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CONTENT

Refered Articles

Role of the State in Financial Sector Development and Achieving Pro-Poor Growth: Evidence from Bosnia and Herzegovina

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Abstract: *This paper provides theoretical background and empirical research on state's role in financial sector development, focusing on state's role in achieving pro-poor economic growth through its activities in development of the financial sector. To this end, in the theoretical part of the paper, it is explained that pro-poor growth depends on the strong private sector, while at the same time private sector development is dependent on the degree of financial sector development. The empirical part of the paper discusses the role of the state in financial sector development and its contribution to economic growth and poverty reduction in Bosnia and Herzegovina (BH), arguing that this growth needs to be pro-poor oriented as BH is the poorest country in Europe. In order to assess the state's role in financial sector development and its implication to pro-poor growth in BH, surveys among small and medium enterprises (SMEs) and government representatives were conducted. The research shows significant disagreement between the two surveyed groups about the efforts currently being implemented by BH government in supporting the private sector through financial sector development. It is concluded that government needs to work more closely with the private sector as well as with the financial sector so as to better identify the private sector needs and then create policies and take actions necessary for the private sector to develop, which would consequently lead to poverty reduction.*

Amra Babajić, Meldina Kokorović Jukan

Introduction

The year 2015 was set as the target year by the United Nations (UN) to implement the Millennium Development Goals (MDGs), with halving absolute poverty set as the first most important goal. Unfortunately, evidence shows that in many developing countries, mostly in Sub-Saharan Africa and Oceania, this goal would not to be met (UN, 2015). In order to reduce poverty, governments need to take necessary actions to assure what in academic literature is referred as the pro-poor economic growth.

Broadly, pro-poor economic growth can be defined as one that enables the poor to actively participate in and significantly benefit from economic activity. Promoting pro-poor growth requires a strategy that is deliberately biased in favor of the poor so that the poor benefit proportionally more than the rich (Kawani 2000:3).

Pro-poor economic growth can be achieved through private sector development (e.g. promotion of entrepreneurship) as the generator of work places. Government role in private sector development is of crucial importance, since the government is responsible for policies and regulations promoting positive environment for private sector development. One of the aspects of promoting pro-poor growth through private sector development is by means of support and development of the national financial system (creating adequate financial market structure and stable financial institutions, as well as assuring adequate prudential supervision). Financial system development requires government support to provide stable and favorable environment for different types of financial institutions to develop, and furthermore, to provide incentives for financial institutions to create financial products/services tailored to the needs of private enterprises and of poor people to be able to self-employ.

The main goals of this paper are twofold. The first goal is to investigate the role of the state in financial sector development with the main focus to establish the link between government efforts to achieve sustainable pro-poor growth and its efforts to develop the financial system which will be in the function of pro-poor growth.

The second goal is to analyze the current state of government intervention in the financial sector oriented to poverty reduction in Bosnia and Herzegovina (BH). Also, the paper is to provide guidelines and recommendations for the improvement of

government policies regulating financial sector and for greater involvement of the state in providing financial support to private sector development.

BH is a rather dysfunctional country with a relatively high poverty rate. According to UNICEF's poverty measure AROPE (*At-Risk-of-Poverty and Social Exclusion*), BH has the greatest risk of poverty and social exclusion among European countries. AROPA for BH is 58.6% (of population), and it fairly deviates from the EU-27 AROPE that totals to 24.2% as well as from the new member countries whose AROPE totals to 30.6%. This evidence shows that BH needs the shift in current economic policies.

The first part of the paper provides the theoretical background on the financial sector impact on poverty reduction. It focuses on establishing the link between state's role in financial sector development and state's role in contributing to poverty reduction by creating policies (among other policies) that ensure the development of the financial sector. In the second part of the paper a review on the existing literature and previous research on the subject is presented. In the third part of the paper empirical research results on the state's role in financial sector development in BH are presented.

Using discriminant analysis, it was found that a huge gap exists between government perceptions of their influence on financial sector development and perceptions of private sector participants on the government role in financial sector development.

Theoretical Background on State's Role in Poverty Reduction through Financial Sector Development

Economic growth, which is in the function of poverty reduction, requires macroeconomic stability, efficient investment in human and physical capital including infrastructure, regulation of enterprises and well-functioning financial sector (financial institutions as well as financial markets). Private sector, dominated by small and medium enterprises, is perceived as the most important key for assuring economic growth and job creation. In that respect, government efforts should be directed to enforce policies and create positive environment for promoting private sector development which, in the end, will deliver pro-poor economic growth.

Moreover, an important precondition for strong private sector development and its ability to deliver pro-poor growth is the existence of a sound financial system. According to the UK government's Department for International Development, the

financial system contributes to factors needed for private sector to deliver pro-poor growth by the following activities (DFID, 2004:4-5):

- Mobilizing savings for productive investment, and by facilitating capital inflows and remittances from abroad. The financial sector has a crucial role to play in stimulating investment in both physical and human capital, and hence increasing productivity;

- Reducing transactions costs, facilitating inward investment, and making capital available for investment in better technologies. The financial sector can promote technological progress, thus increasing productivity, and improving resource use;

- Enabling the poor to draw down accumulated savings and / or borrow to invest in income-enhancing assets (including human assets e.g. through health and education) and start micro-enterprises, wider access to financial services generates employment, increases incomes and reduces poverty;

- Enabling the poor to save in a secure place, the provision of bank accounts (or other savings facilities) and insurance allows the poor to establish a buffer against shocks, thus reducing vulnerability and minimizing the need for other coping strategies such as asset sales that may damage long-term income prospects.

Developed financial sector contributes to poverty reduction in two different ways: directly and indirectly (see Figure 1).

Figure 1: Financial Sector Development and Poverty Reduction
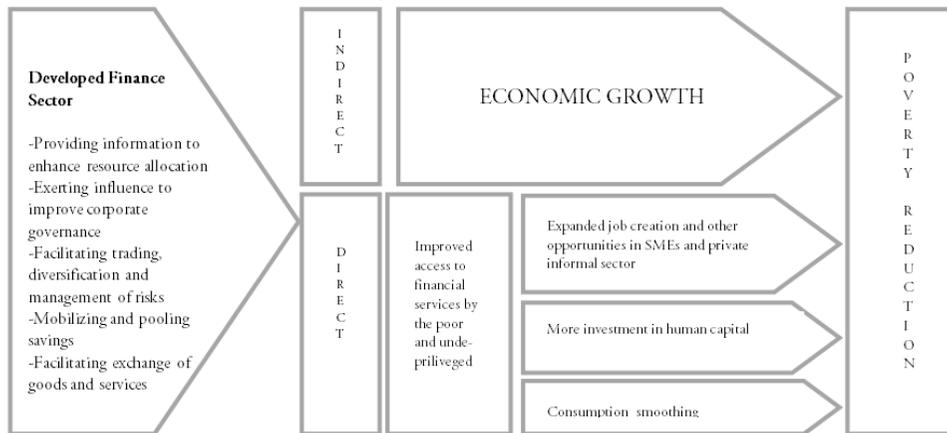
Source: Zhuang J. et al., 2009:10

Directly, financial sector contributes to poverty reduction through improving the access to financial service for poor and underprivileged people. Government may enforce policies which promote and create opportunities for self-employment and SMEs development. Furthermore, government can invest in better education and human capital development. Through better allocation of fiscal revenues for social spending, government can contribute to consumption smoothening among different population groups. Indirectly, the financial sector contributes to poverty reduction through boosting economic growth.

In most developing countries, the major challenge of financial systems development is to provide access to formal financial sources (products and services) to the poor. Poor people are usually deprived of accessing commercial bank loans and financial services since poor people are observed as risky clients. For that reason, poor people mostly rely on the informal or semi-formal financial institutions which, in general, offer much more expensive financial products/services. Empirical evidence (Beck, Demirgüç-Kunt, and Martinez-Peria, 2007) confirms that the most important direct channel through which financial sector development impacts on poverty reduction is better access to financial services.

Furthermore, it is important to emphasize that state's role in financial system development is extremely important. Through regulation and supervision, the state

creates secure and stable environment for financial institutions and markets to develop.

To assure poverty reduction, governments need to implement policies which would lead to the increase in economic growth rates. But, efficiency of economic growth in poverty reduction depends on the capacity of the poor to participate in the growth (WB, 2005). Poor people can participate in achieving the economic growth only if they are given an active role in job creation. This is confirmed by the World Bank study titled "*Pro-Poor Growth in the 1990s: Lessons and Insights from 14 Countries*", where it is emphasized that policymakers who seek to reduce poverty should implement policies that enable their countries to achieve a higher rate of growth. But growth is more effective in reducing poverty in some countries than in others, depending on the capacity of poor people to participate in and benefit from growth.[1]

As emphasized, development of the private sector as the new job creator is of key importance. The biggest responsibility for private sector development is on the government, because they need to create stimulative environment for development of the existing and the opening of new enterprises. There is persuasive evidence from all over the world confirming that rising levels of competition have been unambiguously associated with increased economic growth, productivity, investment and increased average living standards (OECD, 2006:41).

Therefore, based on the modern regulatory regimes for development of the private sector which include competition policy regimes, economic growth model based on the pro-poor principles is desirable in BH. The existing model of economic growth in BH is not pro-poor oriented, because the *Strategy for poverty reduction in BH* adopted in 2004 is not fully implemented.

Literature Review

Literature review shows that early researches aimed to understand the relation between financial system and social welfare, while more recent studies (last decade) are more oriented to find the link between financial sector development and poverty reduction/alleviation.

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[1] We argue that the private sector, if properly supported by the government (especially in terms of development of entrepreneurship culture), is in the function of building the capacity of the poor people to participate in the country's economic growth.

Vast theoretical and empirical academic literature exists on the subject of financial sector impact on the social welfare. The majority of the papers in the 1990s debated mainly on the relation between financial system development and economic growth in general (Bencivenga & Smith, 1991; King & Levine, 1993; Levine, 1997) and on industrial growth in particular (Rajan & Zingales, 1998). Levine (2004) argues that countries with better functioning banking sector and financial markets grow faster.

Bencivenga and Smith (1991) found positive relation between financial intermediation development and increase in real growth rates. Furthermore, they conclude that regulation policies (such as reserve requirements and interest rate caps) might have an impact on economic growth and need to be considered by developing countries. King and Levin (1993) formulated and empirically proved the model showing that better (more developed) financial systems stimulate economic growth by accelerating productivity rates. It is shown that more developed systems make more efficient selection for financing entrepreneurial activities and, therefore stimulating faster economic growth. Fields (2001) argues that through better access to finance poor people have better opportunities to participate in economic activities. Most recent empirical studies shows the existence of a significant positive effect of financial system development on poverty reduction, where countries with more developed financial systems are more likely to have lower poverty rates. (e.g. Akhter et *al.* 2010; Ho S. and Odhiambo, N. M , 2011; Azra. D *et al*. 2012; Uddin, G. S. *et al.* 2012).

Honohan (2004) shows that correlation between financial development and sustainable economic growth needs to be drawn by more comprehensive statistics than merely banging sector depth. Furthermore, Quartey (2005) investigated the relation between savings mobilization and poverty reduction showing the existence of correlation between the two variables, but emphasizing the role of the government and its policy in stimulating domestic savings.

It was also observed that institutional quality and adequate regulation of financial institutions play a crucial role in positive relationship between financial system development and poverty reduction (Dhrifi, 2013a.)

Moreover, Dhrifi concludes that government must cooperate closer with the financial market and the banks acting as the regulator for formalizing models for the poorest access to formal and informal finance. Such actions of policy intervention should normally facilitate institutions providing financial services to the poor. In

addition, it should foster cultures of households to invest in profitable projects. Political solutions must be tailored to the problems of the financial sector. (Dhrifi, 2013b:477).

Having in mind the importance of government involvement in financial sector development aiming to achieve pro-poor economic growth, further research focuses mainly on the government role in BH in reducing poverty through financial sector development.

Contribution of Financial Sector Development to Poverty Reduction in BH

Overview of the Institutional Framework in BH Supporting the Private Sector and SMEs

The general climate in the society should lead individuals to consider the option of starting their own business as attractive, and acknowledge that SMEs contribute substantially to employment growth and economic prosperity (EC 2008:3). In that respect, institutional infrastructure is necessary to support SMEs in proving growth and economic prosperity.

When it comes to creating stimulative environment for private sector development in general, government's role is of the utmost importance. Nevertheless, institutions forming infrastructure for private sector development are not just governments, but also non-government, private and non-profit organizations. There is no unique institutional infrastructure for private sector development and it differs from country to country. Support provided by government institutions is usually related to providing consulting and professional services, presenting good practices, etc. The majority of countries have developed different types of institutions such as government agencies, ministries, associations, chambers, and financial institutions. These institutions operate on different levels, from local, regional, state to international level.

In context of creating adequate institutional infrastructure for supporting the private sector, especially for supporting SMEs, the European Union (EU) has made significant improvements. By adopting "Small Business Act" for Europe, the European Commission has laid a set of principles for implementation of policies both at the EU and Member State level in order to improve the legal and administrative environment throughout the EU for SMEs. These principles are the following (EC, 2008:4):

- Create an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded,
- Ensure that honest entrepreneurs who have faced bankruptcy quickly get a second chance,
- Design rules according to the "Think Small First" principle,
- Make public administrations responsive to SMEs' needs,
- Adapt public policy tools to SMEs' needs: facilitate SMEs participation in public procurement and better use State Aid possibilities for SMEs,
- Facilitate SMEs access to finance and develop the legal and business environment supportive to timely payments in commercial transactions,
- Help SMEs to benefit more from the opportunities offered by the Single Market,
- Promote the upgrading of skills in SMEs and all forms of innovation,
- Enable SMEs to turn environmental challenges into opportunities, and
- Encourage and support SMEs to benefit from the growth of markets.

By turning these principles into practice, many different institutions supporting SMEs have been established across the EU with coordinating efforts to provide better institutional framework for SMEs. By adopting *EU Acquis Communautaire*, BH has accepted these principles to create adequate institutional setting for SMEs development.

Currently, there are several institutions that provide institutional support for SMEs in BH. This infrastructure is rather complicated due to the elaborate olitical and legal system in the country. BH operates on the state level with two entities: Federation of BH (FBH) and Republic of Srpska (RS), and Brcko District. FBH is further divided into ten cantons, each operating as a state within the state. The overview of BH government institutions and governmental financial institutions supporting SMEs is given in Table 1.

On the state level, development of SMEs is coordinated by the *Ministry of foreign trade and economic relations*. Within this Ministry the *Sector for Economic Development and Entrepreneurship* is responsible for SMEs development and is in charge of the following basic activities: normative-legal, study-analytical, technical-operational, information-documentary, and administratively-technical. These activities include different areas such as: macroeconomic analysis and economic

growth forecast of BH; collaboration with international institutions and organizations; collaboration with domestic and foreign scientific and research institutions; preparation of treaties, agreements, and other acts for projects and programs of economic restoration and development; projects and programs of bilateral and multilateral donations and credits for economic restoration and development; coordination of international economic assistance to BH except the part regarding the European Union assistance; preparation of bilateral and multilateral agreements and other acts regarding economic restoration and development of BH; development of entrepreneurship, support to the development of SMEs; SMEs promotion.[2] Nevertheless, the fund for financial support for SMEs on the state level does not exist. Financial government support for SMEs is under the jurisdiction of the entities.

On the level of FBH, SMEs are supported by the *Ministry of Development, Entrepreneurship and Crafts and Development* and the *Development Bank of FBH*. Furthermore, each of the ten cantons has cantonal ministry which deals with SMEs. In RS, SMEs development is supported by the three following institutions: the *Ministry of Industry, Energy and Mining of RS,* the *Agency for SMEs* and the *Development Bank of RS.*

Table 1: The overview of BH government institutions supporting the private sector and SMEs

Level of government	Government institution	Government financial institution
State level	*Ministry of foreign trade and economic relations of BH*	*Does not exists*
Entity level Federation of BH	*Ministry of development, entrepreneurship and crafts*	*Development Bank of FBH*
Entity level Republic of Srpska	*Ministry of industry, energy and mining of RS* *Agency for SMEs*	*Development bank of RS*
Cantonal level	*Designated ministry for SMEs*	*Development bank of RS.*
Brcko District	*Government of Brcko District –*	*Development Grant Fund of Brcko District*

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[2] www.mveteo.gov.ba

Besides the government institutions, there is a wide network of non-government institutions providing support to SMEs development in BH, such as REDAH - *Regional Development Agency for Herzegovina*, REZ – *Regional Development Agency for Central BH region*, NERDA - *Regional Development Agency for North-East BH*, SERDA – *Sarajevo Regional Development Agency*, etc.

This existing legal infrastructure in BH, with different laws adopted on different government levels (state, entities, and cantons) and problems in the implementation of the Strategy for SMEs development, is rather complicated and does not provide proper conditions for enterprises to operate. Laws adopted on different government levels are not harmonized. Furthermore, there is no single state register of SMEs. Other infrastructural problems are related to complicated public administration, high costs of maintaining public administration, redundancy in functions of different institutions on all government levels with unclear responsibilities, etc. The number of registered enterprises in BH is reduced year by year, and conditions for the operation of the existing enterprises are worsened.

Overall, it can be concluded that the current infrastructure supporting SMEs in BH is not in favor of achieving sustainable growth in the country. The Strategy of SMEs development is not being implemented properly and Strategy for poverty reduction is nothing more than cold facts on paper, as government is doing nothing to enforce and achieve strategy objectives. These strategies are not producing pro-poor growth.

Overview of the BH Financial Sector

The BH financial system is bank centric, where the dominant role is played by the commercial banks. The non-bank financial sector is relatively underdeveloped with the following financial institutions operating within the sector: microcredit organizations, leasing companies, investment funds and insurance companies. As Figure 2 shows, commercial banks account for 84% of the total financial asset within the BH financial system, while the remaining financial institutions account for 5% or less of the total assets.

Figure 2: Structure of financial institutions of the BH financial sector in 2013
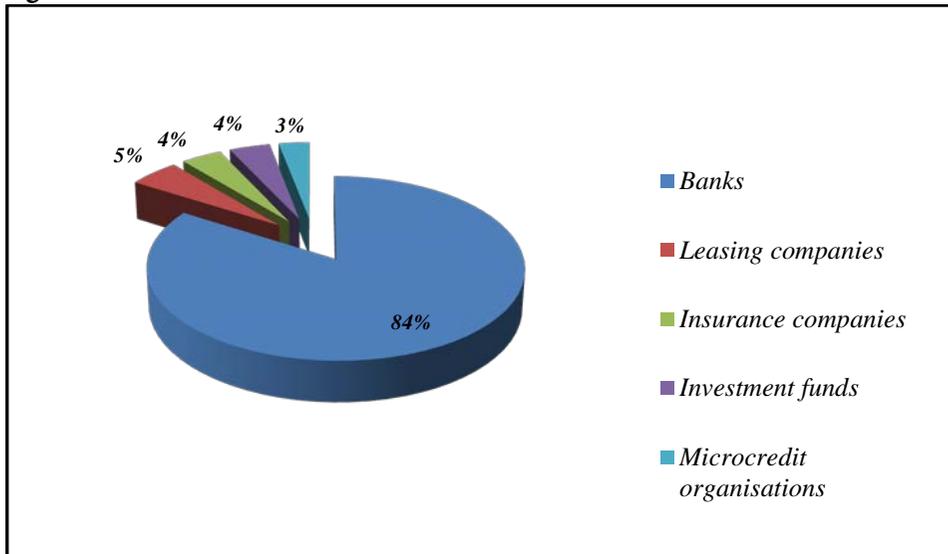
Source: CBBH (2014)

Stability and security of the overall banking sector is adequate, according to the data provided by the Banking Agencies of Federation of BH and of Republic of Srpska. In 2012, capital adequacy rate of the banking sector, as the most important measure of banking sector performances, was 16.4%, which is substantially above the regulatory minimum of 12%. Regardless of the financial crisis, the financial system of BH remains strong in terms of its ability to provide financial support to non-financial sector (companies and households).

On the other hand, statistical data shows that credit activity of banks was decreased during 2012, where 51.6 % of total credits (approx. BAM 16 billion) was granted to non-financial companies (public and private), 42.6% to households and 5.2% to the government. In the same period, microcredit financial institutions in Federation BH granted only 2% of the total credits (BAM 400 million) to companies and 98% to households.

According to the Annual Report for 2012 of the Central Bank of BH, there were 28 licensed banks in BH, with 18 of them operating in FBH and 10 in RS. There were 19 microcredit financial institutions (13 in FBH and 6 in RS), with 15 of them

organized as microcredit foundation and 4 as microcredit organizations.[3] Leasing companies are less developed financial institutions with only 9 being licensed for providing leasing contracts (7 in FBH and 2 in RS).

Furthermore, capital markets in BH are not used to their full potential. Organized capital markets exist within two securities exchanges (Sarajevo Stock Exchange and Banja Luka Stock Exchange), but the annual turnover at these exchanges is rather symbolic. The structure of the securities exchanges turnover shows the lack of foreign investors and dominance of government debt securities. Private companies do not use securities exchanges to raise capital funds through stock or bonds issuing or initial public offerings.

Research Methodology and Sample

For the purposes of assessing government involvement and policies impact on strengthening the financial sector oriented to poverty reduction and pro-poor growth, we conducted the research among SMEs and government bodies. The aim of the research was to better understand the perceptions of SMEs as the most important creators of work places, as well as of the perceptions of government agencies representatives about the level of government involvement in financial sector development.

In order to collect the research data two types of questionnaires were created, one for SMEs and other for government representatives. The questionnaires were structured to collect data about government policies and actions impact on private sector development and poverty reduction focusing on the financial sector impact.[4] The questionnaires were created consulting the OECD document - *Promoting Pro-Poor*

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[3] One of the main differences between microcredit foundations and microcredit institutions is related to the maximum amount of granted credit. Microcredit foundations can grant a credit in the maximum amount of BAM 10,000 (approx. EUR 5000), while microcredit organizations can grant a credit in the maximum amount of BAM 50,000 (approx. EUR 25,000 EUR).

[4] The research results, presented in this paper, are part of the broader research on government role in poverty reduction in BH which, besides its role in strengthening the financial sector, covered government role in strengthening entrepreneurial environment and the overall support to the private sector by eliminating different barriers, such as regulatory, administrative and financial.

Growth: Private Sector Development and the European Commission document - *The European Platform against Poverty and Social Exclusion: A European framework for social and territorial cohesion.* The questionnaire for SMEs included thirteen questions, while the one for government bodies included eighteen questions.

The sample of the surveyed SMEs was created based on the partial data on the number and types of SMEs from the Indirect Taxation Office of BH and the Agency for Statistics of BH, since the state level database of SMEs operating in BH does not exist. Having in mind that the sample would be rather large to collect the data, it was decided to include 250 SMEs in the sample. The size and structure of the sample is shown in Table 2. The response rate among SMEs was 50%.

Table 2: Size and structure of the sample of the surveyed SMEs

Group	Number of employees	Type of SME	Stratums		Sample	
			Number of enterprises	%	Number of enterprises	Number of enterprises in the sample
1	0 – 10	Micro Enterprises	31,102	78.58	196.45	197
2	10 – 50	Small Enterprises	6,539	16.52	41.3	41
3	50 – 250	Mid-sized Enterprises	1,938	4.90	12.25	12
Σ			39,579	100.00	250.00	250

Source: Authors' research

The survey of government institutions included the following institutions and agencies: Federal Ministry of Development, Entrepreneurship and Crafts, FBH Development Planning Institute, Agency for Development of Small and Midsized Enterprises of Republic of Srpska, Government of Brcko District – Development Grant Fund of Brcko District, Federal Ministry of Energy, Mining and Industry, Ministry of Foreign Trade and Economic Relation of BH, and ten cantonal ministries of entrepreneurship. The response rate among government institutions was 81%.

The data was collected in the period from May to November 2014, by e-mail, phone and direct contact.

Research Results and Discussion

As it was indicated in the previous part of the paper, economic pro-poor growth implies orientation to poverty reduction through different government measures, including financial sector development. Financial sector development contributes to pro-poor growth by creating a network of different types of financial institutions as well as a variety of financial products/services for the private sector and supporting entrepreneurial development, which contributes to poverty reduction by increasing employment and self-employment.

SMEs Perceptions of State's Role in Financial Sector Development in BH

In general, the survey shows negative SMEs perceptions of the state's role in financial sector development and its contribution to entrepreneurial development and, therefore, to poverty reduction. Figure 3 shows the results of the level of the surveyed SMEs agreement with different aspects of government (state) support to financial sector development.

Figure 3: Perceptions of SMEs on the state's role in financial sector development
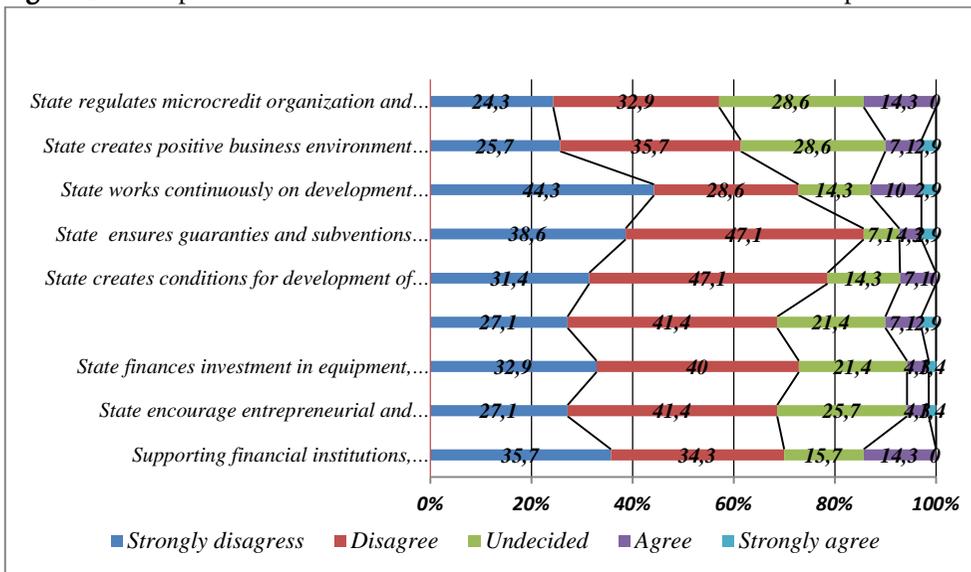
Source: Authors' research

As Figure 3 shows, 23% to 44% of the surveyed SMEs strongly disagree, while 28% to 41% of the surveyed SMEs disagree that the state supports financial sector development oriented towards helping SMEs and entrepreneurial firms.

The majority of the surveyed SMEs disagree that state:

- ensures guaranties and subventions for debt financing of the companies (85.7% of the surveyed SMEs),
- creates conditions for development of different types of financial products/services for micro/small/mid-sized companies (78.5% of the surveyed SMEs), and
- works continuously on development and strengthening of the financial sector (72.9% of the surveyed SMEs).

Furthermore, the research results show that most of the surveyed SMEs have either a negative or neutral attitude towards the state regulations on microcredit organizations and prevention of misuse of these organizations, state's role in creating positive business environment and support to microcredit organizations, and state's support to financial institutions.

It is interesting to observe that less than 15% of the surveyed SMEs expressed a positive attitude towards the state's role in financial sector development and its impact on entrepreneurial development.

Government Bodies Perceptions of its Role in Financial Sector Development in BH
In contrast to SMEs negative perception, the survey shows a more positive attitude among government bodies of the state's role in financial sector development. The results of the survey are shown in Figure 4.

Figure 4: Perceptions of government bodies on the state's role in financial sector development
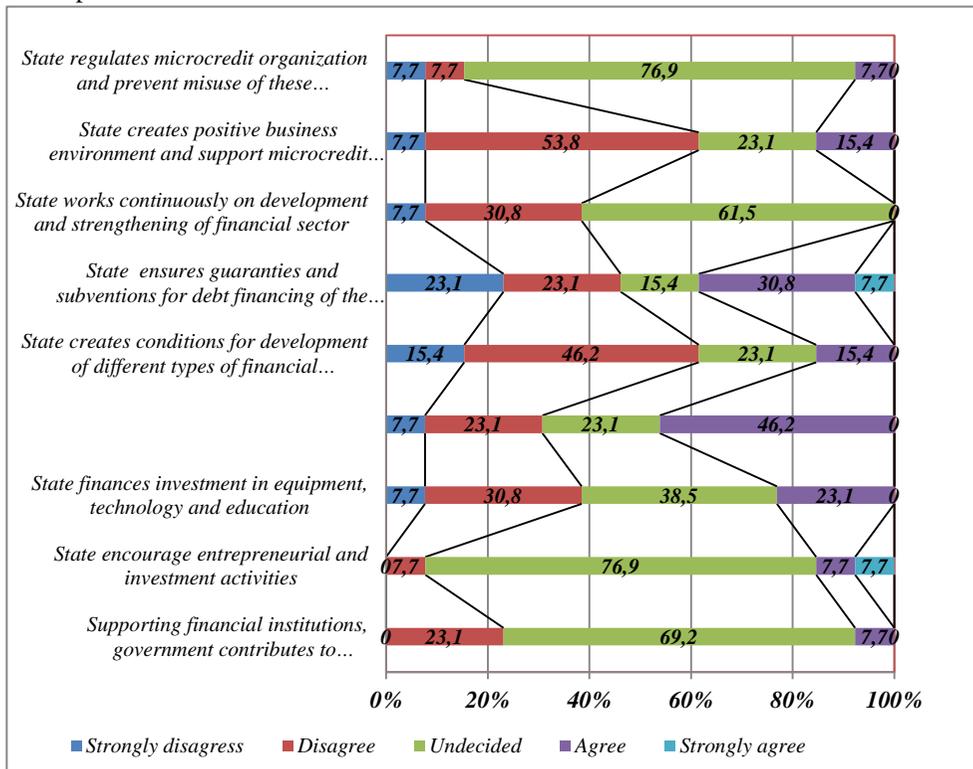
Source: Authors' research

The majority of the surveyed government bodies are undecided (neutral) towards the statements related to state policies and to the entrepreneurial development through strengthening the financial sector. Government bodies agree that the state does not create conditions for development of a wide range of financial products/services for micro/small/medium enterprises and, moreover that it does not create positive environment and financial support for microcredit organizations.

In contrast to the perceptions of the surveyed SMEs, government bodies express a positive attitude towards the state's role in creating the conditions for debt financing for start-ups and enterprise development, as well as towards the state's role in ensuring grants and subventions for debt financing of SMEs.

Using discriminant analysis existence of the significant difference among attitudes between the private and government sectors on the state's role in strengthening the financial sector was tested. In that respect, one discrimination function was determined, where the function describes 100% of the variation of the between groups variation, which is shown in Table 3.

Table 3: *Discrimination analysis for the state's role in strengthening financial sector*

F	eigenvaules λ	% of Variance	Cumulative %	Canonical Correlation r_c	Wilks' Lambda λ	Chi-squared χ^2	df	Sig.
1	0.278	100	100	0.467	0.782	18.788	9	0.027

Source: Authors' research

Squared canonical correlation (r_c), the effect size for the discriminant functions, is $(0.467^2)=0.278$. Wilks Lambda is rather high (Wilks $\lambda=0.782$) showing low discrimination strength of discriminant functions. Chi-squared test (χ^2) for function 1 is statistically significant ($\chi^2=18.788$, sig.=0.027), showing that discrimination model is significant, and therefore can adequately measure group membership, but determined differences between groups are rather small.

Table 4 shows discriminant function coefficients and group centroids for the state's role in strengthening financial sector.

Table 4: *Discriminant function coefficients and group centroid for the state's role in strengthening financial sector*

	Discriminant Coefficient (DC)	Group	Centroid
State encourages entrepreneurial and investment activities	0.823	Private sector	-0.225
State ensures guaranties and subventions for debt financing of companies	0.629		
State creates conditions for debt financing of start-up/development of firms	0.624	Government	1.209
State finances investment in equipment, technology and education	0.569		

Supporting financial institutions, government contributes to entrepreneurial development	0.536		

* Difference does not exist

Source: Authors' research

Table 4 shows differences between the observed groups for chosen variables in the hierarchical order. The mayor difference in perceptions among the private and government sectors is observed in respect to the following: state's role in encouraging entrepreneurial and investment activities (DC=0.823), and state's role in ensuring guaranties and subventions for debt financing of companies (DC=0.629). On the other hand, there is no significant difference between perception among the private and government sectors on the state's role in creating positive business environment and support to microcredit organizations.

It can be observed that even though some differences in perceptions among the private and government sectors, on the multivariation level, do exists, where the private sector gives a lower grade than the government bodies for the state's involvement and contributions to financial sector development, those differences are rather insignificant.

Conclusions and Recommendations

In order to reduce poverty, governments in developing countries need to take necessary actions to assure pro-poor economic growth. Pro-poor economic growth can be achieved by greater role of the state in developing private sector and creating environment for entrepreneurship. In that respect government needs to establish economic environment which would boost private sector to create more work places for the poor. Furthermore, the state needs to engage in development of the financial sector, as financial sector development is one of the preconditions for private sector to develop. Without proper financial sector infrastructure for private sector and entrepreneurs to obtain external financial sources (more precisely, without availability of different types of external financial sources tailored to their needs), it cannot be expected that a pro-poor growth can be achieved through private sector development.

As the research shows, based on the BH experience, it is not enough to create the regulation framework of the financial system and regulation for SMEs, but it is

important that regulations and government actions are in line with the expectation of the private sector.

The research shows that private sector is not satisfied with actions undertaken by the state for supporting financial sector. The analysis of SMEs perceptions reveals that SMEs have negative perceptions towards the state's role in financial sector development. The surveyed SMEs are of the opinion that the state interventions in financial sector are not contributing to entrepreneurial development in BH, regardless of the fact that BH financial sector is well developed and well regulated.

On the other hand, the analysis of perceptions of government bodies at all levels (municipal, cantonal, entity and the state level) reveals that the state is not aware of the needs of private sector, as well as of entrepreneurial sector. It is obvious that a huge lack of understanding between the state and private sector exists. In that respect, it is important that government work more closely with private sector as well as with financial sector to identify the needs of private sector and create policies and take actions necessary for private sector to develop.

In particular, when it comes to financial sector development, government bodies need to:
- rethink and better distribute guaranties and subventions for debt financing of companies,
- create conditions for development of different types of financial products/services specially tailored for the needs of SMEs,
- work continuously on development and strengthening of financial sector, hold workshops or focus groups where all interested parties (the state, financial institutions and SMEs) would be able to discuss the problems in access to financial products and services.

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Trade liberalisation and product structure: The case of the Western Balkans

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Abstract: *This paper addresses an important issue of an impact of trade liberalisation on export structure and product concentration, which, according to contemporary findings, has a strong influence on the dynamics of economic growth. The analysis covers the region of the Western Balkans (WB) in years 1995 – 2013. An emphasis is put on effects of the Stabilisation and Association Process (SAP) and CEFTA-2006 agreement, which formed the basis for the trade liberalisation in the region. The empirical results provide evidence that is in contrary to findings from other countries where trade liberalisation resulted in their deepened specialisation in export of raw materials and labour-intensive goods. Moreover, liberalisation processes turned out not to have had much impact on product concentration of the WB's trade. Finally, substitutability of capital and labour factors in production of the basket of exported goods was confirmed.*

Introduction

The countries of the Western Balkans were undergoing in the recent past a number of trade liberalisation processes, out of which two appeared to have had the most prominent role[i]. The first one, Stabilisation and Association Process (SAP), was a programme set up by the European Union (EU) after the end of the Kosovo conflict in 1999 with an aim of bringing the countries of the region onto a path of a peaceful co-operation with would lead to a final membership of those countries in the EU. A tariff-free access for almost all products originating from the WB countries was one of the key economic incentives proposed in the programme.

Although regional co-operation was a tough challenge after troublesome 1990s, because of at least two things this process was desired. Firstly, all but one (Albania) countries of the WB region constituted for decades one single state, Yugoslavia, thus the borders between them were somewhat unnatural. Secondly, the EU was sending clear signals that countries applying for a membership should first show their ability to co-operate on a regional level. Thus, a step was taken to follow the path of the so-called Visegrad countries and to sign the Central European Free Trade Agreement. Since December 2006, when all the WB countries finally signed it, it has been referred to as the CEFTA-2006. A rapid tariff reduction was planned and applied, followed by slower addressing the problem of non-tariff issues.

If and how those two processes influenced product structures of the Western Balkan countries' trade was the focal point of this research. Its importance comes from the works of Hausmann, Hwang and Rodrik (2005) and Misztal (2011), who prove that product structures and concentration of export have a strong impact on the economic growth dynamics.

In the research a hypothesis was tested that export of the Western Balkan countries was dominated by raw materials and labour-intensive products and that their shares went even higher due to trade liberalisation processes. This hypothesis was based on findings of Rodriguez and Rodrik (1999) and UNCTAD 2002. An alternative approach was presented by Molendowski (2010) who predicted that due to convergence resulting from trade liberalisation, a process of levelling production factor prices would begin.

Another feature of trade structures was product concentration. Its importance was highlighted by Misztal (2011), who showed that in case of many developing

countries trade diversification led to faster GDP growth. On the other hand, Snorrason (2012) proved that relatively small countries should have a high level of product specialisation, which is connected with a low level of internal demand. Thus, it was tested if trade liberalisation processes had an impact on product concentration of trade in the Western Balkans.

Methodological framework

A vast majority of trade of the Western Balkan countries took place in two directions: with the European Union and within the WB region. In 2013 these two regions together accounted for over 82% of exports and for over 74% of imports of the Balkan countries (see Table 1).

Table 1. Geographical structure of export and import of the Western Balkan countries in selected years from period 1995–2013 (in %)

Country group	1995	1999	2007	2008	2009	2013
	Shares in the WB export (%)					
EU	64.6	60.9	60.1	64.0	58.8	63.0
W. Balkans	15.8	22.0	23.5	23.4	24.9	19.4
Other	19.6	17.2	16.4	12.6	16.3	17.6
	Shares in the WB import (%)					
EU	66.8	67.0	58.9	57.9	59.4	63.2
W. Balkans	8.8	10.1	11.1	11.1	10.8	11.2
Other	24.4	22.9	30.0	31.1	29.7	25.6

Source: Own calculation based on data from:
http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en,
(access: 23.02.2015).

Similarly, in those two directions WB countries conducted their two major trade liberalisation processes: SAP and CEFTA-2006[ii]. For these reasons, an impact of trade liberalisation in both above instances on trade structure was investigated. It implied a division of the research period for three stages:

- 1995–1999 (period after the war in Bosnia and Herzegovina)
- 2000–2007 (from starting of the SAP until entering into force of the CEFTA-2006),

- 2008–2013 (from the first year of entering into force of the CEFTA-2006 in all countries until the last year for which data were available).

As the economic crisis of 2008 had deep consequences on economic performance of the WB countries, the last stage was divided for two sub-periods:

- 2008 (the sole year when CEFTA-2006 countries didn't encounter effects of the crisis)
- 2009 – 2013 (period of functioning in circumstances of the crisis and its effects).

All data used in the research comes from the UNCTAD STAT internet database.

Factor content of trade

Trade liberalisation processes in the Western Balkans resulted in changes of the factor content of their trade. As of 1995, 1/3 of their export came from labour-intensive products, 1/4 of each of raw materials and technology-intensive goods (mostly easily imitable), whereas 1/6 of capital-intensive products (see Table 2 and Graph 1). In the first years after the war, the share of labour-intensive products even grew (to 34.9%), whereas the share of raw materials dropped (to 22.1%). In the period 2000 – 2007, connected with the SAP process, the importance of the labour-intensive products dropped (28.9%), mostly in favour of capital goods (21.9%). This positive trend got even stronger after entering into force of the CEFTA-2006 agreement.

The World economic crisis influenced the export structure of the WB economies very heavily. Just in the first year of its outbreak the share of the labour-intensive products increased from 27.3% in 2008 to 29.7% in 2009, and, reversely, the share of capital goods fell down from 22.8% to 17.8%. It is worth mentioning, that in the whole analysed period, the share of technology-intensive goods stayed on a quite similar level (ca. 25% to 26%).

Table 2. Factor content in total export of the Western Balkan countries between 1995–2013 (in %)

Products	1995	1999	2007	2008	2009	2013
Raw materials	25.1	22.1	24.8	23.8	26.5	27.7
Labour-intensive	33.3	34.9	28.2	27.3	29.7	26.0
Capital-intensive	16.6	16.7	21.9	22.8	17.8	21.7
Technology-intensive, where:	25.0	26.4	25.1	26.0	26.1	24.7
- easily imitable	6.6	6.1	5.3	5.6	6.2	7.7
- difficultly imitable	18.4	20.3	19.7	20.4	19.9	17.0

Source: Own calculation based on data from:
http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en,
(access: 23.02.2015). The division of the SITC sections based on factor content after:
(Misala, Pluciński 2000, p. 153).

Graph 1. Factor content in total export of the Western Balkan countries between 1995–2013 (in %)
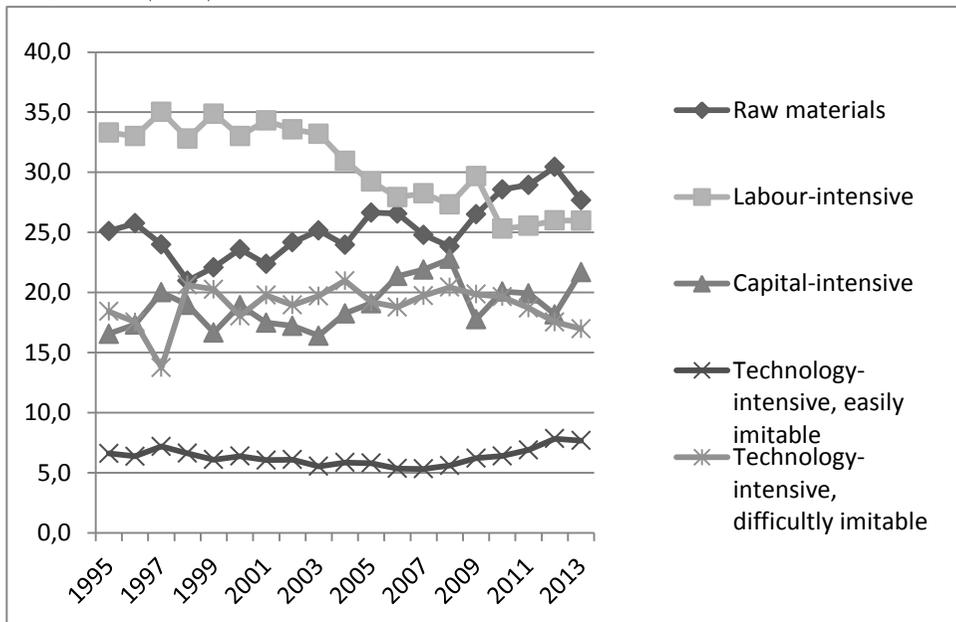
Source: Own calculation based on data as in Table 2.

From this short section a number of conclusions can be drawn on influence of the trade liberalisation and factor content of trade. Firstly, one can notice that the share of raw materials and technology-intensive goods in the WB countries export doesn't

result from liberalisation processes. Secondly, the hypothesis was confirmed that relatively poor WB countries would focus on production and export of labour-intensive goods, more than capital-intensive ones. Thirdly, the liberalisation processes didn't result in any larger scale of the labour-intensive goods against capital-intensive ones.

Product categories traded

An interesting issue is the main product groups traded by the Western Balkan countries and their share in total trade. As for Albania, the first five sections constituted in 2013 as much as 59% of total export of the country (the highest value of all the WB states). Out of this, 28.1% came from sales of petroleum oils, oils from bitumin. materials, crude (SITC section 333), and 14.7% from sales of footware. They were followed by ores and concentrates of base metals and men's clothing (see Table 3).

Footware was the main export category of Bosnia and Herzegovina (8.3%), followed by furniture, aluminium, electric current and iron & steel bars.

To the products groups of the highest value of Croatia's export belonged in 2013 petroleum oils or bituminous minerals > 70 % oil (10.2%, SITC section 334), medicaments (4.3%), ships, furniture and wood simply worked.

The share of Montenegrin's export of the five best export categories was in 2013 as high as in the case of Albania (59.0%). More than 1/4 value thereof came from electric current, 1/5 – aluminium, followed by alcoholic beverages, ferrous waste and wood.

A different export structure characterised export of Serbia. The main section was motor vehicles for the transport of persons (13.4%), followed by equipment for distributing electricity, copper, rubber tyres and fruit.

On the other hand, among the most popular export products of Macedonia one could find miscellaneous chemical products (15.0%), pig iron & spiegeleisen (10.0%), followed by pumps (excluding liquid), gas compressors & fans, women's clothing and men's clothing.

To sum up, the export categories of the Western Balkan countries seemed to be relatively diversified in 2013. Among the main categories of Albania, Bosnia and Herzegovina, Montenegro and Macedonia there were mainly raw materials and labour-intensive goods. On the other hand, in the export of Croatia and Serbia, the share of capital- and technology-intensive products was predominating.

As for the main SITC categories in import or the countries of the WB region, the situation looked quite differently in 2013. In all the countries to the main categories belonged sections:

333 - Petroleum oils, oils from bitumin. materials, crude
334 - Petroleum oils or bituminous minerals > 70 % oil.

In the import of Albania, the latter one had the highest share of 14.8%, followed by motor vehicles, medicaments, footwear and leather. Both "petroleum" sections opened the list of the Bosnia's top imports, with shares 7.8% (334) and 6.3% (333). The next positions belonged to medicaments, motor vehicles and footwear. Similarly in Croatia's import the first two categories were 333 with 9.4% and 334 with 5.6%, followed by natural gas, medicaments and electric current. The section 334 had the highest share in the import of Montenegro (10.2%), followed by motor vehicles, other meat, electric current and medicaments. The only country where the top import section was not "petroleum" type, was Serbia with "parts & accessories of vehicles" (8.7%) holding that place. This section is bound by a technological process with the main export category – "motor vehicles for the transport of persons". The next positions were section 333, natural gas, medicaments and 334. In Macedonia section 334 of 10.1% leaded, then silver, platinium, flat-rolled products, eletric current and cotton fabrics.

Table 3. The main product categories in export of the Western Balkan countries in 2013 and their shares in 1995

Exporter Albania			Exporter Bosnia & H.			Exporter Croatia		
Product	Share 1995	Share 2013	Product	Share 1995	Share 2013	Product	Share 1995	Share 2013
[333] Petroleum oils, oils from bitumin materials, crude	0.0%	28.1%	[851] Footwear	7.2%	8.3%	[334] Petroleum oils or bituminous minerals > 70% oil	7.1%	10.2%
[851] Footwear	18.8%	14.7%	[821] Furniture & parts	4.9%	6.4%	[542] Medicaments (incl. veterinary medicaments)	1.6%	4.3%
[287] Ores and concentrates of base metals, n.e.s.	3.7%	7.4%	[684] Aluminium	2.0%	5.7%	[793] Ships, boats & floating structures	5.6%	3.0%
[841] Men's clothing of textile fabrics, not knitted	6.3%	5.0%	[351] Electric current	0.0%	4.0%	[821] Furniture & parts	3.3%	2.9%
[845] Articles of apparel, of textile fabrics, n.e.s.	3.8%	3.8%	[676] Iron & steel bars, rods, angles, shapes & sections	1.0%	3.7%	[248] Wood simply worked, and railway sleepers of wood	2.9%	2.7%
Total	32.7%	59.0%	Total	15.0%	28.1%	Total	20.5%	23.1%

Exporter Montenegro			Exporter Serbia (and Mne.)			Exporter Macedonia		
Product	Share 2008	Share 2013	Product	Share 1995	Share 2013	Product	Share 1995	Share 2013
[351] Electric current	0.0%	25.7%	[781] Motor vehicles for the transport of persons	0.5%	13.4%	[598] Miscellaneous chemical products, n.e.s.	0.1%	15.0%
[684] Aluminium	43.2%	21.4%	[773] Equipment for distributing electricity, n.e.s.	2.4%	3.9%	[671] Pig iron & spiegeleisen, sponge iron, powder & granu	6.7%	10.0%
[112] Alcoholic beverages	5.7%	4.9%	[682] Copper	8.4%	2.8%	[743] Pumps (excluding liquid), gas compressors & fans; centr.	0.2%	6.3%
[282] Ferrous waste, scrape; remelting ingots, iron, steel	0.8%	3.9%	[625] Rubber tyres, tyre treads or flaps & inner tubes	2.1%	2.8%	[842] Women's clothing, of textile fabrics	3.4%	5.9%
[248] Wood simply worked, and railway sleepers of wood	2.5%	3.2%	[058] Fruit, preserved, and fruit preparations (no juice)	4.9%	2.4%	[841] Men's clothing of textile fabrics, not knitted	3.9%	4.7%
Total:	52.2%	59.0%	Total:	18.3%	25.3%	Total:	14.3%	41.9%

Source: Own calculations based on data from: http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en (access: 23.02.2015)

Table 4. The main product categories in import of the Western Balkan countries in 2013 and their shares in 1995

Importer — Product	Albania Share 1995	Share 2013	Importer — Product	Bosnia & H. Share 1995	Share 2013	Importer — Product	Croatia Share 1995	Share 2013
[334] Petroleum oils or bituminous minerals >70% oil	1.7%	14.8%	[334] Petroleum oils or bituminous minerals >70% oil	4.1%	7.8%	[333] Petroleum oils, oils from bitumin. materials, crude	9.5%	9.4%
[781] Motor vehicles for the transport of persons	2.4%	2.8%	[333] Petroleum oils, oils from bitumin. materials, crude	0.0%	6.3%	[334] Petroleum oils or bituminous minerals >70% oil	0.8%	5.6%
[542] Medicaments (incl. veterinary medicaments)	1.3%	2.7%	[542] Medicaments (incl. veterinary medicaments)	1.4%	3.1%	[343] Natural gas, whether or not liquefied	0.5%	3.5%
[851] Footwear	6.2%	2.2%	[781] Motor vehicles for the transport of persons	0.9%	2.7%	[542] Medicaments (incl. veterinary medicaments)	1.7%	3.0%
[611] Leather	1.9%	2.1%	[851] Footwear	2.3%	2.1%	[351] Electric current	1.2%	2.7%
Total	13.5%	24.6%	Total	8.7%	22.1%	Total	13.7%	24.1%

Importer — Product	Montenegro Share 2008	Share 2013	Importer — Product	Serbia (and Mne.) Share 1995	Share 2013	Importer — Product	Macedonia Share 1995	Share 2013
[334] Petroleum oils or bituminous minerals >70% oil	8.8%	10.2%	[784] Parts & accessories of vehicles of 722,781,782,783	0.6%	8.7%	[334] Petroleum oils or bituminous minerals >70% oil	10.0%	10.1%
[781] Motor vehicles for the transport of persons	5.6%	3.5%	[333] Petroleum oils, oils from bitumin. materials, crude	5.6%	7.0%	[681] Silver, platinum, other metals of the platinum group	0.1%	8.0%
[012] Other meat and edible meat offal	1.9%	3.4%	[343] Natural gas, whether or not liquefied	0.2%	3.9%	[673] Flat-rolled prod., iron, non-alloy steel, not coated	1.1%	2.7%
[351] Electric current	4.7%	3.1%	[542] Medicaments (incl. veterinary medicaments)	0.8%	3.3%	[351] Electric current	0.0%	2.6%
[542] Medicaments (incl. veterinary medicaments)	1.6%	2.6%	[334] Petroleum oils or bituminous minerals >70% oil	5.7%	3.1%	[652] Cotton fabrics, woven	0.2%	2.2%
Total	22.6%	22.8%	Total	12.9%	26.0%	Total	11.5%	25.6%

Source: Own calculations based on data from: http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?CS_ChosenLang=en (access: 23.02.2015)

Product concentration

Is product concentration of export important at all? It seems so, as Misztal (2011) showed that in case of many developing countries trade diversification led to faster GDP growth. Export of the relatively small countries of the Western Balkans is supposed to be characterised by a high level of product specialisation, which is connected with a low level of internal demand, as presented by Snorrason (2012).

In the first four years of the analysis, all the WB countries but Serbia experienced growth in product concentration of export. After that, in the period of strong influence of SAP arrangements (2000-2007) and subsequent dynamic growth of export values, again all countries but Serbia and Macedonia underwent a process of export diversification. In the following period of implementation of the CEFTA-2006 agreement (2008-2013) brought low results of diverse signs of this indicator, indicating basically a stabilisation (see Table 5 and Graph 2). Thus, one cannot draw specific conclusions on validity of Misztal hypothesis in respect of the Western Balkan countries.

An analysis of changes in product concentration of import of the WB countries leads to an observation, that in case of all countries but Albania the changes went in similar directions. While the value of the H-H indicator for Albania fluctuated rapidly in a wide range between 0.03 and 0.11, its value for all other countries fluctuated relatively small, between 0.01 and 0.03. Just in three periods the value of the H-H index changed in the same directions in case of all (but Albania) WB countries: in 2000, 2007-08 and 2010-13 they showed an increase. In the crisis year of 2009, in half of the countries product diversification rose (see Table 6, Graph 3).

Table 5. Product concentration of total export of the Western Balkan countries (Herfindahl-Hirschman index for 3-digit SITC sections) between 1995 - 2013

Country	Value of H-H index							Change to previous year				
	1995	1999	2003	2007	2008	2009	2013	1996 - 1999	2000 - 2007	2008 - 2013	2008	2009 - 2013

Albania	0.16	0.19	0.18	0.13	0.12	0.12	0.15	0.03	-0.06	0.02	-0.01	0.02
Bosnia & H.	0.05	0.06	0.05	0.03	0.03	0.03	0.03	0.01	-0.02	-0.01	0.00	0.00
Croatia	0.03	0.04	0.03	0.03	0.03	0.02	0.02	0.02	-0.01	-0.01	0.00	-0.01
Montenegro	n/a	n/a	n/a	n/a	0.21	0.18	0.12	n/a	n/a	0.12	0.21	-0.09
Serbia (& M.)	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.00	0.01	0.00	-0.01	0.01
Macedonia	0.03	0.05	0.05	0.07	0.08	0.04	0.05	0.01	0.02	-0.02	0.01	-0.03

*Source: Own calculations, based on data from
http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en,
(dostęp: 23.02.2015).*

Graph 2. Product concentration of export of the Western Balkan countries (Herfindahl-Hirschman index for 3-digit SITC sections) between 1995 - 2013
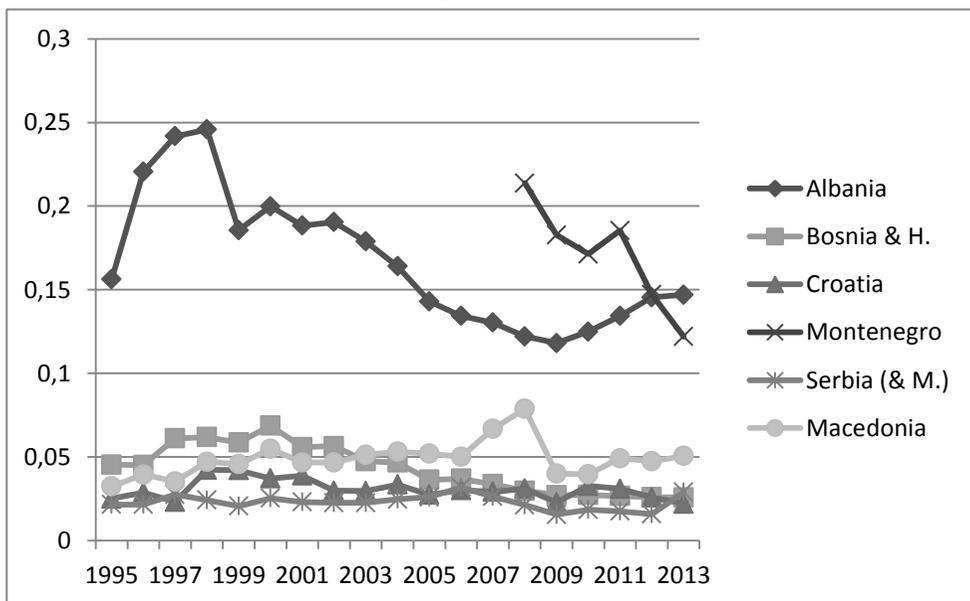
Source: Own concept based on data as in Table 5.

Table 6. Product concentration of import of the Western Balkan countries (Herfindahl-Hirschman index for 3-digit SITC sections) between 1995 - 2013

Country	Value of H-H index							Change to previous year				
	1995	1999	2003	2007	2008	2009	2013	1996 - 1999	2000 - 2007	2008 - 2013	2008	2009 - 2013
Albania	0.06	0.11	0.11	0.07	0.05	0.03	0.11	0.05	-0.04	0.04	-0.02	0.06
Bosnia & H.	0.02	0.01	0.01	0.02	0.02	0.01	0.02	-0.01	0.01	0.00	0.00	-0.01
Croatia	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00
Montenegro	n/a	n/a	n/a	n/a	0.02	0.02	0.02	n/a	n/a	0.02	0.02	0.00
Serbia (& M.)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.01	0.00	0.00
Macedonia	0.02	0.01	0.02	0.03	0.03	0.01	0.02	-0.01	0.01	0.00	0.00	0.00

Source: Own concept based on data as in
http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en,
(access: 23.02.2015).

Graph 3. Product concentration of import of the Western Balkan countries (Herfindahl-Hirschman index for 3-digit SITC sections) between 1995 – 2013.
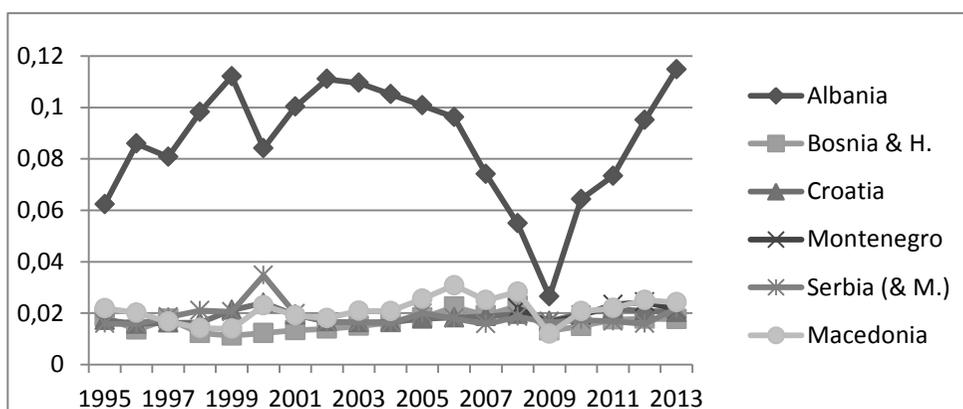
*Source: Own concept based on data as in Table 6.*
http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en,
(access: 23.02.2015).

Conclusions

The trade liberalisation processes that have been taking place in the Western Balkans region after the year 1995 were an incentive to investigate changes in product structure and factor content of their trade. In the course of the research it was found that the share of labour-intensive goods in the total trade didn't rise during the processes of trade liberalisation, as was expected from literature. Their share dropped, witnessing a simultaneous rise in the share of capital-intensive products. This observation confirms substitutability of both factors – labour and capital. The share of raw materials stayed at a quite similar level. Finally, no impact was found of the liberalisation processes on concentration of trade.

A number of limitations were encountered during the research. Firstly, the split of Montenegro and Serbia in 2006 precluded the full comparability of data of these two countries. Secondly, data for Kosovo were not presented, as they don't appear in the official statistics of international organisations like WTO or UN. On the other hand, the World economic crisis of 2008, which affected trade values in the WB region, could have distorted the interpretation of the results. For this sake, the year 2008 was analysed as a separate sub-period in the research.

The results of the research allow to draw policy conclusions, even in a more general manner than just for the region of the Western Balkans. Gradual trade liberalisation can be recommended for transition economies, as it appears to bring positive results in changing factor proportions of the exported goods. In the presented example the share of capital-intensive goods grew, mirroring a drop of labour-intensive ones. At the same time no serious change was noted in product concentration of trade.

A geographical breakdown of the product groups being traded would be recommended for a further research.

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Key Success Factors for Sustainable Strategic Information Systems Planning and Information Technology Infrastructure

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Abstract: *Paper intends to provide an expert view on the approach to transformation of business processes toward business sustainability, or sustainable business processes, with a focus on ecological thinking. Furthermore, it highlights the argument that approach to corporate sustainability is interdisciplinary process spanning from the fields of sociology to applied technological innovation and advances in the IT/IS sphere of influence. Through a review of an amalgam of very recent literature, a versatile business model is recommended bridging together most effective strategic information system planning (SISP) tools for building a sustainable business processes to be deployed in practice. This article intends to help high and middle management extend the notion of sustainable development to their every-day managerial activities while protecting the organization well-accepted business principles.*

Zana Pekmez

Introduction

Information systems (IS) and Information Technology (IT) have in many significant ways contributed to the sustainability cause in the past decades as an instrument to raise awareness about ecological thinking, communicate and distribute information, increase productivity and optimize the use of natural resources, as well as reduce travel and transportation (Huang, 2009). However, all these deeds do not excuse these technological systems and constructs from continuing to stand up for the environment advocating and supporting sustainable business practices and systems. Powerful and wide-spread technology and significant role of information systems in our everyday lives are all reasons why IT and IS should be at the forefront of the battle for sustainability.

For almost four decades it has been a greatest challenge for IT&IS professionals and business executives to align the overall business strategy with IS&IT development planning and investments. This goal became even more ambitious when executives faced the need to reconcile the corporate IS&IT planning with green strategies and sustainable and ecological thinking. The reality is that the use of IT and IS systems significantly impact the environment at every stage of its life and use cycle: consumption of raw materials, energy and water in the production phase and furthermore the consumption of electricity by use of computer, servers, displays and other hardware. Furthermore, waste of computer components has becoming a tremendous problem due to its toxic content (Murugesan, 2008).

Green IS&IT strategy should encompass all the above mentioned stages of IT&IS system life, and at the same time be aligned with corporate business strategy. To achieve this goal companies, need a holistic, systematic and well-planned strategy, deep-seated in the principles of sustainable and ecological thinking toward addressing comprehensive set of environmental concerns. Reconciling the traditional companies' objectives, such as profits, costs and competitive advantage with environmental and sustainability targets is by far greatest challenge of all, however the following text will demonstrate that there are common factors which inevitably lead in the same direction.

Corporate Sustainability and IT&IS Infrastructure

In the past two decades the fight for sustainability has expanded from regulators and government agencies to corporate world. Following the ecological thinking

principles, aware business executives have formed an organization – World Business Council for Sustainable Development which has grown in 2000 to count 150 international companies (Dyllick and Hockerts, 2002). However, the locus of their fight for sustainability has been mainly dominated by „eco-efficiency", e.g. energy saving strategies, recycling, utilization of sustainable products, which have for sure colored most of the companies' green (Dyllick and Hockerts, 2002, 131). Furthermore, companies have mostly focused on consumption of energy by the datacenters and extensive physical hardware machines and servers. According to the analyst from Gartner Research, IT departments of fairly large companies spend about 5% of their total budget on energy costs, however the IT's „dirty secret "is that more energy is consumed during the production and shipping process of hardware (PCs, servers etc.) than during its actual usage (cited in Saran, 2007).

Progressively standards for achieving sustainable business practices are becoming more demanding. Besides the efficient use of resources and energy, companies should take into consideration the entire life-cycle of products and therefore reconsider many aspects of doing business to maintain the recognition of being compliant to sustainability standards. The decision to incorporate practices such as, life cycle analysis, environmental auditing and reporting, outsourcing decisions and choice of suppliers depending on their commitment to environment, are becoming a crucial element of companies' strategy and competitiveness (Elkington, 1994, pp. 91).

Environmental policies and guidelines have been primarily the task of government agencies and regulatory to be imposed on the corporates. In this arrangement, the corporate world has adopted by inertia a very reactive role, in addition to the obligation of compliance. However, due to a very dynamic and changing market conditions, companies require an innovative and unique business practices which will add value to the entire business model and products and thus grant these companies a competitive advantage in its respective industry (El- Gayar and Fritz, 2006). A competitive advantage could be measured by an additional value added to products, better cost-management practices, a robust and efficient information system and IT infrastructure.

During last decade, many companies have discovered that incorporating sustainability into its overall long-term business strategy would possible grant them all the above, namely: additional value to products, better cost management and efficiency of IS&IT infrastructure. Achievement or retention of competitive

advantage in its respective industry and stable stream of income are much valued end-results of incorporating sustainability issues as important features of business processes and overall business goals.

The following table summarizes some of the key success factors critical to achieve sustainable and versatile operating model. All these factors summarized below stem from various disciplines.

Table 1: Summary of Key Factors

IT INFRASTRUCTURE	STRATEGIC IS PLANNING
Virtualization and cloud computing – consumes less energy; prevents the need for a data centers and prevents the need for extensive cooling systems.	CIO&COO awareness – Nexus between Operations and IT toward sustainable business practices
Using virtualization software to divide servers into multiple machines	BPM – a holistic management practices of measuring and re-designing the processes –transformation.
Replacing the old equipment with new energy efficient one – EPEAT and ENERGY STAR certified systems (LCD monitors instead of CRT technology)	LEAN methodology – elimination of all kinds of waste. Deployment of optimization systems Remote workers – less office space, less heat, less power, less commuting.
Power management – activate the power management features on servers and devices; system settings to hibernate and shut down.	Video-conferencing – with employees, customers and suppliers.
Using thin-client computers	Eco –metrics –measuring the use of energy & the levels of emission.
Recycle IT equipment properly: not carefully recycling practices are for companies' serious financial and information security liability.	Corporate environmental reporting Shared service centers

Use of renewable energy	Selecting a supplier according to their commitment to the environment (IS Value Chain)
Use Green IT Standards – Epeat (www.epeat.net), the Energy Star 4.0 standard and the RoHS Directive (www.rhos.gov.uk)	Eliminate printing and use of paper.

Source: Table is compiled by the author from various sources listed at the reference list.

Building the Theory of Corporate Sustainability

Business Process Management (BPM) approach

An approach to transformation and innovation in business practices is an interdisciplinary process with business-related and people-related content and issues concerning design and architecture. To measure the efficiency and effectiveness of processes in terms of the general behavior and practices, a maturity models have been introduced to the fields of Business Process Management (BPM) and Software engineering. These models guide organizations toward prioritizing activities and designing the roadmaps. De Bruin and Rosemann (2007) and Rosemann and vom Brocke (2010) developed a concept of BPM maturity model which contains six crucial components for successful and effective business management namely: strategic alignment of corporate goals, corporate governance, overall methods, information technology, people and culture (cited in Pernici, Aiello, vom Brocke, Donnellan, Gelenbe and Kretsis, 2012, 284). Thus, in order to get the most accurate diagnosis of companies processes to fix them and achieve better and more efficient business practices interdisciplinary approach as an amalgam of different fields of studies and perspectives are most needed.

Since corporate sustainability is entire company's target/goal affecting all of the business practices and departments – from hygiene maintenance, operation processing and high level executive decision making – the most encompassing way to address this issue is through the Business Process Management (BPM). This phenomenon has been revolving throughout the decades and is very flexible to changes and innovation thus manager should use it as a tool to diagnose inefficiency and tailor the processes that will be highly efficient (supporting the main business

goals) and highly sustainable (supporting the environment)- all at the same time. Seidel, vom Brocke and Recker (2011) emphasize that only through the employment of business process change and BPM methodology (process analysis, process performance measurement and process improvement) the altering capability and function of IS and the subsequently the role of IT, will be fully effective in transforming the business toward sustainable practices.

Coinciding roles of IS and IT in making of sustainable business

It is important at the very beginning to make a distinction between IS and IT systems as both are integral tools to sustainable business, however they differ in terms of ways of contribution to the cause, for example: IT is a set of products, mostly hardware, that processes, transmits and stores the data and promotes sustainability with a focus on energy saving, reducing the equipment waste and optimizing utilization. On the other hand, IS (information systems) is an amalgam of organizational goals and strategies brought to life through information system and software to achieve sustainable business practices (Boudreau, Chen & Huber, 2008). For example, Pernici, Aiello, vom Brocke, Donnellan, Gelenbe and Kretsis (2012) discussed the process of IS engineering with the focus on energy efficiency pointing out that application could be more or less efficient depending in the infrastructure in which it is running (different platform would require different levels of energy). Therefore, it is crucial to discuss the existing theories on the role of the hardware components (IT) in the building process of sustainable business model.

On the role of Information technology

In IT processes consumption of power by data centers and hardware have been popular topics; however, the power usage by networks has not been mentioned that often in the context of sustainable IT infrastructure. The fact is that networks consume more energy than data centers and this trend will be constantly increasing. Thus it is of crucial importance to consider the organization of business practices and systematization of human resources in regard to information processing and information sharing (Pernici, Aiello, vom Brocke, Donnellan, Gelenbe and Kretsis, 2012).

Huang (2009) defined the sustainable IT development as a set of principles that takes into account at the same time and with equal importance the business goals and the environment. He proposes a new theoretical approach for the lifecycle

analysis of IT equipment with an explicit focus on the sustainability and he calls it „sustainable system development lifecycle "(SSDLC). SSDLC includes six stages: sustainable planning, sustainable analysis, sustainable design, sustainable implementation, sustainable maintenance and sustainable disposal (Huang, 2009). At each of these stages environmental requirements should be in focus: energy-efficient equipment and power-management software should be used in the planning and design stages; system testing for energy consumption, proper installation, proper system migration during testing and implementation and   proper maintenance to ensure that system if working in the most efficient state to extend its endurance and detect any inefficiencies in time. In addition, effective and sustainable disposal of the equipment is a final, however, most important stage that has been in most cases neglected. (Huang, 2009). This theory of SSDLC should be guiding principles for all IS&IT and business executives in the process of transformation and changeover to sustainable business practices.

A more dynamic theory approach through the classification of degrees of effects of IT infrastructure on the environment has been developed by Hilty at al. (2006) and Kohler and Erdmann (2004) isolating three types of effects: first-order, second-order and third-order. (Cited in Dedrick, 2010, pp. 175). First-order effect is direct impact on the environment from IT hardware and equipment through the entire product lifecycle - from production to disposal. Second-order effects are impacts on the subsidiary processes such as transportation and industry and third- order effects are more complicated constructs whose effects have a power to change people's lifestyle and the economy, such as an example of home-business built on e-commerce platform (Dedrick, 2010).

Information systems

Even though their means of contribution to the sustainable corporate practices differ, a well-designed IS shall not be successful without efficient hardware components and in the long run such business model will not be sustainable in every aspect of its functional performance and end-result. The overview of the following theories will demonstrate the operational interdependence of IS and IT in the process of reaching long-term sustainable business-model.

Besides the Real Theory of Management, that represents the gold-standard guidelines for competitive and successful business practices, new theories have been emerging with a focus on ecological thinking and sustainability that besides the

obvious fight for the environment, still guards the traditional profit-making and competitiveness mantra: such theories revolve mainly around the ideas of eco-efficiency, eco-effectiveness, life-cycle analysis, Lean & Green methodologies etc. (El-Gayar and Fritz, 2006).

Hart (cited in Boudreau, Chen & Huber, 2008, pp. 7) identifies three major sustainability goals, namely: pollution prevention, sustainable product utilization and clean technologies. On the level of firm or organization there are many means by which IS and IT could effectively contribute to all three mentioned goals, such as; using virtualization instead of physical servers (to prevent pollution), recycling computer (sustainable product utilization) and video conferencing or SharePoint for clean technology (Boudreau, Chen & Huber, 2008). Among these three frameworks of integrating sustainability into SISP, Boudreau, Chen & Huber (2008) also mention the key concepts of strategic alignment of business processes by using IS to achieve „aggregation, adaptation and arbitrage ", as well as the principles of ecological thinking („eco-efficiency, eco-equity and eco-effectiveness ") as drives toward sustainability of business practices trough the IS/IT deployment (Boudreau, Chen & Huber, 2008, pp.16).

Furthermore, Dyllick and Hockerts (2002) recognized the need to contribute to building a systematic theory of corporate sustainability and they introduced the model approach of six criteria defining three cases for sustainability, namely the business case, the natural case and the societal case. In most firms' executives follow solely the principles of eco-efficiency in order to achieve positive net value (economic value) in contributing to environment. Dyllick and Hockerts (2002) add to this business case yet another important criterion, namely the socio-efficiency as a new concept that correlates the firm's value to social impact suggesting that when designing a business case besides the eco-efficiency, socio-efficiency should also be used as a guiding principle. In addition to business case, two authors presented the natural case for corporate sustainability driven by the concept of eco-effectiveness and the societal case defined by socio-effectiveness and ecological equity. (Dyllick and Hockerts, 2002).

Belief-action-outcome (BAO) & Energy Informatics

Nigel P. Melville (2010) adds to the theory of corporate sustainability by analyzing the role of IS and innovation through the prism of two new disciplines, namely behavioral science and design science. A micro-macro model, called belief-action-

outcome (BAO), has been developed with an intention to research sustainability issues on diverse levels of granularity and through the different theories and constructs since the field of IS applies many theories among which are some from its own field and many are from different disciplines such as behavioral studies, psychology, sociology, economics etc. (Melville, 2010).

Watson, Boudreau and Chen (2010) contributed to theoretical background by demonstrating a new conceptual framework – Energy Informatics. It is a solution-oriented interdisciplinary idea on how IS should contribute to sustainability with a focus on reducing energy consumption. In other words, energy informatics is a concept that models the relationship between energy and information using the tools from management science, design science and policy formation. It also important to mention that their interpretation and understanding of ecological goals is driven by above mentioned Dyllicks and Hockerts (2002) theories of eco-efficiency, eco-equity and eco-effectiveness. (Watson, Boudreau and Chen, 2010). Besides developing groundwork for a new theory, Watson, Boudreau and Chen (2010) underlined a several fronts where IS scholars and business executives should practice energy informatics, namely: research (9 core research questions have been proposed), teaching, Journals (by migration to electronic format and by actively publishing issues in sustainable IS) and through IS Association (Watson, Boudreau and Chen, 2010).

Competitive advantage: "undeniable" fallout of sustainable business practices

Translating its business practices and infrastructure to ecological and sustainable processes most practitioners and executives identify with high costs and low returns, however sustainability has become a global goal and most of organizational and firms had recognized sustainability issues as critical by incorporating it in its overall long-term business strategy. Those companies that have not done this yet are exposed to high risk of competitive disadvantage for many reasons: costumers worldwide are more environmental consciousness and prefer to buy products with green labels. Furthermore, elimination of many forms of waste (waste of resources, time, and energy) will ultimately lead to lower costs, higher profitability and returns (Boudreau, Chen & Huber, 2008). Practitioners warn that also the outsourcing decision should include, as a grading criterion, vendor's commitment to sustainable business practice. Companies will be ultimately more.

motivated to comply with the sustainable standards due to the increased disclosure from companies in relation to their ecological profiles which will directly impact label, image and ratings in their respective industries.

Commoditization leading to sustainability

Making economic value of goods and services eventually will lead to reducing overheads and transactions costs, however according to Editor in Chief of Computer Weekly Bryan Glick, such commoditization could be a fertile ground for innovation. Consequently, innovation boosts competitive advantage and cost advantage if it channeled in the right direction toward sustainable development. As an example of services being commoditized for greater good, Glick mentions "cloud services" – large and expensive to maintain IT infrastructure (storage, processors and physical servers) is now replaced by 1GB archive disk space for a one US cent on monthly basis. Thus, cloud computing directly eliminates investing heavily in expensive IT infrastructure which enables firms from very beginning to save on large capital costs which further reduces the barriers for market entry for many firms. (Sako, 2012).

Conclusion

There are many approaches to corporate sustainability and environmentally sound business practices, but the question remains how are we to select the business model that will be committed to the environment, profitable and affordable at the same time. The most recent literature on SISP declares this to be a scientific question suggesting that academic research will eventually reveal a manual for the practitioners on how to bring together the costs and benefits of corporate environmental initiatives and transformations (Dedrick, 2010).

Current literature mostly agrees that the competitive advantage from new IT technologies and IS innovations will be assured once these are accompanied with other factors such as corporate governance focused on creativity and exploiting new opportunities introduced by competitive top and middle management. (Del Giudice and Straub, 2011)

In the meantime, practitioners should keep in mind some of the key approaches to corporate sustainability highlighted in this paper. Most importantly, in designing a sustainable business model one should focus on interdisciplinary approach bringing

together sociological, psychological, economical, technological and financial components to construct efficient and lean processes with minimal waste.

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Trends and Challenges of Female Unemployment in the Republic of Macedonia: A Regional Comparative Study

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Abstract: *The Republic of Macedonia has since its independence made great progress in terms of economic reform and social development; prompted often by the county's aspiration to become part of the European Union. However, in spite of these advances, weak labour market indicators in particular among females remains a great concern and a persisting challenge for the country. Based on official data from the Labour Force Survey (LFS) conducted by the State Statistical Office (SSO) for the case of the Republic of Macedonia, the aim of this study is to examine the development of female unemployment in the past decade (2004-2013) in the Republic of Macedonia from a multi-dimensional perspective. This while comparing national trends with other Balkan countries already in the EU using LFS data provided by Eurostat. Findings show that the female unemployment rate in the R. Macedonia is moving in the right direction with a decreasing trend throughout the observed period with drop of 8.8 percent point from 2004 to 2013 (observed at 29% in 2013). Compared to Balkan countries in the EU, findings show that the R. Macedonia has been performing relatively better than these countries, who have all experienced negative fluctuations in female unemployment rates in the observed period with rates at higher levels compared to 2004. Furthermore, the findings show no evidence of inequality between male and female unemployment rates in the country, however notable disparities are evident when observing unemployment among various age groups and the level of education attainment. The paper concludes with clear policy recommendations for boosting female employment to include increasing female access to education and entrepreneurial programs, increased access to childcare, etc.*

Introduction

Issues related to the labour market are the heart of social and political debate in the Republic of Macedonia. The country has since its independence made great progress in terms of economics reforms and social development. However, in spite of these advances, weak labour market indicators in particular among females (15-64 years) remains a great concern and a persisting challenge for the country. High unemployment amongst females is however not a recent phenomenon in the country, nor is the country an exception in this regards. As argued by Mojsoska-Blazevski, Najdova, Stojkov, and Asenov (2009), the labour market in the Republic of Macedonia is considered insufficiently inclusive of females similar to other Western Balkan countries, this despite legislation being in place on labour relations, gender equality, anti-discrimination and equal employment opportunities. Job creation for the most vulnerable groups in society, and especially women, is a key component in the fight against social exclusion, and the most effective way to provide vulnerable groups such as females a sense of independence, financial security and a sense of belonging. Women represent a category in society that is traditionally excluded or underrepresented in the labour market not only due to discrimination and inequality in the labour market, but significantly also due the role they play within the household which makes it often more difficult for them to enter the job market and pursue careers. In this context, it is the aim of this study to shed some light on the development and challenges of female unemployment in the past decade (2004-2013) in the Republic of Macedonia from a multi-dimensional perspective. This while comparing national trends with trends in other Balkan countries, more specifically with Balkan countries in the European Union.

Literature Review

Gender based unemployment in general does not present a new or an unexplored area. However not much study exists on this particular topic that is specific to the R. of Macedonia. At the least no known studies exist covering trends in female unemployment for the observed period that additionally compares female unemployment trends with Balkan countries already in the EU. Available studies on female unemployment specific to the R. of Macedonia is predominately found in non-scientific studies and reports (European Training Foundation, 2013; United Nations, 2013; World Bank, 2008 and 2013) where female unemployment is usually covered lightly as part of a more general studies of labour market indicators in the R. of Macedonia; serving primarily policy making objectives. The closest

scientific research in this field can be attributed to a few (Mojsoska-Blazevski et al., 2009; Lehmann, 2010; Mojsoska-Blazevski, 2012; Mojsoska-Blazevski and Kurtishi, 2012; Avlijaš, Ivanović, Vladisavljević and Vujić, 2013; Mickovska-Raleva and Dimitrijevska, 2013) who try at various levels to depict a picture of female unemployment in the R. of Macedonia; sharing the common understanding that women in the R. of Macedonia are traditionally underrepresented in the labour market. Mickovska-Raleva and Dimitrijevska (2013) further arguing that special attention needs to be given to policies for greater inclusion of women. This in particular women from rural areas and young women. Mojsoska-Blazevski and Kurtishi (2012) argue to greater depth in this context and state that the main reason why the female unemployment rate is not much higher is the relatively high willingness of women to take low-paid, secure public sector jobs, or jobs in newly created small private firms, since by tradition, they are second-income family earners.

Methodology

To properly understand female unemployment, it is essential to consider the development of the labour market from a much broader perspective and to also observe changes in the labour market in general. A close look at other labour market indicators such the rate of economically active and inactive population and employment trends is deemed warranted in this case. This in respect to both gender gaps and aggregate level (National Level) rates. A valuable source in the capturing of events in the labour market is the Labour Force Survey (LFS), which is executed annually by the State Statistical Offices of various EU countries and EU candidate countries. Hence, for the sake of harmonised labour market data, in particular for comparison purposes, data analysis of trends in female unemployment in Republic of Macedonia is based on official Labour Force Survey data published by the State Statistical Office of the Republic of Macedonia and Labour Force Survey data of selected Balkan countries published by Eurostat.

Data Analysis

*Female Labour Market Participation and Inactivity*

Labour force participation rate (Economic Activity Rate - EAR) of women in the Republic of Macedonia has shown a slight increase in the last decade (2004-2013). The participation of women in the labour market has increased in the observed period by 12.8% (Figure 1) which is slightly higher than the increase experienced in

the case of male labour force participation (8.9%) in the same period. Noteworthy, is that a noticeable gap exists when comparing activity rates amongst females and males. As shown in Figure 1, female activity rates are significantly lower than male activity in each year of the observed period. According to the World Bank (2008), lower female participation rates are believed to be mainly driven by very low levels of participation of young-rural-unskilled women. Furthermore, according to the same report, most women who are not in the labour force are either in school or undertaking household activities. While, according to Mojsoska-Blazevski et al. (2009), the main factors influencing low participation of women in R. of Macedonia include the tradition and cultural habits in the country, the low level of education and skills, ethnicity in combined with the education, the availability and cost of child care services and care for older family members, labour market discrimination towards females, etc. Mojsoska-Blazevski et al. (2009) further state that young, rural and unskilled females are less likely to be active in the labour market. Another important aspect to consider in this context is women's participation in the informal economy. As stated by Huyer (2014), the low labour force participation rate of women in the labour market may also indicate a much greater reliance by women on the informal economy. This particular in the case of rural women, and of women with Albanian and Roma origin (Lehman, 2010).

Female labour force participation slightly increased during the global economic crisis opposite to what could have been expected. As stated by Avlijaš et al. (2013) this could be understood as a coping mechanism of households facing income shocks by adding a family member to the labour market or replacing a family member who lost their employment.

From an educational attainment perspective, female participation in the labour market is highest among women with tertiary education which saw a slight but steady increase until 2010 (89.4%) following a slight decrease in the following years reaching 87.6% in 2013.

Figure 1: Labour Force Participation in R. of Macedonia 2004-2013 by Gender and Level of Education Attained Among Females (%)
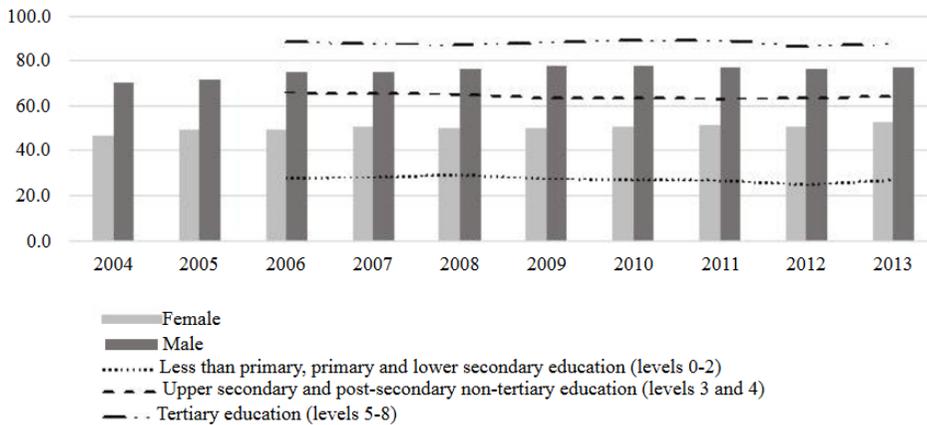
Source: LFS, State Statistical Office of the R. of Macedonia

Compared to Balkan countries in the European Union (Figure 2), data show that R. of Macedonia has had the lowest female labour market participation rate throughout the observed period followed by Croatia and Greece with slightly higher rates. R. of Macedonia lies significantly below the average participation rate of these countries collectively, however noted with the highest increase in rates in the study period with 12.8% followed by Bulgaria with 10.4%. Women in Slovenia are much more active compared to other Balkan countries with an activity rate of 66.6% in 2013, which is 13.9% higher than the R. of Macedonia (52.7%) in the same year.

Figure 2: Female Labour Force Participation in Selected Balkan Countries 2004-2013 (%)
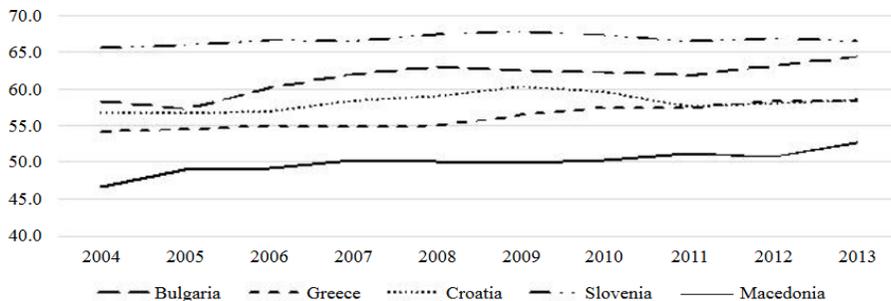
Source: LFS, State Statistical Office of R. of Macedonia and Eurostat

The inactivity rate of females depicted in Figure 3 as a percentage of the total population in R. of Macedonia show that female inactivity is twice as high as male inactivity in the country. Looking at the period 2006-2013, data show that inactivity amongst both females and males is on the way down, but with a very slow and marginal downwards trend and an overall fall of app. 7% in both cases from 2006 to 2013.

Figure 3: Inactive Population as a Percentage of the Total Population in R. of Macedonia by Gender (%)
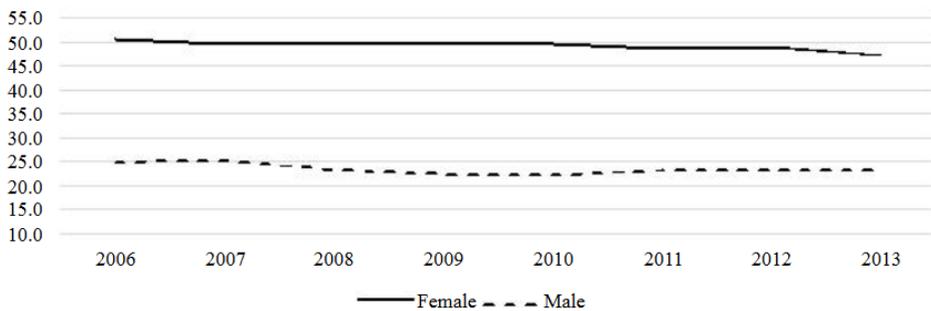
Source: Author's own work based on LFS data, State Statistical Office of the R. of Macedonia

According to data, female inactivity in R. of Macedonia is mostly resulting from household responsibilities and secondly as a result of undergoing education and training (Table 1). While, female inactivity in benchmark countries (Table 1) can be explained primarily due to education and training and secondly to retirement; indicating a much older female population in these countries compared to R. of Macedonia. As reported by the World Bank (2008), who has studied female inactivity at sub-group level in R. of Macedonia, the large share of females who are inactive due to household activities can mainly be attributed to a large number of full-time housewives among women who are less educated and live in rural areas.

Table 1: Inactive Female Population - Main Reasons not Seeking Employment in Selected Balkan Countries in 2013 (%)

	Awaiting recall to work (on lay-off)	Own illness or disability	Other family/ personal responsibilities	Looking after children or incapacitated adults	Pursuing education/training	Retired	Believes no work is available	Other reasons
Bulgaria	0.9	11.9	10.2	13.3	28.4	19.4	11.6	4.2
Greece	:	4.3	18.0	7.8	27.7	16.0	2.2	24.0
Croatia	0.5	6.8	17.8	7.3	31.7	26.1	7.7	2.1
Slovenia	0.3	8.9	9.1	3.4	32.6	38.4	3.7	3.5
Macedonia	:	3.1	38.7	11.2	26.8	11.9	5.2	3.1

Source: Author's own work based on LFS data from the State Statistical Office of R. of Macedonia and Eurostat

Female Employment

Looking at female employment in the R. of Macedonia in the study period, data show that the female employment rate is slowly but constantly on the rise with an 8.4 p.p. increase from 2004 to 2013. Positive and noteworthy in this context is that no spill-over effects seem to have been observed on both female and male employment following the global economic crisis in 2008/09. On the adverse side, noteworthy is that data show female employment rates to be significantly below male employment rates with a gap of 1.5 time higher male employment rate compared to the female employment rate in 2013.

Figure 4: Female vs. Male Employment Rates (15-64 years) in R. of Macedonia 2004-2013 (%)
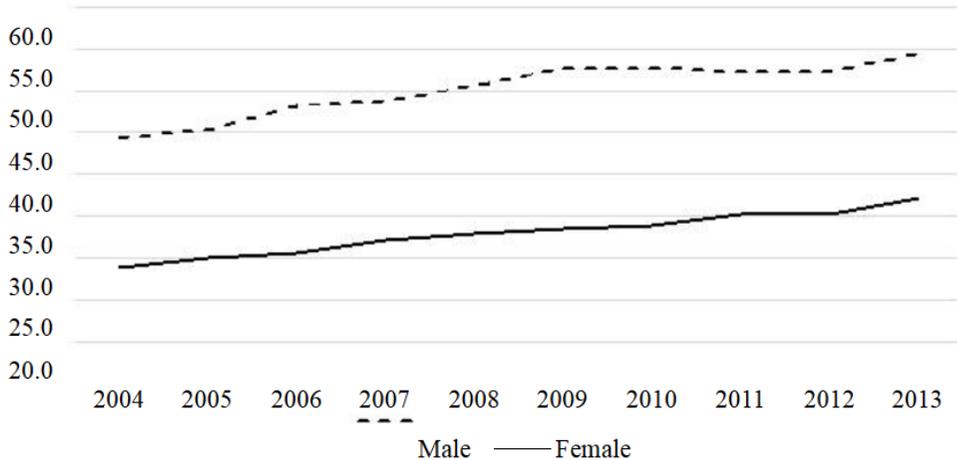
Source: Author's own work based on LFS data from the State Statistical Office of the R. of Macedonia

In a semi regional perspective, data show (Table 2) that the R. of Macedonia is not the only country to struggle with low female employment rates. A similar problem is observed in Greece with a slightly higher female employment rate; 39.9% compared to 37.3% in the case of R. of Macedonia in 2013. Looking at the trend over the study period, all countries included in the study have observed increases in female employment except for Greece and Slovenia who registered a decline of 5.6 p.p. and 2.1 p.p., respectively, from 2004 to 2013. The R. of Macedonia is the only country that has observed a relatively consistent increase in rates throughout the study period; reaching an 8.4 p.p. increase from 2014-2013.

Table 2: Female Employment Rates (15-64 years) in Selected Balkan Countries 2004-2013 (%)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Macedonia	28.9	30.1	30.7	32.3	32.9	33.5	34.0	35.3	35.3	37.3
Bulgaria	51.6	51.7	54.6	57.6	59.5	58.3	56.4	55.6	56.3	56.8
Greece	45.5	46.0	47.3	47.7	48.6	48.9	48.0	45.0	41.7	39.9
Croatia	47.8	48.6	49.4	51.6	52.7	53.7	52.1	49.5	48.5	48.5
Slovenia	61.3	61.3	61.8	62.6	64.2	63.8	62.6	60.9	60.5	59.2

Source: Author's own work based on LFS data from the State Statistical Office of R. of Macedonia and Eurostat

Based on available data (since 2006 only), from an educational attainment perspective (Figure 5), female employment in R. of Macedonia shows a decreasing trend for educated women with a 4.2 p.p. decrease from 2006 to 2013. An opposite trend for women with lower levels of education is however observed. Observed data show that female employment amongst women with primary and lower secondary education (levels 0-2) has increased by 18.4% in the study period and 12.8 % in the case of women with upper secondary and post-secondary non-tertiary education (levels 3 and 4).

Figure 5: Female Employment Rate in R. of Macedonia by Education 2006-2013 (%)
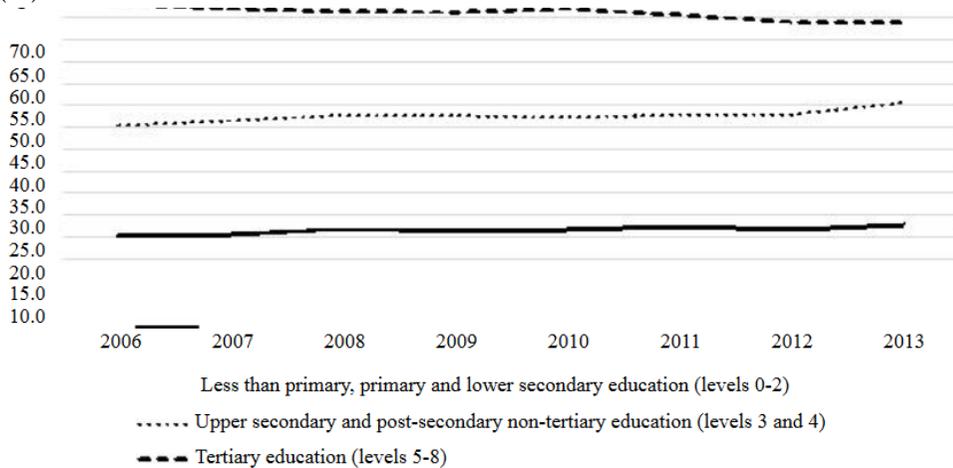
Less than primary, primary and lower secondary education (levels 0-2)

······ Upper secondary and post-secondary non-tertiary education (levels 3 and 4)

‒ ‒ ‒ Tertiary education (levels 5-8)

Source: LFS, State Statistical Office of the R. of Macedonia

Compared to benchmark countries (Table 3), the R. of Macedonia lies significantly below each of the countries and across all educational levels. While looking specifically at female employment with tertiary education attainment a similar trend is seen with declining rates across all countries, but with Greece experiencing the most notable decline by 14.1 p.p. Opposite to other countries, R. of Macedonia is the only country that has observed an increase from 2006-2013 in female employment amongst lower education levels.

Table 3: Female Employment Rate by Education (Highest Level Attained) in Selected Balkan Countries (%)

	2006			2013			Change from 2006 in Percent Point		
	Level 0-2	Level 3-4	Level 5-8	Level 0-2	Level 3-4	Level 5-8	Level 0-2	Level 3-4	Level 5-8
Bulgaria	23.6	62.6	79.7	23.7	59.2	79.1	0.1	-3.4	-0.6
Greece	33.2	47.9	76.7	27.7	36.4	62.6	-5.5	-11.5	-14.1
Croatia	27.9	54.4	79.6	23.7	50.9	75.1	-4.2	-3.5	-4.5
Slovenia	37.5	63.5	86.6	27.2	58.8	80.8	-10.3	-4.7	-5.8
Macedonia	15.2	40.6	68.3	18.0	45.8	64.1	2.8	5.2	-4.2

Source: Authors' own work based on LFS data from the State Statistical Office of R. of Macedonia and Eurostat

One of the ways to boost employment is through fostering entrepreneurship. In this context, R. of Macedonia shows progress. As can be seen from the number of self-employed females in the country (Table 4), the number is on the rise going from app. 19.500 cases in 2008 to app. 27.900 cases in 2013. Approximately, one third of self-employed females are at the same time also employers, and although this category has increased, the highest increase in the observed study period (2008-2103) has been observed among self-employed females without employees (app. 6500 persons). The study period has in this case been reduced to include only observed figures from 2008-2013 due to missing data for period 2004 to 2007.

Table 4: Female Self-Employment in R. of Macedonia from 2008 - 2013 (in thousands)

Self-employment Type/Year	2008	2009	2010	2011	2012	2013
Self-employed Total	19.5	17.8	20.2	23.9	24.0	27.9
Self-employed persons with employees (employers)	7.1	7.3	8.5	9.1	8.2	9.0
Self-employed persons without employees (own-account workers)	12.4	10.5	11.7	14.8	15.8	18.9

Source: LFS, State Statistical Office of the R. of Macedonia

Compared to benchmark countries (Table 5), the R. of Macedonia is the only country with increasing trends throughout the period 2008-2013, while all other countries have had an interruption in their positive trends following 2010; registering decreasing number in both 2011, 2012, and 2013.

Table 5: Female Self-Employment in Selected Balkan Countries from 2008 - 2013 (in thousands)

Country/Year	2008	2009	2010	2011	2012	2013
Bulgaria	124.3	121.2	124.9	110.3	103.2	109.2
Greece	370.9	371.7	379.4	368.1	351.8	341.9
Croatia	104.0	104.4	115.6	106.4	90.5	83.4
Slovenia	24.0	24.8	32.0	31.8	30.3	28.9
Macedonia	19.5	17.8	20.2	23.9	24.0	27.9

Source: LFS, State Statistical Office of R. of Macedonia and Eurostat

Female Unemployment

The female unemployment in the R. of Macedonia stands at a high level, but moving in the right direction (Figure 6). According to data for the observed period, the female unemployment rate shows a decreasing trend and has dropped by 8.8 p.p. in the study period to reach 29% in 2013. This rate coincides with the level of male unemployment in the same year. The Female unemployment has been slightly higher than male unemployment rate until 2010, but on occasions also slightly lower than male unemployment as observed in 2011 and 2012. The discrepancy in gender based unemployment trends in the period 2009-2012 should be seen in light of increased employment in the public sector, and notably in education, which have been favouring women more than men (European Training Foundation, 2013). While labour force participation and employment rates of women are much lower than those of men, unemployment rates are almost equally distributed between the genders. Hence no gender gap is evident. Mojsoska-Blazevski and Kurtishi (2012) argue that this may reflect the relatively high willingness of women to take low-paid, secure public sector jobs, or jobs in newly created small private firms, since by tradition, they are second-income family earners.

Figure 6: Unemployment rate in Macedonia by gender 2004-2013 (%)
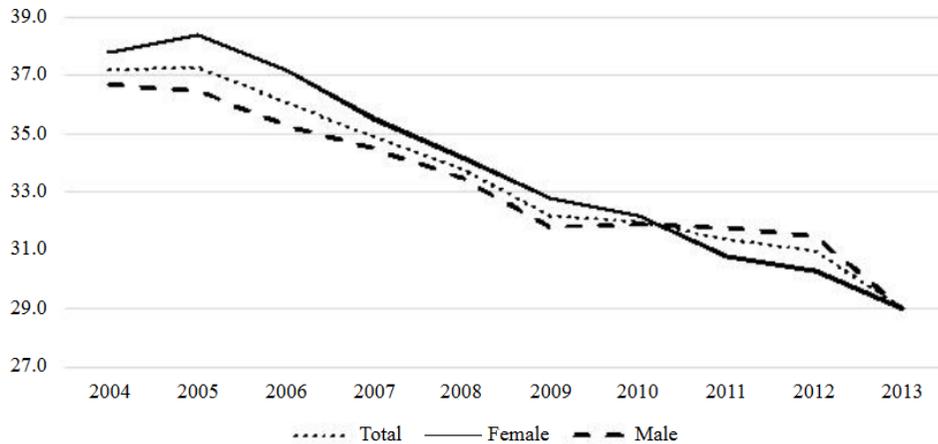
Source: Authors' own work based on LFS data from State Statistical Office of the R. of Macedonia

Observed data for 2013 show (Table 6) that R. of Macedonia has the second highest female unemployment rate (29%) compared to the benchmark, surpassed in this context only by Greece (31.6%) who registered a higher female unemployment rate in the same year. Slovenia (11.1%) and Bulgaria (11.9%) represent the two countries in this context with lowest female unemployment rates in 2013.

The lowest female unemployment rate in the observed period has been registered in Slovenia in 2008 at the rate of 4.9% and the highest rate in the R. of Macedonia back in 2004, which registered a female unemployment rate approximate six times higher than Slovenia (lowest in 2004) and approximately twice the rate of Greece registering the second highest female unemployment rate in the same year. Looking at the trend in the observed period, all countries have experienced fluctuations in female unemployment rates, and notable fluctuations in the period 2009-2013, due to particular to the spill-over effects of the global economic crisis. The R. of Macedonia is the only country registering an uninterrupted decrease in rates throughout the period.

Table 6: Female Unemployment Rates in Selected Balkan Countries 2004-2013 (%)

Country/Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Macedonia	37.8	38.4	37.2	35.5	34.2	32.8	32.2	30.8	30.3	29.0
Bulgaria	11.7	9.9	9.3	7.3	5.8	6.7	9.5	10.1	10.9	11.9
Greece	16.1	15.6	13.9	13.0	11.6	13.4	16.5	21.7	28.4	31.6
Croatia	15.8	14.3	13.2	11.6	10.6	11.0	12.6	14.0	16.3	17.0
Slovenia	6.5	7.2	7.4	6.0	4.9	5.9	7.2	8.3	9.5	11.1

Source: Authors' own work based on LFS data from State Statistical Office of R. of Macedonia and Eurostat

Looking at female unemployment from an age perspective (Figure 7), data clearly suggests that female youth are much more vulnerable to unemployment than other age groups. Although female youth unemployment is showing a decreasing trend (dropped by 9.9 p.p. from 2006 to 2013), it is almost twice as high as females age 25-49 and more than to time higher than females in the 50-64 age group. This can partly be explained by the fact that young people are more vulnerable to economic downturns and the first to be cut from employment. Young people tend to be 'last in' and 'first out' - last to be hired, and the first to be dismissed. This, together with the challenges they face in making the transition from education and training to the labour market, makes younger generations generally subject to higher rates of unemployment than older generations (United Nations, 2013).

Figure 7: Female Unemployment Rate in Macedonia by Age Group (%)
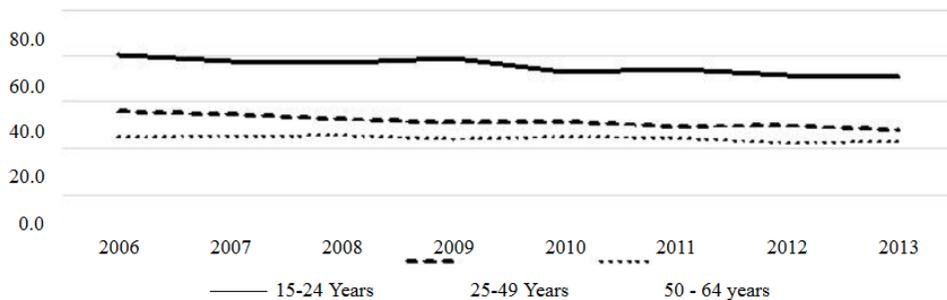
Source: Authors' own work based on LFS data from the State Statistical Office of R. of Macedonia

The vulnerability of female youth towards unemployment is according to data (Table 7) a phenomenon applicable for all benchmark countries. Due to missing

data for 2004 and 2005, the observed period has been reduced to cover only the period 2006-2013.

Similar patterns to the R. of Macedonia are observed also in the case of Bulgaria, Greece, Croatia and Slovenia when observing female unemployment rates by age group. The highest female youth unemployment rate in 2006 was observed in R. of Macedonia (60.9%) followed by Greece (34.2%). Although the R. of Macedonia registered a decrease in female youth unemployment in the following years (app. 9.9 p.p.), it still remains among the countries with the highest female youth unemployment rate (51%) compared to the benchmark. Greece observed a great increase in the female youth unemployment rate (app. 30 p.p.) reaching 63.8% in 2013, surpassing thus the R. of Macedonia and registering the highest female youth unemployment among Balkan countries in the EU.

Table 7: Female Unemployment Rate by Age in Selected Balkan Countries (%)

	2006			2013			Change from 2006 in Percent Point		
	15-24 Yrs.	25-49 Yrs.	50 - 64 Yrs.	15-24 Yrs.	25-49 Yrs.	50 - 64 Yrs.	15-24 Yrs.	25-49 Yrs.	50 - 64 Yrs.
Bulgaria	20.3	8.3	8.3	25.7	11.1	10.9	5.4	2.8	2.6
Greece	34.2	13.2	5.9	63.8	32.0	19.7	29.6	18.8	13.8
Croatia	31.1	12.0	8.6	50.2	16.2	9.6	19.1	4.2	1.0
Slovenia	16.8	6.8	4.3	23.7	10.8	8.2	6.9	4.0	3.9
Macedonia	60.9	35.9	25.1	51.0	27.9	23.1	-9.9	-8.0	-2.0

Source: Authors' own work based on LFS data from the State Statistical Office of R. of Macedonia and Eurostat

Female unemployment in R. of Macedonia, observed from an education attainment perspective (Figure 8), show a decreasing trend over the years for less educated women (Level 0-2), dropping altogether 27.4% from 2006 to 2013. A similar pattern was evident also for level 3-4, which dropped 24.5% in the same period; decreasing from 38.4% in 2006 to 29% in 2013. Whereas, in the case of females with tertiary education (Levels 5-8), an opposite trend is observed throughout the study period with an overall increase of 16.5% (from 23% in 2006 to 26.8% in 2013).

Figure 8: Female Unemployment Rate in R. of Macedonia by Highest Level of Education Attained (%)
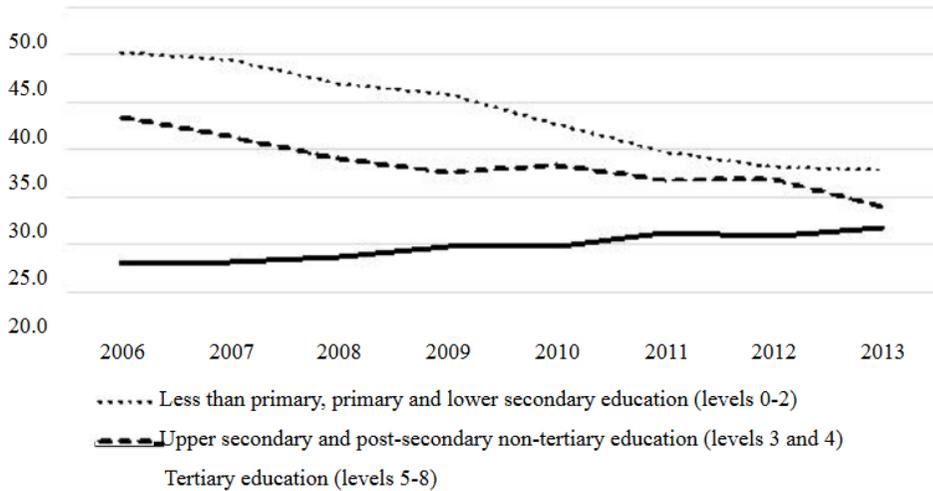
Source: Authors' own work based on LFS data from State Statistical Office of the R. of Macedonia

Compared to benchmark countries (Table 8), a somewhat different pattern is observed when looking at female unemployment by educational attainment. All countries, except for R. of Macedonia have registered an increase in unemployment rates among women with lower levels of education. Greece and Slovenia have registered the highest increase in the case of education attainment level 0-2 calculated at 18 p.p. and 12.3 p.p. respectively from 2006 to 2013. Greece also stands out when observing levels 3-4 and levels 5-8, registering respectively an increase of 20.9 p.p. and 14.2 p.p. from 2006 to 2013. While, all other benchmark countries have registered more moderate increases across all levels in comparison.

Table 8: Female Unemployment Rate by Education (Highest Level Attained) in Selected Balkan Countries (%)

	2006			2013			Change from 2006 in Percent Point		
	Level 0-2	Level 3-4	Level 5-8	Level 0-2	Level 3-4	Level 5-8	Level 0-2	Level 3-4	Level 5-8
Bulgaria	23.2	8.4	4.1	29.5	11.8	6.4	6.3	3.4	2.3

Greece	13.8	16.3	10.3	31.8	37.2	24.5	18.0	20.9	14.2
Croatia	14.0	15.2	7.0	21.2	18.5	11.9	7.2	3.3	4.9
Slovenia	7.9	8.9	3.9	20.2	12.3	7.1	12.3	3.4	3.2
Macedonia	45.3	38.4	23.0	32.9	29.0	26.8	-12.4	-9.4	3.8

Source: Authors' own work based on LFS data from the State Statistical Office of R. of Macedonia and Eurostat

According to data presented in Table 9, the number of female unemployment is highest among urban women and more than two times higher than registered rural female unemployed. This is due to particular low activity rates and high inactivity rates among rural females (World Bank, 2008). However, a positive trend is observed. The number of urban female unemployment decreased by app. 9.800 persons from 2008 to 2013, roughly 12%. While, the number of unemployed females in rural areas decreased by 3.7% in the same period (app. 1400 persons). The largest decrease in registered unemployed females in urban areas is noted among females with primary and lower secondary education (in absolute terms), which dropped from 19545 to 11900 (decrease of 7645). To which extend this decrease is related to these women finding employment is subject to further research. Noteworthy in this context is however that opposite to females with lower levels of educations, females with university level education have both in the case of rural and urban women experienced an increase in numbers with registered unemployed rural women with university education going from 2743 in 2008 to 7873. This is an increase of more than 250%. Registered unemployed urban women with university education has increased likewise notably from 10599 in 2006 to 18030 in 2013.

Table 9: Number of Unemployed Females in R. of Macedonia by Educational Attainment, Rural vs. Urban, 2008 & 2013

Level of Education	2008		2013	
	Rural	Urban	Rural	Urban
Total	38 686	83 501	37 260	73 665
Without education	287	2 300	:	1 358
Incomplete primary and lower secondary education	2 917	3 920	963	3 063
Primary and lower secondary education	13 221	19 545	8 849	11 900
3 years of secondary education	5 005	8 622	4 471	6 523
4 years of secondary education	14 309	35 887	14 605	31 365

| Higher education | 205 | 2 628 | : | 1 426 |
| University level education[1] | 2 743 | 10 599 | 7 873 | 18 030 |

[1] University level education includes: university level education, Master's degree and Doctorate (Ph.D.)

Source: Authors' own work based on LFS data from State Statistical Office of the R. of Macedonia

Female unemployment is mostly long-term in nature, as is the case of men (Table 10). Hence, no gender difference is observed in this respect. Due to missing data, the observed period has been reduced to the period 2009-2013. Long-term female unemployment rates have slightly decreased from 2009-2013 by 2.7 p.p. While, the share of long-term female unemployment in total female unemployment is on the rise and increased from 80.8% in 2009 to 82.2% in 2013.

Table 10: Long-Term Unemployment by Gender in R. of Macedonia[1]

	% of long-term unemployment [2]					Long-term unemployment rate[3]				
	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
Women	80.8	82.7	81.0	80.7	82.2	26.5	26.7	24.9	24.5	23.8
Men	82.5	83.7	83.6	83.0	82.7	26.2	26.7	26.6	26.1	24.0
Total	81.9	83.3	82.6	82.1	82.5	26.3	26.7	25.9	25.5	23.9

[1] Long-term unemployment - unemployed persons for one year or more.
[2] % of long-term unemployment - share of unemployed persons for one year or more in the total number of unemployed persons.
[3] Long-term unemployment rate - share of unemployed persons for one year or more in the total labour force.

Source: LFS, State Statistical Office of the R. of Macedonia

Causes and Challenges of Female Unemployment in R. of Macedonia

Gender based unemployment is vastly studied and discussed in literature, and does as such not present a new or unexplored area, and high unemployment levels is rarely attributed to a single factor regardless of the study perspective such as based on gender, age, and so on. Hence, the causes of unemployment are relatively known and widely accepted, and often characterised as being, frictional, structural, voluntary, etc. Having said that, and without going into much detail on this, it is from available

material clear that limited understanding and research is available to really understand the nature and causes of female unemployment in the specific context of the R. of Macedonia. This area is perceived still as unexplored to the detail that it can be addressed properly and efficiently. Much further research is needed to understand the causes and challenges of female unemployment in the R. of Macedonia, especially from a more holistic perspective including also regional and ethnic disparities given the cultural, religious, and ethnic diversity upon which the R. of Macedonia is founded. However, in general, the high of unemployment in R. of Macedonia, including that of women, can essentially be explained in the absence of significant labour supply constraints and the limited labour demand, stemming especially from the private sector (Micevska, 2008).

Although the high level of unemployment among females in the R. of Macedonia can be vastly explained by the general causes of unemployment, the demanding role of women in the household and the difficulty in entering and remaining in the labour market is one aspect that is often underestimated. The World Bank (2013) reported that the opportunity cost of work for most women is higher than their potential wage in the labour market. While this does not explain the reason for the high unemployment in R. of Macedonia, it touches some key aspects hindering women to enter the labour market and actively pursue jobs such as access to child care, pay gaps, etc.

Another aspect is the industries/sectors and the field of study often characterising women. Women are i.e. very much underrepresented in the construction industry and in study fields representing this industry, and female employment is vastly oriented towards manufacturing (i.e. garment and textile) and in the human health and social work sectors (World Bank, 2013). While this is a structural issue emphasising skill mismatch, the point herein lies more in the context of the lack, or the type and quality, of career support, orientation, Active Labour Market Measure, etc., rather than on the supply and demand aspects. Hence, the high female unemployment in the country can partly, but rather significantly, be explained also by the failure of the institutional framework governing the labour market to provide the necessary support to unemployed and incentives to stimulate female labour market participation and ultimately employment. While higher education institutions are quite rigid and rather slow or reluctant to adapt to changing industry needs given the high unemployment in general. From a general standpoint, it is clear that in addition to focusing on boosting the economy to create more jobs in areas where women are strong, a deeper recognition that female unemployment is

multidimensional concept with both quantitative and qualitative challenges is imperative to address this issue properly.

Conclusions and Recommendations

Female labour market indicators show that the Republic of Macedonia is performing poorly in most aspects in comparison to more advanced countries in the Balkan region. More and more women have entered the labour market in the past decade in the Republic of Macedonia, and especially educated women. Still, the female labour force participation is significantly below Balkan countries integrated in the European Union such as Bulgaria, Greece, Slovenia and Croatia; and the female inactivity rates are despite a slow downwards trend still twice as high than that of males in the country.

Female employment rates have been on the rise in the study period, but at a much slower pace compared to male employment rated and lies still below most Balkan countries. The increase in female employment is mainly stipulated by increases in employment among lower educated women, while a downward employment trend is observed for women with tertiary education. Female self-employment is on the rise, but still at a very low level to other more developed Balkan countries.

Female unemployment in the R. of Macedonia is slowly, but consistently moving in the right direction. The female unemployment rate has dropped by 8.8 p.p. from 2004 to 2013, but remains still at a very high level (at 29% in 2013). The country has the second highest rate compared to benchmark countries, surpassed only by Greece with a higher rate. However, when compared to male unemployment rates in the country, observed data show that no gender gaps seem to exist due to marginal differences in female and male unemployment rates in the study period (2004-2013). The decreasing trend in female unemployment is mainly witnessed among urban females.

Female unemployment is long-term in nature, as observed also with the opposite gender, and a large number of women (app.50%) are unable to enter the labour market due mainly to household responsibilities. Hardest hit by unemployment are especially female youth and lower educated women. Data show a decreasing trend for both categories in the study period, but still both categories display extremely high unemployment rates, especially among female youth. Higher educated women seem to be less vulnerable to unemployment than other categories, but this category

displays an increasing trend in unemployment which is worrisome as this might be a cause to further discouragement among females to enter labour market in the future or/and pursue higher education. Similar trends are witnessed across the countries compared in the context of higher educated women with Greece and Croatia experiencing higher increases in unemployment rates than R. of Macedonia in this category. However, with opposite trends when observing at lower educated women, where the country is performing much better in the period 2006-2013 comparison to the more developed Balkan countries who have all registered growing unemployment rates in this category. In the case of the R. of Macedonia, a downwards trend is observed in the study period with a decrease of 12.4 p.p. from 2006 to 2013.

A high level of complexity is involved in reducing female unemployment and it should be recognized that there is no easy or quick way to do this. Recognition that female unemployment is multidimensional concept with both quantitative and qualitative challenges is imperative to address this issue properly. Further recognition is also needed in terms of the causes and effects of female unemployment in the country. Female unemployment manifests, not only a loss to society in terms of forgone achievement, lost tax income, added expenditure and slower economic growth. Above and beyond all, it causes individual suffering, a loss of personal dignity and material hardship on the part of the jobless and their families which makes it difficult to develop into a socially cohesive society and achieve the kind of sustainability needed to ensure future European integration and general well-being. The Government of the R. of Macedonia should increase efforts to ensure that the institutional framework governing the female labour market addresses and formulates policies and measures in the future in a way that they effectively and inclusively address female employment across all regions and ethnic groups through intervention in key areas impacting female unemployment. Macroeconomic development is the key in this context to ensure job creation, but equally important are also tailored, inclusive, and reasonably funded Active Labour Market Measures (ALMM). To include also promotion and support of female entrepreneurship, reasonable access to child care facilities, improved access to high quality education and training to reduce skills mismatch and the competitiveness of women in the labour market. Key in this context is also the need for improvement of the capacities of the National Employment Agency to be able to better support unemployed females.

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Public Procurement System in Service for Strengthening the Market Economy in Bosnia and Herzegovina

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Abstract: *Public procurement system in Bosnia and Herzegovina (BH) is defined by various laws and regulations and is often identified with the legal profession. However, it is actually more significant and relevant for economists and public officials. One of the key challenges remains the application of transparency to the system of public procurement in the context of strengthening market competition in BH, as well as the market economy in general. The research methods applied reveal the market strength of the contracting authorities (buyers) and market competition among suppliers (sellers) in the public procurement market in BH, as measured by their market shares. Based on the research, the connection between the market strength of contracting authorities and the level of development of competition on the public procurement market in BH in the period from 2010 to 2012 was examined in terms of choosing more or less transparent procurement procedures.*

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Introduction

Public procurement market represents one of the key areas for financial interaction of public and private sector. Public procurement regulations are a novelty in domestic legislation. The public procurement system in Bosnia and Herzegovina (BH) is a new system of awarding contracts in public procurement procedures, and it is based on the Act of Public Procurement of BH[i] (Act), which establishes the rights and obligations of participants in the procurement process as well as the control of public procurement. According to Rička et al. (2008) the purpose of this law is to ensure: (1) the most effective way of using public funds with regard to the purpose and object of the procurement; (2) procurement execution and awarding a public procurement contract that is carried out by contracting authorities in accordance with the procedures established by this act, and (3) contracting authorities will take all necessary measures to ensure fair and active competition among the potential suppliers, by applying equality of treatment, non-discrimination and transparency.

The public procurement system in BH has both its theoretical and practical dimensions. While the theoretical dimension is determined by the external environment such as legal, political and economic environment, its practical aspects lie in the accomplishment of various economic goals. – This is important to all countries, especially for countries in development and transition like BH. Just like there is no system that can accomplish all goals, there is no country that can expect that goals of its system will always remain the same. The current objectives of the single public procurement system in BH (Public Procurement Agency, 2010) are: continuous execution of procedures of public procurement and transparent public procurement contract awarding, equality treatment for all participants in procedures of public procurement, encouragement of sustainable market and economic growth and ensuring legal protection at the same time.

The European Commission reported that public procurement of goods, services and works, in the European Union in 2010 was estimated at 2.406 billion euros, that is 19.7% from total GDP. The public procurement stake in developing countries was even bigger and ranged from 25% to 30% from total GDP (Knežević, 2007). Therefore, public procurement is considered to be a source of economic growth stimulation, strengthening the private sector and the market economy in general (Rička et al., 2008). Countries in transition accomplish their objectives within different political and economic environments, but their common goal is to establish

an efficient bureaucracy that will support creating politics and manage realization of public procurement in an economical manner, without abuse of power. Economic transition requires that a transparent and efficient system of public procurement has to be placed as a priority, so it can support demonopolisation and privatization (European Commission, 2007). Therefore, we can state that a public procurement system, based on transparency, can be in service of strengthening market competition and private sector development. However, in countries in transition, like Bosnia and Herzegovina, at the beginning stages of a market economy, there are great dangers. Bribes and similar tampering threaten real competition and may discourage and repel domestic and foreign investors, which results in a decrease of growth rate in such countries.

Considering the importance and purpose of the public procurement system in BH, the question emerges, how the existing procurement system in BH is applied, and what are its effects in economic terms.That is, whether more transparent procedures for public procurement that strengthen fair market competition are applied, contributing thereby to the strengthening of the market economy in BH, and what are further restrictions on public procurement system which stand in the way of achieving a functioning market economy in Bosnia and Herzegovina? In an effort to find answers to these questions, the subject of research has been defined, and it is reflected in the assessment of theoretical and practical aspects of applying the transparency of public procurement in the context of strengthening the market economy in BH. The overall objective of this paper is to explain the importance of the principle of transparency in the public procurement system, in the context of the creation and growth of a functioning market economy. This is one of the main preconditions for the existence of market competition.

Transparency System of Public Procurement in Bosnia and Herzegovina (BH)

Public procurement is defined as purchasing goods, services and works by contracting parties in accordance with the rules and regulations of public procurement.They are administrative bodies and enterprises that are subjected to the Law and have to carry out the procedures for public procurement, prior to the conclusion of the public procurement of goods, services and works. Procedures of public procurement and conditions for its execution are also defined by the act, where final decision is made by the contracting authority, depending on the fulfillment of conditions defined by the act. Contract value is estimated by the contracting authority in the beginning of the procedure of public procurement, and

that value represents the so called value class on the basis of which the types of public procurement procedure to be applied is determined. In the act, there are two categories of value classes:

- primary i.e. domestic value classes – when the contract value is equal or greater then 50.000,00 KM in case of procurement of goods or services, and equal or greater then 80.000,00 KM in case of procurement of works; and
- international value classes – when contract value is equal or greater then 500.000,00 KM for state authorities or 700.000,00 KM for local authorities and public entities in case of procurement of goods and services, and equal or greater than 2.000.000,00 KM in case of procurement of works.

The act establishes five primary procedures for the award of contracts in public procurement, which are equal to or above the primary value class and for international competition (described in Chapter II of the act), as follows: (1) open procedure; (2) restricted procedure with prequalification; (3) negotiated procedure with publication of procurement notice; (4) negotiated procedure without publication of procurement notice; (5) a design contest project. The act provides for the application of two more procedures (as described in Chapter III of the act), as follows: (1) a direct agreement, and (2) the competitive request of quotations, which are applicable to public procurement procedures below the primary value class, or governing contracts of lesser value.

The basic principles on which the Act of Public Procurement in BH (Act) is based on, and the EU Directives on public procurement, which the contracting authorities must respect throughout the procurement process are the principles: equal treatment (non-discrimination), transparency, fair and open competition, economy and legality (Rička et al., 2008). The principle of transparency in public procurement procedures demands availability of relevant information to all interested parties, consistent and in a timely manner, via accessible and prevailing medium, at no or at reasonable cost (Public Procurement Agency, 2009). Respect for the principle of transparency is guaranteed by the regulations which are presented in Table 1.

Table 1: Legal regulations that implement transparency requirements

LEGAL REGULATIONS	TRANSPARENCY REQUESTS
Article 11.	Rules of selection of the public procurement procedures, and in accordance with them, basic and preferential procurement procedure is an open procedure.
Article 13.	Contracting authority has the obligation to prepare tender documentation which contains a collection of information on the procurement.
Article 18.	Give the tender documentation to interested suppliers.
Article 19.-20.	Publication of public procurement notices.
Article 38.	Requesting for informing the candidates and tenderers of the decisions made during the procurement procedure.
Article 40.	Requesting for the publication of contract award notices.
Article 41.	Report about procurement procedure.
Article 42.	Archiving documents of the given procurement procedure by the contracting authority.

Source: adapted in accordance to EUPPP Manual (European Commission, 2007)

However, depending on whether the act established the obligation to perform certain operations or left it as a choice to the contracting authority, public procurement procedures prescribed by the act can be viewed as more or less transparent compared with each other. Pursuant to the provisions of the Act, authors themselves carry out a qualitative analysis of the transparency assessment of public procurement procedures, according to following criteria: whether it is obligatory or not to publish procurement notice and tender documentation, whether it is obligatory or not to publicly display the offers, whether it is obligatory or not, to have a minimum deadline for offer acceptance and minimum number of offers and bidders, and whether the tender documentation is free or not. Authors classified all procedures in three groups: most transparent procedures, less transparent procedures, and least transparent procedures, as it is show on the Figure 1.[ii]

Figure 1: Public procurement procedure in BH - transparency assessment
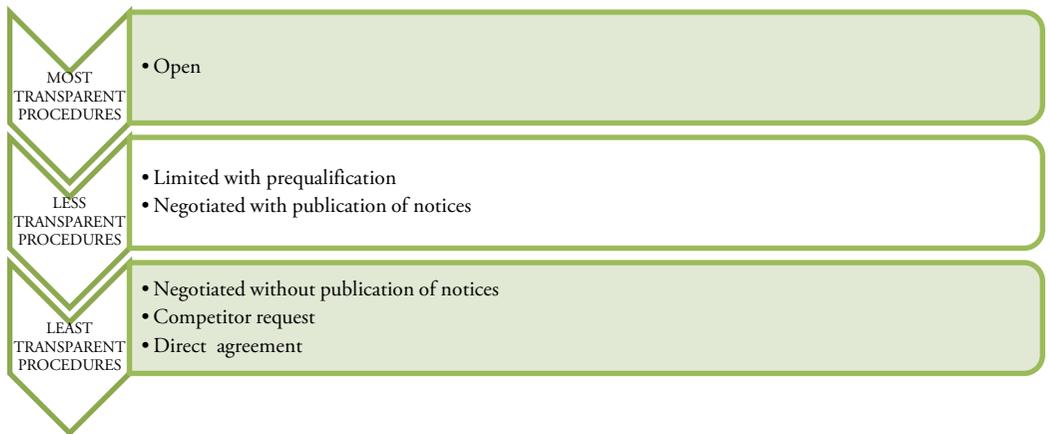
The transparency of the public procurement system is not an end in itself; it is a mechanism that is used to accomplish a certain goal. Trepte (2006) states that the transparency of the public procurement system is primarily used as a mean to protect economic efficiency, and ensure control by regulator (national or international), of the whole procurement system. Economic efficiency, as a natural result of free market, is based on establishing perfect competition. Therefore, imposition of transparent procedures, defining conditions and specifications in advance and publishing the criteria for selection and awarding the contract, are mechanisms that are used to avoid direct discriminations that could endanger desired competition.

Methodological Framework of the Research

The empirical part of the research covered dynamic analysis of two research areas: (1) the existing public procurement system in BH, its framework and limitations considering transparency principle; (2) the public procurement market in BH in determining market power of contracting authorities and suppliers by measuring their individual and collective market shares in period from year 2010. to 2012.

Theoretical Concept of Empirical Research

The research was conducted using secondary research and available statistical data. According to authors' adaptations, the theoretical concept of empirical research is shown in Figure 2, and it states that the most significant factors for competition development in the public procurement market in BH are: scale and structure of

market demand, eventual barriers for entering the market, purchasing power of buyers (contracting authorities), whether or not procedures are transparent and open, and market power of the suppliers.

Figure 2. Most significant factors for competition development in public procurement market in BH
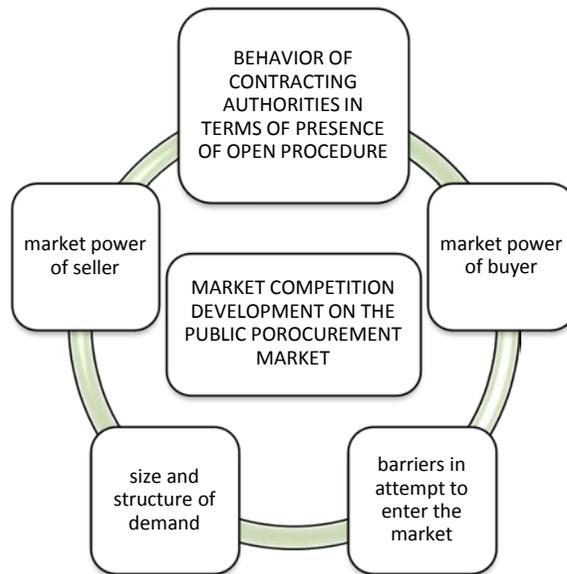
Authors are considering the correlation between the most significant factors for competition development in the public procurement market in BH (Figure 3), in the way that scale and structure of demand, eventual barriers for entering the market and individual shares of contracting authorities in the public procurement market determine their market power. Market power of buyers determines their behavior in regards to selection of certain public procurement. Their choice of more or less transparent procedures contributes to the decrease or increase of competition in the public procurement market in Bosnia and Herzegovina.

In this context, besides the central research hypothesis: increase in transparency of public procurement contributes to the strengthening of market competition in Bosnia and Herzegovina, two backup hypotheses have been established:

H1: In the case that contracting authorities have more market power, they will utilize less transparent procedures.

H2: In the case that contracting authorities have less market power, they will utilize more transparent procedures – open procedures.

Figure 3: Correlation between the factors of market competition in the public procurement market in BH
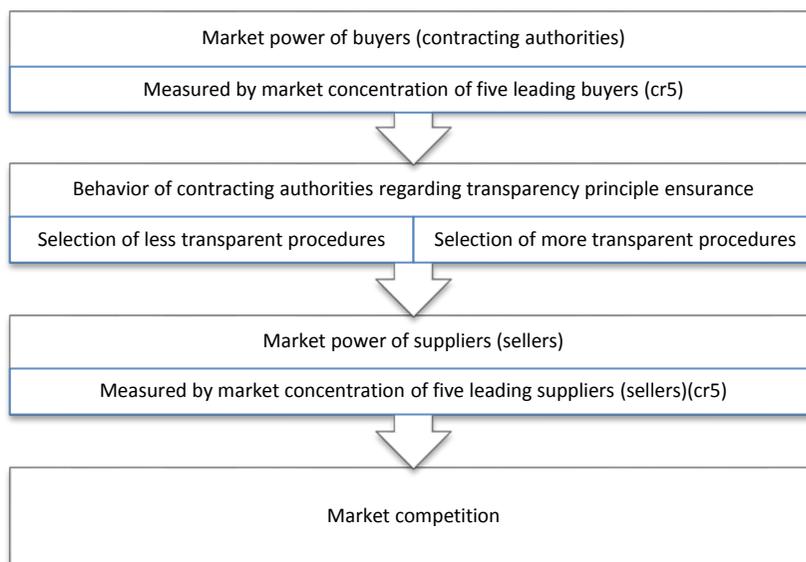
For the assessment of contracting authorities regarding their selection of procedures, authors used the data published by the Public Procurement Agency of BH (Agency). Two hundred of the largest contracts, completed in years 2010, 2011 and 2012, and which refer to: the procurement subject description (goods/services/works), the name of the contracting authority and its supplier for each contract, the type of executed procedure and the contract value. The Agency could not deliver the data for the years 2008 and 2009 because data from those years were not representative. Two hundred of the largest contracts that were completed in 2010 and in 2012 represent more than 50% of the total public procurement market in Bosnia and Herzegovina, and in year 2011, 200 of the largest contracts represented just 34.60% of the total market. In other words, 200 of the largest contracts in the year 2010 constituted 51.57% of the total demand, in the year 2011, 34.60%, and in the year 2012

58.61% of the total demand for goods, works and services in the public procurement market (Table 2).

Table 2: Representativeness of samples for examining the market power of participants in the public procurement market

	TOTAL VALUE OF COMPLETED CONTRACTS	TOTAL VALUE OF COMPLETED CONTRACTS IN A SAMPLE	REPRESENTATIVENESS OF THE SAMPLE
2010	3.469.981.667,61	1.789.620.514,48	51,57 %
2011	3.128.833.371,96	1.082.513.780,32	34,60 %
2012	3.560.468.418,94	2.086.767.392,45	58,61 %

Source: adapted from the Public Procurement Agency of BH data

Size and Structure of the Public Procurement Market

Considering that there are more than 2000 contracting authorities that are subjected to the act of public procurement of BH, and that annual value of public procurement is getting close to 4 billion KM (Public Procurement Agency, 2013),we can state that it is large and important market. Based on data published by the Directorate of Economic Planning of BH(2013), the public procurement share in GDP of BH in the year 2012 was 12.95%. Structure of the public procurement market can be analyzed by the subject of procurement: goods, services and works. During all observed years, in total value of completed contracts of public procurement, the market of the public procurement of goods was the largest. In other words, demand for goods was the largest, while the lesser demand was for works and the least for services. In the European Union as opposed to BH, services were the predominating demand, and in the year 2010 it constituted 42% of all public procurement. While 36% was the demand for work, and goods were in last place, constituting only 22% (European Commission, 2012).

Analyzing the sample of 200 of the largest completed procurement of public procurement in BH (Table 3), the major procurement in years 2010 and 2011 was procurement of goods that consisted 54.4% and 74.16% of total public procurements, respectively. In the year 2012, a slightly larger procurement of works was recorded (48.21%) in regard to procurement of goods (40.70%).

Table 3: Structure of demand with regard to the subject of the procurement in observed sample

YEAR	GOODS		SERVICES		WORKS		TOTAL	
	KM	%	KM	%	KM	%	KM	%
2010	973.545.490,04	54,40	213.286.929,33	11,92	602.788.095,11	33,68	1.789.620.514,48	100,00
2011	802.753.121,10	74,16	158.607.096,00	14,65	121.153.563,22	11,19	1.082.513.780,32	100,00
2012	849.231.383,10	40,70	231.599.765,66	11,10	1.005.936.243,69	48,21	2.086.767.392,45	100,00

Source: adapted from Public Procurement Agency of B&H data

Behavior of contracting authorities in BH – public procurement procedure selection

All responsibility for adequate implementation of the public procurement system in BH lies with contracting authorities that make the final decision about utilization of a certain procedure (that can be more or less transparent), depending on the fulfillment of the conditions prescribed by law.

Therefore, it was necessary to analyze their behavior in the context of ensuring the transparency principle during the selection of the procedures of public procurement.

Transparency of public procurement is identified as an independent variable in the central research hypothesis. The following indicators for transparency of public procurement in BH are used:

- Presence of certain procedures in total public procurement;
- Variations of open negotiation procedures without notice shares in total public procurement.

While in the EU transparency in public procurement procedures is rising year in and year out according to data reported by European Commission (2012), in BH transparency is dropping gradually. Data analysis of applied procedures in public procurement, represented in Table 4, has shown an apparent decline of transparency in conduction of public procurement in observed period of time. Open (most transparent) procedure in year 2012 had only 37.13% of the share in total public procurement, while in the year 2008 it had even 91.89% of the share in total public procurement. A procedure opposed to negotiation without publication of notification that is, the least transparent procedure in group of procedures from

Chapter II of the Act, in the year 2008 had the share of 3.99% of total public procurement. Until the year 2012 its share increased to 49% of total public procurement. Variation of open and negotiation procedure without notice shares are presented in Figure 4.

Table 4: Public procurement procedures applied in period between 2008. and 2012.

YE AR	OPEN PROCEDURE		LIMITED PROCEDURE		NEGOTIATION PROCEDURE[iii]		COMPETITIVE REQUEST		DIRECT AGREEMENT		TOTAL PUBLIC PROCUR EMENT
	KM	%	KM	%			KM	%	KM	%	KM
20 08	1.598.03 7.250,83	<u>91, 89</u>	62.150.50 0,68	3, 15	78.788.985,5 7	<u>3,9 9</u>	191.465.3 28,57	9,7 1	41.829.98 1,63	2, 1 2	1.972.330. 047,28
20 09	1.507.30 6.001,68	82, 95	34.806.81 3,94	1, 91	275.141.970, 96	12,9 5	240.465.4 98,04	11, 32	67.093.63 2,79	3, 1 6	2.124.813. 917,41
20 10	1.343.82 1.679,59	38, 73	47.762.31 2,35	1, 38	1.510.857.88 6,84	43,5 4	423.359.6 03,82	12, 2	144.180.1 85,00	4, 1 6	3.469.981. 667,60
20 11	1.169.51 5.441,01	37, 38	18.256.71 0,88	0, 58	1.549.709.73 3,15	49,5 3	*	*	*	*	3.128.833. 371,96
20 12	1.321.88 2.884,64	<u>37, 13</u>	60.962.41 3,53	1, 71	1.744.479.03 7,03	<u>49, 00</u>	355.389.8 73,35	9,9 8	77.754.21 0,10	2, 1 8	3.560.468. 418,65

*data not available because the Agency did not publish the report for year 2011.
Source: adapted from Public Procurement Agency annual reports (2008, 2009, 2010 &
2012) and Transparency international BH for year 2011

Figure 4: Open and negotiation procedure -variations of shares
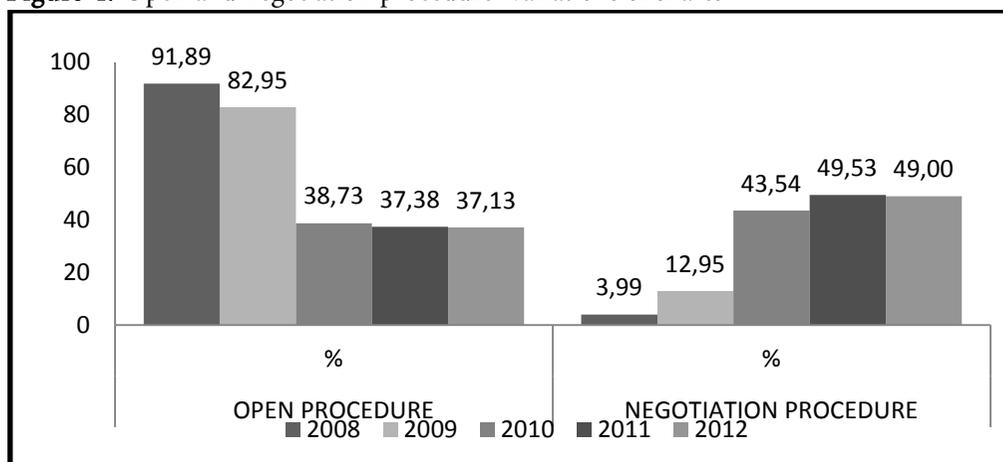
Source: adapted from Public Procurement Agency annual reports (2008, 2009, 2010 & 2012) and Transparency International BH for the year 2011

With the fact that the least transparent procedures (competition request, direct agreement, negotiation procedure without notice) reached almost a 70% share of the total contracts signed, we can say that the behavior of contracting authorities in the context of ensuring transparency principle has failed and that it violates fair market competition.

Competition on Public Procurement Market in BH

Business strategies of firms affect the structure and organization of the market as well as their own functioning (Sharma and Tomić, 2011). There are many factors that affect shaping of competitive relations between participants on the market: number and size of individual participants on offering and/or demanding side, limitations and possibility of new competitors emergence, spatial distribution of customers and suppliers, greater or lesser homogeneity or differentiation of products, elasticity degree of demand for certain products, etc. (Jurin and Šohinger, 1990). Useful basic indicators of participants' market power and the market power of their competitors are determining the market shares and level of market concentration of the observed market (Croatian Competition Agency, 2005). The greater the market share of a concentration participant, the greater the probability that such an entrepreneur has market power as well. Term – market power of an entrepreneur can be defined as a long-term ability to sell its products at a higher price than the market price.On the basis of said we can conclude that entrepreneur has significant market power if he is characterized by a large market share and high financial power that enables him to dictate purchase (market) conditions, and to exclude competitors from the market. His market power is greater if he operates on closed market. The entrepreneur with high market power has the ability to act independent of potential and real competitors, customers' interest, suppliers, and society on the whole.

Market competition is identified as an independent variable. It is also a precondition for strengthening market economy in general. For measurement of market competition on the public procurement market in B&H, based on the observed sample, the following indicators were used:

- The market shares of customers and sellers

- The market concentration ratio of the five largest buyers/sellers on submarkets of goods, services and works procurement.
- The (Non)Existence of buyers/sellers   domination on the public procurement market

The Market Concentration ratio (CR) is one of the usual measures of market concentration. It shows the total (joint) market share of a relatively small number of the largest entrepreneurs that operate on the same market. The higher the CR is, the market is more concentrated. Considering a number of entrepreneurs whose market share is observed, the market concentration ratio is denoted with CR2, CR3, CR4, etc. A higher ratio of market concentration indicates that market competition has decreased, and vice versa.

To measure (non)existence of dominant buyer/seller on the public procurement market in B&H, the following criteria, established by provisions of the competition Act,[iv]were used in this paper:

- A buyer/seller is dominant on the market if it has more than 40% of market shares.
- Two or three buyers/sellers are dominant on the market if they, together, have more that 60% of the market shares.
- Four or five buyers/sellers are dominant on the market if they, together, have more than 80% of the market shares.

*Market Power of Buyers (contracting authorities)*

On the procurement of goods, the market concentration ratio of five leading suppliers indicates that they have high market power because their total shares (CR5) ranged from 43.58% in the year 2010, 38.9% in the year 2011 and to 40.53% in the year 2012. They do not have a dominant position but they do have significant power on this market. Three enterprises that emerge in five leading suppliers are: coal mines Kreka Tuzla, brown coal mines Kakanj and brown coal mine Banovići. Their cumulative shares are increasing each year, and in year 2012 they were 32.73%.

On the procurement of works market, it has been recorded that the market concentration of the five leading suppliers was the highest in regards to market of goods and services. CR5 was 80.03% in year 2010, 37.31 in year 2011, and finally it

rose to 82.0% in year 2012. In accordance with set criteria, five leading suppliers are dominant in this market.

On the market of services procurement, CR5 indicates that market concentration of the five leading suppliers is rising with each year, ranging from 37.58%, over 47.59% to 48.93% in the year 2012. There are no enterprises or group of enterprises that are dominant on this market.

Figure 5: Concentration of public procurement of goods, works and services markets in terms of suppliers (CR5 in period from 2010-2012)
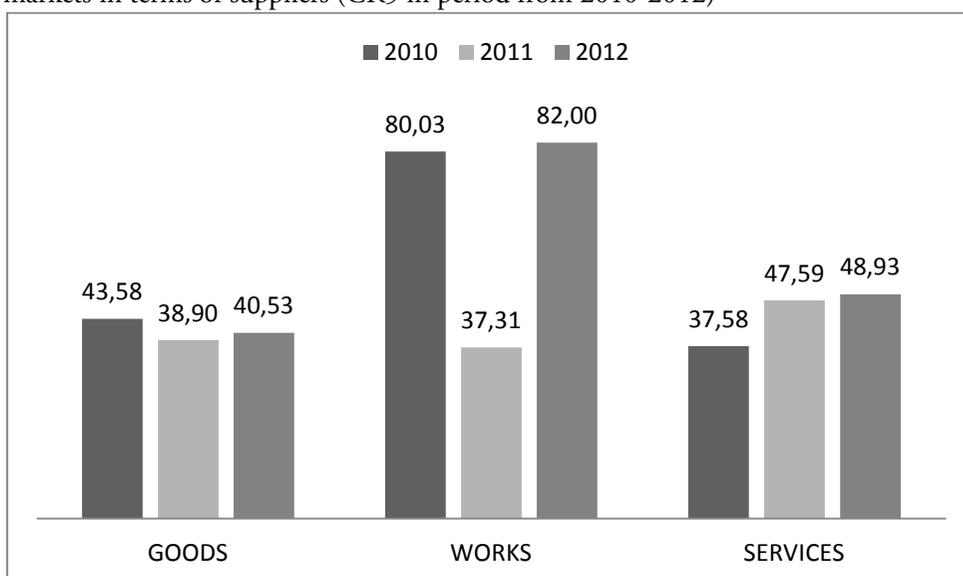
Source: adapted from Public Procurement Agency data

On the overall public procurement market in terms of suppliers, high market concentration has been recorded for the five leading suppliers in year 2012 (CR was 48.12%), which indicates that these five leading buyers have relatively high market power, but not a dominant position. In regards to the market power of the five leading buyers, their market power is significantly lower. Different companies have had the position of the largest supplier in the years 2010, 2011 and 2012: NISKOGRADNJA with a share of 24.27%, Kreka coal mines with a share of 10.36%, and CHV Czech Republic with 33.63% of the share, respectively. Their individual shares are big but these suppliers were not dominant in the overall market.

Results of Empirical Research of the Public Procurement Transparency Impact on Streightening Market Competition in BH

Starting from the theoretical concept of empirical research and the relationship between the most significant factors of market competition development, based on the results obtained, it is possible to test the proposed research hypothesis and examine the impact of increasing the transparency of public procurement to strengthen the market competition in BH. Results of the study based on a sample of the 200 largest, completed public procurement contracts in BH in the period from 2010 to 2012 are presented in Table 5, and refer to the information on:

- ✓ size and structure of demands for goods, works and services,
- ✓ market concentration of the five leading buyers on the market of goods, works and services,
- ✓ market concentration of the five leading suppliers on the market of goods, works and services,
- ✓ the amount of open procedures in the total procurement of goods, works and services.

Table 5: Research results

INDICATORS	GOODS PROCUREMENT MARKET				WORKS PROCUREMENT MARKET				SERVICES PROCUREMENT MARKET		
	2010	2011	2012		2010	2011	2012		2010	2011	2012
SIZE AND STRUCTURE OF THE DEMAND IN %	54,40	74,16	40,70		33,68	11,19	48,21		11,92	14,65	11,10
MARKET CONCENTRATION OF BUYERS CR5	75,83	64,91	75,16		84,32	42,39	95,66		59,28	62,92	64,56
AMOUNT OF OPEN PROCEDURES IN %	18,45	29,02	18,85		7,98	8,47	14,32		3,57	10,21	2,91
MARKET CONCENTRATION OF SUPPLIERS	43,58	38,90	40,53		80,03	37,31	82,00		37,58	47,59	48,93

| CR5									

Testing auxiliary hypotheses will be conducted by re-examining the relationship between market power of the largest buyer in the whole public procurement market in BH (Elektroprivreda BiH) and the amount of the open procedures in its procurement, because research shows that the public enterprise "Elektroprivreda BiH" achieved the highest individual share of 26.55%, 38.34% and 55.44% in the period from 2010th to 2012th year

Research Results on the Market of Procurement of Goods

In the reporting period, a higher demand for goods than for works and services has been recorded. Considering that a high demand for goods offers possibility to make a profit, many suppliers are present on this market, and therefore larger competition is expected. In the reporting period, the highest reported demand for goods was reported in year 2011 and it amounted to 74.16% from total public procurement in BH. High demand resulted in the decreasing of market concentration of the five leading buyers (CR5 was 64.91%). As a result of the decreased market power of buyers in year 2011, the amount of open procedures was highest (29.02%). This contributed to the increase in competition and in final, decreasing of the market concentration of the five leading suppliers to the smallest level in the reporting period (CR5 was 38.90%). This relationship can be seen in Figure 6. Observing this market in the year 2012, when lower demand was recorded than in the year 2011, the market power of buyers increased again, as they used their higher market power to conclude smaller value contracts with open procedure than in the year 2011. That was the reason why the market concentration of five leading buyers increased, i.e. competition on this market was lower.

Figure 6: Relationship between market concentration of suppliers, amount of open procedures of total public procurement procedures and market concentration of buyers (period from 2010 to 2012) in %
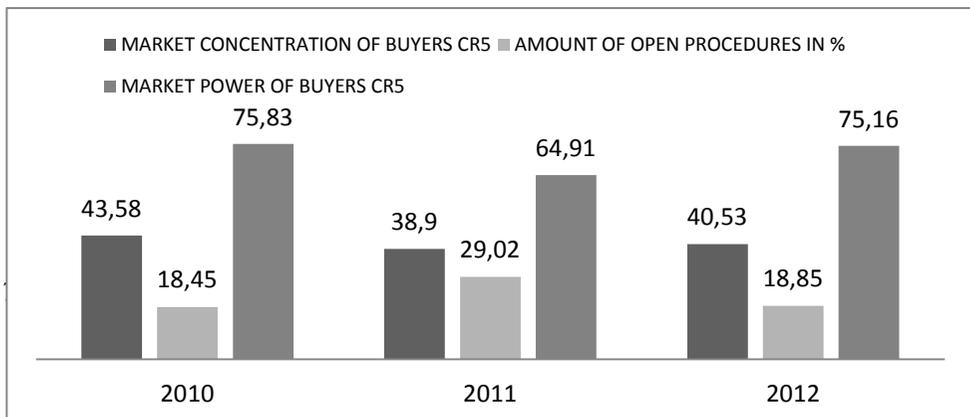
Source: data from Table 5

The largest buyer, JP Elektroprivreda BiH, acted in accordance with its market power. This buyer had a dominant position in all observed years on the market of goods with shares over 40%. As its market power as a buyer increased, the amount of open procedures in the market decreased, which can be seen in Figure 7.

Figure 7: Relationship between the market share of public enterprise "Elektroprivreda BiH" and open procedure on the market
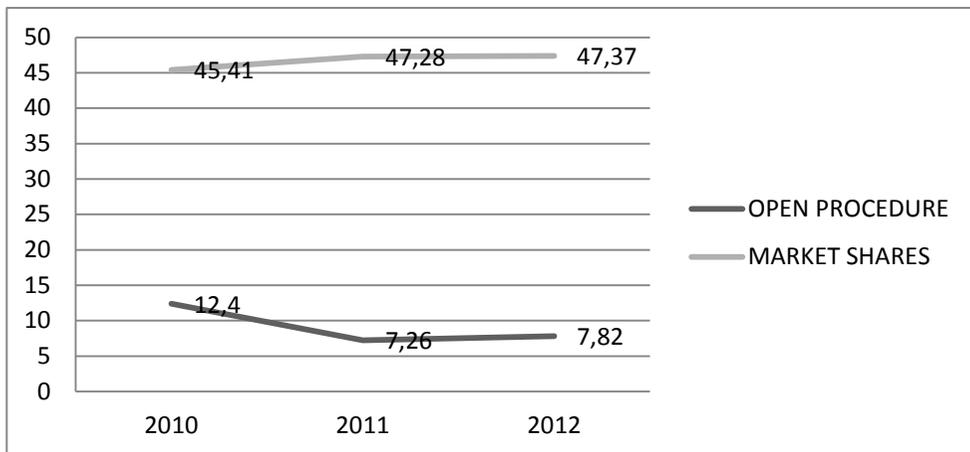
Researching the impact of increasing the transparency of public procurement on strengthening market competition on the commodities market we came to the following conclusions:

- With increase in the market power of buyers, the amount of most transparent procedures decreases i.e. transparency of public procurement decreases.

- With the decrease of public procurement transparency, market concentration of the five leading suppliers increases i.e. market competition decreases.

Research Results on the Procurement of Works Market

The highest demand for works was reported in year 2012, when it amounted to 48.21% of the total public procurement in BH. As opposed to the commodities marketwhere very high demand for works did not result in an increase of competition between suppliers; on the contrary, the largest market concentration of five leading suppliers has been reported. That year, they had very high market power and dominant position (CR5 was 82%), in accordance to research criteria (Figure 8). Causes of such phenomenon can be found in the undeveloped market of works in which operates a small number of construction companies that have had difficulties surviving in periods of economic crisis. If we add to it barriers that occur with entering the market (licenses, the necessary references, business expenses etc.), high market (negotiation) power of the five leading buyers that have dominant positions on this market (CR5 95.66%), then it is not surprising that the level of market competition is at such a low level. The market power of buyers and suppliers has contributed that amount of open procedures from the total public procurement procedures was merely 14.3% in the year 2012, although values of signed contracts were high. Considering indicators recorded in the year 2011, when the lowest demand for works was recorded (11.19%), it is clear that the market power of buyers (CR5 42.39%) and sellers (CR5 37.31%) was at the lowest level in the observed period.

Due to the low presence of open procedure in all the years, especially in 2010 and 2011 when it was about 8%, contracting authorities, applying the least transparent procedures for the award of public works discouraged the entry of new companies into the market and thereby jeopardizing the development of competition and the market economy in general.

Figure 8: Ratio of market concentration of suppliers, representation of the open procedure and market concentration of buyers (period from 2010 to 2012)
Source: data from Table 5

Public Enterprise "Elektroprivreda BiH", which has almost achieved monopoly in the works market in year 2012, with shares of 71.57% in this market acted in accordance with its market power. The lowest level of amount of open procedure (2.54%) in total procurement of this buyer was in year 2012, when their market power was highest (Figure 9).

Figure 9: Market share of public enterprise "Elektroprivreda BiH" and open procedure on the works market ratio
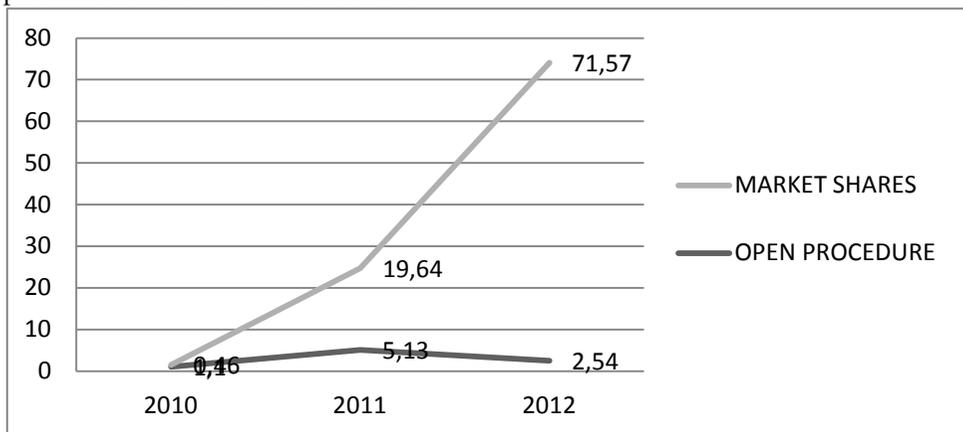
Source: Author's interpretation according to data from Public Procurement Agency of BH

Examining the impact of the increase in public procurement transparency on the strengthening of market competition in works market, the following conclusions were made:

- Market power of buyers and suppliers is very high – the five leading buyers and suppliers have a dominating position on the market.
- Undeveloped market and the existence of real barriers for new companies to enter the market makes the market power of buyers and suppliers even stronger
- The very low level of public procurement transparency on this market is a consequence of very a high market power of buyers i.e. their dominant position.

- The lower the level of public procurement transparency is, the greater is the market concentration of suppliers i.e. lower is the market competition.

Results of the Research on Services Procurement Market

On the services market, continual growth of the market power of buyers and sellers has been recorded, as well as the percentage of open procedures on observed submarkets (3% - 10%). The market power of the five leading buyers is growing each year because of low demand for services, specific procurement cases and real barriers for new companies to enter this market. The very small percentage of open procedure on this market contributes to the ever growing concentration of the five leading suppliers i.e. weakening market competition.

Figure 10: Market concentration of suppliers, percentage of open procedure and market concentration of buyers ratio (period 2010 to 2012)
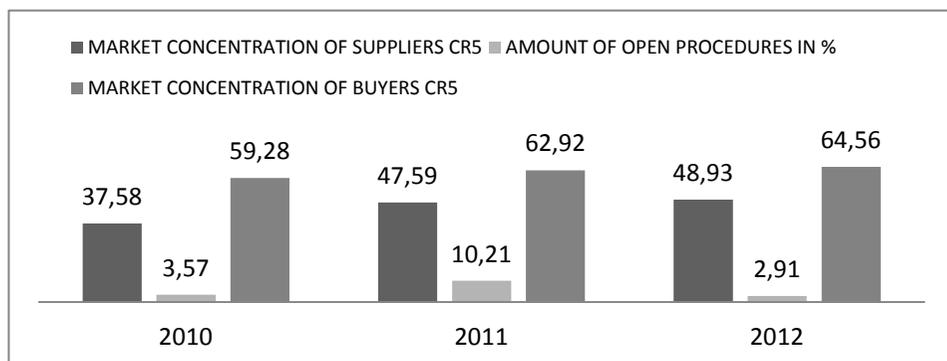
Source: Data from Table 5

The classic example of the market power of buyers and the amount of open procedures ratio is the case of largest buyer on the services market, Public Enterprise "Elektroprivreda BiH". The higher the market share of the buyer was, the smaller the amount of open procedures and vice versa. When the market share of this buyer was at its lowest level (7.34%) the highest percentage of open procedure was recorded (1.87%), which can be seen in Figure 11.

Figure 11: Market share of "Elektroprivreda BiH" and open procedure percentage ratio on services market
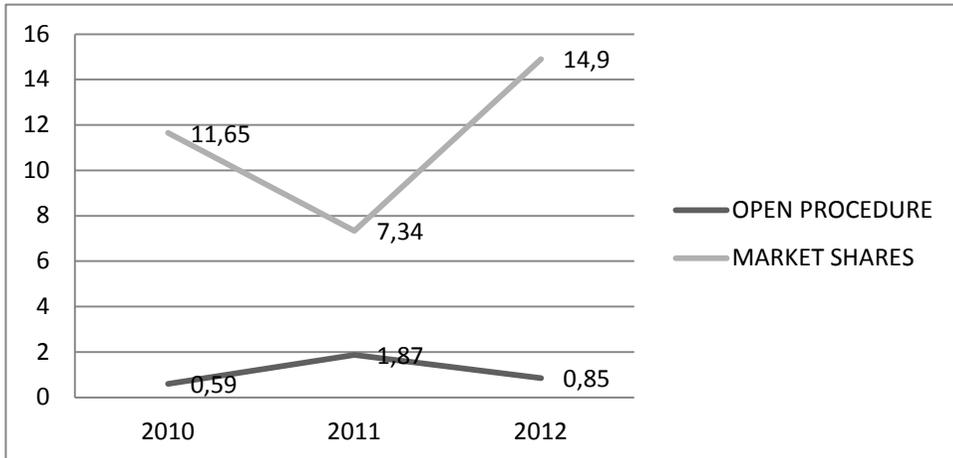
Source: Authors' interpretation according to data received from public procurement agency of BH

In examining the impact of increased public procurement transparency on strengthening market competition on the services market, following the conclusions can be stated:

- Higher market power of buyers and suppliers is continually increasing each year.
- Undeveloped market and the existence of real barriers for new companies to enter the market additionally strengthens the market power of buyers and sellers.
- Very low level of public procurement transparency on this market is a consequence for the high market power of buyers.
- The lower the level of public procurement transparency, the higher the market concentration of suppliers i.e. market competition is weaker.

Conclusion

Insights into the public procurement system, the market power of contracting authorities and suppliers, measured by their individual and cumulative market shares, as well as insights into their behavior in the context of ensuring transparency principles in public procurement have contributed in drawing one general

conclusion: the public procurement system in BH can be used as an instrument for strengthening the market economy altogether with the transparency mechanism by contributing to strengthening (free) market competition, because market competition represents foundation of functional market economy.

By the scientific research method, it has been determined that there is a high market concentration of five leading buyers and five leading suppliers on the market. That means a lower level of market competition. It has also been determined that public procurement transparency is decreasing. Based on quantitative evidence about the size of market competition on the public procurement market, and quantitative analysis of the transparency system impact on market competition, we can conclude that the research hypothesis has been confirmed and that: *increase of public procurement transparency contributes strengthening market competition in Bosnia and Herzegovina.*

The results of the research give us one more insight: *behavior of contracting authorities in terms of ensuring the transparency principle is determined by their market power i.e. higher their market power, measured in market shares* the lower the percentage of open procedures in public procurement."*,*

Intentionally or not, contracting authorities negatively affect the development of market competition and therefore functional economy in BH, by not preferring most transparent procedure - open procedure. Theoretical, methodical and empirical insights on the impact of the public procurement system's transparency on market competition and the market economy in general, represent an argument for urgent reform of the existing public procurement system that enables contracting authorities to weaken the development of market competition and the market economy in Bosnia and Herzegovina.

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[i] "Official Journal B&H", number 49/04, 19/05, 52/05, 94/05, 8/06, 24/06, 70/06, 12/09, 60/10 & 87/13.

[ii] Design contest project as one of the possible procedures was excluded from the analysis due to his specific application.

[iii] The Public Procurement Agency in the Annual reports does not publish data of the value of concluded contracts by negotiated procedure with publication of procurement notice and negotiated procedure without publication of procurement notice separately.

[iv] Criteria have been established based on the provisions of Act of Public Procurement of Bosnia and Herzegovina

Investigating the Drivers of Choice Behavior in Tourism: Corporate Image, Perceived Risk and Trust Interactions through Reputation Management

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Abstract: *This study examines how reputation management (RM) activities influence consumers' choice behaviors. In order to understand the relationship between them the possible consequences of RM activities such as corporate image, consumer trust, and perceived risk were analyzed as the antecedents of consumers' choice behavior. Specifically, a structural equation model was developed for hypothesized relations between the constructs of the study. Empirical research was conducted using data from 232 individual consumers in Albania (n=109) and Turkey (n=123) to test our conceptual model. The data were analyzed through t-test and structural equation modelling (SEM). The study shows that RM activities obviously determine the constructs of corporate image and consumer trust positively, whereas they affect perceived risk by consumers negatively. The lower level of perceived risk through RM activities was found as a significant determinant of consumers' choice behavior.*

Introduction

In marketing science, psychological processes behind consumer behaviors and preferences are accepted as key determinants based on a vast body of research on their reactions to products, brands and the names of firms. This understanding prescribes that general beliefs about a firm can determine the way in which consumers make their decisions toward the given firm. Also, marketing research mentions that the factor of consumer trust is another important key determinant in the decision making process (Moorman et al., 1992; Chen and Tan, 2004). Both factors are leading parts of the psychological process although objective evaluations such as firm performance and quality of offerings are significant in addition to these two factors. If market players can manage the psychological processes of consumers successfully, then they are able to increase the possibility of being chosen by consumers among many other competitors. This viewpoint builds a practical question for firms: what strategies and activities positively increase consumers' beliefs and trust toward the firm? This study examines reputation management activities from the perspective of increasing the positive image of any firm and consumer trust to create choice behavior in favor of the firm.

Reputation has been defined as the intangible asset expressing the evaluation of a target market on whether the firm is substantially 'good' or 'bad' (Weiss et al. 1999), and reflects the cumulative knowledge about the past and present acts of the organization (Suh and Amine, 2007). In today's highly competitive markets, reputation is not a result that appears by itself, and that can be gained by chance. However, it is an organizational value that could be improved by management perspective with long term strategies. In short, creating a good reputation for a firm requires the understanding of strategic marketing management to transform these activities into reputation management.

Reputation gained by successful strategic marketing management can be demolished in very short order if the attention is not sustained. Although reputation is an abstract concept, it has a potential to generate concrete values if it is created successfully by any firm. Fombrun (1996) states the meaning of positive reputation perceived by consumers for an organization in terms of competitive advantages as follows: (1) delaying rival mobility in the industry, (2) charging price premium to customers, at least in highly uncertain markets, (3) attracting higher-quality and larger amounts of investments from the stock market, (4) maintaining a high spirit among employees, (5) supporting and enhancing new product introduction and

recovery strategies in the event of a crisis (Fombrun & Shanley, 1990; Fombrun, 1996).

However, although there is extensive research on reputation management (Weigelt and Camerer, 1988; Fombrun, 1996; Roberts and Dowling, 2002; Cretu and Brodie, 2007), the literature still suffers from a lack of empirical studies that examine whether reputation management activities shift perceived risk by consumers through creating a positive corporate image in the minds of consumers and establishing consumer trust. Therefore, the aim of this study is to explore the relationship between reputation management activities and consumers' choice behaviors through perceived corporate image, consumer trust, and perceived risk by consumers exposed to the reputation management activities of firms. The knowledge this study generates is expected to contribute to the competitiveness topic of marketing literature by its research model considering the consequences of reputation management activities as the antecedents of choice behavior.

The rest of the paper is organized as follows: First, a literature review is presented to recognize the main variables of the study. Second, we present a research model indicating the hypothesized relationships between constructs. Finally, methodology of the research, data analysis and findings will be presented, followed by a conclusion with the limitations of this research study.

Literature Review and Development of Hypotheses

Reputation Management

Intensive competition, the leading feature of today's markets, forces market players to find various strategic advantages. A widely accepted theory of the resource-based view of the firm (Barney, 1991) points out that valuable, rare, inimitable, and nonsubstitutable resources of firms are essential for stronger and long-term competitiveness. It should be noted that the resources building competitiveness are not related only to production and technical processes such as R&D, efficiency, and cost, but also to managing the general psychology in the marketplace towards the firm. When consumers have negative associations for a firm then market performance of the firm will probably not be independent of them. In other words, what consumers, competitors, and related institutions in the market are saying about the firm is a direct part of market performance since the words have an obvious power to attract and discourage individuals into a given market player. Thus, the

reputation of any firm can play as a rare, inimitable, and nonsubstitutable resource in a highly competitive market environment to encourage consumers toward the firm if it can be built successfully. Reputation of a firm, therefore, can be considered to be a psychological antecedent in the consumer decision-making process. It is possible to consider this dimension as a leading strategic resource for the competitive advantage of any firm (Fombrun, 1996; Capozzi, 2005). In this context, the concepts of reputation, reputation management (RM), and reputation management activities attract attention particularly from the management and marketing areas examining the question of how to be competitive (i.e., Roberts and Dowling, 1997; Hutton et al., 2001; Capozzi, 2005; Cretu and Brodie, 2007).

Reputation occurs around individuality, or what a person or an organization is known for. In business literature, it is therefore defined as an overall evaluation of the extent to which a firm is substantially "good or bad", or "positive or negative" (Deephouse, 2000; Roberts & Dowling, 2002). The reputation created for a firm in the marketplace can include real, perceived and incorrect dimensions. Even if it is sometimes incorrect or unreal, the reputation of a firm has the power to influence consumers' reactions. There is a consensus among academicians that corporate reputation must be purposefully managed rather than driven by chance so that it can contribute to the competitiveness of the firm (Fombrun, 1996; Formbrun and van Riel, 2004; Simoes et al., 2005). Thus, designing specific activities to manage the process of building reputation comes into prominence in strategic behavior.

Corporate Image

Corporate image is described as the overall impression made on the minds of individuals about an organization (Finn, 1961; Kotler, 1982; Dichter, 1985; Barich and Kotler, 1991). In marketing literature, image is defined as a mental construct processed internally (Crompton, 1979), or as a mental picture of consumers (Dobni and Zinkhan, 1990) for any given offering such as business name, variety of products, package design and quality, and appearance of store.

Some empirical evidence in the marketing field clearly shows that the long-term reputation of the seller has been found to be more important than short-term product quality movements (Landon & Smith, 1997). McKnight et al., (1998) report, based on empirical research, that corporate reputation provides the assurance of consumers' integrity and goodwill. Assurance also helps to increase trust, particularly when the consumers have not had experience before and hence do not

have firsthand knowledge of the firm. A typical example provides a valuable insight into this relationship: there is a perceived notion around the world that products processed in China will not have long-life due to not meeting quality standards. Products from China may really be low-quality and it is normally expected that consumers who have experienced these products before will avoid new transactions, but it is not uncommon to observe consumers avoiding Made-in-China products who have not had experience with them before. It is possible to explain this type of consumer behavior with the poor reputation of China in the marketplace. Poor reputation results in poor image in the minds of consumers.

It is expected, therefore, that the more positively consumers think about a firm, the more positive their perceptions towards the corporate image. In line with the foundation built above, the following hypothesis is proposed:

H1: There is a positive relationship between RM activities and corporate image.

Trust

From the view of social exchange theory (Blau, 1964; Cook and Emerson, 1978) trust is a leading factor in a relationship between consumers and the firm. The theory emphasizes the importance of human psychology in forming social exchanges. Research proves that lack of trust can directly disrupt the formation of a relationship from the consumer side. Thus, trust can be described as a psychological antecedent for consumer behavior (Garbarino and Johnson, 1999; Ba and Pavlou, 2002; Pavlou and Gefen, 2004).

The creation of a positive reputation for the firm through specific and pre-planned activities, and managing the corporate image, can increase the value of intangible assets such as trust (Calantone, Cavusgil & Zhao, 2002). Positive reputation of the firm and brilliant corporate image are expected to function as preceding states for trust in consumer psychology, based on the social exchange theory. Several researchers (Weigelt & Camerer, 1988; Garbarino & Johnson, 1999; Plank, Reid, & Pullins, 1999) report that corporate reputation has a vital role in reducing the uncertainty consumers encounter when they evaluate firms. Positive corporate reputation is based on superior performance over a certain period of time. In other words, positive corporate reputation can lead to creating confidence, and thus

increasing the trust (Morgan & Hunt, 1994). Based on the above reasoning we propose that:

H2: There is a positive relationship between RM activities and consumer trust.

H3: There is a positive relationship between corporate image and consumer trust.

Perceived Risk

The factor of risk perceived by consumers has been a major question in the marketing discipline since it is considered to be a leading part of human psychology in the decision-making process. Risk is defined as an individual's or a group's perceptions of the uncertainty associated with engaging in an activity (Dowling and Staelin, 1994). Bauer (1960) stated this as "the uncertain consequences resulting from purchase". From this perspective, risk perceptions of consumers arise from potentially negative results of any engagement. Some academicians (Engel, Blackwell, and Miniard, 1986, p. 109) consider perceived risk as "beliefs about the risks associated with product (service) purchase". In marketing literature there is a widely accepted classification based on the study of Jacoby and Kaplan (1972) and Kaplan et al.(1974) that includes financial, physical, psychological, performance, and social risk. Greatoresk and Mitchell (1994) identified social risk as "social loss", and added the sixth category as time risk.

Trust and perceived risk are closely interrelated (Mayer et al., 1995). In terms of managerial perspective, consumer trust and positive corporate image lead to more positive perceptions towards the quality of the products, and the firm as a whole. Marketing literature, based on a vast body of empirical evidence, suggests that the mentioned constructs encourage consumers by cutting negative associations about the firm (McKnight et al., 1998; Garbarino and Johnson, 1999; Pavlou and Gefen, 2004; Cretu & Brodie, 2007). In other words, the level of perceived risk can be decreased by increasing the positive clues.

The higher the perceptions of risk, the higher the trust needed to facilitate a transaction. When risk is present, a higher level of trust is needed to make transactions possible. That is, consumer trust towards a product or an organization reduces the perceived risk for a specific offering. As a result, the firms attached to positive associations are expected to behave well and avoid negative behaviors, which

strengthen customers' perceptions towards lower level perceived risk. Based on this view we hypothesize that:

H4: There is a negative relationship between corporate image and perceived risk by consumers.

H5: There is a negative relationship between consumer trust and perceived risk by consumers.

Choice Behavior

Understanding the essential determinants in the process of the evaluation of consumer behavior has been a supreme aim in the field of marketing. It is possible to state that customers' evaluations towards a product, a brand or the name of the organization are signals of actual choice behavior (Zeithaml, Berry and Parasuraman,1996), based on structural psychology (George and Jones, 1999, p.532) in which human behaviors are described as the activity done consciously. This description also emphasizes the important difference between "behavior" and "motion". The underlying indication from the discipline of psychology emphasizing the connection between behavior and its antecedents explains specifically that most human behavior is under volitional control (Ryan, 1970). There are different ways of examining choice behavior of consumers in marketing literature. For example, Bloemer and Odekerken-Schröder (2007) examined price insensitivity in the context of choice behavior. Bansal, Irving, and Taylor (2004) investigated consumers' choice behaviors in the context of switching intentions. On the other hand, Mittal, Kumar, and Tsiros (1999) measured customers' intention to recommend to other people, which can be considered to be an indicator of choice behavior if it is positive.

Consumers' choice behaviors among competing offerings emerge based on maximizing their benefits as it is implied in the explanations from psychology area (Becker, 1990; Tversky and Kahneman, 1981). Lower level of risk perceived by consumers is a direct part of higher benefits. In other words, reducing risk ensures consumers reach more satisfactory results. A rational theory of consumer behavior (Tversky and Kahneman, 1986, 1991) implies that consumers will employ the level of risk they perceive as a cue for their possible satisfaction. From this perspective, perceived risk by consumers is a main indicator in terms of whether they engage with a brand or a firm. In short, the more risk consumers perceive the less choice behavior they exhibit. More specifically, if they perceive relatively higher levels of risk towards

a firm, then they are more likely to have the intention not to prefer, switching intentions, negative word-of-mouth and price sensitivity. Based on this view we hypothesize that:

H6: There is a negative relationship between perceived risk and choice behavior of consumers.

Building on the literature review and the hypotheses developed, the following model emerged as the research model of this study (figure 1). In the research model, five main constructs and the relations between them are examined through hypothesized paths.

Figure 1. Conceptual model and hypothesized relations
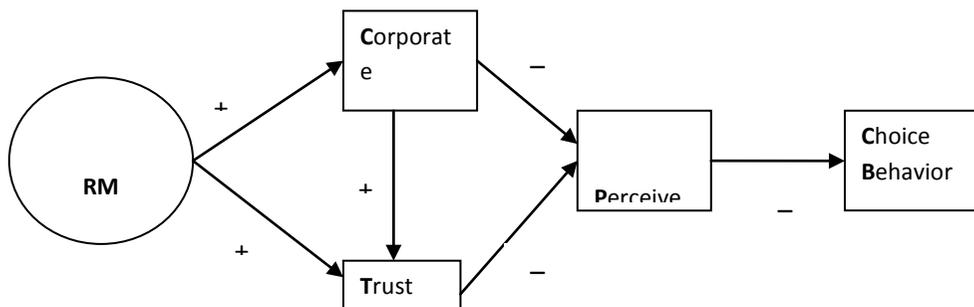
Research Design

The research in this study was conducted by employing a quantitative methodology. In this context, a structured questionnaire was developed as the data collection instrument based on a literature review and previous research (e.g., Sirdeshmukh et al., 2002; Selnes and Sallis, 2003; Dowling, 2006). The sample for this survey consisted of customers who were staying at Sheraton Hotels in Tirana, Albania and Istanbul, Turkey, in the period February – April 2009. The survey was limited only to the businessmen segment due to their constant demand for hotel services, and thus their enhanced familiarity. The design of the questionnaire was based on five different constructs examined in this research. As presented in tables 1, 2, 3, 4 and 5,

reputation management (RM) activities were measured using the scale adopted from Fombrun (1998) and Fombrun, Gardberg, and Sever (2000). Items for measuring consumer trust were adopted from Selnes and Sallis (2003). The construct of corporate image was adopted from the study of Wu and Petroshius (1987). For the variable of perceived risk, we employed the well-known definition of Engel, Blackwell, and Miniard (1986, p. 109) and the well-established classification of Jacoby and Kaplan (1972) for perceived risk by consumers. And finally, choice behavior was measured using items from Bansal et al., 2004; Mittal et al., 1999; and Zeithaml et al., 1996).

All constructs were measured on five-point Likert scales ranging from Definitely agree to Definitely disagree. The overall value of the Cronbach alpha to assess the reliability of the variables was 0.83, indicating a satisfactory level.

Methodology

The study was conducted between April - July 2015. Albania and Turkey were selected for the realization if the study and research was made in 2 five star hotels in these countries. Albania and Turkey was selected so as to reach data easier and to compare two facilities belonging to same chain in two different countries. Moreover, the reputation of the aforementioned hotel chain is high. Based on these information, country and facility selection was made by intentional sampling among nonstochastic selection methods. However the selection of customers within these facilities was performed by simple sampling method among the probabilistic sampling methods. Data was obtained by the evaluations of 109 participants from the hotel facility in Albania and 123 participants from the hotel facility in Turkey. During the study, certain number of surveys were conducted each month so as to prevent formation of duplicate results. In the data collection stage of the study, as the universe and sample could not be determined clearly and as the obtained data was insufficient, the frame could not be determined clearly. After this study which can be assumed to be pilot, other comparisons may be supported by other studies in which the number of facilities and participants will be higher.

Descriptive Statistics

In total, 268 usable questionnaires were collected from participants over the course of three months (February – April 2009) in Albania and Turkey simultaneously. Of those gathered thirty-six forms were eliminated (13.4 %) due to excessive amounts of

missing data. Thus, 232 forms were coded for data analysis. The distribution of questionnaires analyzed by country is as follows: Respondents from Albania were 109 (47 %) and from Turkey 123 (53 %) of the overall sample. The analysis of demographic characteristics of the sample revealed that most of them were male (169 respondents; 73 %) and in the 45 – 60 age category (171 respondents; 73.7 %). Just over half had a university degree (131 respondents; 56.4 %).

Data Analysis and Results

Analysis of Differences between Albanian and Turkish Consumers

In the first step of the analysis, the collected data were analyzed by employing the SPSS program. A series of independent t-tests were used to determine if differences existed between Albanian and Turkish consumers across the constructs of the research model. Table 1 indicates the differences between the subgroups of the sample in the evaluation of RM activities.

Table 1. Mean Differences between Albanian and Turkish Consumers for RM Activities

Statement's	AL	TR	t – value	Sig.
Average	**4.46**	**4.80**	**-1.83**	0.068
Declaring to provide high quality offerings every time	4.22	4.61	-1.81	0.071
Declaring to provide value-for-money offerings every time	4.32	4.55	-1.36	0.173
Declaring to provide new and innovative offerings every time	3.96	4.67	-2.61	**0.015**
Declaring that the philosophy shared by all staff is high customer satisfaction	4.43	4.38	1.81	0.071
Showing its upper-class level through comments in the media	4.51	4.77	-1.62	0.103
Announcing the names of famous guests staying at Sheraton	4.46	4.71	-2.47	**0.022**
Employing upper-class marketing channels	4.49	4.40	0.56	0.510
Creating a feeling of a first-class company through specific advertisements	4.24	4.65	-2.59	**0.011**
Designing an extraordinary building externally	4.79	4.61	0.810	0.412
Designing an exclusive atmosphere inside the hotel	4.88	4.29	3.26	**0.003**
Providing excellent working environment to its staff	4.63	4.51	1.87	0.062
Equipping its staff with superior qualifications	4.70	4.27	2.27	**0.025**
Building high standards in human relations	4.83	4.52	1.75	0.078

Hosting and sponsoring eminent art events	4.80	4.66	1.82	0.070
Hosting many popular meetings (official meetings, society weddings, cocktail parties)	4.21	4.79	-2.51	**0.014**
Supporting and announcing many societal projects	3.91	4.48	-2.38	**0.017**
Declaring its environmental responsibility and sensitivity	4.27	4.49	-1.77	0.075

Note: The negative t-values mean that Turkish respondents have higher mean scores than Albanian respondents for the related items. The criteria were based on a five-point scale, ranging from "1= Definitely agree" to "5= definitely disagree".

The findings of the comparison between Albanian and Turkish groups showed that Turkish consumers had a slightly higherscore but this finding cannot be confirmed by statistical results (p>0.05). Based on the results in table A, no significant difference was found for the evaluation of RM activities. Although Turkish consumers have higher scores, Albanian consumers also have very positive overall evaluations towards the firm's RM activities. It should be noted that the largest difference was found in the "designing exclusive atmosphere inside the hotel" (p< 0.01), indicating one of the lowest scores from the Turkish group at 4.29 that means very positive.   This means that both groups in different countries have similarly positive perceptions for RM activities of the firm.

While analyzing the relationships among the constructs across the research model, the second construct is determined as *corporate image*. Table 2 reports the view of the corporate image from the respondents' evaluations.

Table 2. Mean Differences Between Albanian and Turkish Consumers for Corporate Image

Statement's	AL	TR	t – value	Sig.
Average	4.61	4.41	1.74	0.078
Has a pleasant atmosphere	4.62	4.48	1.80	0.073
A well-known brand	4.90	4.77	1.66	0.104
Has high quality goods and services	4.82	4.33	2.21	**0.028**
Well-managed firm	4.41	4.44	-0.67	0.498
Has polite staff	4.33	4.68	-1.72	0.081
Has consumer-oriented staff	4.22	4.31	-0.86	0.397
Attracts upper-class customers	4.76	4.28	2.10	**0.036**
Means prestigious	4.60	4.12	1.99	**0.039**
Exclusive firm	4.88	4.36	2.14	**0.033**

Note: The negative t-values mean that Turkish respondents have higher mean scores than Albanian respondents for the related items. The criteria were based on a five-point scale, ranging from "1= Definitely agree" to "5= definitely disagree".

Table 2 shows that there is no significant difference between Albanian and Turkish consumers for the evaluations towards CI of the firm. Both groups are seen to have very positive assessments. In comparison with those of Albanian consumers, Turkish consumers had slightly lower scores but this was not confirmed statistically (p > 0.05). Similarly, in both groups the most positive evaluation was reported on the item *the firm is a well-known brand* (mean scores: 4.90 and 4.77, respectively). For the Albanian group, clearly it is possible to see the reflections of CI since they ranked the item *it is an exclusive firm* as second highest (4.88). Also, in the Turkish group, it should be noted that overall scores for CI items are above 4.00. The largest difference existed between the groups on *the firm has high quality goods and services*, which means that the former had much more positive views than the latter (p < 0.05). However, the mean value of the Turkish group for this item can also be considered rather positive (4.33). The data obtained from the sample of this study in two different countries clearly prove a brilliant CI for the firm in the minds of respondents.

Table 3. Mean Differences between Albanian and Turkish Consumers for Trust*

Statement's	AL	TR	t - value	Sig.
Average	4.59	4.42	1.73	0.081
I trust that S is competent at what it is doing	4.89	4.41	1.81	0.070
I feel that S is trustworthy.	4.81	4.13	3.31	**0.001**
I feel that S is honest in fulfilling its promises	4.70	4.19	2.12	**0.034**
I think that S is very responsive to customers.	4.33	4.68	-1.77	0.076
I believe that S will respond with understanding in the event of problems	4.22	4.72	-1.87	0.064

Table 4: Mean Differences between Albanian and Turkish Consumers for Perceived Risk*

Statement's	AL	TR	t - value	Sig.
Average	4.40	4.65	-1.82	0.068
In S, facing offerings that are not value-for-money is a serious risk. (R)	4.32	4.60	-1.91	0.063

Satisfactoriness of physical environment in S is a serious risk. (R)	4.45	4.62	- 1.94	0.062
It is a serious risk that the goods and services offered by S can be inadequate in order to meet my needs (R)	4.12	4.71	- 2.31	**0.024**
Staying at S can create unhappiness in my inner world (R)	4.76	4.81	- 1.35	0.177
If I say to friends that I prefer S, they may condemn me (R)	4.38	4.53	- 1.79	0.071

Table 5: Mean Differences Between Albanian and Turkish Consumers for Choice Behavior *

Statement's	AL	TR	t - value	Sig.
Average	4.25	4.12	1.57	0.074
I will prefer S in the future.	4.13	4.05	1.80	0.073
I will consider S the first choice at which to stay.	4.58	4.37	1.93	0.058
I don't think that the other brands will provide clearly better offerings.	4.11	4.07	1.86	0.062
It is a low possibility that I will replace S with a competitor.	4.18	3.99	1.74	0.081

* **Note:** The negative t-values mean that Turkish respondents have higher mean scores than Albanian respondents for the related items. The criteria were based on a five-point scale, ranging from "1= Definitely agree" to "5= definitely disagree". R: Reverse coded.

The findings of the comparison between Albanian and Turkish consumers for the dimension of *trust* are presented in Table 3. Based on average scores from the subgroups of the sample, a statistically significant difference was not reported by significance level ($p > 0.05$) for t-values computed (1.73). Respondents both in Albania and Turkey seem similar to each other in terms of trust towards Sheraton (grand mean values: 4.59 and 4.42, respectively). The largest difference between the groups was observed for the item *I feel that Sheraton is trustworthy*, which means Albanian respondents clearly had much more positive attitudes in favor of Sheraton than the respondents in Turkey (mean values: 4.81 and 4.13, respectively). Based on the grand mean values, it is possible to state that the sample as a whole clearly has the feeling of trust towards the firm.

Table 4 provides the results of *perceived risk* by respondents towards the firm, Sheraton. The results reveal that there were no significant differences between the

mean scores except one item on *risk for inadequacy of offerings to meet individual needs* (p < 0.05). It is important to note that this part of the scale measuring *perceived risk* towards the firm was established with five reverse coded items. The negative signs of the t-values indicate less perceived risk by Turkish respondents than Albanians. However, the mean scores of Albanians can be considered as a strong indicator that they perceive risk at minimum levels towards the firm. Likewise the grand mean scores for both groups report the similarity statistically (t-value: - 1.82 and p > 0.05). This result shows that the respondents both in Albania and Turkey are sure about the standards of the firm, and thus they do not worry about the firm and its offerings.

Table 5 summarizes the data obtained from the sample on their *choice behavior*. According to the results shown in table 5, overall the items were assessed similarly by Albanian and Turkish respondents. These four items all have a probability value that is more than .05. Grand mean scores for both groups (4.25 and 4.12, respectively) did not produce statistically significant differences (t-value: 1.57 and p > 0.05). The mean scores ranged from 4.11 to 4.58 in the group of Albanians, and from 3.99 to 4.37 in the Turkish group, indicating a strong loyalty or very positive choice intention in the future. These findings indicate that respondents preferred the firm, Sheraton, consciously at present and clearly they have a tendency to maintain this behavior.

The overall analyses of responses through five t-test operations point out the obvious resemblance between Albanian and Turkish respondents towards the given stimuli. It should be noted that those stimuli are the main constructs within the research model of this study. It is possible, therefore, to put together the subgroups of the sample while analyzing the research model rather than conducting separate analyses.

Analysis of the Research Model

This study was designed to understand the effects of the factor of reputation management that target markets consider when they prefer a brand or a firm rather than its competitors. In this study, a structured model related to the variables assumed to be influential on choice behavior of consumers was tested by employing Structural Equation Modeling (SEM). The structure, composed of the relationship of four assumed constructs to one main dependent variable (choice behavior) constitutes the model of the study to be tested. As mentioned before, the reliability

coefficient of the overall scale was computed as Cronbach alpha ; 0.83. Data analysis involves evaluation of the measurement model and the structural model.

The Evaluation of the Overall Model

For the overall model, the Chi-square value was found significant as 514.93 with 233 degrees of freedom. This value is not unusual for larger sizes of sample (Doney and Cannon, 1997). The ratio of Chi-square to degree of freedom is 2.21, which is adequate statistically for the fit of the model. Although the values of GFI (0.93) and AGFI (0.92) are lower than those of CFI (0.97), NFI (0.93) and NNFI (0.94), it is accepted that CFI values above 0.95 are suggestive of a meaningful model (Hu and Bentler, 1999). The fit indices calculated here with RMSEA (0.058) and SRMSR (0.073) can be considered as adequate. All related indices are summarized in Table 6.

Table 6: Goodness-of-fit summary

Fit indices	Values
X^2	514.93
Ratio (X^2/ df)	2.21
GFI	.93
AGFI	.92
NFI	.93
NNFI	.94
CFI	.97
Standardized RMSR	.07
RMSEA	.06

GFI, Goodness of fit index; AGFI, Adjusted Goodness of fit index; NFI, Bentler-Bonett normed fit index; NNFI, Bentler-Bonett non-normed fit index; CFI, comparative fit index; RMSR, root mean squared residual, RMSEA, root mean squared error of approximation.

Measurement Model

The quality of the model was assessed on unidimensionality, convergent validity, reliability and discriminant validity (*see* Table 7). The unidimensionalityof each construct in the model was analyzed with principal component analysis that reveals the appropriate items loaded at least 0.60 on the hypothesized components. A good overall model fit has provided support for convergent validity of the scale through all

loadings that were significant ($p < 0.05$). Many of the R^2 values have exceeded 0.50 proposed by Fornell and Larcker (1981). On the other hand, reliabilityof the measurement model was analyzed based on the values of composite reliability that should be greater than the benchmark of 0.70 to be considered adequate (Fornell and Larcker, 1981). As indicated in table 7, all the reliability values are above 0.70, revealing adequate reliability.

Discriminant validity was tested by confirmatory factor model in which correlations between constructs were constrained to one. Chi-square differences were significant throughout the model ($p < 0.01$). The model of the study, therefore, is proper to be applied for understanding the relationships between the constructs given with the support of reliability, convergent validity, discriminant validity and unidimensionality.

Table 7. Measurement Model

		Composite reliability	Variance Explained	Loading	R^2
Reputation Management Activities (Fombrun, 1998; Fombrun, Gardberg, and Sever , 2000)	1. Declaring to provide high quality offerings every time	0.77	0.72	0.88	0.74
	2. Declaring to provide value-for-money offerings every time			0.81	0.63
	3. Declaring to provide new and innovative offerings every time			0.76	0.55
	4. Declaring that the philosophy shared by all staff is high customer satisfaction			0.89	0.74
	5. Showing its upper-class level through comments in the media			0.72	0.52
	6. Announcing the names of famous guests staying at S			0.67	0.48
	7. Employing upper-class marketing channels			0.63	0.42
	8. Creating a feeling of first-class company through			0.92	0.79

	specific advertisements				
	9. Designing an extraordinary building externally			0.76	0.55
	10. Designing exclusive atmosphere inside the hotel			0.91	0.79
	11. Providing excellent working environment to its staff			0.81	0.63
	12. Equipping its staff with superior qualifications			0.78	0.58
	13. Building high standards in human relations			0.66	0.46
	14. Hosting and sponsoring eminent art events			0.62	0.42
	15. Hosting many popular meetings (official meetings, society weddings, cocktail parties)			0.72	0.52
	16. Supporting and announcing many societal projects			0.63	0.42
	17. Declaring its environmental responsibility and sensitivity			0.72	0.52
Corporate Image (Wu and Petroshius 1987)	1. Has a pleasant atmosphere	**0.83**	**0.62**	**0.81**	**0.63**
	2. Well-known brand			0.70	0.51
	3. Has high quality goods and services			0.84	0.68
	4. Well-managed firm			0.73	0.52
	5. Has polite staff			0.93	0.83
	6. Has consumer-oriented staff			0.89	0.74
	7. Attracts upper-class customers			0.82	0.63
	8. Means prestigious			0.90	0.79
	9. Exclusive firm			0.77	0.56
	1. I trust that S is competent at what it is	**0.78**	**0.66**	**0.73**	**0.52**

Trust (Selnes and Sallis, 2003)	doing				
	2. I feel that S is trustworthy			0.91	0.79
	3. I feel that S is honest in fulfilling its promises			0.82	0.63
	4. I think that S is very responsive to customers			0.71	0.52
	5. I believe that S will respond with understanding in the event of problems			0.75	0.55
Perceived Risk (Engel, Blackwell, and Miniard,1986; Jacoby and Kaplan,1972)	1. In S, facing offerings that are not value-for-money is a serious risk (R)	0.85	0.72	0.70	0.51
	2. Satisfactoriness of physical environment in S is a serious risk (R)			0.89	0.74
	3. It is a serious risk that the goods and services offered by S can be inadequate in order to meet my needs. (R)			0.83	0.64
	4. Staying at S can create unhappiness in my inner world. (R)			0.69	0.51
	5. If I say to friends that I prefer S, they may condemn me (R)			0.92	0.79
Choice Behavior (Bansal et al., 2004; Mittal et al., 1999; Zeithaml et al., 1996)	1. I will prefer S in the future	0.88	0.74	0.83	0.64
	2. I will consider S the first choice at which to stay			0.84	0.66
	3. I don't think that the other brands will provide clearly better offerings			0.94	0.83
	4. It is a low possibility that I will replace S with a competitor			0.88	0.74

Structural Model

The estimates and hypothesis results are summarized in Table 8. Furthermore, figure 2 also provides the complete model with the path estimates. The model explained 62 – 74 % of the variance (R^2 scores). Overall, the research model accounted for 74 % of the variance of choice behavior.

Table 8: Structural Model of RM Activities on CI, CT, PR and CB

Parameter (Paths)	Hypothesis		Estimates
RM Activities ⟶ Corporate Image	H1 (+)		0.793*
RM Activities ⟶ Consumer Trust	H2 (+)		0.678*
Corporate Image ⟶ Consumer Trust	H3 (+)		0.423**
Corporate Image ⟶ Perceived Risk	H4 (–)		- 0.447**
Consumer Trust ⟶ Perceived Risk	H5 (–)		- 0.763*
Perceived Risk ⟶ Choice Behavior	H6 (–)		- 0.872*

Squared Multiple Correlations for Structural Equations	Estimates
Corporate Image	0.71
Consumer Trust	0.62
Perceived Risk	0.66
Choice Behavior	0.74

* $p < 0.001$
** $p < 0.01$

Figure 2. SEM Analysis of the Research Model
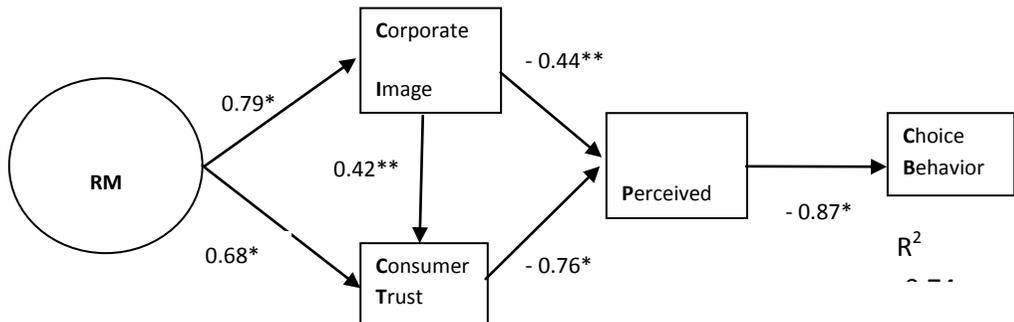
* p < 0.001 , ** p < 0.01

As seen in table 8, all proposed relationships between the constructs of the model were supported by the statistical results. The standardized estimates of the structural parameters (i.e., RM activities corporate image and consumer trust, and corporate image consumer trust) prove that consumers' evaluations toward RM activities positively influence the view of corporate image in their minds (see table 8, r: .79 and p < 0.001).

Similarly, RM activities to be exposed clearly determine consumer trust positively towards the firm that organized RM activities (r: .68 and p < 0.001). These outcomes confirm H1, in that positive evaluations of consumers towards RM activities of the firm lead to positive corporate image in their minds. Also, the hypothesis H2 was confirmed by the results, in that positive evaluations of consumers towards RM activities lead to higher levels of trust towards the firm in consumer psychology. It is possible, therefore, to state that RM activities organized by firms have a direct influence on both the appearance of the firm in the marketplace, and inner evaluation processes consumers activate. Thus, RM activities of firms have a power to create doubled effect on consumers' decision making process as external and internal stimuli.

Consumer trust is also positively influenced by corporate image, as hypothesized in H3 (r: .42 and p < 0.01). This confirmation for H3 shows that positive corporate image in the minds of consumers plays a supportive role to enhance the feeling of

trust in consumer psychology. Therefore, RM activities have both direct influences on consumer trust, and indirect influences on it through corporate image.

H4 and H5 investigate the impact of corporate image and consumer trust on the factor of perceived risk. The standardized estimates of the structural parameters reveal that corporate image has a significant effect on perceived risk, but in a negative direction (r: - .44 and p < 0.01). In other words, perceived risk by consumers for a given firm is negatively influenced by corporate image in the mind of consumers. That is, the more positive corporate image consumers assume the less perceived risk they have. Also, the results confirm H5, in that a higher consumer trust toward a firm leads to a lower perceived risk by consumers (r: - .76 and p < 0.001). Thus, perceived risk by consumers is influenced significantly by the two variables in a negative direction, as hypothesized in the research model. Comparing the values of the two coefficients, it appears that consumer trust has greater influence on perceived risk by consumers than corporate image.

The analyses of the hypotheses obviously point out that perceived risk by consumers is a significant determinant on their choice behavior (r: - .87, p < 0.001), in support of H6. Perceived risk seems to have a negative impact on choice behavior of consumers, just as hypothesized at the beginning of the research. Based on this test result, one can infer that higher perceived risk will result in lower choice behavior. Thus, it is possible to say that in order to increase the positive attitude toward choice of a firm's offerings, perceived risk should be cut off through enhancing consumer trust based on RM activities.

Overall, all the parameters are significant in the research model. According to Chin (1998), in order for coefficients to be considered meaningful they should be above the value 0.2. In our research model all parameters were computed between 0.42 – 0.87, indicating considerable impact. Moreover, all the structural relationships are in the hypothesized direction (table 8). These findings strongly support the positive relationships between RM activities and corporate image created in the minds of consumers and consumer trust in the psychological structure (figure 2), negative relationships between corporate image - consumer trust and perceived risk, and then a negative relationship between perceived risk and choice behavior. These results are not only consistent with the findings of previous studies (e.g. Benjamin and Podolny, 1999; Keh and Xie, 2008) but also with our expectations of associated relationships among the constructs.

Conclusion

This paper aims to understand the role of RM activities on consumers' choice behaviors. Drawing on the literature for reputation management and behavioral intentions of consumers, this research study theoretically develops and empirically measures a model analyzing the effects of RM activities toward the evaluations of consumers and then choice behavior. In conclusion, choice behavior of consumers can be predicated as a dependent variable with a rate of 74 % through antecedent constructs triggered by RM activities.

Empirical results clearly reveal that perceived risk by consumers plays a determinative role in the process. Therefore, we should especially focus on how to minimize perceived risk through RM activities. It is possible to say that RM activities influence consumers' decision making processes with indirect effects by enhancing corporate image and creating trust. The empirical results of this study show that perceived risk can be decreased by increasing consumer trust and positive corporate image based on RM activities of firms. Thus, if firms organize specific RM activities (i.e. making *high-volume and continuous* commitments to the market for superior customer satisfaction, announcing the famous people preferring the offerings of the firm, sponsoring important events in social life) strategically and systematically, this will function in building positive judgments resulting in lesser perceived risk and finally in more positive tendencies to prefer any given firm's offerings.

We note that the findings of this study should be assessed together with some specific limitations. First, the data required were collected from actual customers of a firm within its business atmosphere rather than in an unrelated place. However, designing a research activity in Sheraton was a result of the difficulties of reaching consumers for examining the reflections of RM activities of any firm.

Second, although all hypotheses are supported, the findings of this study were generated from the customers of only one firm. This type of research should be reinforced by a variety of research outputs examining the other firms' cases.

Finally, the research model developed in this study can be expanded by other possible antecedents and consequences of reputation management (i.e., corporate identity, consumer sensitivity) to be able to produce more sophisticated understanding.

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