minimum capital requirements at least 2 million GEL (for non-life insurance) and 2.2 million GEL (for life insurance and reinsurance - changed in 2015) is very far from the minimum guarantee fund requirements according to solvency II which is 3 million euros. Also, currency exchange rate and consumer price index should be considered (The European Union carries out the minimum capital adjustment in accordance with this index). It is necessary to plan for a time-limit plan to increase the minimum capital gradually, which will be announced to insurance companies to take measures in advance. It is inevitable to resolve this issue to meet EU standards on one hand, and to increase the level of solvency and financial stability of insurance companies on the other hand.

As for calculating the base of the solvency margin, since June 2016, the amendments has been introduced in the Law on Insurance. Also, it has defined the calculation base which is applicable to the requirements of EU

Directive 2009/138/EC. Thus, the solution of this issue should be assessed positively;

10. Assets of the insurance sector are growing at a slow pace and very low level of capitalization and investments are made by them. This indicates weakness of financial management and wrong assessment of the risks. In this respect, there is a lot to be done by companies and the government itself. The function of the government in this case requires setting up high standards of education and promotion and licensing of high level specialists in insurance and actuarial activities;

11. Weak management, coordination, communication and internal retraining of staff, and corporate management standards. In today's Georgia, many companies are suffering due to weak management in the long term. This applies to insurance companies as well. Time and money expenditure, which cannot be counted in quantitative terms at a glance, is expressed in reduced sales and increased acquisition or administrative expenses over the long term. The weakest link in this case is the lack of coordination at all levels, at the top management or in the middle level. Incomplete systems and methods of communication at the vertical and horizontal level are the main problem of information exchange. This, however, increases the cost of operation or creating and accounting costs of a specific policy.

The level of general qualifications of personnel is also not acceptable. An investment in human capital increases the expected returns in the long term. However, in many cases, the HR policy is not at this level.

Finally, it can be said that there is still much to be done in order to minimize the factors and risks associated with the development of agro-insurance in Georgia. If the relevant legislative-regulatory activity were not started, it is possible that this process cannot give the expected positive results and all efforts could be in vain.

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