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The Financing Incentives for Smart Cities and Importance for Local Government

Sabina Hodžić
University of Rijeka, Faculty of Tourism and Hospitality Management
Croatia
sabinah@fthm.hr

Sabina Arnautović
University of Rijeka, Faculty of Tourism and Hospitality Management
Croatia
sab.arnautovic@gmail.com

Abstract: Nowadays, the processes of globalisation and digitalisation have deliver rapid and profound development of the cities and local governments around the world, including, the European Union member states. This has led to consider a new concept to navigate and manage urban expansion in local government units. Therefore, the concept of smart cities offers huge economic and financial potential. In addition, the importance of smart cities is to enhance the quality of life, stimulate economic growth, sustain local government budget, and create new value for both investors and local population. To maintain all above mentioned and make it sustainable in the future, the main obstacle is to find appropriate financial resources. The aim of this paper is to present the main financial incentives for smart cities and importance for local government within European Union member states. Moreover, the paper provides the analysis of capacity of governments and public financial institutions to promote smart cities innovative solutions. The results of analysis showed that some countries have fiscal rules within local government budget that limit the ability of cities to take on additional debt to fund some new projects or programmes. To solve this problem, local government need to find a new way of financing the concept of smart cities.

Keywords: *smart cities, local government, budget, financial incentives*

Introduction

Nowadays, a city has become a main source of competitiveness, trade, finance and economic benefits. On the other side, it has been facing numerous difficult challenges such as pollution, social exclusion and financial limitations. This led to an urgent need to scrutinize different concepts in order to diminish the challenges and exploit the opportunities of the cities. Therefore, the concept of smart cities has been evolving at phenomenal rate all over the world, including the European Union member states. This also increased attention among various academic researchers and policymakers.

The development of smart city concept with all technological progress must be open to all social, economic, and emotional side of human life. The modern and urban cities present the pier of civilization development. In addition, they attract the best human, technological, organizational and natural resources. Therefore, the smart cities should be developed towards integrated cities, where awareness about integration will be applicable in all life areas. This will enhance the quality of life, stimulate economic growth, sustain local government budget, and create new value for both investors and local population. The aim of this paper is to present the main financial incentives for smart cities and importance for local government within European Union member states. The paper will fill the gap in scientific literature about smart city concept and financial support for their creation. The contribution of the paper is to

the existing literature of the smart city concept, importance for local government and financial incentive for their development.

The remainder of the paper is as follows. After introductory notes, a brief literature review on the development of the smart city concept will be presented. In the third section, the financial incentives and importance for local government will be presented, while in section four, overview of government investment. The last section provides conclusion, limitations and recommendations for further research.

Literature review

The origin of the concept of smart cities can be traced back to at least the Smart Growth Movement of the late 1990s and has been emerging ever since. In addition, the term smart city is interdisciplinary, but in retrospective it has been observed and defined in various ways. This is a complex, long-term vision of a better urban areas aimed at reducing the city's environmental footprint and creating a better quality of life of citizens (Hall, 2000; Dameri 2012; Dameri and Benevolo, 2016).

Caragliu et al. (2011) found that "a city is smart when investments in human and social capital and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic growth and a high quality of life, with a wise management of natural resources, through participatory governance" (p. 70).

Lombardi et al. (2012) defines the smart city a process of the application of information and communications, social and relational capital as well as environmental issues.

Washburn et al. (2010) defines the smart city as "the use of computing technologies in making the critical infrastructure components and services of a city, which include city administration, education, healthcare, public safety, real estate, transportation and utilities – more intelligent, interconnected, and efficient" (p. 2). Moreover, Mullen (2014) found that social interactions between the citizens and city administrators, as well as the intensity of civic activism and social participation affect the development of social policies and practices in a smart city.

Abella et al. (2017) defines smart city as a public-private ecosystem with support from technology and considers the social and economic impact on the society.

In further specifying the concept, according to the relevant scientific literature resulted in the Centre of Regional Science at the Vienna University of Technology, the smart city is the creation that is functioning in forward oriented way in six main types of action (Giffinger et al., 2007): *smart economy, smart mobility, smart environment, smart people, smart living and smart governance*. According to Nam (2012) this can be subcategorized to three crucial components such as technological, institutional (governmental) and social factors. These dimensions are related to traditional regional and neoclassical theories of urban growth and development. The main characteristics of the six dimension is described in the following paragraphs.

According to Carillo et al. (2014) first dimension, the *smart economy* includes indicators on innovation, entrepreneurship, trademarks, productivity and flexibility of the labour market, and integration in the national and international market.

Smart mobility consists of local and international accessibility where infrastructure is an essential part of this dimension. Cities that monitor the development of major infrastructure are more successful in providing services to their citizens (Hall, 2000).

Smart environment includes natural conditions, environmental amenities and environmental protection efforts (Hall, 2000; Carillo et al. 2014).

Chourabi et al. (2012) found that the most important factors related to *smart people* are the following: participation and partnership, communication, digital divide, education, quality of life and accessibility.

Smart living refers to quality of life in terms of availability and quality of public services, such as culture, religion, healthcare, safety, housing and other (Giffinger et al., 2007; Nam and Pardo, 2011).

Within the concept of smart city there is an open or *smart government* (Chourabi et al., 2012; Giffinger et al., 2007; Nam and Pardo, 2011) referring to the relationship among individuals, interest groups, institutions, and service providers in the ongoing business of government. This also refers to municipal ordinances, public-private partnerships, subsidiaries, negotiations, citizen participation and territorial policies. Therefore, local government bodies are the core determinant of smart city government.

Based on a study of European Commission (2019) the main obstacle in the implementation of the smart city concept is financial funding.

Financing smart cities

According to European Commission (2019) one of the key challenges when it comes to implementation of smart cities strategies is finding the funding. The realization of such strategies requires considerable financial investments. Numerous cities and urban areas have unfortunately minor access to financial means and non-sufficient credit ratings to find low priced source of funding, due to the adverse effects of debt crisis. Observing the strategic importance of these urban centres, it is crucial to unfold attractive financial means to facilitate low carbon transition. Giving the fact, that the smart cities market has been driven by technological and industrial factors, in order to foster the smart transition, the market has to shift to a city-needs-led and demand-driven model, which has to be predominantly bolstered by enhanced collaboration between cities and industry party. The set of opportunities impelled by growing smart cities market is very substantial and giving the strained public budgets more needed. Thus, the actions have to be oriented towards creating the scope which will further enable investors to benefit from new business models. There has been significant awakening of the multilateral institutions and private sectors, which however has to be continually cultivated to foster their contribution to the leadership of new funds and financial incentives.

European Commission addresses that there is a need for a joint investment programme for European smart cities. Moreover, European Union has to have audacious goals, but at the same time be aware that these goals require effort and time, as well as significant amount of commitment and ongoing support. According to European Commission, engagement of cities, industry and investor is an immense assignment and collaboration is the only approach that will result in performance. Due to the ongoing changes of nature of financing, there is a need to diversify the financial sources and create innovative business models, to help potential European smart cities to work together and find various resource of long-term financial incentives to facilitate their grow and prosper.

In addition, European Commission has presented a set of regulations to govern the next programming period of 2014-2020. As a result, a general Common Provisions Regulation 2014-2020 has been proposed. The latter presents strategic priorities including management

mechanisms and monitoring machinery which have been derived from the strategic document EU 2020 "towards a smart, sustainable and inclusive" economy and society. Therefore, financial instruments represent a resource-efficient way of deploying Cohesion policy resources in order to pursuit the EU 2020 Strategy objectives. By targeting projects with potential economic viability, financial instruments provide support for investments in form of loans, guarantees, equity and other risky mechanism possibly combined with the interest rate or guarantee fee subsidies within the same operation process.

When it comes to European Union financial incentives for smart cities, *Cohesion and Structural Policy* is one of the key policies. The aim is to foster economic, social and territorial cohesion among the community. Within this framework a special focus is dedicated to underdeveloped regions, where economic growth as well as employment are advocated. According to European Commission, the incentives with the most importance are *Joint European Support for Sustainable Investment in City Areas, The Risk Sharing Finance Facility and European Local Energy Assistance.*

Table 1 depicts mentioned financial incentives for smart cities that have been used for delivering investments and who are expected to play even stronger role in European Cohesion Policy in programming period from 2014 to 2020.

Table 1. Overview of the European financial incentives for smart cities

Financing programme	Description	Sub-total per programme	Target/ beneficiary
Joint European Support for Sustainable Investment in City Areas (JESSICA) - Support for financial instruments 2014-2020	JESSICA is a policy initiative of the EC developed jointly with EIB and in collaboration with the the CEB.	This incentive is not a new source of funding for Member States, but rather a new way of using existing Structural Fund grant allocations to support urban development projects.	The main benefit of this incentive is to make Structural Fund support more efficient and effective by using non-grant financial instruments and creating robust incentives for project implementation. Its role reflects in mobilisation of additional financial resource for public-private partnership as well as other projects related to urban development with a focus on sustainability. Other than that this incentive uses financial and managerial expertise from international

			financial institutions such as the EIB.
The Risk Sharing Finance Facility (RSFF) 2007-2013	This is JFI whose purpose is to decrease barriers in the Research, Development and Innovation sector.	ca. 1 billion euros.	By considering this programme, parties will benefit improved access to debt financing for all types and sizes of private companies and public organisations. The latter is carried out by conducting long-term research, development and innovation projects. The parties can also benefit by having crucial support in research. applied or industrial research, experimental development, pilot activities and feasibility studies.
European Local ENergy Assistance (ELENA)	ELENA is a joint initiative by the EIB and the EC under the Horizon 2020 programme.	ca. 40 to 50 million euros.	The main benefit of this programme reflects in complete technical support in implementation of energy efficiency, distribution of renewable energy and urban transport programmes. By using financial funds, parties benefit in covering costs of feasibility activities, market studies, conduction of plans, audits and financial structuring.

Source: Adapted from European Commission 2013, Using EU funding mechanism for Smart Cities, Brussels.

The Joint European Support for Sustainable Investment in City Areas (JESSICA) 2014-2020 Initiative was launched in late 2006 initially by European Commission in cooperation with European Investment bank to assist establishment of Financial Engineering Instrument in order to facilitate urban renewal and transformation. JESSICA is not a new source of funding

for member states, but rather a new way of using existing Structural Fund grant allocations to support urban development projects. It is up to European Union member states and Managing Authorities (MAs) to decide how much of these Structural Funds to channel in this way. Within the framework of this programme, MAs have possibility to realise the investment in couple of European Union Structural Funds supporting urban development. By undertaking such activities, financial sources can be recycled so investments in Europe's urban areas can be enhanced and thus accelerated. An example of such Structural Fund is Urban Development Fund (UDF) whose role is to invest in Public-Private partnerships (PPP) integrated in projects urban sustainable development. Additionally, JESSICA supports European Union member states and MA on the preparation of next programming period taking into consideration gained experience and good practices of current programming periods.

Another significant financial incentive for smart cities is The Risk Sharing Finance Facility (RSFF) 2014-2020 which has been created in 2007 by European Commission and European Investment bank. This is A Joint Financial Instrument (JFI) whose purpose is to decrease barriers in the Research, Development and Innovation (RDI) sector by financing promoters of investments that would normally not have access to debt financing giving their risk profile. The RSFF capital is leveraged to different kind of loans and guarantees with a higher than normal risk profile. This kind of financing is provided solely to those eligible RSFF projects such as private and public entities of all sizes and ownership including Small and Medium-sized Enterprises, Special Purpose Companies, Joint Ventures, PPPs, etc. Since 2014 RSFF has expanded in the field of structural funds foreseen for innovation. The estimated grant budget of this programme is 1 billion EUR.

Other than these two financial incentives, initiated by European Commission and European Investment bank, is the European Local Energy Assistance (ELENA) under the Horizon 2020 that has been established in order to facilitate the mobilisation of grants for investments in sustainable energy development at local level. The role of ELENA emerges in preparation, implementation and financing investments programmes and supporting in-depth feasibility and market studies, construction of programmes, plans, audits. Seized in few words, ELENA provides support for everything to make cities and regions sustainable energy projects ready for financing and implementation. In framework of this programme are offered grants that can cover up to 90% of costs of technical assistance and project development costs for the plans above 30 million EUR with 3-year implementation period for energy efficiency and 4-year for urban transport and mobility. The annual fund budget is estimated to be between 40 and 50 million EUR.

In summary, classical local government financing does not seem enough to finance the smart city concept. Therefore, financing of smart city concepts requires a good mixture of various financing incentives and model by both public and private stakeholders.

Smart city investment

In today's world, cities are facing challenges, such as budget cuts, pollution and social exclusion. In some European Union member states, like Croatia, Slovakia and Austria have fiscal rules within local government budget that limit the ability of cities to take on additional debt to fund some new projects or programmes. One of the solution is smart city investment. The aim is to reduce capacity and efficiency gaps by meeting the basic infrastructure needs,

and to make cities more innovative and attractive to people and businesses. European Union funding reforms in the post 2020 Multi-Annual Financial Framework will be crucial for local government units (cities and municipality) investment.

Figure 1 reports the investment share of GDP by government sector in 2018 in European Union member states. Due to limited data, we were not able to present the data for Croatia, Malta, Greece, Estonia and Bulgaria.

Figure 1. Investment share of GDP by government sector in 2018
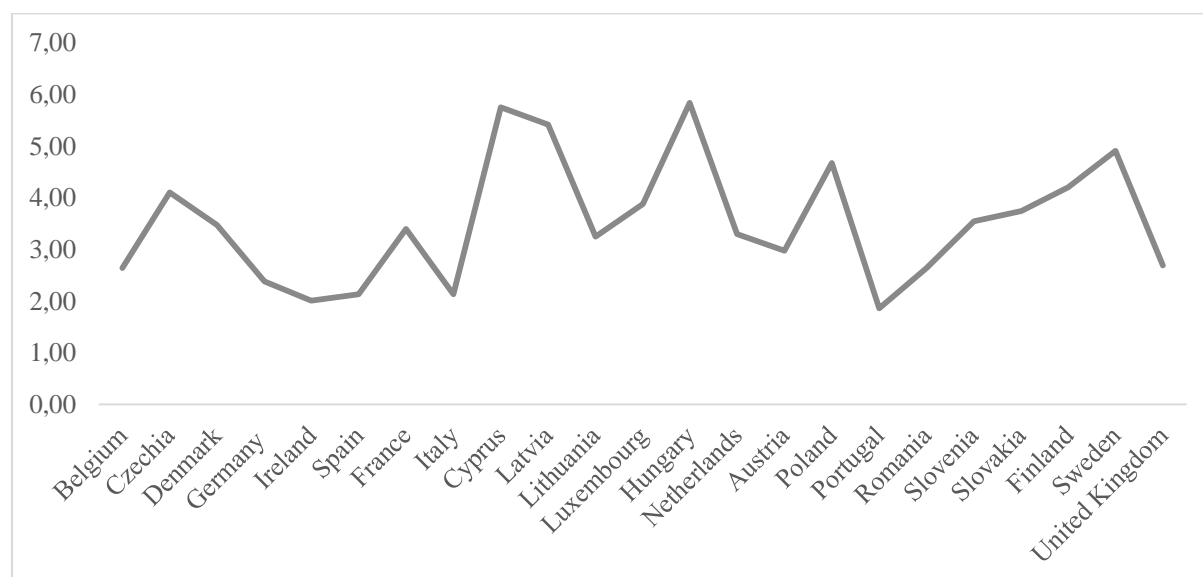
Source: Eurostat, 2018.

This indicator gives the share of GDP that is used for gross investment, defined as gross fixed capital formation expressed as a percentage of GDP for the government. By observing data, the countries with highest investment share of GDP by government sector in 2018 were recorded in Hungary (5.84), Cyprus (5.75) and Latvia (5.42). On other side, the lowest value was recorded in Portugal (1.86), Ireland (2.01) and Italy (2.13). This can be explained by the fact that every member states public investment is followed by fiscal consolidation strategies. Therefore, very important role is how governments manage the public investments. According to OECD (2014) three challenges for multi-level governance of public investment hinder the achievement of best possible outcomes:
1. "Co-ordination challenges. Cross-sector, cross-jurisdictional and intergovernmental co-ordination are necessary, but difficult in practice.
2. Capacity challenges. Public investment and growth outcomes are correlated to the quality of government.
3. Challenges in framework conditions. Good practices in budgeting, procurement and regulatory quality are integral to successful investment, but not always robust or consistent across levels of government" (p. 6).
In order to stimulate development of smart city concept, member states governments should co-ordinate across levels of government to strengthen the efficiency and effectiveness of public investment. Moreover, this will help to identify investment opportunities, manage joint

policy competencies, ensure adequate resources and capacity to undertake investment. In addition, governments should implement a fiscal framework adapted to the different objectives pursued.

Conclusion

The influence of the financial incentives enacted to fund smart city development will be predicated on the activities of national, regional and local authorities. The presented European Union financial incentives and mechanisms for smart cities offer them a chance to set alignment of their targets to the development of smart regions and cities. This will affect social, economic and environmental aspects of a local government units. To support their smart development, smart development strategies are inevitable. To implement these strategies, cities needs to develop a vision for the city within its surrounding region based on its strengths and the goals needs to be based on key performance indicators.

Based on analysis, some countries are supported by government to invest into the concept of smart city, like Hungary, Cyprus and Latvia, since they have highest investment share by government sector. On other side, countries with lowest investment share are Portugal, Ireland and Italy. The national and regional authorities are empowered to erect a suitable framework and include local authorities into development of coherent smart economy and creating services and human resources for the future. The limitations of the paper are that we observed only 2018 year in investment share by government sector in European Union member states and the data we not available for all member states. The recommendation for further research is to compare financial incentives for smart city of European Union member states with other countries in the world, i.e. US, China and Asia.

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Building the Entrepreneurial Ecosystem an Atempt to Reconsider the Role of the Entrepreneur

Mirjana Grčić Fabić
University of Rijeka,
Faculty of Economics and Business Croatia
mirjana.grcic.fabic@efri.hr

Abstract: The concept of an entrepreneurial ecosystem, analogous to the notion of the natural and biological ecosystem, is terminologically set up to include a relatively broad theoretical framework for the analysis of a set of interrelated actors and factors that together participate in creating new value. The focus on entrepreneurial activity as the primary output of such an ecosystem is what this concept makes potentially different from other related perspectives in literature. However, when considering the issue of measuring the performance of such a system, the question is who are the actors, ie what are their results, what can be considered as an output of entrepreneurial activity, and the thought arises: who makes entrepreneurs, whether all actors together build an entrepreneurial ecosystem by acting entrepreneurially? In order for the entrepreneurial ecosystem to be adequately measured, it must first be defined, which leads to a reconsideration of the very role of entrepreneurship and entrepreneur. The concept of the entrepreneurial ecosystem through the breadth of understanding of the actors who everyone through their effort contributes to the creation of a new value, sheds light on the concept of entrepreneurship, focusing precisely on the ability to combine and organize resources in an innovative way, thus highlighting its essence. The purpose of the paper is to analyze, through the concept of entrepreneurial ecosystem, certain aspects in defining entrepreneurship and to identify the key ones, ie to determine the concept of entrepreneur and entrepreneurship through the prism of entrepreneurial ecosystem.

Keywords: *entrepreneurial ecosystem, entrepreneur, entrepreneurship, definition, analysis*

Introduction

Setting up a theoretically well-defined concept of entrepreneurship is not an easy task. The notion of entrepreneurship is still blurry, requiring the questioning of existing definitions and reflection on the essential issue of the terminological formulation of the concept of entrepreneurship and entrepreneur.
In practice, this discrepancy is even greater, and often entrepreneurship is equated with the general business community, that is, with a business entity, with an enterprise. Therefore, there is a need for questioning the meaning of the term with the purpose of emphasizing the very essence, that is, the purpose of entrepreneurship, which should lie in the definition of the term itself.
As the Ahmad and Seymour (2008, p. 13) stated 'clearly not all businesses are entrepreneurial despite the fact that they take risks, create products, employment, revenue and taxes, and if entrepreneurship studies were just about businesses and the people who owned or ran them, entrepreneurship would just be a euphemism for the general business environment'. However, the concept of entrepreneurship in itself necessarily entails the process of innovating and

creating new value, and entrepreneurial activity is concerned with the process of change, emergence and creation. This is also confirmed by the claim set up by Hobsbawm (1969) that economy of private enterprise does not have automatic bias towards innovation, but it has a bias only towards profit.

The recent notion of entrepreneurial ecosystem provides a potentially fruitful framework for rethinking the concept. It is because it places the entrepreneur at the center, along with the contextual factors, and everything is "subordinate" to achieving success of the entrepreneur and the ultimate outcome, which is economic well-being.

The concept of entrepreneurial ecosystem has some commonalities with other existing research concepts which imply spatial or specifically industry concentration analysis, like cluster literature, innovation systems or triple-helix initiatives (Oh et al., 2016, Kuckertz, 2019). The entrepreneurial ecosystem approach differs from these concepts, because it puts the entrepreneur in the center of the analysis, instead of the firm and also highlights contextual framework of the entrepreneurial process.

This paper offers a review of the some of the aspects in defining the phenomenon of entrepreneurship, through the rise of the entrepreneurial ecosystem concept, as a recent and insightful theoretical framework. The paper concludes that entrepreneurial ecosystem offers a perception of the entrepreneurship phenomenon that is close to the Schumpeter's view on entrepreneurship, and highlights the focus on 'ambitious' entrepreneurship. The remainder of the paper is as follows. First, it provides a review of the literature on the research studies the concept of entrepreneurial ecosystem relies on. It then delineates the main components of theoretical concept of entrepreneurial ecosystem. The next section deals with the reconsideration of the role of entrepreneurship and entrepreneur through the prism of the entrepreneurial ecosystem approach with the gained crucial insights in further elaboration on the essence of entrepreneurial activity. In the final section conclusions are offered.

Literature review

Research field of entrepreneurship are very popular in recent two decades and is increasingly attracting the attention of researchers. However, entrepreneurship research is fraught with many definitions and aspects, leading to heterogeneity in understanding the very role of entrepreneurship and entrepreneur.

The former interest in entrepreneurship is evident not only in practical terms, (Birch, 1987, Wong et al., 2005, Sternberg, 2012, OECD, 2016, Isenberg & Onyemah, 2016, OECD, 2019), but also largely in a theoretical sense (Malecki, 2011, Cunningham & O´Kane, 2017, Corrente et al., 2019, Audretsch et al., 2019, Neumeyer et al., 2019, Seguí-Mas et al., 2019). Cause for the stated, among others, can be attributed to the term entrepreneurial ecosystem, which has been gaining in importance over the last decade. The term consists of the word 'entrepreneurial' and 'ecosystem', thus invoking consideration of the theoretical settings of the term entrepreneurship, and especially in trying to measure the concept as a separate construct, and its relation to other constructs in the context of its application in explaining the contribution to economic growth and development, assuming whether local, regional or national level.

The notion of ecosystem implies consideration of agglomeration effects, which dates back to the Marshall's (1927) analysis of the industrial concentrations in Victorian England and

concept of 'agglomeration economies'. Agglomeration effects can be analyzed on the level of regions (such as urban, regional or national ecosystems) and industries (agricultural, chemical, manufacturing, finance ecosystems), such as clusters either of firms (business, entrepreneurial ecosystems) or activities (service, innovation ecosystems) (List, 1841, Nelson & Winter, 1982, Porter, 1990, Feldman & Tavassoli, 2015, Bruns et al., 2017).

The cluster concept was very much introduced by Porter (1990). According to the Porter (1998, p. 197) the cluster approach focuses on 'geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (…) in particular fields that compete but also cooperate'. The cluster concept gained much attention in the realm of practical application and policy makers around the world adopted cluster policies as a tool to generate a strong local economic performance (Audretsch, 2015).

As the literature on clusters evolved, both scientifically and practically, innovation researchers introduced the concept of innovation systems, which aim was to understand the systemic localized processes (Freeman, 1995, Lundvall, 2010). In the center of the innovation systems are networks and institutions, such as universities, public research labs and innovative firms. Systems of innovation are systems of economic, political, social, technological, institutional and organizational factors that make an impact on innovation activity and economic growth (North, 1990). However, the innovations systems literature has been missing focus on analysis of entrepreneur's behavior and entrepreneurial activity that takes place in the process of innovation. The former implies that research on innovation systems does not consider systematic, that is, holistic approach to entrepreneurship (Mason & Brown, 2014, Audretsch & Link, 2019).

Entrepreneurial ecosystem literature has been criticized about adding no additional value to the other existing very similar research concepts which imply spatial or specifically industry concentration analysis, like cluster literature, innovation systems or triple-helix initiatives (Oh et al., 2016, Kuckertz, 2019). The entrepreneurial ecosystem approach differs from these concepts, because it puts the entrepreneur in the center of the analysis, instead of the firm and also highlights contextual framework of the entrepreneurial process. According to Brown and Mason (2017) combination of distinctive localized characteristics, such as social, cultural, institutional and relational within ecosystems is intrinsic to the concept of entrepreneurial ecosystem. Also, studies on entrepreneurial ecosystem concept found that high growth firms (HGFs) prosper in distinctive types of supportive environment (Mason & Brown, 2014, Acs & Mueller, 2008), from those which have high rates of start-ups, perceiving this type of entrepreneurial activity as an important source of innovation and economic growth. Therefore, entrepreneurial ecosystem approach explicit focus is on entrepreneurial activity and especially on high growth firms. Second, the emphasis is on local and regional environments and the contextual requirements to generate, support and develop ambitious entrepreneurship (Stam et al., 2012).

Recognition of entrepreneurship effects, its output and outcomes, leads to the discussion about „innovative" and „replicative" entrepreneurs, as well as about „opportunity" and „necessity" entrepreneurs, or „ambitious" and „unambitious" entrepreneurs, that is, all of this diversifications evoke consideration of the feature of quality in the realm of entrepreneurship. The distinctive feature of the entrepreneurial ecosystem approach seems to be precisely because it takes into account the aforementioned diversification and also establishes the

definition of entrepreneurship. However, as entrepreneurial ecosystem approach has been popularized only during the last decade, there is not yet a generally shared definition.

Entrepreneurial ecosystem approach

The term entrepreneurial ecosystem, analogous to the notion of natural and biological ecosystems, is terminologically designed to encompass elements in the entrepreneurial environment that facilitate the success of entrepreneurs in achieving their entrepreneurial intentions. The term is based on the perception of similarity to biological systems, and in this respect Moore (1993) pioneered the concept of business ecosystems and defined it as a cluster of interrelating actors that exist in a common setting and evolve together. Interrelating actor may be different kinds of companies, universities, scientific parks, educational institutions, public government etc. Actors, that is, economic agents interact with their environment, which implies they are not interested only in achieving advantages over their rivals through competition mechanism using only their own resources (Acs et al., 2017, Colombo et al., 2017). Determinants of competitive advantages are largely related to shared resources, network externalities, knowledge spillovers, local foundations, and governmental support, and thus emphasizes the role of approaches beyond the firm specific competitive advantage concept (Porter, 1990).

Iansiti and Levien (2004) also used the term 'ecosystem' that was introduced by Moore (1993), in their paper about business ecosystem. Furthermore, Isenberg has popularized the concept (2010, 2011) and specified nine principles when building an entrepreneurial ecosystem, that are claimed to lead to venture creation. Nine principles emphasize the role of local conditions and bottom-up processes, concept of ambitious entrepreneurship and the role of institutions: 1) stop emulating Silicon Valley, 2) shape the ecosystem around local conditions, 3) engage the private sector from the start, 4) stress the roots of new ventures, 5) don't over engineer clusters, help them grow organically, 6) favor the high potentials, 7) get a big win on the bord, 8) tackle cultural change head-on, 9) reform legal, bureaucratic, and regulatory frameworks (Isenberg 2010). This is further supported by the six distinct domains of the ecosystem: policy, finance, culture, support, human capital and markets (Isenberg, 2011). Since the Isenberg contribution the ecosystem literature has gained increasing popularity in the fields of business, management, and policy, and the number of publications drawing on the concept of ecosystem achieved rapid growth (Audretsch et al., 2019).

Comprehensive definition of entrepreneurial ecosystem was set by Mason and Brown (2014, p. 5), as a 'set of interconnected entrepreneurial actors, entrepreneurial organizations, institutions and entrepreneurial processes which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment', where the dynamic and systemic nature of the concept was highlighted.

Audretsch and Belitski (2017) defined system of entrepreneurship, thus implying an ecosystem, as institutional and organizational as well as other systemic factors that interact and influence identification and commercialization of entrepreneurial opportunities, thereby providing a holistic approach that builds up from the level of the entrepreneur in order to better understand the context of the entrepreneurship. Generally, entrepreneurship research is mainly concerned with personal traits and behaviors and thereby often ignores the issue of explaining the environment, that is, the context where the entrepreneurial activity implying

certain personal traits and behaviors behavior, takes place (Autio et al., 2014, Borissenko & Boschma, 2016).

It can be concluded that the concept of entrepreneurial ecosystem offers a potentially new and relatively broad theoretical framework for analyzing a set of interdependent actors and factors that enable productive entrepreneurship (Stam, 2015). The term productive entrepreneurship refers to any entrepreneurial activity that contributes directly or indirectly to net output of the economy or to the capacity to produce additional output (Baumol, 1990). Generally, popular definition of entrepreneurial activity is considered as the process by which individuals create, evaluate and exploit opportunities (Schumpeter, 1934, Shane & Venkatamaran, 2000). Such an activity results in innovation and eventually lead to new value in society. Perceiving entrepreneurial behavior in such a way it can be determined that entrepreneurial activity would present more an intermediary output of the system, with its many manifestations, such as innovative start-ups, high-growth start-ups, and entrepreneurial employees (Stam, 2014), while new value creation can be considered as the utmost objective, that is, an outcome of an entrepreneurial ecosystem (Figure 1). Entrepreneurial ecosystem consists of many elements, that are consolidated into six domains, according to the Isenberg (2011); policy, finance, culture, supports, human capital, markets and policy. Each of this domain can be further broken down into several elements. For example, policy can be observed through the elements of leadership (unequivocal support, social legitimacy, entrepreneurship strategy, urgency, crisis and challenge) and government (institutions, financial support, regulatory framework incentives, research institutes, venture-friendly legislation, property rights) (Isenberg, 2011).

Figure 1: Entrepreneurial ecosystem inputs, outputs and outcome
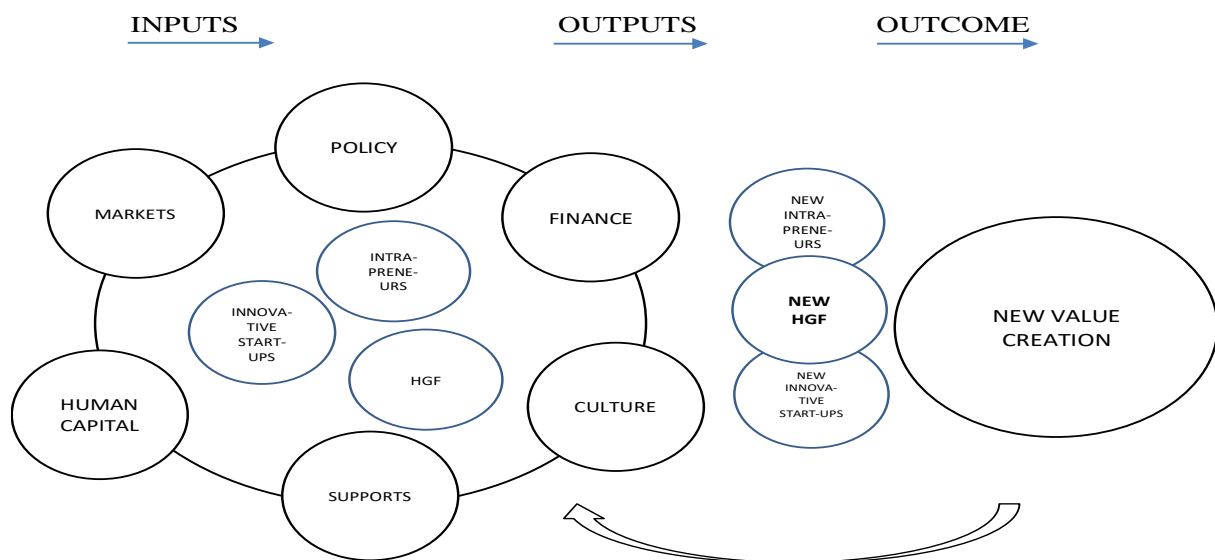
Source: Isenberg, 2011

However, the entrepreneurial ecosystem concept narrows the entrepreneurial activity consideration, usually implying only high growth firms activities (Stam, 2015, Alvedalen & Boschma, 2017, Stam & Spigel 2017), perceiving this type of entrepreneurial activity as an

important source of innovation, productivity growth, and employment (Mason & Brown, 2014, Henrekson & Sanandaji, 2014, Parker, 2018). This type of 'ambitious' entrepreneurs (Stam et al., 2012) are more likely to achieve substantial performance through firm growth, innovation or internationalization than the 'average entrepreneur. This implies that not all types of entrepreneurship are equally important for economic growth. The approach of entrepreneurial ecosystem thus makes a change in thinking about the orientation of entrepreneurial policy towards the quality, and not quantity of entrepreneurship (Stam, 2015). As determined by previous research (Shane, 2009, Stam et al., 2012, Mason & Brown, 2013, Henrekson & Sanandaji, 2014) it can be stated that the entrepreneurial ecosystem approach does not include the traditional statistical metrics of entrepreneurship, such as indicator of new venture creation (Levie et al., 2014), nascent entrepreneurs (Gartner et al., 2004), self-employment/business ownership (Parker & Robson, 2004,) or small businesses indicator (Holtz-Eakin et al., 2000) into entrepreneurship. Concurrently, it potentially introduce conceptually more adequate measures of entrepreneurship such as innovative and growth-oriented entrepreneurship (Mason & Brown, 2013, Henrekson & Sanandaji, 2014).

Reconsideration of the role of entrepreneurship and entrepreneur

In order for the entrepreneurial ecosystem to be adequately measured, first it must be defined, which leads to a reconsideration of the very role of entrepreneurship and entrepreneur. The conceptualization of the entrepreneurial ecosystem, because of its various determinants, such as social, cultural, institutional and organizational determinants, is very problematic in terms of defining and measuring the concept itself (Audretsch & Belitski, 2017). Therefore, the issue of approaching the uniform definition and measurement of a concept remains a research challenge. As Brown and Mason (2017) stated, entrepreneurial ecosystems are highly variegated, multi-actor and multi-scalar phenomenon which therefore requires bespoke policy interventions. Such heterogeneity of the term is also found in the attempt to define the term of entrepreneurship, as multifaceted phenomenon, which can be analyzed at both the individual and the level of the firm, and conceptually it can encompasses personal traits and behaviors, but also process of creating and identifying, evaluating and exploiting opportunities.

Additional difficulty further arise from selective perception of entrepreneurship, through its particular forms, such as „ambitious" and „unambitious" (Stam et al., 2011), „innovative" and „replicative" (Baumol et al., 2009, Baumol, 2010), as well as „opportunity" and „necessity" entrepreneurs (Global Entrepreneurship Monitor, 2001), which leads to reflection about what constitutes an entrepreneurial activity at all, and how to define entrepreneurship.

The concept of entrepreneurial opportunity is now dominant as a core concept in the realm of entrepreneurship research. The mostly used definition is the one that describes entrepreneurship as an activity that involves the discovery, evaluation, and exploitation of opportunities to introduce new goods and services, ways of organizing, markets, processes, and raw materials through organizing efforts that previously had not existed (Venkataraman, 1997, Shane & Venkataraman, 2000). Accordingly, Shane and Venkataraman (2000) argued about Kirzner´s and Schumpeter`s opportunities.

In Kirzner's view the entrepreneur is arbitrageur and alert to profit opportunities, that other do not see, because of different access to information due to unevenly distributed prior knowledge, and who by acting on that way through mechanism of price adjustments, brings back the system into equilibrium. Schumpeter stressed the role of the entrepreneur as a

disruptive force and define entrepreneur as innovator that is responsible for doing new things or doing of things that are already being done in a new way (Schumpeter, 1947). Unlike Kirzner's equilibrating force, Schumpeter's entrepreneur represents a disruptive force.

Parker (2018) distinguishes between the economics and business studies approaches in defining an entrepreneurship. Economists are more inclined to take a practical view of entrepreneurs and therefore often identify them with business owners, the self-employed and small firms, while business studies researchers generally do not accept such perceptions of entrepreneurial activity and are mainly focused on the study of entrepreneurial behavior, claiming that there is nothing entrepreneurial in the fact of being an owner of a small business.

Considering generally such an attitude in defining the concept of entrepreneurship, it can be concluded that economists are more in favor of Kirzner's view of entrepreneurs, while business studies researchers tend to identify with Schumpeter's concept of entrepreneurship and entrepreneurs. Parker (2018) further argue that heterogeneous approaches in defining the term of entrepreneurship reflects the reality of a entrepreneurship concept as a multifaceted phenomenon, and that 'it seems unlikely that any single measure of entrepreneurship could, or even should, ever be regarded as portraying all the nuances of entrepreneurship' (Parker, 2018, p. 18). In accordance with Baumol (1993) many of the definitions are therefore complementary rather than competitive.

The focus on entrepreneurial activity as the primary output of such an ecosystem is what this concept of entrepreneurial ecosystem makes potentially different from other related perspectives in literature. Taking into account the foregoing insights it can be stated that entrepreneurial ecosystem concept, through the breadth of understanding of the actors who everyone through their effort contributes to the creation of a new value, recognizes and sheds light on the concept of entrepreneurship, focusing precisely on the ability to combine and organize resources in an innovative way, thus highlighting its essence. Such a perception is close to the Schumpeter's view on entrepreneurship with innovative activities and new value creation in the center.

Furthermore, discourse in the light of the entrepreneurial ecosystem makes a significant detachment from the previous perceptions of a wider complementary rather than competitive definition of the entrepreneurship phenomenon, because of a more narrower focus that encompasses merely high growth firm entrepreneurial activity as an output of such a system, implying this type of entrepreneurial activity as an important source of innovation, productivity growth, and employment. Observing the role of entrepreneurship according to these determinants, this approach makes a change when contemplating about the orientation in setting the role and the definition of entrepreneurship towards the quality, and not quantity. This new, yet not enough theoretically and empirically investigated and confirmed concept, provokes some aspects in defining entrepreneurship and the features of entrepreneurial process, especially in the light of perception how entrepreneurial incentives affect economic growth and development.

Conclusion

The notion of entrepreneurial ecosystem has been gaining in importance over the last decade as a potential insightful framework for adopting a holistic approach that builds up from the level of the entrepreneur in order to better understand the context of the entrepreneurship.

This new phenomenon in the entrepreneurship research has been recognized as a multi-actor and multi-scalar phenomenon. Similarly, such heterogeneity of the term is also found in the attempt to define the term of entrepreneurship, as multifaceted phenomenon, which can be analyzed at both the individual and the level of the firm, and conceptually it can encompasses personal traits and behaviors, but also process of creating and identifying, evaluating and exploiting opportunities.

The concept of entrepreneurial ecosystem can be used in the analysis of clarifying the determinants of entrepreneurial activity and certain aspects in defining the phenomenon of entrepreneurship. Although a generally shared definition of this new approach has not yet been determined, as it has been popularized only during the last decade, the concept may shed light on some existing views on the essential features of entrepreneurial activity.

It can be stated that entrepreneurial ecosystem concept are focused on the entrepreneur as a central agent in entrepreneurial environment, that is, in the ecosystem. Precisely, it specifically examines the role of the entrepreneur as the ability to combine and organize resources in an innovative way, and in conjunction with contextual factors, and thus highlighting its essence as the core one. Such a perception is close to the Schumpeter's view on entrepreneurship in relation to the Kirzner's vision of the entrepreneurial activity. Also, this approach makes a significant departure from the research rhetoric, which advocates a more complementary approach as opposed to competitive, in attempts to define the concept of entrepreneurship, because of a more narrower focus on high growth firm entrepreneurial activity as crucial output of such a system, that positively affects economic growth and development. This selective perception of entrepreneurship which highlights the 'ambitious' entrepreneurship as an essential one, confidently makes a change in the orientation when setting the very role and the definition of entrepreneurship towards the quality and not quantity.

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Diversification Benefits of Gold and Other Precious Metals in an Investment Portfolio

Sinisa Bogdan
University of Rijeka, Faculty of Tourism and Hospitality Management
Opatija
Primorska 42, Ika
51410 Opatija, Croatia
sinisab@fthm.hr

Suzana Baresa
University of Rijeka, Faculty of Tourism and Hospitality Management
Opatija
Primorska 42, Ika
51410 Opatija, Croatia
suzanab@fthm.hr

Srdjan Curcic
University of Rijeka, Faculty of Tourism and Hospitality Management
Opatija
Primorska 42, Ika
51410 Opatija, Croatia
ps23309@fthm.hr

Abstract: Precious metals, especially gold had an important role through the almost entire history of a mankind. Throughout the centuries, gold and other precious metals have always been considered as investors safe store of value especially during financial crisis. This indicates that precious metals could be good diversifiers in an investment portfolio. For example, investors can buy gold in many ways: through exchange-traded funds, buying gold mining stocks and related companies or buying physical product. Aim of this research was to find diversification possibilities of gold and other precious metals in an investment portfolio which was consisted of equities, fixed income and short-term financial instruments on the example of the Croatian financial market in the time frame from 2009 to 2019. In this research Modern Portfolio Theory was applied as an investment framework for the selection of investment portfolios based on the risk and return. The second aim of this paper was to research which of the precious metals can offer the best diversification possibilities in an investment portfolio. Research analysis has provided interesting empirical results.

Keywords: Modern portfolio theory, efficient frontier, silver, platinum, palladium

Introduction

The need for investment security pointed out precious metals as an asset that can provide protection in a period of market uncertainty and turmoil. The term "precious metals" is used to classify metals that are rare and therefore have high economic value. The most popular precious metals, for investors are: gold, silver and platinum, other precious metals that are used in industrial processes are related to the iridium and palladium, which are used for

specific alloys and in the application of electronics and chemicals. Gold is the most popular precious metal and has been in use for thousands of years and it has double role because it is used both in industry and in finance. Silver also attracts attention of investors. It is used in industrial production especially in production of solar panels, phones, computers and some components of electronic devices. Due to its high temperature resistance, platinum has many applications in the industry as well. Precious metals are often sought as a hedge against inflation and in times of financial uncertainty. Although gold is quite risky as an individual asset, the return on it is largely independent compared to other types of assets. This shows that gold can have a very important role in diversifying portfolio risk. Sherman (1982) has found that portfolio which is consisted of 5% and 10% of gold can lower volatility and improve returns. Similarly, to the previous research, Jaffe (1989) tested four hypothetical portfolios of varying risk, and he has concluded that the addition of gold in each case increases the average return while reducing the standard deviation. Financial assets such as stocks and bonds tend to move in the same direction, while gold has a negative or very low correlation with those assets, therefore it can be concluded that gold plays an important role as a diversifier. Chua (1990) shows that over the period from 1971 to 1988, a 25% weighting of gold bullion led to a reduction in portfolio risk while increasing return. If the correlation coefficient is low enough, gold will lower the overall risk of the common stock portfolio without reducing the expected return. Although gold offers good risk protection, it does not mean that it is a safe haven for the all types of assets. Risk diversification can be achieved when the asset has low or negative correlation with other assets, while safe haven can be achieved if there is a low or negative correlation between assets in extreme market conditions. In this way the two concepts can differ from each other. According to Baur and Lucey (2010) gold can offer protection and safe haven for stocks in all markets. However, this cannot be applied for bonds. Therefore, it can be concluded that gold offers protection and short–term safe haven.

In this research following questions about precious metals were raised: Do precious metals provide valuable diversifying possibilities? Which of them can offer the best risk diversification? Therefore, the aim of this research was to test whether the inclusion of precious metals such as gold, silver, platinum and palladium can reduce the risk of portfolio which is consisted of stocks, bonds and short-term financial assets, and which type of precious metals can offer the best performance in diversifying portfolio risk. *Modern portfolio theory* was applied in order to find best risk-return possibilities after including precious metals in an investment portfolio.

Paper is structured in three main parts with introduction and conclusion. Basic information about investing in precious metals will be described in the first part. Second part of the paper provides an overview of relevant researches which emphasize investing in precious metals with the purpose of reducing risk. Data sample and methodology will be presented in the third part. Last part of this paper refers on conclusion, limitations and recommendations for future research.

Literature review

Numerous studies dealt with pros and cons of investing in precious metals especially gold. Precious metals have a wide variety of applications in daily life, they had an important role through the almost entire history of a mankind, especially gold and silver. Nowadays they offer numerous benefits like: liquidity, privacy, tax benefits, diversification benefits, etc.

There is an extensive list of academic papers which deal with diversification possibilities which can be achieved by adding precious metal in an investment portfolio. We will highlight some of the most important ones.

In their paper Ratner and Klein (2008) tried to assess the value of holding gold to U.S. investors from 1975 to 2005. They have investigated the value of gold as a stand-alone investment and assessed the benefit of including the metal as part of a global investment portfolio. Their sample consisted of U.S. dollar-denominated total monthly index returns for 50 developed and emerging countries from 1975 to 2005. They used Markowitz mean-variance (MV) optimization to obtain the optimal portfolios. They have applied a five-year bootstrap simulation to the optimal efficient portfolio, which demonstrated the small potential improvement in portfolio performance.

Michaud, Michaud and Pulvermacher (2006) examined the importance of gold in contemporary institutional strategic asset allocation. Authors have avoided the limitations of previous studies by using longer historical periods, conservative estimates of return, a focus on gold price return, improved and consistent risk estimation and enhanced optimisation technology. They have concluded that during periods of fiscal or monetary mismanagement, crises of various kinds of fundamental changes in the dominant currency, gold may be a very useful asset for hedging risk.

Wozniak (2008) found that portfolios with gold produce equal or higher risk-adjusted returns than those without, he also claim that portfolios with gold produce better efficient frontier than those without. Over the period 1987 to 2011 investors would have obtained better risk-adjusted returns and/or reduced the maximum losses by adding gold to portfolio.

Smith (2002) examined the relationship between the price of gold and stock price indices for markets in Europe and Japan. Three gold prices set in London and 23 stock price indices for 18 countries were used in the research. Author concluded that short-run correlation between returns on gold and returns on US stock price indices is small and negative and for some series and time periods insignificantly differ from zero — which indicates high diversification opportunities.

Hillier, Draper and Faff (2006) analysed daily data over the period 1976-2004 and concluded that : gold, platinum and silver have the potential to play diversification role in broad-based investment portfolios. Authors claim that precious metals exhibit hedging capability during periods of abnormal stock market volatility and they proved that financial portfolios containing a moderate weighting of gold perform better than portfolios consisting only of financial assets.

Hood and Malik (2013) evaluate the role of precious metals and volatility (volatility index - VIX) as a potential tool for hedging or providing a safe haven in the US stock market. They analysed daily data over the period 1995-2010 and concluded that gold, unlike other precious metals, serves as a hedge and a weak safe haven for the US stock market.

Hammoudeh, Malik and McAleer (2010) examined volatility dynamics in precious metals. They have provided some useful information for financial market participants. Authors suggested that portfolio weights should have more gold than any of silver, platinum and palladium in order to minimize risk without affecting the expected returns. Although investing in precious metals could be a good choice for diversifying risk, it is also important to note that there are some spillover effects between them, especially between gold and silver (Batten, Lucey and Ciner, 2014).

Lean and Wong (2015) used stochastic dominance approach and they have studied the role of gold quoted in Paris in the diversification of French portfolios. Their empirical results suggest that it is preferable to include gold in stock portfolios to maximize the expected utilities of risk-averse investors, especially in times when gold has significant growth.

Ghazali, Lean and Bahari (2019) aimed to analyse the characteristics of gold as a diversifier, a hedge or a safe haven against the stock market collapse in five countries. Core findings in their research suggest that gold displays substantial evidence of strong hedge characteristics against the stock market in India and the US and has a diversifier role in China. Gold denominated in the UK and Malaysia currencies performs poorly as a hedge. During turmoil in the stock market gold has an important role in diversifying risk.

Robiyanto, Hadiyatno and Sudjinan (2019) examined the establishment of a portfolio among Sharia stocks represented by the Jakarta Islamic Index (JII) with gold. In their research they have employed *dynamic conditional correlation–generalized autoregressive conditional heteroscedasticity*. Authors proved that involving gold to Sharia stocks portfolios can improve their performance. Beside previously mentioned, authors have concluded that gold can be used as a diversifier instrument for Sharia stocks.

However, there are also some opposite opinions like Gencer and Musoğlu (2014). Authors concluded that after applying GARCH modelling, the gold does not act as a diversifier in Turkish financial markets because it is not positively nor perfectively correlated with stocks and bonds in general, but their results indicate that gold is a safe haven for stocks during market turmoil.

Data description

The sample data of this research consists of monthly returns of investment funds and precious metals observed over the period from June 2009 to June 2019 with a total of 121 observation per asset. Data for calculating returns of precious metals — gold, silver, platinum and palladium were retrieved from *London Bullion Market Association* while returns from investment funds were downloaded from *Hrportfolio*. Since liquidity on Croatian capital market is low (Bogdan, Baresa, and Ivanovic 2012; Škrinjarić and Besek 2013), we have decided to use investment funds, as proxies for well-diversified portfolios of stocks, bonds and short-term financial assets. Three types of investment funds were used in this research: equity funds, bond funds and short-term bond funds. All investment funds which operate long enough (at least 10 years) in the Croatian financial market were used in this research. Currently, 24 equity funds, 9 bond funds and 17 short-term bond funds operate in Croatia. We have observed only investment funds which operate 10 years or longer, so the total data sample consisted of 17 equity funds, 5 bond funds, 11 short-term funds and four types of precious metals (gold, silver, platinum and palladium). After summing the whole sample, 33 investment funds and 4 types of precious metals were used in estimating efficient frontier. Table 1. displays descriptive statistics of monthly returns of all assets.

Table 1: Descriptive statistics of monthly returns over the period from June 2009 to June 2019

	Symbol	Mean	Standard Error	Standard Deviation	Min.	Max.	Count
KD Victoria	E1	0.24	0.31	3.45	-7.86	10.69	121
InterCapital Global Equity	E2	0.48	0.25	2.74	-8.17	7.79	121
ZB trend	E3	0.50	0.34	3.76	-9.53	10.35	121
KD Prvi izbor	E4	0.40	0.30	3.31	-10.99	8.92	121
ZB euroaktiv	E5	0.48	0.31	3.42	-9.25	7.47	121
Capital Breeder	E6	0.04	0.31	3.44	-15.68	14.23	121
KD Europa	E7	-0.13	0.32	3.56	-9.60	8.26	121
PBZ Equity fond	E8	0.18	0.28	3.13	-8.34	8.25	121
HPB Dionički	E9	0.35	0.23	2.58	-7.99	10.13	121
ZB aktiv	E10	0.25	0.25	2.72	-7.79	8.95	121
InterCapital SEE Equity	E11	0.46	0.25	2.70	-6.77	7.94	121
Platinum Global Opportunity	E12	0.29	0.34	3.73	-9.90	10.02	121
KD Nova Europa	E13	0.29	0.41	4.50	-12.08	12.34	121
OTP indeksni	E14	0.16	0.36	3.98	-11.44	17.37	121
Platinum Blue Chip	E15	0.20	0.28	3.03	-9.15	7.22	121
OTP Meridian 20	E16	0.30	0.28	3.04	-9.46	10.96	121
A1	E17	-0.02	0.35	3.80	-12.55	12.60	121
ZB bond	B1	0.33	0.08	0.85	-2.54	3.22	121
InterCapital Global Bond	B2	0.30	0.07	0.76	-2.76	2.60	121
PBZ Bond fond	B3	0.18	0.14	1.53	-12.31	3.09	121
Intercapital bond	B4	0.43	0.05	0.59	-1.20	2.35	121
HPB Obveznički	B5	0.36	0.09	1.02	-5.95	2.70	121
PBZ START fond	ST1	0.12	0.01	0.15	-0.01	0.73	121
ZB plus	ST2	0.12	0.01	0.15	0.00	0.68	121
ZB eplus BE	ST3	0.10	0.01	0.10	0.00	0.50	121
ZB eplus BK	ST4	0.10	0.01	0.10	0.00	0.50	121
PBZ E-START fond	ST5	0.08	0.05	0.56	-5.15	0.54	121
PBZ D-START fond	ST6	0.12	0.01	0.09	-0.03	0.61	121
HPB Kratkoročni obveznički kunski	ST7	0.16	0.03	0.29	0.00	2.70	121
OTP start	ST8	0.12	0.01	0.14	-0.30	0.55	121
InterCapital Short Term Bond	ST9	0.15	0.02	0.19	-1.19	0.63	121
KD Plus	ST10	0.22	0.02	0.17	0.04	1.04	121
Allianz Short Term Bond	ST11	0.20	0.07	0.73	-0.01	8.00	121
Gold (EUR)	PC1	0.59	0.43	4.68	-15.11	13.02	121
Silver (EUR)	PC2	0.49	0.74	8.15	-21.23	23.34	121
Platinum (EUR)	PC3	0.01	0.47	5.14	-13.25	15.35	121
Palladium (EUR)	PC4	2.04	0.71	7.86	-16.30	27.85	121

Source: Authors' own work

Among all assets in table 1 palladium and gold can be highlighted as the assets with the highest return, while equity funds A1 and KD Europa are the only assets with negative return. Precious metals like silver, palladium, platinum and gold have the highest standard deviation among all assets, while short bond funds like PBZ D-star fund and ZB eplus BK fund have the lowest risk. In order to estimate diversification possibilities of the observed assets, results of the correlation matrix are presented in table 2.

Table 2. Correlation matrix

|	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	B1	B2	B3	B4	B5	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	M1	M2	M3	M4
E1	1.00																																				
E2	0.40	1.00																																			
E3	0.29	0.61	1.00																																		
E4	0.30	0.86	0.58	1.00																																	
E5	0.33	0.82	0.66	0.79	1.00																																
E6	0.45	0.41	0.13	0.32	0.34	1.00																															
E7	0.33	0.77	0.55	0.79	0.73	0.32	1.00																														
E8	0.70	0.53	0.31	0.38	0.39	0.51	0.49	1.00																													
E9	0.58	0.39	0.25	0.32	0.29	0.37	0.40	0.73	1.00																												
E10	0.54	0.57	0.30	0.49	0.44	0.40	0.52	0.76	0.63	1.00																											
E11	0.66	0.54	0.29	0.40	0.40	0.50	0.47	0.80	0.61	0.66	1.00																										
E12	0.29	0.70	0.67	0.72	0.71	0.21	0.66	0.40	0.32	0.47	0.42	1.00																									
E13	0.24	0.62	0.48	0.66	0.60	0.21	0.67	0.41	0.27	0.48	0.37	0.53	1.00																								
E14	0.73	0.44	0.28	0.28	0.28	0.52	0.40	0.85	0.67	0.66	0.72	0.27	0.34	1.00																							
E15	0.19	0.71	0.40	0.70	0.78	0.24	0.63	0.19	0.18	0.36	0.31	0.60	0.48	0.08	1.00																						
E16	0.61	0.62	0.52	0.55	0.61	0.38	0.63	0.82	0.61	0.60	0.65	0.55	0.64	0.69	0.32	1.00																					
E17	0.65	0.40	0.23	0.30	0.28	0.47	0.35	0.76	0.66	0.60	0.61	0.28	0.27	0.83	0.11	0.65	1.00																				
B1	0.08	0.39	0.02	0.35	0.36	0.15	0.35	0.18	0.10	0.31	0.19	0.20	0.31	0.10	0.41	0.22	0.12	1.00																			
B2	0.31	0.37	0.23	0.42	0.44	0.32	0.43	0.28	0.23	0.18	0.35	0.30	0.29	0.18	0.39	0.39	0.20	0.42	1.00																		
B3	0.17	0.14	0.13	0.14	0.12	0.49	0.14	0.18	0.08	0.03	0.19	0.18	0.07	0.17	0.12	0.13	0.15	0.22	0.30	1.00																	
B4	0.18	0.21	0.22	0.25	0.29	0.11	0.30	0.24	0.15	0.22	0.32	0.28	0.25	0.16	0.26	0.29	0.16	0.36	0.48	0.45	1.00																
B5	0.21	0.26	0.32	0.33	0.33	0.18	0.35	0.33	0.31	0.28	0.35	0.36	0.31	0.24	0.22	0.42	0.26	0.29	0.39	0.43	0.69	1.00															
S1	-0.06	0.03	0.07	0.00	0.17	-0.22	-0.01	-0.01	0.05	0.04	-0.06	0.06	0.11	-0.01	0.14	0.16	0.11	0.20	-0.08	-0.02	0.17	0.13	1.00														
S2	-0.10	-0.01	0.07	0.00	0.12	-0.26	-0.04	-0.05	0.04	-0.01	-0.09	0.06	0.08	-0.04	0.10	0.11	0.07	0.24	-0.07	0.01	0.12	0.09	0.90	1.00													
S3	-0.08	-0.03	0.04	0.00	0.09	-0.26	-0.05	-0.12	-0.04	-0.02	-0.09	0.04	0.05	-0.08	0.13	0.01	-0.01	0.23	0.01	0.06	0.17	0.09	0.79	0.86	1.00												
S4	-0.08	-0.03	0.04	0.00	0.09	-0.26	-0.05	-0.12	-0.04	-0.02	-0.09	0.04	0.05	-0.08	0.13	0.01	-0.01	0.23	0.01	0.06	0.17	0.09	0.79	0.86	1.00	1.00											
S5	0.10	0.05	0.02	0.06	0.07	0.00	0.02	0.07	0.13	0.18	0.03	0.03	0.08	0.08	0.10	0.03	0.12	0.09	0.05	-0.03	0.06	0.04	0.31	0.30	0.34	0.34	1.00										
S6	0.00	0.04	-0.02	0.03	0.06	-0.13	0.01	0.01	-0.01	0.06	0.01	-0.08	0.06	-0.02	0.15	-0.01	-0.01	0.27	-0.01	0.19	0.25	0.17	0.33	0.26	0.29	0.29	0.16	1.00									
S7	-0.07	-0.02	0.08	-0.02	0.09	-0.17	-0.01	0.00	-0.03	-0.05	-0.03	0.01	0.06	-0.01	0.05	0.08	0.06	-0.01	-0.02	-0.05	0.08	0.07	0.60	0.56	0.55	0.55	0.21	0.16	1.00								
S8	-0.03	-0.01	0.08	0.00	0.13	-0.20	-0.03	-0.02	0.07	0.03	-0.02	0.07	0.07	0.02	0.14	0.11	0.11	0.25	-0.01	0.05	0.23	0.17	0.89	0.89	0.84	0.84	0.31	0.29	0.59	1.00							
S9	0.01	0.00	0.06	0.03	0.12	-0.12	-0.02	0.03	0.09	0.00	0.03	0.13	-0.01	0.02	0.07	0.16	0.14	0.10	0.10	0.00	0.12	0.07	0.67	0.71	0.67	0.67	0.24	-0.12	0.43	0.67	1.00						
S10	-0.10	0.01	0.12	0.05	0.15	-0.23	-0.03	-0.09	-0.02	0.01	-0.06	0.09	0.10	-0.10	0.12	0.07	-0.03	0.19	-0.01	0.07	0.23	0.17	0.81	0.81	0.85	0.85	0.30	0.35	0.53	0.79	0.57	1.00					
S11	0.10	-0.09	-0.04	-0.09	-0.07	0.04	-0.09	0.04	0.04	0.00	0.10	0.00	-0.17	0.00	-0.03	0.03	0.03	0.04	0.07	0.04	0.02	0.03	0.17	0.18	0.23	0.23	0.08	0.00	0.11	0.20	0.29	0.18	1.00				
M1	-0.12	-0.05	-0.26	0.01	-0.13	0.11	0.00	-0.10	-0.10	0.09	0.03	-0.09	0.00	-0.05	0.10	-0.21	-0.07	0.28	-0.06	0.15	0.17	0.04	0.09	0.08	0.13	0.13	0.10	0.22	0.05	0.14	-0.04	0.08	0.12	1.00			
M2	0.04	0.14	0.05	0.19	0.11	0.15	0.23	0.14	0.01	0.25	0.18	0.22	0.28	0.14	0.25	0.13	0.06	0.26	0.11	0.26	0.23	0.25	0.09	0.09	0.12	0.12	0.09	0.13	0.12	0.16	-0.05	0.11	0.03	0.71	1.00		
M3	0.32	0.22	0.12	0.25	0.15	0.25	0.27	0.31	0.22	0.35	0.29	0.22	0.26	0.28	0.21	0.24	0.21	0.21	0.13	0.23	0.22	0.19	0.18	0.15	0.18	0.18	0.17	0.22	0.18	0.19	0.05	0.18	0.11	0.60	0.61	1.00	
M4	0.11	0.31	0.15	0.35	0.22	0.14	0.28	0.23	0.15	0.30	0.22	0.25	0.30	0.19	0.19	0.25	0.16	0.20	0.15	0.05	0.09	0.08	0.13	0.13	0.10	0.10	0.04	0.26	0.11	0.07	0.01	0.17	0.02	0.28	0.38	0.50	1.00

Source: Authors' own work

After analysing correlation matrix according to the Cohen scale (1988) there are 2 correlation coefficients with almost perfect correlation, 37 coefficients with very large correlation, 60 coefficients with large correlation and 99 coefficients with moderate correlation. If we sum the number of high with moderate correlation coefficients, then we get a total of 198 coefficients. According to this result it can be concluded that most of the correlation coefficients are small or negative. More specifically, 230 coefficients have a low correlation, 139 coefficients have a trivial correlation (up to 0.1), while 98 coefficients have a negative correlation. After summing these values, the number 467 of low or negative correlation coefficients is reached, therefore it can be concluded that diversification possibilities between different types of assets exist. After taking a closer look at the correlation coefficients of precious metals, it can be concluded that they are generally low or very low, which justifies their use in further testing of risk diversification possibilities.

Methodology and Results

In this research *Modern Portfolio Theory* was involved in order to investigate the diversification possibilities of precious metals in an investment portfolio which consists of stocks, bonds and short-term assets. This theory was pioneered by Markowitz (1952, 1959) and it has been widely used by many authors in different fields of research. This theory is still one of the most rapidly growing field of modern finance. Bogdan, Baresa, and Ivanovic (2016) used mean variance approach to measure diversification possibilities among domestic and international stock markets and for measuring risk and return performance of stocks in tourism sector (Baresa, Bogdan, and Ivanovic 2018). The same theory was used in analysis of foreign tourist demand in Croatia (Ivanovic, Bogdan, and Baresa 2018). Gökgöz and Atmaca (2012) have used it for financial optimization in the Turkish electricity market.

First step in this research part will be to construct efficient frontier with portfolios which consisted of equity investment funds, bond funds and short-term bond funds (Figure 1). Several constraints were included before calculating the efficient frontier: sum of all weights is equal to 1. All weights are equal or larger than 0. It is also necessary to point that transaction costs were not included, and short selling was not allowed. This efficient frontier represents a set of optimal portfolios which have the highest expected return for a certain level of risk, or lowest risk for a predefined level of expected return. A rational investor will always try to maximize returns relative to the risk that is submitted and vice versa (Ivanovic, Baresa, and Bogdan 2013).

Figure 1: Efficient frontier consisted of equity investment funds, bond funds and short-term bond funds
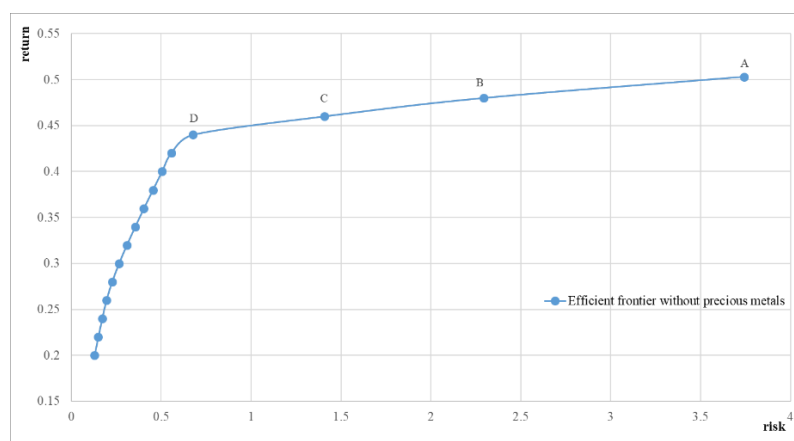
Source: Author´s own research

In figure 1 it can be noticed that only the first four portfolios are pointed (portfolio A, B, C and D) since, after adding precious metals, risk diversification is easily noticeable on portfolios with higher return and, accordingly, higher risk. *Portfolio A* has return 0.5, *Portfolio B* has return 0.48, *Portfolio C* has return 0.46 and *Portfolio D* has return 0.44. Next step was to compare these portfolios with portfolios A', B' C' and D' which have the same return, but they have included gold. The optimal weights of gold in an investment portfolio were calculated under the optimization framework.

Figure 2: Comparison of efficient frontiers with gold and without precious metals
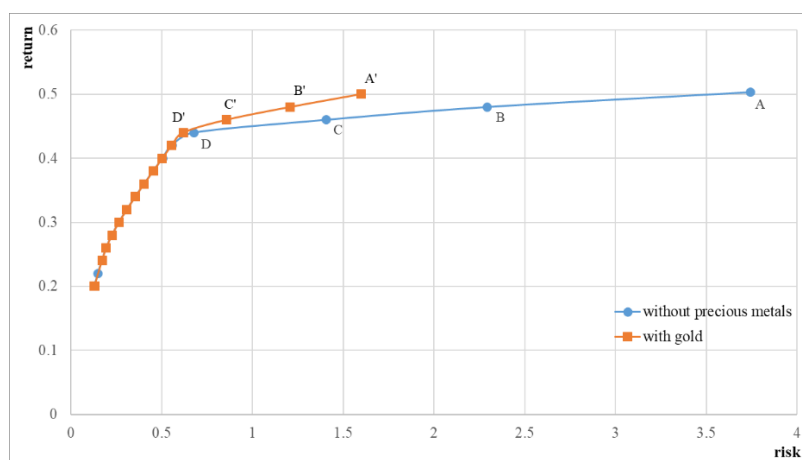
Source: Author´s own research

Portfolios which have included gold D', C', B' and A' for the same return have much lower risk, so it can be concluded that after the inclusion of gold in an investment portfolio that does not contain precious metals, it is possible to achieve a significantly lower risk for a given return. Shares of gold in investment portfolios A', B' C' and D' are equal to 29.31%, 20.54%, 11.71% and 2.89%. Performance of the efficient frontier which will include silver in portfolios will be analysed in the next figure.

Figure 3: Comparison of efficient frontiers with silver and without precious metals
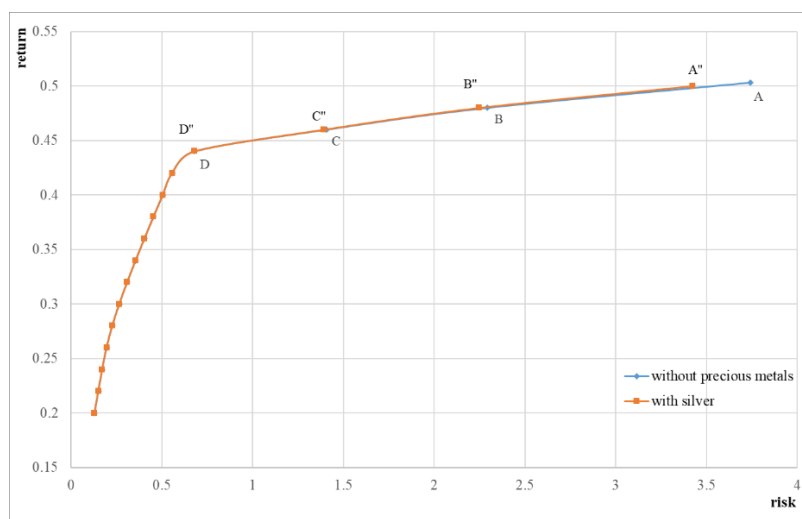
Source: Author´s own research

Only portfolios A'', B'' and C'' have lower risk compared to portfolios A, B and C, because they contain shares of silver. These shares are low but large enough to achieve the same return

with lower risk exposure. Shares of silver in portfolios A'', B'' and C'' are equal to 6%, 5.6% and 2.8%. Other portfolios do not contain silver at all. It can be concluded that by incorporating silver in an investment portfolio, it is possible to achieve risk diversification at the efficient frontier with higher expected returns.

Next tested precious metal was platinum. After applying linear programming, we found that platinum cannot contribute to additional risk diversification. If we add the restriction that the portfolio must contain a certain minimum amount of platinum, that portfolio will have a higher risk for the same return, compared to the portfolio which contains shares of equity investment funds, bond funds and short-term bond funds. It can be concluded that platinum doesn't offer risk diversification possibilities in a portfolio which comprises financial assets. Last tested precious metal was palladium.

Figure 4: Comparison of efficient frontiers with palladium and without precious metals
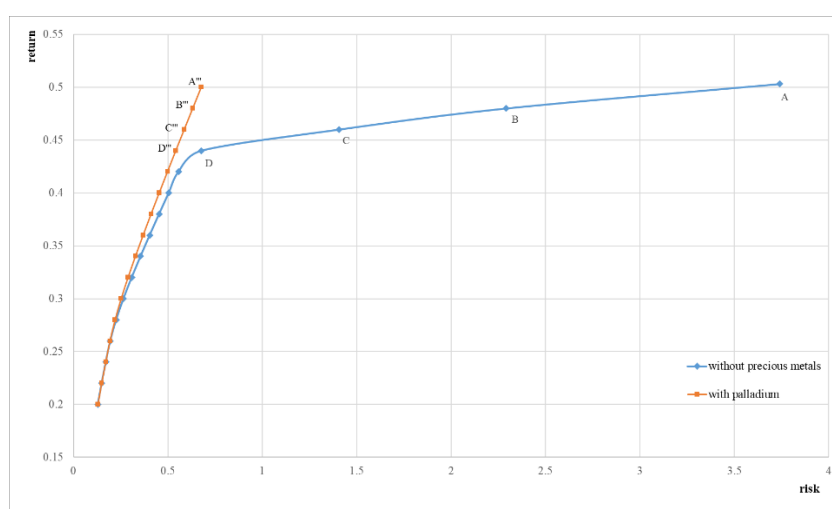
Source: Author´s own research

Among all precious metals, palladium has shown the best risk diversification possibilities. Apart from the first four analysed portfolios (A''', B''', C'''and D''') with the highest returns, according to figure 4, it can be noticed that the risk is lower in other portfolios also — since they contain a small share of palladium. Share of palladium in portfolios A''', B''', C''' and D''' is equal to 4.15%, 3.67%, 3.36% and 3.05%, and continues to decline towards the first portfolio (with the smallest variance) where the share of palladium is equal to 0.03%.

Conclusion

Unlike paper currency or coins, precious metals maintained their value throughout the history. Among all precious metals, gold had a special role. People saw it as a good way of wealth preservation, investors saw it as a good value of insurance especially in tough times. Nowadays there are several ways to invest in precious metals like investing in: exchange-traded funds (ETFs), futures, bullions, numismatic coins or investing in mining stocks. Numerous articles claim that gold acts as a *safe haven* in times of instability, there are also several studies which have extended research on the other types of precious metals like silver,

platinum and palladium and they have concluded that, there are times when silver, platinum and palladium act even more than gold as a *safe haven* (Lucey and Li 2015).

Since correlation coefficients between precious metals and other types of financial assets were low, very low or negative, first condition for including precious metals in an investment portfolio which was consisted of financial types of assets was met. The purpose of this research paper was to investigate whether the inclusion of gold, silver, platinum and palladium can be used for reducing risk in investment portfolio which is consisted of shares from equity investment funds, bond funds and short-term bond funds. In order to investigate diversification possibilities of precious metals, Markowitz mean-variance (MV) approach was used to obtain the optimal portfolios. By using this theory, an investor can construct an efficient frontier of optimal portfolios.

The core findings of this study suggest inclusion of precious metals like: palladium, gold and silver in an investment portfolio which is consisted of different types of financial assets, since those metals offer good risk diversification possibilities, especially palladium. Platinum as a precious metal doesn't offer risk diversification possibilities in investment portfolio consisted of financial assets, therefore it is recommended replacing with aforementioned precious metals. Financial portfolios containing a low weighting of gold, platinum or palladium perform better than portfolios consisting only of financial assets. Scientific contribution in this paper is evident since we extend earlier studies and present new evidence on the benefits of adding precious metals to Croatian investment portfolios consisted of different types of financial assets. It is certainly necessary to point out some limitations in this research like: transaction costs were not taken into account, and mean return value was calculated as a future expected return value, it would be advisable to use more sophisticated methods in future research to calculate expected return.

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Financial Stability and Business Performance of Hotel Companies in the Republic of Croatia

Suzana Baresa

University of Rijeka, Faculty of Tourism and Hospitality Management Opatija
Primorska 42, Ika
51410 Opatija, Croatia
suzanab@fthm.hr

Abstract: Tourism is one of the most complex socio-economic phenomena of the new era. As one of the fastest growing economic sectors in the Republic of Croatia, tourism plays an important role for the entire Croatian economy. Croatia is a country with great tourism potential as well as the potential for developing and achieving good business results for hotel companies. Therefore, analysis of business performance, profitability, indebtedness and liquidity is in the focus of this paper. The financial stability and success of Croatian hotel companies is quantified and evaluated through financial indicators on a selected sample of 22 business entities from the sector of "Accommodation and food service activities", whose financial statements are available on the Zagreb Stock Exchange. Certain financial ratios from the financial statements have been analysed in order to assess the stability and success of Croatian hotel companies. The financial analysis has provided interesting facts which can be of the great use to internal and external users.

Keywords: financial analysis, financial indicators, liquidity, indebtedness, profitability

Introduction

In the last six decades, tourism has become one of the fastest growing industries in the world, and despite various economic, natural or other difficulties, it has been recording an almost continuous growth. Tourism is a factor in the development, prosperity and well-being of a country and contributes to the economic development through a number of economic effects. According to UNWTO (2018), international tourist arrivals grew from 25 million in 1950 to 278 million in 1980, and from 674 million in 2000 to 1,235 million in 2016 (up to 7% from the previous year) and amounted totally 1,323 million in 2017. On the other hand, according to UNWTO (2018), international tourism revenue rose from $ 2 billion in 1950 to $ 104 billion in 1980, 2000 to $ 495 billion and 2016 to $ 1,220 billion, respectively, in 2017 amounted to $ 1,340 billion (an increase of 5% compared to the previous year).

The Republic of Croatia systematically follows contemporary tourism trends and is well positioned in the European tourism market. In 2018, the Croatian tourism sector registered record results – 18.7 million of tourist arrivals and 89.7 million of tourist overnights, which is 7.1% more in tourist arrivals and 4% in overnights (Croatian Bureau of Statistics 2019).

The purpose of this paper was to present business performance of the Croatian hotel companies, in the 2008–2018 period which was assessed by means of financial analysis indicators. The financial statements of the company are the starting point for financial analysis to evaluate past business achievements as well as current financial opportunities. Since the Republic of Croatia has potential and space for further tourism development, Croatian hotel companies have the potential to achieve good business results.

The aim of this paper is to analyze and quantify business performance, that is, the performance and financial stability of Croatian hotel companies in the period 2008–2018 through financial analysis indicators. The sample selected consists of 22 companies listed on the Zagreb Stock Exchange and their financial statements are publicly available. According to the national classification of activities (Official Gazette 2007), the selected companies belong to the sector "*I* – Accommodation and food service activities", class I 5510 "Hotels and similar accommodation".

In the first part of the paper, prior to the analysis of Croatian hotel companies, basic indicators of tourism development were highlighted in order to gain insight into the trends, size and significance of tourism sector results in the Republic of Croatia. The second part of the paper highlights the importance of financial analysis based on the financial indicators, data are presented in the third part of this paper, followed by a methodology and results in the fourth part of the paper. Final part of the paper provides short summary of findings and some important research questions for further research in this field.

Tourism indicators of Croatian tourism

The Croatian tourism sector is constantly recording impressive results. According to the Croatian Bureau of Statistics (2019), in 2018 Croatia registered 89.7 million tourist overnights (86.2 million in 2017), while tourist arrivals in 2018 amounted to 18.7 million (17.4 million a year earlier). Although the Croatian tourism sector has been affected by numerous negative and positive shocks since the early 1990s, research conducted by Gil-Alan, Mervar, and Payne (2016) indicated that they are transient and disappear relatively quickly.

Historical review and analysis of the basic indicators of tourism development over the period 1980–2015 (Table 1) show a trend of constant growth, namely in the number of tourist arrivals, overnights and the number of beds till 1990. A descending trend was registered the period 1990 –1995, as a result of the historical war events in Croatia. The tourism expansion in Croatia (after independence) has been noticeable since 2000, with an upward trend. In 2007, the number of tourist arrivals exceeded the result achieved in the 1987[1], and in 2015 the number of tourist overnights significantly exceeded the tourist results achieved in 1986[2] according to the data from Croatian Bureau of Statistics. Croatia's accession to the European Union, its stability and the recognition of the destination as safe and tourist-friendly and numerous investments in tourism, certainly contributed to these trends and results. The average number of overnights per bed is increasing, while the average number of overnights spent by a single tourist on arrival is decreasing due to a shorter stay in the destination. According to the total annual tourist overnights in 2017, there are 70 overnight stays per bed, 85.9% were realized during the summer period (June, July, August and September), more precisely 60.5% are realized in July and August (Institute of Economics 2018). In 2018 Croatia had the highest ratio of the most visited and least visited months of the year at EU level, and in addition, the concentration of Croatian tourism is reflected in data indicating that 48.6% of total foreign overnights were made by tourists from only four countries, 48.7% of all overnight stays were made in only two Croatia countries and 48.4% of all overnight stays were made in private accommodation (Croatian Chamber of Economy 2019a).

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[1] After comparing pre war years, the highest number of tourist arrivals — 10,487 millions was registered in 1987.
[2] After comparing pre war years, the highest number of tourist nights — 68,216 millions was registered in 1986.

Table 1: Basic indicators of the Croatian tourism sector development in the period 1980–2015[3]

	1980	1985	1990	1995	2000	2005	2010	2015
Number of beds (in 000)	692	820	863	609	710	909	910	1,029
Number of tourists (in 000)	7,929	10,125	8,498	2,438	7,136	9,995	10,604	14,343
Number of nights (in 000)	53,600	67,665	52,523	12.885	39,183	51,421	56,416	71,605
Average number of nights per bed	77	83	61	21	55	57	62	70
Average number of nights per tourist arrival	6.8	6.7	6.2	5.3	5.5	5.1	5.3	5.0

Source: Ministry of Tourism of the Republic of Croatia (2019, 11).

According to the Institute of Economics Zagreb (2019), the total accommodation capacities in Croatia (data from 2018) amount to 1 313 163 beds, of which 183 330 are in hotels and similar accommodation, 864 670 in holiday and other short-stay accommodation, 262 542 in camping sites and camping grounds, and 2 621 in other accommodation.

Observing historically the structure of accommodation capacities in Croatia over the period 1980–2015, it is noticeable that since 2000 the number of accommodation capacities, and especially private rooms, has started to grow strongly, while the number of accommodation facilities in the workers' resorts has decreased.

The strong export orientation is also confirmed by data on tourist traffic, ie data on the share of foreign tourist nights in total overnight stays and the sector's contribution to total Croatian exports. Total overnight stays in the last ten years have been constantly increasing (Table 2).

Table 2: Overnights of domestic and foreign tourists in Croatia in the period 2008-2018 (in 000)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Domestic	6,478	5,799	5,369	5,562	5,174	5,140	5,160	5,742.6	5,819.5	5,978.3	6,476.6
Share %	11.34	10.30	9.55	9.25	8.28	7.93	7.76	8.02	7.47	6.94	7.22
Foreign	50,626	50,501	50,849	54,547	57,333	59,688	61,324	65,862.7	72,099.4	80,212.0	83,175.2
Share %	88.66	89.70	90.45	90.75	91.72	92.07	92.24	91.98	92.53	93.05	92.78
Total	57,103	56,300	56,217	60,110	62,507	64,828	66,484	71,605.3	77,918.39	86,200.3	89,651.8

Source: according to the Croatian Chamber of Economy (2019b).

In the total structure of tourist overnights, in the last ten years 89–93% of the share was made by foreign tourists and 7–11% by domestic tourists. The number of overnight stays of foreign tourists recorded a constant increase, while the number of overnight stays of domestic tourists declined from 2008 to 2013, and thereafter also recorded a constant increase.

In the period 1980–2015, the share of domestic and foreign tourist arrivals in Croatia (Table 3) till 2000 was approximately the same (up to 10% difference), after that year significant difference was evident, since the number of foreign guests visiting Croatia has increased significantly.

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[3] Due to the space limitation only certain years are shown in table 1, full data are available on request.

Table 3: Arrivals of domestic and foreign tourists to Croatia in the period 1980–2015 (in 000)[4]

	1980	%	1985	%	1990	%	1995	%	2000	%	2005	%	2010	%	2015	%
Domestic	3,922	49	4,569	45	3,477	41	1,113	46	1,305	18	1,528	15	1,493	14	1,660	12
Foreign	4,007	51	5,556	55	5,020	59	1,324	54	5,831	82	8,467	85	9,111	86	12,683	88
Total	7,929	100	10,125	100	8,497	100	2,438	100	7,136	100	9,995	100	10,604	100	14,343	100

Source: according to the Ministry of the Tourism Republic of Croatia (2019).

Structure of arrivals and overnight stays divided by the accommodation capacities according to division 55 of National Classification of Activities – NKD 2007. and by types of tourist accommodation establishments are shown in Table 4 and Figure 1. In the structure of tourist overnights in the last five years (2012–2017), the highest share is in the class 55.2. (Holiday and other short-stay accommodation) in all observed years, and in the structure of tourist arrivals the highest share has class 55.1. (Hotels and similar accommodation) till 2016. There is also a noticeable upward trend in the share of tourist arrivals and overnights which has a class of 55.2.

Table 4: Structure of tourist arrivals and nights, according to division 55 of NKD 2007, 2012–2017 (in %)

	2012		2013		2014		2015		2016		2017	
	arrvl.	nights	arrvl.	nights	arrvl.	nights	arrvl.	nights	arrvl.	nights	arrvl.	Nights
55.1. Hotels and similar accommodation	45.7	33.7	44.7	32.6	44.1	31.6	43.8	31.0	43.6	29.9	40.3	28.5
55.2. Holiday and other short-stay accommodation	31.6	39.5	33.8	41.2	35.5	43.0	38.1	44.8	41.2	47.6	43.4	49.3
55.3. Camping sites and camping grounds	20.2	25.9	19.7	25.7	18.5	24.9	18.0	24.0	16.8	22.4	16.2	22.1
55.9. Other accommodation	2.5	0.9	1.9	0.6	1.9	0.5	0.1	0.2	0.1	0.1	0.1	0.1

Source: according to the Croatian Bureau of Statistics (2015; 2018b)

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[4] Due to space limitation only certain years are shown in table 1, full data are available on request.

Figure 1: Structure of tourist arrivals and overnights, according to the division 55 of NKD 2007, 2012–2017 (in%)
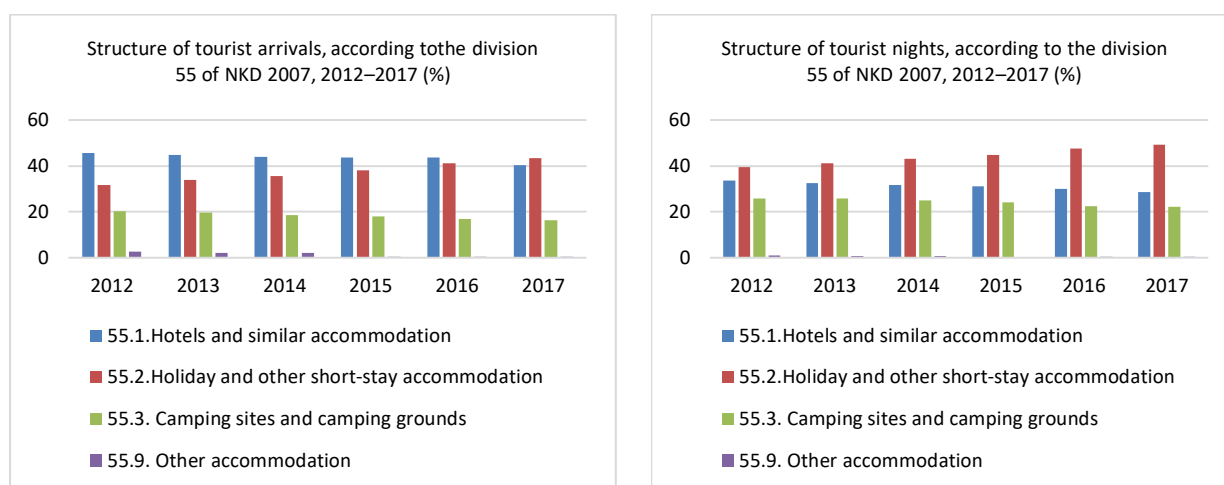
Source: according to the Croatian Bureau of Statistics (2015; 2018b).

The most significant tourist counties in Croatia are Istria, Split-Dalmatia, Primorje-Gorski kotar, Dubrovnik-Neretva, Zadar, Šibenik-Knin and the City of Zagreb (which has the status of a county). Out of the 21 counties in Croatia, these 7 have more significant tourist results compared to the remaining 14 counties (Table 5), which is not surprising, since tourism in Croatia is concentrated on the Croatian coast, which is the most visited due to its favorable climate, natural and historical beauties. According to the tourist arrivals and overnights in 2017 and 2018, the most visited counties are Istria, Split-Dalmatia and Primorje-Gorski Kotar.

Table 5: Tourist arrivals and overnight stays in Croatian counties in 2017 and 2018

Counties	Arrivals (in 000)		Structure (%)		Nights (in 000)		Structure (%)	
	2017	2018	2017	2018	2017	2018	2017	2018
Istria	4,104	4,333	23.5	23.2	25,426	26,179	29.5	29.2
Split-Dalmatia	3,160	3,474	18.1	18.6	16,596	17,562	19.3	19.6
Primorje-Gorski kotar	2,789	2,910	16.0	15.6	14,898	15,284	17.3	17.0
Dubrovnik-Neretva	1,864	2,015	10.7	10.8	7,712	8,051	8.9	9.0
Zadar	1,559	1,664	8.9	8.9	9,218	9,591	10.7	10.7
City of Zagreb	1,286	1,400	7.4	7.5	2,264	2,512	2.6	2.8
Šibenik-Knin	923	965	5.3	5.2	5,455	5,512	6.3	6.1
Other (14) counties	1,745	1,905	10.1	10.2	10,086	10,086	12,0	12,0
Total	17,430	18,666	100.0	100.0	86,200	89,652	100.0	100.0

Source: according to the Ministry of Tourism of the Republic of Croatia (2019).

The counties of Istria, Split-Dalmatia and Primorje-Gorski Kotar recorded the majority of tourist arrivals and overnights in Croatia with the total share of 65.8% overnights and 57.4% of arrivals in 2018 which make them the most significant tourist counties in Croatia.
Foreign exchange income from tourism is also on the rise. In 2018, foreign exchange revenues from tourism from foreign guests amounted to EUR 10 billion and EUR 96 million,

which compared to 2017 (EUR 9 billion and EUR 492 million) represents an increase of EUR 604 million, which is an increase of 6.36% in relation to the previous year. Revenues from international tourism (Table 6) indicate a positive trend in foreign exchange earnings, which has been present since 2011. The decrease in foreign exchange income was recorded only in 2009 and 2010.

Table 6: Tourism revenue, in mil. EUR in the period 2008–2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	7,459.4	6,379.7	6,230.0	6,616.9	6,858,7	7,202.8	7,402.3	7,962.0	8,635.0	9,492.9	10,096.5

Source: Croatian Chamber of Economy (2018), Croatian National Bank (2019).

Revenue from foreign tourists in the period 2010–2017 increased by an average of 5.3% annually, and the share of foreign currency income from tourism in GDP increased from 13.8 to 19.4% in 2017 (Institute of Economics Zagreb 2018, 8). The high share of foreign exchange income from tourism in GDP indicates an insufficiently diversified structure of the Croatian economy as well as a high dependence on tourism.
The upward trend in tourism indicators in Croatia is being realized in parallel with the upward trends and globally (Croatian Chamber of Commerce 2019a). Indicators of tourist arrivals and overnights as well as financial indicators indicate the continuing of the growth trend of the tourism sector in the Republic of Croatia.

Significance of financial statement analysis

In the process of managing a business and developing a business entity, financial statement analysis is of great importance and utility, which "seeks to look to the future and emphasize those aspects of business that are critical for survival, which are above all the safety and effectiveness of the business" (Zager et al. 2017, 36). The analysis of financial statements can assess the production, financial and market potential of a company and identify errors in the business, production and policies of companies that directly affect the profitability, efficiency and financial stability of the company (Karanovic, Baresa, and Bogdan 2010). Likewise, an important issue in the area of finance and business management is the avoidance of failure (Puagwatana and Gunawardana 2005, 246) as businesses face numerous challenges and financial difficulties related to liquidity, especially in the context of dynamic business changes, financial and economic instability and uncertainty (Baresa, Bogdan, and Ivanovic 2017).
Analysis of financial statements is the process of applying various analytical tools and techniques to obtain useful quantitative financial information. Comparative financial statements, structural financial statements, analysis using financial ratios, and other specialized analyzes are common analytical tools and procedures used in the financial statement analysis process (Berstein and Wild 2000). Financial analysis provides an understanding of past operating results, as well as current financial opportunities, "primarily using monetary metrics and indicators based on financial data" (Ivanovic 1997, 11). The purpose of financial statement analysis is to "evaluate the trend, size, dynamics and riskiness of a company's future cash flows" (Viducic 2006, 376).

Financial ratios are the most significant instrument of analysis of financial statements that use different economic size ratios together. Individual financial ratios are usually classified into groups of indicators."Financial ratios have played an important part in evaluating the performance and financial condition of an entity" (Chen and Shimerda 1981, 51).

Financial ratios serve as a "popular tool for users who are owner, shareholders, creditors, investors, government and other users to evaluate the financial condition and performance of a company by computing a set of key financial ratios from financial statements" (Puagwatana and Gunawardana 2005, 246), therefore, they have an important role in the financial analysis.

Data description

The purpose of this paper was to analyze the business results of companies in the tourism sector and to assess the extent to which the business operations of the companies are safe and successful, and to show the tendency and dynamics of the movement of individual financial indicators over the period 2008–2018.

Starting point for financial analysis was to collect financial statements. The annual financial statements of Croatian hotel companies (joint stock companies) from accommodation activities (NKD I–5510), whose shares are listed on the Zagreb Stock Exchange, were collected for the purpose of research. The sample of 22 analyzed hotel companies is shown in the Table 7.

Table 7: Sample of analyzed hotel companies

No.	Symbol	Company
1	ARNT	ARENA HOSPITALITY GROUP d.d.
2	HBRL	HOTELI BRELA d.d.
3	HHLD	HOTELI HALUDOVO MALINSKA d.d.
4	HIMR	IMPERIAL RIVIERA d.d.
5	HJDR	HOTELI JADRAN d.d.
6	HMST	HOTELI MAESTRAL d.d.
7	HPDG	MEDORA HOTELI I LJETOVALISTA d.d.
8	HTCP	HOTELI TUCEPI d.d.
9	HTPK	HTP KORCULA d.d.
10	HTPO	HTP OREBIĆ d.d.
11	HVDC	HOTELI VODICE d.d.
12	HZVG	HOTELI ZIVOGOSCE d.d.
13	ILRA	ILIRIJA d.d.
14	JLSA	JELSA d.d.
15	LRH	LIBURNIA RIVIERA HOTELI d.d.
16	MAIS	MAISTRA d.d.
17	OLVD	OLYMPIA VODICE d.d.
18	PLAG	PLAVA LAGUNA d.d.
19	PLCH	PALACE HOTEL ZAGREB. d.d.
20	RIVP	VALAMAR RIVIERA d.d.
21	SLRS	SOLARIS d.d.
22	TUHO	TURISTHOTEL d.d.

Source: Authors' own work

Business performance of Croatian hotel companies in this research is quantified and evaluated based on selected financial analysis indicators. Some results of the calculation of individual indicators are excluded (mathematically correct but not economically logical) or there was no data to calculate. The results of the financial analysis provide interesting information and facts that can be of great benefit to both internal and external users. The findings and conclusions provide relative insight into the observed activity (class I–5510 Hotels and similar accommodation) through the selected sample, and the analysis of the business performance of the selected hotel companies is based solely on the selected groups of indicators and does not reflect the overall assessment of the business of each company.

Methodology and Results

Business performance and financial performance of hotel business in this study was analyzed and presented based on the selected and calculated individual indicators from the group *liquidity ratios – current ratio*, quick ratio, and financial stability coefficient. The *Solvency/leverage ratios* group analyzes and displays *debt to assets ratios* and *equity assets ratio*, and from the *profitability ratios* group – *return on assets, return on equity*.

Liquidity ratios indicate the ability of an entity to meet its current liabilities. Liquidity indicators show the ability of companies to avoid insolvency (Baresa, Bogdan, and Ivanovic 2013).

Current ratio indicates the extent to which current-to-maturity liabilities that fall due within a period of up to one year are covered by current assets. A higher liquidity ratio (current ratio) indicates greater certainty that an entity will be able to settle short-term liabilities in a timely manner. In general, company should have at least twice as much current assets as current liabilities. An indicator value less than 1 indicates a problem with payment of liabilities. The benchmark of this indicator in European business practice is between 1.3 and 1.4, while in US practice it is 2 (Horvat Jurjec 2011, 20). The portion of current capital – working capital, which is financed from long-term sources, is determined as the difference between current assets and current liabilities. If there is a persistent shortage of working capital, which is increasing in increasing intensity, liquidity is threatened, and such a situation raises serious financial difficulties. Working capital is often referred to as a liquidity reserve, a financial stability reserve, or a business security reserve. The higher current assets that repeatedly cover current liabilities, the lower the risk of monetizing a sufficient portion of current assets to meet current liabilities. A high degree of liquidity reserve indicates that the safety of cash operations is extremely high, however, this in turn implies a lower efficiency in the use of funds (cash is underutilized, and the rate of return is reduced). The value of this indicator above 2 indicates excellent liquidity position and working capital reserves.

Quick ratio or *Acid test ratio*, indicates the extent to which an entity is able to settle short-term liabilities with quickly recoverable assets. The value of this indicator, which continuously exceeds the value 1 in the observed years, indicates excellent liquidity, while the value below 1 indicates a very poor liquidity position.

For the selected sample of Croatian hotel companies, the most used liquidity ratios were calculated, the *current ratio* and the *quick ratio*, and their values are presented as follows (Tables 8 and 9).

Table 8: *Quick ratio* of Croatian hotel companies 2008–2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
ARNT	0.16	0.28	0.23	0.28	0.82	0.96	1.32	2.16	0.91	9.14	9.02	2.30
HBRL	0.11	0.07	0.11	0.09	0.18	0.13	0.30	0.49	1.01	0.43	0.97	0.35
HHLD	5.78	0.11	0.14	0.29	0.74	0.66	0.80	1.01	0.79	0.49	0.72	1.05
HIMR	0.14	0.10	0.11	0.35	0.22	0.32	0.55	0.87	1.18	1.24	1.12	0.56
HJDR	0.67	0.60	0.68	0.66	0.19	0.16	0.24	0.86	1.07	1.40	1.66	0.75
HMST	0.51	0.31	0.26	0.15	0.24	0.33	0.53	0.48	0.68	0.72	0.99	0.47
HPDG	0.26	0.24	0.21	0.21	0.14	0.14	1.09	0.06	0.25	0.34	0.42	0.31
HTCP	0.17	0.10	0.14	0.17	0.38	0.20	0.23	0.70	1.02	1.99	2.39	0.68
HTPK	0.18	0.10	0.08	0.06	0.09	0.14	12.94	0.62	2.04	1.56	1.79	1.78
HTPO	0.98	0.66	0.48	0.13	0.10	0.17	6.09	5.70	1.21	2.78	2.46	1.89
HVDC	0.80	0.60	2.05	1.50	0.75	0.02	0.04	0.05	0.07	0.08	0.07	0.55
HZVG	0.05	0.05	0.05	0.21	0.19	0.01	1.09	0.14	0.60	0.09	0.19	0.25
ILRA	0.32	0.13	0.17	0.23	0.32	0.31	0.31	0.32	0.41	0.42	0.42	0.31
JLSA	N/A	0.24	0.56	0.57	0.84	0.03	0.15	0.20	0.22	0.30	0.45	0.36
LRH	1.55	1.58	1.37	1.60	1.99	1.30	1.51	1.38	0.91	0.88	0.84	1.35
MAIS	0.04	0.05	0.05	0.03	0.04	0.03	0.03	0.04	0.08	0.03	0.07	0.04
OLVD	2.41	0.30	0.34	0.17	0.40	0.25	0.14	0.37	0.42	0.14	0.72	0.52
PLAG	1.30	2.40	2.97	3.52	2.55	2.95	2.50	1.27	1.26	1.55	0.83	2.10
PLCH	1.60	2.25	3.04	1.36	0.89	1.30	0.91	2.11	2.66	1.78	2.01	1.81
RIVP	1.20	1.13	0.38	1.26	1.54	1.63	0.86	1.38	0.72	0.62	0.47	1.02
SLRS	0.36	0.33	0.55	0.48	0.69	0.41	0.40	0.71	0.60	0.53	0.46	0.50
TUHO	5.87	7.50	8.76	7.10	2.85	7.59	4.77	11.28	9.08	3.43	7.02	6.84
Average total	1.17	0.87	1.03	0.93	0.73	0.87	1.67	1.46	1.24	1.36	1.60	1.18
Average trend	1.00	0.75	1.19	0.90	0.79	1.18	1.93	0.88	0.84	1.10	1.17	

Source: Authors' own work

Table 9: *Current ratio* of Croatian hotel companies 2008–2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
ARNT	0.17	0.29	0.24	0.29	0.83	0.97	1.34	2.19	0.93	9.16	9.05	2.31
HBRL	0.17	0.09	0.14	0.12	0.21	0.15	0.33	0.51	1.04	0.45	1.00	0.38
HHLD	5.80	0.13	0.15	0.31	0.77	0.67	0.82	1.03	0.81	0.49	0.73	1.07
HIMR	0.16	0.11	0.12	0.37	0.24	0.34	0.58	0.90	1.21	1.27	1.18	0.59
HJDR	0.71	0.62	0.70	0.68	0.19	0.16	0.25	0.86	1.07	1.40	1.66	0.75
HMST	0.54	0.33	0.28	0.17	0.28	0.40	0.57	0.54	0.74	0.81	1.08	0.52
HPDG	0.28	0.26	0.23	0.23	0.16	0.15	1.15	0.10	0.32	0.42	0.46	0.34
HTCP	0.24	0.13	0.21	0.21	0.39	0.21	0.24	0.71	1.04	2.00	2.41	0.71
HTPK	0.27	0.20	0.14	0.11	0.13	0.18	13.31	0.74	2.10	1.67	1.90	1.88
HTPO	1.02	0.71	0.53	0.15	0.12	0.19	6.15	5.77	1.26	2.87	2.54	1.94
HVDC	0.80	0.61	2.07	1.51	0.76	0.03	0.04	0.05	0.08	0.08	0.08	0.55
HZVG	0.06	0.05	0.06	0.23	0.21	0.02	1.11	0.15	0.61	0.10	0.20	0.25
ILRA	0.35	0.16	0.20	0.27	0.37	0.36	0.37	0.38	0.47	0.49	0.49	0.35
JLSA	N/A	0.24	0.56	0.57	0.84	0.03	0.16	0.21	0.22	0.30	0.45	0.36

LRH	1.59	1.61	1.40	1.63	2.15	1.34	1.56	1.42	0.95	0.93	0.88	1.41
MAIS	0.07	0.08	0.06	0.04	0.05	0.03	0.04	0.04	0.09	0.04	0.07	0.05
OLVD	2.42	0.32	0.36	0.19	0.42	0.26	0.16	0.38	0.43	0.18	0.80	0.54
PLAG	1.33	2.43	3.03	3.57	2.59	2.98	2.53	1.29	1.28	1.57	0.85	2.13
PLCH	1.92	2.66	3.20	1.43	0.93	1.36	0.94	2.16	2.71	1.81	2.12	1.93
RIVP	1.25	1.16	0.39	1.29	1.57	1.66	0.88	1.41	0.77	0.67	0.52	1.05
SLRS	0.43	0.38	0.59	0.51	0.71	0.44	0.43	0.75	0.68	0.56	0.51	0.54
TUHO	5.92	7.57	8.84	7.16	2.87	7.68	4.81	11.45	9.24	3.48	7.12	6.92
Average total	1.22	0.91	1.07	0.95	0.76	0.89	1.72	1.50	1.27	1.40	1.64	1.21
Average trend	1.00	0.75	0.88	1.04	0.72	0.93	2.25	1.68	0.74	0.93	1.29	

Source: Authors' own work

The results of liquidity analysis (current ratio and quick ratio) for Croatian hotel companies 2008–2018 suggest that majority of Croatian hotel companies have indicators below the suggested (referent) values for both. This situation is characterized by the activity of the analyzed hotel companies, which have an average of 93% of fixed assets and 7% of current assets in the structure.

The highest level of average liquidity has TUHO. When observing the average value (indicator) of indicators over the observation period for each individual company (according to the tables 8 and 9) the quick ratio ranges between the lowest 0.04 and the highest 6.84 value, and the current ratio ranges between the lowest 0.05 and the highest 6.92 value. There are 9 hotel companies with an average value of 1 and more for quick ratio, and 3 companies out of a total of 22 analyzed have an average value of 2 and more while measuring current ratio. The total average value for all companies in observed years is 1.18 for quick ratio and 1.21 for current ratio. According to the liquidity results of Croatian hotel companies obtained from the research of Loncar (2004) for the analyzed period 1996–2001 it can be concluded that in general liquidity results are currently higher. Liquidity and solvency problems have been present in Croatia for a long period of time (Baresa, Bogdan, and Ivanovic 2017), but according to the current analyzed results in hotel industry the situation is improving. The movement of the average coefficients by year is variable.

The *financial stability indicator* is the ratio between long term assets on one hand and equity plus long-term liabilities on the other. The value of the coefficient must be less than 1 because the company must finance part of its current assets from long-term sources. The lower value of this indicator indicates greater liquidity and financial stability. The financial stability ratio for the selected sample of Croatian hotel companies was calculated and presented in the Table 10.

Table 10: *Financial stability ratio* of Croatian hotel companies 2008–2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
ARNT	1.07	1.06	1.07	1.06	1.01	1.00	0.98	0.95	1.01	0.73	0.76	0.97
HBRL	1.15	1.31	1.12	1.14	1.07	1.10	1.08	1.07	1.00	1.10	1.00	1.10
HHLD	0.95	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
HIMR	1.13	1.12	1.10	1.05	1.07	1.05	1.03	1.01	0.99	0.98	0.99	1.05
HJDR	1.08	1.13	1.10	1.13	1.47	1.53	1.48	1.06	0.97	0.93	0.89	1.16
HMST	1.11	1.21	1.22	1.29	1.09	1.04	1.03	1.03	1.01	1.01	1.00	1.09

HPDG	1.11	1.14	1.17	1.19			0.99	1.17	1.09	1.05	1.06	1.11
HTCP	1.08	1.19	1.06	1.07	1.06	1.08	1.08	1.03	1.00	0.83	0.87	1.03
HTPK	1.15	1.14	1.30	1.42	1.52	1.47	0.81	1.01	0.92	0.97	0.96	1.15
HTPO	1.00	1.05	1.07	1.20	1.20	1.25	0.79	0.84	0.98	0.94	0.94	1.02
HVDC	1.11	1.31	0.95	0.96	1.05	1.96	1.19	1.19	1.20	1.21	1.24	1.22
HZVG	3.27			1.92	1.96			0.99	1.12	1.06	2.73	2.51	1.95
ILRA	1.13	1.23	1.16	1.14	1.08	1.08	1.10	1.09	1.05	1.04	1.05	1.10
JLSA	N/A	1.27	1.10	1.10	1.03	5.23	1.22	1.19	1.18	1.08	1.08	1.55
LRH	0.98	0.97	0.98	0.97	0.96	0.95	0.97	0.97	1.01	1.00	1.01	0.98
MAIS	1.93	1.93	1.93	2.06	1.90	1.81	1.84	1.75	1.54	1.59	1.35	1.78
OLVD	0.93	1.09	1.08	1.11	1.09	1.15	1.18	1.15	1.13	1.10	1.01	1.09
PLAG	0.99	0.95	0.94	0.90	0.93	0.90	0.95	0.98	0.98	0.95	1.01	0.95
PLCH	0.97	0.96	0.96	0.98	1.01	0.98	1.00	0.93	0.89	0.92	0.90	0.95
RIVP	0.99	0.99	1.08	0.98	0.96	0.92	1.01	0.97	1.03	1.04	1.05	1.00
SLRS	1.04	1.05	1.04	1.05	1.04	1.06	1.08	1.03	1.03	1.05	1.06	1.05
TUHO	0.56	0.47	0.39	0.43	0.49	0.52	0.51	0.46	0.67	0.76	0.75	0.55
Average total	1.18	1.12	1.13	1.14	1.10	1.35	1.06	1.04	1.03	1.09	1.07	1.13
Average trend	1.00	0.95	1.00	1.02	0.96	1.23	0.78	0.99	0.99	1.06	0.98	

Source: Authors' own work

The values of the *financial stability ratio* of Croatian hotel companies in the period 2008–2018 suggest that most of Croatian hotel companies have a coefficient above the benchmark. The value of the coefficient above 1 indicates that long-term sources of financing are related to long term assets and that there is a lack of long-term sources of financing for current assets. TUHO, PLAG and PLCH have the best level of financial stability over the observed period. When looking at the average value of indicators in the observation period for each individual company then the coefficient of financial stability ranges between the lowest 0.55 (TUHO) and the highest 1.95 (HZVG). Five hotel companies have the average value of financial stability indicators <1. The total average value for all companies in observed years is 1.13. The movement of the average coefficients by year is variable.

Solvency/leverage ratios – *debt to assets ratio* and *debt to equity ratio* are formed on the basis of balance sheet data and reflect static indebtedness. They reflect liabilities structure and indicate the ratio of financing of assets from owners' equity and the ratio of financing from liabilities. Indicators of debt or leverage ratios show the capital structure and ways in which an entity finances its assets. Debt to assets ratio and equity to assets ratio together represent the structure of sources of financing assets, summing up 1. The debt ratio shows what share of assets is acquired through borrowing, or to what extent an enterprise uses borrowing as a form of financing. The lower the debt-to-asset ratio, the lower is the financial risk. As a rule, the value of the debt ratio should be up to 50%. For the selected sample of hotel companies, the debt to assets ratio were calculated and presented graphically (Figure 2).

Figure 2: Average *debt to assets ratio* of Croatian hotel companies 2008–2018
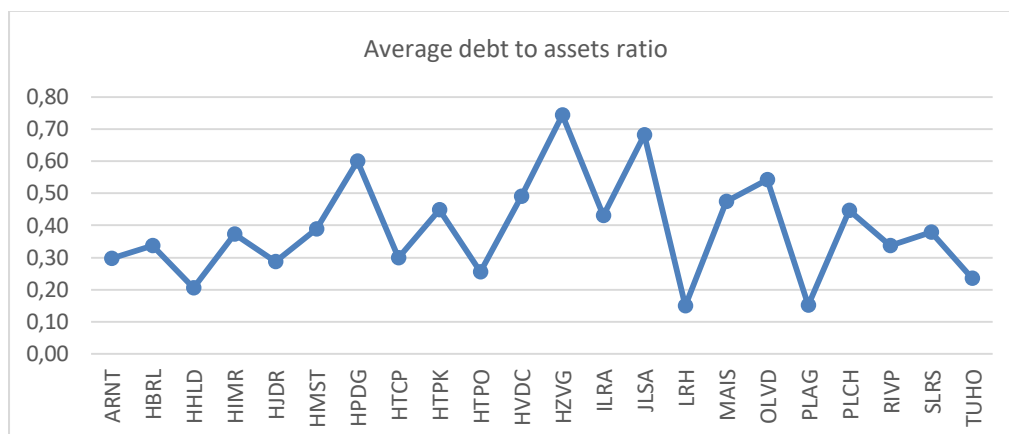
Source: Authors' own work

Table 11 shows the values of average debt to assets ratio and average equity ratio for each individual hotel company for the period 2008–2018.

Table 11: Average debt to assets ratio and average equity assets ratio of Croatian hotel companies 2008–2018

Symbol	Average debt to assets ratio	Average equity assets ratio
ARNT	0.30	0.70
HBRL	0.34	0.66
HHLD	0.21	0.79
HIMR	0.37	0.63
HJDR	0.29	0.71
HMST	0.39	0.61
HPDG	0.60	0.40
HTCP	0.30	0.70
HTPK	0.45	0.55
HTPO	0.26	0.74
HVDC	0.49	0.51
HZVG	0.74	0.15
ILRA	0.43	0.57
JLSA	0.68	0.32
LRH	0.15	0.85
MAIS	0.47	0.53
OLVD	0.54	0.46
PLAG	0.15	0.85
PLCH	0.45	0.55
RIVP	0.34	0.66
SLRS	0.38	0.62
TUHO	0.24	0.76
Average total	0.39	0.61

Source: Authors' own work

The values of the average debt to equity ratio and equity asset ratio of hotel Companies in the period 2008–2018 suggest that only 4 hotel companies have indebtedness > 50%. The average debt to assets ratio and average equity ratio for most hotel companies is satisfactory. The highest average debt to assets ratio is 0.74 (the highest HVZG debt) and the lowest 0.15 (the lowest PLAG and LRH debt).

The total average value of the debt to equity ratio for all companies in all observed years (at the activity level) is 0.39: 0.61. The share of financing of assets with other sources (liabilities) is 39% and the share of equity financing is 61%.

Profitability ratios — return on assets and *return on equity* measure return on equity. The *return on assets* indicator measures the profit generated by a company on its assets. A higher value of the indicator indicates a higher profit that has been made with a certain level of assets. It has a significant role to play in evaluating the overall efficiency and effectiveness of the business. *Return on equity* measures the return on equity of a company. Higher return on equity (higher return on equity) than return on assets indicates a positive effect of the leverage effect, i.e. due to the use of other sources of financing, the company made higher profits for owners of its own sources of financing.

For the selected sample of Croatian hotel companies, the return on assets and return on equity were calculated of Croatian hotel companies for the period 2008–2018 (Table 12).

Table 12: Average return on assets and average return of equity of Croatian hotel companies for period 2008–2018

	Average return on assets	Average return of equity
ARNT	-0.44	-0.71
HBRL	2.15	2.72
HHLD	-3.37	-4.31
HIMR	1.66	2.59
HJDR	0.46	0.48
HMST	-0.06	-0.25
HPDG	-5.29	-2.08
HTCP	1.59	2.38
HTPK	-1.33	-3.70
HTPO	-3.46	-4.99
HVDC	-3.76	-13.83
HZVG	5.45	-6.45
ILRA	5.18	8.87
JLSA	-1.24	-5.53
LRH	0.27	0.34
MAIS	2.88	5.19
OLVD	0.16	0.17
PLAG	5.14	6.20
PLCH	0.05	0.05
RIVP	2.36	4.14
SLRS	-0.83	-1.47
TUHO	14.85	19.49

Source: Authors' own work

The average *return on assets* are realized by 13 hotel companies and *average return on equity* by 12 companies. The lowest average return on assets is 0.05 and the highest is 14.85% (TUHO). The lowest average return on equity is 0.05 and the highest is 19.49% (TUHO). The average return on equity is higher than the average rate return on assets on 11 hotel companies, and it can be concluded that half of the surveyed sample has a favourable financing structure for its business operations.

Conclusion

Analysis of financial statements is the process of applying various analytical tools and techniques to obtain useful quantitative financial information that can serve to understand and track the results of business operations, as well as to identify current financial stability and performance. This paper analyses the performance and financial stability of Croatian hotel companies based on selected financial indicators.

The quick ratio and the current ratio for most hotel companies in the sample over the reference period have a value below the general benchmark. The total average value for all companies in observed years is 1.18 for quick ratio and 1.21 for current ratio. The overall average quick ratio for all hotel companies analysed is satisfactory. The overall average current ratio indicates that current assets are insufficient and therefore liquidity is relatively unsatisfactory.

The results of the financial stability ratio show that most Croatian hotel companies have a coefficient value above the general benchmark, so it can be concluded that long-term sources of financing are related to non-current assets and that there are no long-term sources of financing for current assets. The total average value of the financial stability ratio for all companies in all observed years (at industry level) is 1.13. It can be concluded that the financial stability of most companies is above the reference level (which is negative). Only 5 hotel companies have a good average value of financial stability ratio.

To what extent the company finances the assets from equity and how much from liabilities it has been examined on the basis of leverage ratios. For most of the hotel companies in the sample, debt to assets ratio is satisfactory (below 50%).

The average debt to assets ratio for all sampled companies in the observed years (at the activity level) is 0.39. The maximum value of average debt to assets ratio is 0.74 and the lowest value is 0.15. The average equity assets ratio for all sampled companies in the observed years (at industry level) is 0.61. The average share of financing of assets from liabilities for all hotel companies in all observed years (at the activity level) is 39%, and the share of financing with own capital is 61%. These results suggest that the industry-wide level of borrowing is satisfactory.

In order to evaluate the performance of the business, the indicator of profitability of total assets and profitability of equity was used and analysed. The lowest average return on assets is 0.05% and the highest is 14.85%. The lowest average return on equity is 0.05% and the highest is 19.49%. A higher return on equity than return on assets indicates a positive effect of the leverage effect. There are 12 such observed companies (half of the sample). Their average return on equity is higher than the average return on assets, and it can be concluded that on average 54% of the sample of hotel companies has a favourable financing structure for business, and favourable returns on assets and capital.

Although this research has analysed in detail hotel companies in Croatia, it has some limitations: the financial statements for the entire sector are not available in the observed period, so a smaller sample of activities was analysed. Due to the lack of certain data in the financial statements of the sample companies, some indicators are omitted. The general reference coefficient sizes were used in determining the position of the considered companies as well as the average activity.

The financial stability and performance of the company in this paper was performed on the basis of selected financial indicators. Since the selected indicators do not represent the only criterion for assessing financial stability and performance, a larger number of indicators should be included in future research and ex ante data should be included in the research to predict possible future projections of the analysed business.

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Tourist´s Attitudes towards Cultural Tourist Offer in Croatian Coastal Destinations

Romina Alkier
Faculty of Tourism and Hospitality Management Opatija, Croatia
rominaa@fthm.hr

Vedran Milojica[5]
Faculty of Tourism and Hospitality Management Opatija, Croatia
vedran.milojica@gmail.com

Roberta Frey
Faculty of Tourism and Hospitality Management Opatija, Croatia

Abstract: Cultural resources represent the main and key part of an integral tourist product of a tourist destination. This has been witnessed by the fact that Cultural Tourism, as a specific form of tourism, registered a strong and powerful growth within world, and European tourism flows in particular. Through successful development of Cultural Tourist offer European countries are contributing towards further development of its tourist offer in general, and they are strengthening their country´s cultural identity through its preservation, which enables for them to be more recognizable and competitive on the tourist market. In the Republic of Croatia the most significant majority of tourist turnover is achieved in the summer period and in the coastal destinations. In order to be able to overpass this seasonal character of business of coastal destinations, it is necessary to focus attention on development of specific forms of tourism such as Cultural Tourism, considering that its services can be used and experienced throughout the entire year, and they are not conditioned by a particular seasonal period. The main purpose of this paper is to determine which are the current attitudes of tourists towards the cultural tourist offer in Croatian coastal destinations. Based on the determined results the authors will be able to propose potential directions of further improvement and development.

Key words: Cultural tourism, cultural tourist offer, Croatia, Coastal destinations

Introduction

Every destination possesses a unique cultural identity, which enables not only for (potential) tourists to percept it as unique and recognizable; it also enables formation of a uniquely recognizable and competitive tourist offer capable of achieving maximum success on the contemporary market. Acceptance and respect of the destination´s identity guarantees that tourists will percept the destination and the local population in a way that is acceptable to the local community. Also, this will increase the local population´s awareness of these particularities, which will result in not only growth of their total satisfaction with the way of life; it will encourage them to include into formation and offer of a tourist product, which is significant for strengthening the economic stability of a destination. Culture is, and needs to

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[5] Vedran Milojica is a Master of Economics and a PhD Student at the Faculty of Tourism and Hospitality Management Opatija, University in Rijeka.

be considered constantly as a destination´s identity card, respectively, a strong and important foundation for development of new and innovative tourist products, which will enable for a destination to become more recognizable and unique, and position itself strategically on the tourist market as a leading destination (Drpić et al., 2017; Jelinčić, 2010). Republic of Croatia is a country with a long tourist tradition, in which tourism represents the most important part of its economy (Zadel and Bogdan, 2013). Its tourist offer is mostly based on Bathing tourism (Zadel, 2016), which is witnessed by the fact that throughout the year the majority of tourist turnover is achieved in coastal destinations and in a summer period. However, over the years other specific forms of tourism started registering growth (Ivanović et al., 2016), one of them being Cultural tourism whose offer is based on unique particularities of Croatian cultural heritage. According to the Strategy of Development of Tourism of the Republic of Croatia until 2020, this specific form of tourist offer belongs to the group of dominant tourist products (Government of the Republic of Croatia, 2013), and as such needs to be developed further, in particular due to the fact that Croatian tourism is still mostly characterized as seasonal, and cultural tourist offer can contribute in overcoming this, respectively, tourists can visit and explore Croatian cultural beauties in (coastal) destinations during the whole year, which will finally result in numerous advantages not only for tourists and domestic population (i.e. widening their horizons through learning new information about each other´s culture and tradition, etc.), but also for the destination itself (increase of tourist turnover, higher level of recognizability and achieving competitive advantages on the tourist market). Bearing in mind the fact that Croatian tourist offer still mostly bases its tourist offer on Bathing tourism, within this paper the authors will focus on determining the significance of cultural tourism in Croatian coastal destinations, respectively on determining the attitudes of tourists towards the cultural tourist offer in coastal destinations of Croatia, to which extent culture is their motive when choosing Croatia as a holiday destination, which are their preferences in terms of choosing cultural activities, and finally the level of satisfaction with the elements of Cultural tourist offer. Based on the determined results it will be possible to rethink further developmental actions.

Cultural Tourism as a Part of a Contemporary European Tourist Product

Tourist offer based on culture has been registering strong and fast growth in recent years, due to the fact because this specific form of tourism promotes the diversification of tourism supply and demand, while at the same time preserving the destination´s (cultural) resources (Artal-Tur et al, 2018). Culture has a strong and direct influence on tourism, and vice versa, due to which cultural tourism is becoming an important motive of tourist travels. Also, a significant attention is being given to the activities in leisure and cultural consumption in the contemporary society (Dujmović, 2014,108-109; Hannam and Knox, 2010). Europe represents the key cultural tourism destination due to its possession of unique and incomparable cultural heritage such as museums, theatres, archaeological sites, historical cities and industrial sites, as well as music and gastronomy. Uniqueness and particularity of European cultural heritage significantly contributes towards enriching people´s lives, as well as inspires development of cultural and creative industries by which many destinations became recognizable over the years. It has been estimated that Cultural Tourism participates in the overall European tourism with the high 40%, respectively, that 4 out of 10 tourists tend to visit European Union countries due to its cultural tourist offer. The importance of culture

has been recognized on the European Union level, as a part of inevitable and crucial part of the European tourism experience and as an element that can enhance the profile of Europe as a global destination. The European Commission supports the areas of cultural tourism that have the greatest potential for growth, in particular by promoting a balanced approach between the needs to boost growth on one side, and the preservation of artefacts, historical sites, and local traditions on the other. All previously mentioned emphasizes the importance of further development of this specific form of tourism, with a goal of achieving generation of economic growth, employment and social cohesion. The combination of culture and tourism can be a powerful driver of economic activity (UNWTO, 2018; European Commission, n.d.). All this has been recognized on the European level, considering that European cities and regions make strong efforts towards reflecting its cultural diversity, since they have an excellent potential for turning their cultural heritage into a strategic asset. A discussion was conducted at the European Committee of the Regions' plenary session, during which Tibor Navracsics, Commissioner for Education, Culture, Youth and Sport emphasized that strengthening a common European identity and promoting social and economic cohesion are among the objectives of the European Year of Cultural Heritage 2018 and conditions to build the Europe of tomorrow. During the same session Karl-Heinz Lambertz, the president of the European Committee of the Regions emphasized the necessity of contribution of culture and education towards reinforcing the sentiment of belonging to the European Union, due to which cultural heritage must be considered as a strategic resource for Europe. He also stated that further investments in soft power (including youth, education and culture) will guarantee the achievement of more solidarity and it will contribute towards decreasing the risk of disintegration of the European identity. All these priorities need to be reflected across the different programs of the next EU budget. Due to the previously stated it has been decided that in the European Commission´s proposal for the European Union´s following Multiannual Financial Framework the existing actions which support the European culture and creativity will be included into the new Creative Europe Program with a slight budget increase. Also, doubling of the budget for Erasmus+ and reinforcing the European Solidarity Corps has been proposed by the European Commission. These instruments are included in the new Investing in People, Social Cohesion & Values cluster with a total budget of €139.5 billion (European Committee of the Regions, 2019). Previously stated implies the recognition of culture as an important developmental factor for Europe in general, and especially for tourism. According to Drpić (2018), formation of synergistic effects among culture, heritage and tourism enables formation of new, unique and recognizable tourist products based on destinations unique heritage characteristics. The diversity of offer on the world tourist market stimulates the destination management on constant rethinking of creation of new and innovative tourist products aimed towards forming and providing new experiences and motives of tourist arrivals to a certain destination. The goal of formation of new and innovative tourist products is formation of additional value for all the destination´s stakeholders as well as achieving competitive positioning on the world tourist market. Cultural tourism represents an important part of Croatia´s tourist product, due to which it is necessary to rethink the proper ways of improvement of current and formation of new elements of a Croatian cultural tourist product. In order to be able to do that, it is important to determine the precise attitudes of tourists towards elements of cultural tourist offer in the coastal destinations. In the following chapter the authors will analyze the current condition of cultural tourism of the Croatian coastal destinations.

Characteristics of Contemporary Cultural Tourist Offer in Croatian Coastal Destinations

It is a well-known fact that culture and tourism are tied with a strong and unbreakable bond, respectively, this ideal combination possesses a significant developmental potential which can contribute towards strengthening the destination´s competitiveness and attractiveness through sustainable valorization of cultural assets. Successful development of cultural tourism is twofold: appropriate use of cultural resources enables formation of an authentic tourist offer, and tourism enables investments in material and non-material heritage. Over the years cultural and creative industries have been recognized as an important factor for differentiation of a regional identity and image, as well as for promotion and branding of tourist destinations, especially those who over the years relied mostly on natural resources such as the sun, sea and sand. Through inclusion of cultural attractions and material and non-material heritage into the tourist product, tourist destinations are capable to emphasize their comparative advantages on an increasingly demanding tourist market, develop local specificities, respond properly on globalizing cultural trends, and take a competing position on the tourist market (Golja and Urošević, 2016). Despite the fact that Cultural tourism has been recognized as an important segment of contemporary tourism offer for many world destinations, its professionals are constantly faced on daily basis with the challenges how to attract cultural tourists to visit that specific destination and meet their needs and wishes in the sense of providing them meaningful experiences. In order to meet this challenge and achieve success, it is important to determine an appropriate balance between cultural and historical value of i.e. heritage sites and events, and making tourist experiences attractive, new and engaging as much as possible, but without disturbing its authenticity (den Dekker, 2017). When discussing tourism of the Republic of Croatia, it is apparent that its offer is still mostly based on sun, sea and sand (Zadel, 2016; Mikulić et al,2014), and the highest tourist turnover is achieved in the summer months. In order to overcome destination´s seasonality (Ćućić et al. 2016), it is important to focus on further development of specific forms of tourism (Ivanović et. al, 2016; Kovačić et al. 2009; Bošković and Velenik, 2004) based on Croatian tourist resources. Due to the significant richness of cultural tourist resources and them being the destination´s identity carrier (Demonja, 2013), Cultural tourism has been recognized as one of the specific tourism forms with the strong potential of development, which is why a significant attention has been given to it in terms of scientific research, i.e. how destination´s cultural heritage can contribute towards development of cultural tourist offer (Vojnović, 2015; Urošević, 2010; Dujmović and Vitasović, 2016; Matečić and Barišić, 2018; Bošković et al., 2009;) and providing unique cultural experiences (Gržinić an Vitasović, 2009). Development of a unique tourist product based on cultural resources enables a significant differentiation of a tourist product (Kesar et al., 2018; Urošević, 2013;), as well as branding a destination (Gržinić et al., 2008) and achieving the destination´s competitiveness (Drpić, 2013; 2017; 2018; Zadel, 2012). A significant attention has been given to the importance of events as a part of a cultural tourist offer (Krajnovic and Gortan-Carlin, 2017; Trošt et al., 2012), development of creative industries (Alkier et al., 2018), etc., while in particularly emphasizing the importance of sustainable development (Demonja and Gredičak, 2014; Jelinčić, 2008).
According to the Guidelines of the Strategy of Development of Tourism of the Republic of Croatia until 2020 (Ministry of Tourism of the Republic of Croatia, 2015, 4; Ministry of Tourism of the Republic of Croatia, 2013), Cultural Tourism has been enlisted in the

potentially leading product groups of Croatian tourist offer, according to the criteria of attractiveness. For Croatia, relevant products of Cultural Tourism which are defined by the Strategy include: city tourism, heritage tourism, event tourism, creative tourism and religious tourism. If placed into the relation with the fact that it has been estimated that about forty percent of all international travels include a cultural component, there is a need for more intensive and faster development of this product in order to be able to use its potential in a better way. In order to achieve that, it is necessary to form ways of systematic valorization of various forms of heritage and contemporary cultural production and identifying projects of national and regional significance and define developmental model with which culture and tourism can achieve synergistic effects.

Systematic inclusion of culture into the tourist offer can become one of the significant stimulators of economic development of Croatia, not only for the areas which until now egistered poor tourism development (Demonja and Gredičak, 2015), but also for destinations which already possess a developed tourist offer, in particular the destinations whose business is marked by the seasonality (in this case, coastal destinations). In Croatian tourism, Bathing tourism is still registering the strongest development, and is one of the most developed specific forms of tourism, based on which majority of coastal destinations form their offer. In order to reduce the effect of seasonality, it is necessary to focus on development of other specific forms of tourism whose offer can be experienced throughout the entire year, such as cultural tourism. Croatian coastal destinations are extremely rich in cultural heritage resources based on which it can provide a unique cultural tourist offer throughout the entire year. In order to be able to plan adequate development of more competitive cultural tourist offer in coastal destinations, it is necessary to observe their attitudes towards the elements of cultural tourist offer. Following the authors will present the attitudes of tourists towards Cultural tourist offer in Coastal destinations in Croatia, while primarily focusing on determining to which extent culture is the motive of their arrival to Croatia, to which extent are they interested in participating in cultural activities, which is their level of satisfaction with the same, as well as how much they spend on cultural activities. All this will be presented with the use of selected parts of TOMAS Summer attitudes and consumption of tourists in the period 2014-2017 (Institute for Tourism Zagreb, 2015; Institute for Tourism Zagreb 2018).

Table 1: Motive of arrival of tourists to coastal destinations in Croatia in 2014 and 2017

Motive	2014	2017 %	2017/2014
Getting acquainted with cultural sights and events	6,6%	12,3%	+5,7%
Religious reasons	0,2%	1,0%	+0,8%

Source: Institute for Tourism (2015, 36; 2018, 31)

The data in the previous table indicate that tourists have recognized Croatia as a destination with a rich cultural heritage, and choose to visit it in order to get more acquainted with cultural sights and events which is proven with a 5,7% increase registered in 2017 in relation to the year 2014. However, religious reasons take a very small share (extremely low 1%, respectively a +0,8% of increase in relation to the year 2014).

Table 2: Activities during stay in a destination

Activities	2014 %	2017 %	2017/2014
Sightseeing	65,0%	25,7%	-39,3%
Visiting museums and exhibitions	34,9%	14,0%	-20,9%
Visiting concerts	30,7%	10,3%	-20,4%
Visiting theatres and manifestations	23,1%	7,6%	-15,5%

Source: Institute for Tourism (2015, 46; 2018, 41)

Table 3: Satisfaction with elements of tourist offer in a destination

Elements of an offer	2014	2017	2017/2014
Quality of marking sights	Low	Medium	Increase
Presentation of cultural heritage	Medium	Medium	No change
Diversity of cultural manifestations	Low	Low	No change

Source: Institute for Tourism (2015, 50; 2018, 46)

Unlike the positive results presented for the motive of visit, the indicators presenting the undertaken cultural activities during tourist´s stay in a coastal destination are very discouraging and unsatisfying considering that they register a significant decrease in a three year period, the highest being interest for sightseeing, followed by visiting museums and exhibitions, concerts, and finally theatres and manifestations. All this is consistent with the expressed level of satisfaction with the cultural elements of coastal tourist destinations which is also registering poor results; in a three year period the satisfaction with the quality of marking the sights has been increased from low to a medium level, while presentation of cultural heritage and diversity of cultural manifestations registered no change; tourists have shown a medium level of satisfaction with the presentation of cultural heritage, and a low satisfaction with the diversity of cultural manifestations.

In 2017 total daily consumption of tourists per person was 78,77 EURO, which is an increase of 18,70% in relation to 2014, when the consumption was 66,36 EURO. In 2017 tourists spent approximately 2,72 EUR daily on cultural activities and entertainment, which is a decrease in relation to 2014 when the consumption amounted totally 3,99 EUR (Institute for Tourism, 2015, 58; 2018, 52).

Previously presented indicates that in Croatian coastal destinations Cultural tourism hasn´t reached the development level which it truly deserves, despite of these destinations being rich in cultural-historical resources and tradition. In order to improve their business, as well as reduce the seasonality, further developmental actions need to be undertaken for Cultural tourism development. In the following chapter the authors will present the proposal of developmental actions of cultural tourism development in Croatian coastal destinations.

How to improve Current Cultural Tourism Offer in Croatian Coastal Destinations? Proposition of Guidelines

Based on the research results presented in the previous chapter the authors present the following developmental guidelines of Cultural tourist offer in Croatian coastal destinations

(Zadel et al, 2018; CBI Ministry of Foreign Affairs, 2018; The Official Website of the Tourist Board of Rijeka, 2015):

- It is necessary to enable adequate positioning of Croatian coastal destinations on European and world tourist market through appropriate valorization of cultural resources (greater openness of spaces of cultural importance with a goal of attracting greater number of visitors and increasing their level of satisfaction;
- Define a precise model of preservation of cultural heritage, clearer marking of the sights in order to make it easier for tourists to visit it;
- Enable further improvement of the coastal destination´s integral tourist product through further improvement of their Cultural tourist offer (development and offer of organized and individual sightseeing tours of cultural monuments and buildings under the guidance of professionals and in foreign languages, organization of cultural workshops, planning and developing programs of various and diverse cultural events based on destination´s heritage and history);
- Provision of top quality education of tourist guides and other personnel in charge of developing destination´s cultural tourist offer through lifelong learning programs;
- Undertaking market research to determine their attitudes, and undertaking appropriate marketing activities through strategic and marketing planning, as well as promotion, etc.;
- Conducting continuous coordinated actions of all activity carriers of tourist offer of Cultural Tourism and networking of stakeholders.

Conclusion

The primary aim of this paper was to emphasize the importance of Cultural tourism as a part of contemporary tourist offer in Croatian coastal destinations, and the current tourist´s attitudes towards it. The presented attitudes indicate a significant interest of tourists in getting more acquainted with the cultural tourist offer in coastal destinations of Croatia, however their needs are not met, which is witnessed by the strong decrease of the interest in participating in the cultural activities while staying in a coastal destination, unsatisfactory level of satisfaction with the cultural tourist offer elements, as well as the extremely poor consumption on cultural tourist offer. As previously mentioned in this paper, Croatia is a destination with a rich cultural-historical history and tradition, and as such possesses all the preconditions for developing this specific form of tourism which would contribute strongly in reducing the seasonality of coastal destinations, as well as achieving competitiveness on the European tourist market. In order to be able to achieve further development, it is necessary to continue observing the tourist´s attitudes as well as to implement the proposed developmental guidelines.

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Tourist´s satisfaction with the Nautical Tourism Offer in function of achieving Destination´s Competitiveness

Danijel Drpić
University of Polytechnic
ddrpic@veleri.hr

Merdžana Obralić
University of Sarajevo, Faculty of Administration-joined member
merdzana.obralic@fu.unsa.ba

Vedran Milojica[6]
University of Rijeka, Faculty of Tourism and Hospitality Management Opatija
vedran.milojica@gmail.com

Abstract: For the Republic of Croatia tourism represents an essential branch of economic sustainability and insurance for sustainable economic growth. According to its characteristics, tourism also represents one of the most fragile branches strongly influenced by changes in its surrounding such as legislative solutions, organizational structure of tourist offer carriers, crisis, tourist trends, and similar. Besides its positive effects on country´s economic development, tourism represents a threat to the preservation of resource basis (a foundation of tourism´s development), if not formed in a sustainable way. Nautical tourism represents a specific form of tourism which registers constant growth, and its demand is marked by heterogeneity, economic power and the desire for top quality tourist offer. In order to be able to provide top quality service for the yachtsmen, it is necessary to observe to which extent they are satisfied with the elements of Nautical tourist offer. Only through provision of high quality offer it is possible to form an adequate image and achieve competitiveness on the tourist market, which will also result in destination´s economic sustainability. Successful development of Nautical tourism offer provides an opportunity of integration of local community´s maritime tradition into the tourist product with a goal of its preservation. Through previously mentioned it is possible to achieve multiple benefits for the destination-recognizability, uniqueness of the offer, growth of the destination´s competitiveness, etc. The purpose of this paper is to present the current state of Nautical tourist offer of the Republic of Croatia with the use of appropriate qualitative and quantitative data gathered from the secondary sources. The primary aim is to contribute towards increasing even greater level of satisfaction and strengthening the destination´s competitiveness on the tourist market. Based on the findings the authors will propose the developmental guidelines for further sustainable development of tourist offer with a goal of permanent preservation of resource basis, increasing the level of satisfaction, and destination competitiveness on the tourist market. The authors will also present the model Maritime Croatis, whose goal is to emphasize the need of greater level of synergy among all the destination stakeholders, in order to achieve all the previously stated activities.

Keywords: Nautical Tourism, tourist´s satisfaction, competitiveness, sustainability, management of Nautical Tourism

Introduction

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[6] Vedran Milojica is a Master of Economics and a PhD Student at the Faculty of Tourism and Hospitality Management Opatija, University in Rijeka.

Globalization processes have made a strong impact on tourism offer development over the years (Pavlić et al, 2011; Alkier, 2019; Blažević et al., 2009), which manifested in significant changes in tourist demand and tourist´s motives which are constantly shaping and forming today´s tourism. Time period from the nineties of the twentieth century until today were marked with a significantly demanding tourist demand. Contemporary tourists are no longer satisfied with the uniformed offer but are searching for a holiday adjusted to their individual needs (Gračan et al., 2011), respectively they are increasingly interested in specific forms of tourism, and one of them being on the rise is Nautical Tourism. Today´s coastal destinations are utterly aware of the necessity and advantages of developing this valuable specific form of tourism based on destination´s tourist resources, and many of them are developing it, considering that its specificity based on natural and other tourist resources enables them the enrichment of total destination´s offer, diversification on the tourist market, achieving and attracting of tourists with high purchasing power (Gržinić and Saftić, 2011). As a destination with a long-term and strong maritime tradition, Croatia has recognized significant and strong potential for development of a competitive offer of Nautical Tourism and is constantly developing it. Croatia´s unique natural potential enables for it to take a very high and competitive position on the European and world nautical tourism market (Jugović et al., 2013). In order to be able to determine the stage of current development of Nautical Tourism offer, as well as to plan its future development, it is mandatory to find out if there were any positive movements in development of Nautical Tourism offer. In order to do so, the authors will present the selected parts of TOMAS Nautika research results for the year 2017 (Institute for Tourism Zagreb, 2018), while primarily focusing on their satisfaction which represents one of the most important factors of future destination´s revisit, as well as achieving competitiveness on the tourist market.

Theoretical background

Characteristics of Nautical Tourism in Europe and Croatia

In Europe, boating industry belongs among the most dynamic and competitive sectors, and is a significant contributor to its economy. Richness of its resources, such as 37,000 km of inland waterways and more than 70,000 km of coastline enables for Europe to provide a perfect environment for 48 million of European citizens to participate regularly in recreational marine activities, as well as a large number of tourists. Over 6 million boats are kept in European waters while 10,000 marinas provide over 1 million berths both inland and in coastal areas. It has been registered that approximately one in ten citizens of the European Union (48 million) practice water sports on regular basis, of which 36 million practice boating activities. Provision of services related to Nautical Tourism such as repairment of the equipment, boat charter, marinas and others generate s significant number of jobs and revenue. In total, the EU's nautical tourism sector comprises up to 234 000 jobs and generates € 28 billion in revenue each year (European Boating Industry, 2018 according to ICOMIA 2018; European Commission, 2017). All the previously mentioned had a significant impact on development of Nautical Tourism which has over the years been experiencing a very strong demand, and in the Mediterranean in particular (Gračan et al., 2006; Gračan et al., 2007), which placed a significant challenge in front of destination planners in terms of its offer

development. In order to be able to plan and develop a competitive Nautical Tourism offer, it is necessary to rethink constantly how well are nautical tourism destinations meeting the current tourist demand both in terms of capacity and quality of tourist offer (Horak et al., 2006). Gračan et al. (2011) also emphasize in their research that greater and greater number of tourists are becoming more and more oriented on spending their holiday at the seaside, not just for sunbathing anymore; those with the possibilities are passing on open sea surfaces in order to sail, recreate and practice water sports, all with a goal of active holiday and running from everyday life. Croatia is a world known Mediterranean country with a significant tradition of tourist offer development, which has over the years been focusing on development of specific forms of tourism, one of them being Nautical tourism, whose offer is developed on a strong resource basis, of which it is possible to emphasize one of the indented coastlines in the Mediterranean, morphology of the Adriatic, clear sea, mild climate with over 2,500 hours of sun on the northern part of Adriatic, cities and places with a autochthonous architecture and built harbors, large number of protected coves, geographical position, layout of ports which enables multiple sailing a day, rich cultural historical heritage, protected and untouched nature, etc.

In Croatia there are 56 marinas which are all joined in the Society of Croatian Marinas of a capacity of 16,000 berths in the sea and 8,500 berths on the mainland, and additionally 30,000 berths in ports and sports ports. All the marinas are constantly investing efforts towards enriching and increasing the level of service quality, and are adapting to the needs and wishes of contemporary boaters. All of them are situated in greater Dalmatian cities or beautiful island coves, in the vicinity of the most interesting natural and cultural attractions. Many of the ports have invested in renewing the facilities, from top quality traditional cuisine, obligatory water and electric supply, health clinics, services of charter companies, using the suites, electronic supervision and security of guest´s property. Also, greater and greater number of marinas are receiving the International Blue Flag which represents an ecological reward for a project of protection of sea and coast of the International Foundation for Education for the Environment (FEE) which has been conducted successfully for the last 13 years. Also, it is necessary to mention the Adriatic Croatia International Club, also known as the ACI Club, is the leading company of Croatian Nautical Tourism, and as such represents a unique chain consisting of 21 marinas. The ACI Club has been successfully doing business for 22 years, during which it has managed to achieve a recognizable level of service quality, along with the tendency of trying to develop and popularize sailing and architectonic markings (Croatia Yachting, 2019). The following table presents the characteristics of tourist offer of Croatian Marinas.

Table 1: Characteristics of offer of Marinas in the Republic of Croatia

Name of the Marina	Location	Characteristics of the offer
Marina Umag	Umag, Istrian County	518 berths in the sea and 120 spaces for accommodation on the dry dock, all equipped with water and electricity supply; Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), laundry service, grocery store, repair shop, 50 t mobile crane, car parking, seasonal border crossing and harbor master's office at the top of the marina's eastern dock,

		year-round border crossing at the main port, fuel pump next to the marina (200 m). The marina has one of the main ADAC and AMTC boaters' service points.
Marina Laguna Novigrad	Novigrad, Istrian County	120 berth in sea, and 50 spaces for accommodation on dry dock, all equipped with water and electricity supply, possibility of docking of vessels of length up to 1,5m; Reception and exchange office, grocery and nautical equipment stores, repair shop, 12 t crane. The fuel station located in the marina and in the immediate vicinity there are hotels with all facilities.
Marina Červar Porat	Červar Porat, Istrian County	259 berths in the sea for boats of length of 3 to 25 m, all equipped with water and electricity supply; Reception desk, exchange office, two sanitary facilities with hot water (toilets and showers), restaurant, hotel, tourist agency, grocery and nautical shops, repair shop, crane with a capacity of 15 t. Parking is located within the marina.
Marina Poreč	Poreč, Istrian County	120 berths in the sea, and 150 spaces for dry docking, all equipped with water and electricity supply; Tourist and catering offer, sports and recreational facilities, reception, exchange office, sanitary facilities (toilets and showers), repair shop, crane 5 t capacity, parking. The fuel pump is located in the marina.
Marina Parentium	Poreč, Istrian County	200 berths in the sea and 50 spaces for dry docking for vessels of length from 3–20 m and maximum 5 m draft, all equipped with water and electricity supply; Reception desk, exchange office, restaurant, grocery, sanitary facility with hot water (toilets and showers), repair shop, crane with a capacity of 10 t, parking. Vicinity of hotels, post office, medical service and sports fields.
Marina Vrsar	Vrsar, Istrian County	220 berths in the sea and 40 spaces for dry docking, all equipped with water and electricity supply. Possibility of acceptance of larger yachts. Reception desk, exchange office, restaurant, café, grocery, sanitary facilities (toilets and showers), repair shop, 30 t crane, parking. The fuel pump located in the marina.
Marina Valalta	Rovinj, Istrian County	180 berths on each side of the breakwater and along the seafront. Reception desk, water and electricity connection, grocery store, small boat lift, sports airport.
ACI Marina Rovinj	Rovinj, Istrian County	380 berths in the sea and 40 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), repair shop, 10t crane, driveway, car parking, grocery and nautical equipment shop. The nearest fuel pump 500 m away, located in the northern part of the city port (sea depth 4 m).
ACI Marina Pula	Pula, Istrian	200 berths in the sea, and 80 spaces for dry docking, all

	County	equipped with water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), repair shop, 10t crane, parking for cars, car rental agency. The fuel pump located on a small dock to the marina. Branches of the Harbor Master's Office and Customs located nearby.
Tehnomont Marina Veruda	Pula, Istrian County	630 berths in the sea (possibility of berthing for mega-yachts up to 40 m), and 150 spaces for dry docking, all equipped with water and electricity supply. Reception, exchange office, restaurant, sanitary facilities (toilets and showers), grocery store, nautical equipment store, repair shop, lifting capacity 15 t, parking. The fuel pump located in the marina.
Aci Marina Pomer	Pomer, Istrian County	220 berths in the sea and 30 spaces for dry docking, all equipped with water and electricity supply. Reception, exchange office, restaurant, sanitary facilities (toilets and showers), grocery store, nautical equipment store, repair shop, 10t crane lift, parking for passenger cars. The nearest grocery store 700 m away.
Marina Admiral	Opatija, County of Primorje-Gorski kotar	160 berths in the sea and 40 spaces for dry docking, all equipped with water and electricity supply. Reception and exchange office, all facilities of the hotel "Admiral"-restaurant, tavern, indoor pool, sauna, massage, hairdresser and beauty salon, garage. The gas station and Harbor Master's Office are 0.5 m from the marina.
Aci Marina Opatija Icici	Opatija, County of Primorje-Gorski kotar	300 berths in the sea, and 30 spaces for dry docking, all equipped with water and electricity supply. Reception, exchange office, restaurant, café, toilet (toilets and showers), laundry service, grocery store, nautical equipment and clothing store, souvenir shop, repair shop, crane with a capacity of 15t, driveway, parking for cars. The fuel pump located in the city port of Opatija (2 nm).
Marina Punat	Punat, County of Primorje-Gorski kotar	900 berths in the sea, and 500 spaces for dry docking, all equipped with water and electricity supply. Dry Marina "Brodica" disposes with additional 300 berths on the mainland. Reception, exchange office, restaurant, luxuriously decorated hotel "Kanajt", internet cafe, grocery store, nautical equipment store, sanitary facilities (toilets and showers), car parking, repair shop, 10t crane lift, trolley, mobile crane 50 t, slip 20t, air-conditioned boat paint hall. The fuel pump 2 nm away.
ACI Marina Cres	Cres, County of Primorje-Gorski kotar	450 berths in the sea and 120 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, café, toilet (toilets and showers), laundry service, grocery store, nautical equipment store, dental office, repair shop, 10t crane, 30t mobile crane, mast removal needle (20 m), parking for passenger cars and a

		fuel pump in the northern part of the marina. Accommodation in eight comfortable apartments.
ACI Marina Supetarska Draga	Rab, County of Primorje-Gorski kotar	270 berths in the sea and 50 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), grocery store, repair shop, 10t crane lift, driveway, car parking. The nearest fuel pump located in the ACI marina Rab (11 nm).
ACI Marina Rab	Rab, County of Primorje-Gorski kotar	140 berths in sea, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), grocery store, repair shop, car parking, fuel pump.
Marina Mali Losinj	Mali Lošinj, County of Primorje-Gorski kotar	150 berths for yachts up to 20m. Reception desk, water and electricity connections, sanitary facilities (toilets and showers), hotel, restaurant, cafe bar, laundry service, minimarket, fuel pump, repair services.
ACI Marina Šimuni	Kolan, County of Zadar	175 berths in sea and 30 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), grocery store, repair shop, lifting crane capacity of 15t, boat ramp up to 8 m in length, parking for cars. The nearest fuel pump located in the city port of Novalja (7 nm).
Marina Ist	Ist, County of Zadar	66 berths, more precisely, the marina possesses buoys. Reception, electricity and water connections, sanitary facilities, exchange office and several restaurants in the village.
Marina Borik	Zadar, County of Zadar	220 berths in sea and 70 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, coffee bar, sanitary facilities (toilet and showers), private beach, tennis courts, mini golf, fitness center, repair shop, 5t crane lift, slip, 40t auto crane lift. Vicinity of banks, shops, private restaurants and apartments. The fuel pump one nm away.
Marina Vitrenjak	Zadar, County of Zadar	250 berths. Electricity and water supply, showers, parking and exchange office. Other facilities available at the nearby Borik marina in Zadar. The marina has 2 cranes (2.5t and 5.5t.)
Tankerkomerc Marina Zadar	Zadar, County of Zadar	300 berths in sea and 200 spaces for dry docking, all equipped with water and electricity supply. Reception and exchange office, restaurant, snack bar, nautical equipment stores, high capacity ice machine, sanitary facilities (toilets and showers), parking and garages, rent-a-car, repair shop, cranes with a capacity of 6.5 Mp and 15 Mp, automatic loading 50 Mp.
Tankerkomerc Marina Veli Iz	Veli Iz, County of Zadar	50 berths in sea and 4000 m2 of space for storing vessels on the mainland. All berths are equipped with water and electricity supply. The fuel pump is four nm away. Reception desk, exchange office, restaurants and cafes, sanitary

		facilities (toilets and showers), grocery store, repair shop, 50 t automatic crane, construction and repair of wooden boats.
Marina Dalmacija Zlatna Luka	Bibinje-Sukosan, County of Zadar	1200 berths in sea and 500 spaces for dry docking, all equipped with water and electricity supply. Reception, exchange office, restaurants and cafes, groceries and nautical equipment store, sanitary facility (toilets and showers) parking with individual garages, regatta center, laundry service, repair shop, 30 t crane lift, 65 t crane lift. The fuel pump located in the marina.
Marina Kornati	Biograd na moru, County of Zadar	600 berths in sea and 60 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, captain's club, grocery store, nautical equipment store, repair shop, 10t capacity crane, 70t mobile crane, charter service with more than 80 yachts, parking.
Marina Sangulin	Biograd na moru, County of Zadar	200 berths in sea and 10 spaces for dry docking, all equipped with water and electricity supply. Reception and exchange office, sanitary facilities (toilets and showers). In the immediate vicinity of the marina there are restaurants, supermarkets, post office, gas station, pharmacy, harbor master's office, repair shop, crane with a capacity of 12 t. The fuel pump located in the marina.
ACI Marina Zut	Jezera, County of Šibenik-Knin	120 berths in sea. Boats with draft greater than 3 m are moored along the entire eastern part of the pier, or at its very west end. Berths equipped with electricity and water connection. Water connection for the needs of the vessel limited. Reception desk, exchange office, restaurant, telephone, sanitary facilities (toilets and showers), grocery store, possibility of supplying necessary supplies of water. The closest fuel pump located in the port of Zaglav on Dugi otok (8 nm).
Marina Betina	Betina, County of Šibenik-Knin	180 berths in the sea and 90 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), repair shop, crane of lifting capacity 20t, mobile crane of lifting capacity 260 t, the fuel pump 0.3 nm away.
Marina Hramina	Murter, County of Šibenik-Knin	400 berths in the sea and 250 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, hotel with 10 rooms of semi-apartment type, telephone, laundry service, grocery and nautical equipment store, sanitary facilities (toilets, showers), gas filling station, workshop, 15t crane, 50t mobile crane, access for small boats, rent a boat. In the immediate vicinity a fuel station, port office, bank, post office, various shops and services, restaurants, dispensary, pharmacy, hotel, etc.
ACI Marina Jezera	Donji Kraj,	200 berths in sea and 35 spaces for dry docking, all equipped

	County of Primorje-Gorski kotar	with water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), repair shop, 10t crane, parking for cars, sailing school (Academia Navalis Adriatica), boat rental-Sun Adriatic Yacht Charter. The fuel pump located on the marina's work plate.
ACI Marina Piskera	Jezera, County of Šibenik-Knin	150 berths in sea. Sea depth on the piers amounts 2,5–3,5 m. Berths are equipped with water and electricity connections. Water supply of the needs of the vessel is limited. Reception desk, exchange office, restaurant, telephone, sanitary facilities (toilets and showers), grocery store, possibility of supplying necessary supplies of water. The nearest fuel pump at the port of Zaglav on Dugi otok (12 nm).
ACI Marina Skradin	Skradin, County of Šibenik-Knin	200 berths in sea equipped with electricity and water connection. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), car parking. The nearest fuel pump in the Šibenik city port (8 nm).
NCP Marina Madalina	Šibenik, County of Šibenik-Knin	350 berths in sea equipped with electricity and water connection. Reception desk, internet point, WLAN, exchange office, ATM machine, pizzeria & cafe bar, sanitary facilities (shower and toilet), ice machine, children's playground, mini market, parking, sailing and motor yacht rental, sailing school, sports club, regatta organization , taxi, rent-a-car, van transfers to the center of Sibenik and the shopping center, transfers by sea, laundry and boat supply on request.
ACI Marina Vodice	Vodice, County of Šibenik-Knin	415 berths in sea and 90 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), laundry service, repair shop, 10t crane, 40t mobile crane, carriageway, car parking, boat rental-AYC (Adria Yacht Center). The fuel pump located on the outside of the breakwater, which protects the marina from southerly winds.
Marina Tribunj	Tribunj, County of Šibenik-Knin	260 berths in the sea and 150 spaces for dry docking, all equipped with water and electricity supply, as well as cable tv and internet. Reception, exchange office, Pink-Keel Irish Pub-a large selection of food and drinks, superbly equipped apartments and rooms (air conditioning, TV, jacuzzi, underfloor heating), laundry with washers and dryers, workshop, travel lift 80 t, parking, dry berths, gas station, 24 hour security of the marina.
Marina Kremik	Primosten, County of Šibenik-Knin	265 berths in sea and 150 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, grocery store, repair shop, 5t capacity crane, 30t mobile crane, 50t capacity slip, taxi service on request, parking. The fuel pump located in the marina. Yacht charter.

Marina Frapa	Rogoznica, County of Šibenik-Knin	300 berths in sea and 150 spaces for dry docking, all equipped with water and electricity supply. Reception, exchange office, within the marina there are luxuriously furnished apartments, restaurants, wine cellar, champagne bar, captain's club, grocery and nautical shops, patisserie, pizzeria, toilet (toilets and showers), and parking. The fuel pump located in the marina.
Marina Agana	Marina, County of Split-Dalmatia	200 berths in sea and 100 on the mainland. Electricity & water connection, laundry service, parking, restaurant, bar, supermarket, toilets, 40 t cargo lift.
ACI Marina Trogir	Trogir, County of Split-Dalmatia	180 berths in sea and 60 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), grocery store, repair shop, 10t crane lift, parking for passenger cars. The fuel pump located at the west end of the marina.
Marina Zirona	Drvenik Veli, County of Split-Dalmatia	140 berths. The marina is still without facilities. Near the Marina is a restaurant. Other facilities are available nearby in place.
Marina Kastela	Kastel Gomilica, County of Split-Dalmatia	420 berths in sea and 200 on the mainland. Reception desk, electricity and water connection, toilet, restaurants, shop, parking, cargo crane up to 60 tons.
ACI Marina Split	Split, County of Split-Dalmatia	360 berths in sea and 120 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, snack bar, sanitary facilities (toilets and showers), grocery and nautical shops, repair shop, crane with a capacity of 10t, driveway (35t), parking for cars. Year-round border crossing at the city port. Fuel station in front of the "Marjan" Hotel (100 m). The marina has one of the main ADAC and AMTC boaters' service points.
ACI Marina Milna	Milna, County of Split-Dalmatia	170 berths in sea and with 20 spaces for dry docking. All marina piers are completely refurbished, and berths equipped with water and electricity connections. Reception desk, exchange office, restaurant, café, sanitary facilities (toilets and showers), repair shop, lift 10t. The fuel pump located west of the shipyard specialized in repairing wooden ships (500 m). Several grocery stores, a grocery store and a butcher shop just off the town dock.
Marina Tučepi	Tucepi, County of Split-Dalmatia	50 berths. Reception, water and electricity connection, telephone, sanitary facilities, restaurants and shops, crane.
Marina Podgora	Podgora, County of Split-Dalmatia	220 berths. Electric and water connections, boat lift.
ACI Marina	Vrboska,	85 berths in sea and 30 spaces for dry docking, all equipped with

Vrboska	County of Split-Dalmatia	water and electricity supply. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), repair shop, 5t crane, parking for cars. Fuel pump next to the crane. Possibility of shopping in the city (300m).
ACI Marina Palmizana	Hvar, County of Split-Dalmatia	160 berths in sea equipped with water and electricity connection. Reception desk, exchange office, restaurant, sanitary facilities (toilets and showers), grocery store. The nearest fuel pump (2.5 nm) located in the town port of Hvar (Križna luka).
ACI Marina Korcula	Korcula, County of Dubrovnik-Neretva	135 berths in sea and 15 spaces for dry docking, all equipped with water and electricity supply. Reception desk, exchange office, restaurant, restroom, laundry service, grocery store, repair shop, 10t crane lift, parking for passenger cars. The fuel pump located about 0.5 mile east of the harbor, next to the ferry dock. Possibility of staying in 11 comfortable apartments in the marina.
Marina Lumbarda	Lumbarda, County of Dubrovnik-Neretva	50 berths. Water connections and standing, freight elevator.
Marina Orebic	Orebic, County of Dubrovnik-Neretva	240 berths
ACI Marina Dubrovnik "Miho Pracat"	Dubrovnik, County of Dubrovnik-Neretva	450 berths in sea and 110 spaces for dry docking, all equipped with water and electricity supply. Reception, exchange office, café, tennis courts, swimming pool, sanitary facilities (toilets and showers), laundry service, grocery store, nautical equipment store, repair shop, 60t mobile crane, parking for cars. Fuel and gas pump (500 m). Year-round border crossing in the port of Gruz. One of the main ADAC outlets and AMTC for boaters within the Marina.

Source: Croatia Yachting, (2019)

The data presented in the previous table presents the current capacities of Croatian marinas. Gathered information indicate that a significant majority of mentioned marinas disposes with an appropriate number of berths as well as the necessary facilities within it such as water and electricity connection, repair service, restaurant services and many others, which significantly contributes to the level of satisfaction of boaters. In the following part of this chapter, and with the use of appropriate quantitative and qualitative indicators, the authors will present the state of Croatian Nautical tourism.

Table 2: Vessels on permanent berth in harbors of Nautical Tourism according to the flag of the vessel in the period 2013-2018

	2013	2014	2015	2016	2017	2018	2018/2013
Total	13.735	13.793	13.399	13.422	13.433	13.617	99.14
Vessels for which only berth in the sea was used	11.605	11.664	11.487	11.756	11.641	11.742	101.18
Vessels for which only place on the mainland was used	2.130	2.129	1.912	1.666	1.792	1.875	88.03
Austria	2.043	1.993	1.904	1.977	1.917	1.851	90.60
Belgium	51	53	69	75	82	68	133.33
Czech Republic	142	135	130	139	146	172	121.13
Finland	11	7	7	11	11	12	109.09
France	87	73	90	100	138	164	188.50
Greece*	N.D.	1	1	2	2	1	…
Croatia	4.456	4.957	5.013	5.039	4.944	5.172	116.07
Italy	694	635	601	591	545	496	71.47
Israel	5	4	3	2	1	1	20
Hungary	149	129	129	113	112	130	87.25
Netherlands	136	139	132	138	173	180	132.35
Norway	28	23	25	21	25	28	0
Germany	1.862	1.840	1.748	1.863	1.858	1.781	95.65
Poland	88	90	104	101	119	159	180.68
Russia	9	11	6	7	6	4	44.44
USA	344	193	147	131	117	95	27.62
Slovakia	156	155	152	154	153	206	132.05
Slovenia	640	598	601	575	578	599	93
Sweden	42	40	40	47	43	38	90.48
Switzerland	75	81	69	80	77	73	97.33
United Kingdom	320	281	268	302	304	261	81.56
Other European countries	132	132	135	139	153	149	112.88
Other non-European countries	135	94	113	149	137	102	75.55

Source: State Bureau for Statistics: Nautical Tourism Capacities and Business of harbors of Nautical Tourism in the period 2013-2018, retrieved from www.dzs.hr
Notes: N.D.-no data available for the requested period; *No data was available for Greece in 2013, due to which it was not possible to conduct a comparison.

In a five year period there was a minor decrease of total number of vessels on permanent berth in harbors of Nautical Tourism according to the flag of the vessel amounting 0.86%. Number of vessels for which only berth in the sea was used registered an increase of 1.18%, while there was a decrease of vessels for which only place on the shore was used (-11.97%). In terms of number of vessels according to the flag, the following countries register an increase in a five year period: Belgium (+33,33%), Czech Republic (+21,13%), Finland (+9,09%), France (+88,50%), Croatia (+16,07%), Netherlands (+32,35%) Poland (+80,68%), Slovakia (+32,05%), and other European countries (+12,88%). Norway did not register any changes, and for Greece there was not possibile to make a comparison considering that there was no available data for year 2013.

Table 3: Achieved income of ports of Nautical Tourism without VAT in the period 2013-2018 in thousands of Croatian Kuna

	2013	2014	2015	2016	2017	2018	2018/2013
Republic of Croatia	686.660	716.555	753.412	768.938	855.166	856.550	124.74
Renting berths	504.746	527.811	519.360	539.210	598.191	618.150	122.47
Permanent berths	403.887	424.090	416.154	422.755	469.601	483.553	119.72
Transit berths	100.859	103.721	103.206	116.455	128.590	134.597	133.45
Repair services	48.974	48.340	57.185	60.202	65.862	69.761	142.44
Other incomes	132.940	140.404	176.867	169.511	191.113	168.639	126.85

Source: State Bureau for Statistics: Nautical Tourism Capacities and Business of harbors of Nautical Tourism in the period 2013-2018, retrieved from www.dzs.hr

The results for achieved income of ports of Nautical Tourism without VAT are registering a positive trend of growth in the period 2013-2018, respectively a total increase of 24,74%. According to the individual services, the highest growth was registered for repair services (+42,44%),berth of vessels in transit (+33,45%), other incomes (+26,85%), renting berths (+22,47%) and permanent berths (19,72%).

Following in this chapter the authors will present the selected parts of the most recent research TOMAS Nautika 2017 (Institute for Tourism Zagreb, 2018) in order to present the most recent profile of boaters, while in particularly focusing on the level of their satisfaction with the services of Croatian Nautical Tourism. According to the research results, the majority of contemporary boaters belong to the age group 36–45 (29,4%), followed by 46–55 (25,8%), 26–35 (21,1%), 56 and more (16,6%), and the lowest share belongs to the age group up to 25 (7,1%). A significant majority is highly educated with a finished faculty and more (50,6%), 36,3% of them have a junior college degree, and 13,1% have high school or lower. The results for their monthly income are very satisfactory; 26,9% of the respondents possess a monthly income between 3.501–3.500 EURO, followed by 3.001–3.500 (17,3%), 5.001-7.500 (13,7%), etc. In terms of frequency of visiting Croatia, the majority of the respondents visited Croatia for the first time (31,5%), however, those who have visited before are showing significant loyalty towards Croatia as a nautical destination; 27,1% of them visited Croatia 6 and more times, followed by 3–5 times (23,2%), while 18,2% of them visited Croatia two times so far. In terms of researching for information about Croatian Nautical tourist offer, internet remained the leading source of information (38,4%) which is not surprising if taken

into consideration that over the years globalization significantly influenced the development of Information and Communication technology, and its application in tourism and hospitality industry. In terms of choosing sources of information when browsing the Nautical tourism offer, it has been registered that boaters prefer to rely on previous stay in Croatia (31,1%), as well as recommendation of relatives and friends (23,7%) which has proven that positive word of mouth is still belongs among one of the most efficient forms of promotion. When observing the company during their travel, the majority prefers to travel with family members (36,8%), while 35,3% prefer to enjoy the company of just their partner (35,3%), or with friends and acquaintances (23,8%). The lowest share of boaters stated the preference of traveling with an organized group (3,2%) or alone (0,9%). When observing the duration of their stay, 59,4% of boaters prefer to stay in Croatia in duration of 4-7 days, followed by 8–14 days (26,3%), while 7,7% prefer to stay 15–21 day, 4,6% 22 and more days, and 2% prefer 1–3 days (Institute for Tourism, 2018).

Table 4: Activities of boaters during their stay in the Republic of Croatia in 2017

Activities	%
Visiting restaurants	95.9
Shopping	84.2
Visiting pastry shops, coffee shops, etc.	53.2
Scuba diving	47.9
Walks in nature (hiking)	40.2
Fishing	33.8
Visiting national parks/protected natural areas	33.0
Visiting the sights, museums and exhibitions	32.1
Other sports activities in the sea (besides swimming and bathing)	30.6
Visiting the local parties	29.9
Dance or disco	20.2
Sports activities on the land	15.8
Visiting concerts, theatre, and manifestations	14.6
Visiting theme/water parks	11.0
Visiting wine and olive oil roads	8.7

Source: Institute for Tourism (2018, 38)

The previous table shows the preferred activities of boaters during their stay in Croatia. They show a very high interest for exploring the destination´s authentic gastronomic offer (95,9%), as well as shopping (84,2%) and visiting pastry and coffee shops (53,2%) which is of high importance for destination, because this significantly contributes to the higher tourist consumption. They show a bit lower interest in participating in sports activities such as scuba diving (47,9%), hiking (40,2%) and fishing (33,8%), while for other activities such as visiting concerts, theatre and manifestations (14,6%), visiting theme/water parks (11,0%) as well as wine and olive oil roads (8,7%) they showed less interest.

Table 5: Evaluation of the level of satisfaction of tourists with the elements of the Nautical Tourism offer in the Republic of Croatia

Elements	Level
Beauty of the nature and landscape	Very high
Personal safety	Very high
State of the boat (correctness, tidiness, equipment, etc.)	Very high
Staff service in the marinas	Very high
Acceptance in the marina**	Very high
Richness of gastronomic offer in the destinations	Very high
Traffic availability of the starting port	Very high
Spatial layout of the marinas	Very high
Water supply (cold and warm) in marinas	Very high
Accessibility of water and electricity connections in marinas	Very high
Ecological preservation	Very high
Availability of information in marinas about the tourist offer of the destination	Very high
Reception at the airport **	Very high
Total offer for yachtsmen	Very high
Arrangement and cleanliness of the environment in marinas	Very high
Moorings (width, correctness)	Very high
Quality of technical repair service (speed of repairs) in the marinas	Very high
"Value for money" of total offer for the yachtsmen	High
Diversity of cultural manifestations	High
Quality of restaurant services in the marinas	High
Diversity of entertainment facilities	High
Sanitary facilities in marinas	High
Richness of sports facilities in the destinations	High
Possibility of shopping in the marinas	High

Source: Institute for Tourism (2018, 39)
** Only for yachtsmen in Croatian charter

The results in the previous table indicate that boaters who choose to stay in Croatia as a nautical destination show a very high level of satisfaction with the majority of tourist offer elements such as beauty of nature and landscape, sense of safety during their stay, state of the boat, staff service in the marinas, richness of gastronomic offer, total offer for boaters, etc., while other elements such as "Value for money" of total offer for the boaters, quality of restaurant services in the marinas, diversity of entertainment facilities, sanitary facilities in marinas, richness of sports facilities in the destinations, possibility of shopping in the marinas, etc. received a bit lower, but still satisfactory grade High, which indicates that further improvements could be made in order for these elements to reach a higher level of quality, which will result in higher satisfaction as well as consumption.

Table 6: Average daily expenditure of boaters on their voyage/sailing according to the vessel ownership (per person, in EURO) in the Republic of Croatia in 2017

	EURO
Total	126.18
Boat Expenditures	87.60
Expenditures for renting vessels	46.53
Expenditures for a skiper (unless they are not included in the lease)	4.70
Expenditures for renting moorings (not including the expenditures for permanent mooring)	11.90
Expenditure for the fuel	20.97
Expenditure for the repair service and other expenditures	3.51
Other expenses during the sailing	38.58
Accommodation on the mainland	1.38
Restaurant services	19.40
Shopping	12.58
Culture, entertainment, sports, recreation and one-day trips	3.78
The rest	1.44

Source: Institute for Tourism (2018, 42)

In 2017 boater´s total daily consumption amounted 126,18 EURO, of which the majority was related on expenses related to the vessels, while other services registered a lower result than expected when observing the level of satisfaction, of which it is necessary to emphasize consumption on restaurant services (19,40 €), shopping (12,58€), culture, entertainment, sports, recreation and one-day trips (3,78€), etc.

Previously presented results indicate that boaters show a significantly high level of satisfaction with the elements of Croatian Nautical tourist offer, which means that Croatia is on the right path of becoming one of the most, if not the most competitive nautical tourist destination on the European tourist market. However, there are still some improvements that need to be made. In the following chapter the authors will propose the developmental activities as well as the model Maritime Croatis, with a goal of emphasizing the need of greater level of synergy among all the destination stakeholders, in order to achieve all the previously stated activities.

Proposition of developmental activities and the model Maritime Croatis

Nautical tourism represents a specific form of tourist offer which provides numerous developmental possibilities of sustainable tourism and creation of additional value for all destination stakeholders, as well as growth of socioeconomic usefulness. Nautical Tourism enables creation of new products which, with their characteristics, enable achievement of high quality of offer adapted to the users of highest purchasing power. Management´s skills to coordinate knowledge and skills within the nautical tourism destinations represents the basic core competitive advantage on the tourist market. The goal of Destination Management needs

to be excellence in every element of tourist product and managing a destination (Alkier et al., 2015; Alkier et al., 2015).

With a goal of achieving further improvement of current Nautical tourist offer, the authors propose the following guidelines:

Formation of team of experts in the destination of Nautical Tourism;

- Formation of a measuring instrument for determining the level of satisfaction;
- Conducting constant lifelong learning programs for the tourism employees;
- Communicate the satisfaction project to all destination stakeholders;
- Communicate the satisfaction project to all visitors/users of services
- Regular measuring of level of satisfaction;
- Formation of improvement activities based on the return information;
- System of reward for employees;
- System of reward for visitors.

The authors also propose the following model Maritime Croatis.

Model 1: Maritime Croatis

MEASURING SATISFACTION PROJECT NAUTICUS CROATIS

Measuring total level of satisfaction of visitors, management and local community is conducted based on formed measuring units (with the use of contemporary technological solutions, knowledge and skills).

TARGET GROUP: STAKEHOLDERS IN THE DESTINATION AND VISITORS

Through level of satisfaction visitors point on the potential lacks and flaws of the offer and inadequate qualities of the staff;

Destination Management can act adequately on removing the registered flaws (IT applications 365/7/24)

Correction activities focused towards increasing the quality of offer, satisfaction of visitors and competitive position of Nautical Tourism of the destination.

+ SAITSFACTION = + COMPETITIVENESS

Higher level of satisfaction of visitors will condition higher level of destination competitiveness.

Positive impacts:

Economic success

Satisfaction of visitors, employees, local community and other stakeholders;

Better quality of life.

Source: Authors´ research

Establishing previously stated system enables creation of new and innovative business ideas and tourist product, and strengthening the exchange of knowledge and skills, as well as forming synergy among stakeholders in a destination of Nautical Tourism. Constant cooperation and establishment of clearly measurable standards and criteria will enable strengthening of competitiveness of an individual destination of Nautical Tourism and form a competitive spirit within the destination, as well as among destinations, all with a goal of satisfying the needs and desires of contemporary tourists and achieving the leading position on the tourist market. Use of contemporary technological solutions (applicative support-QR code, mobile applications, websites, virtual walks, online questionnaire) will enable a permanent and constant contact with service users, which will enable for Destination Management to react timely on all expressed needs and desires of users, removement of registered flaws and improvement of the existing management system and set of tourist products. Use of contemporary applicative solutions as well as the application of the proposed

management model Maritime Croatis will enable a permanent synergy among all stakeholders in the destination on micro and macro level.

Conclusion

Nautical Tourism forms a basic part of tourist offer of Croatia, and as such it has been included in all its developmental strategies. The data presented in the paper clearly indicate that tourists are very much satisfied with the tourist offer in the marinas, and that they are willing to spend significant funds for a holiday in Nautical Tourism Destinations, in marinas in particular. Destination Management must focus its steps towards strengthening of additional destination offer such as diversity of cultural, sports and entertainment programs, possibility of shopping in marinas, strengthening the quality of restaurant offer and further improvement of sanitary conditions in the marinas. In term of future activities, the authors propose conducting of detailed market research of nautical tourist demand, but also all nautical tourist offer carriers, in order to be able to start applying the proposed system Maritime Croatis. This system is a subject to permanent changes and corrections which need to suit to the needs of all nautical tourist destination stakeholders with a goal of achieving general excellence and long-term sustainability of tourist product.

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Marine Le Pen's Presidential Campaign Discourse on Social Media: An Analysis of its Performative Structure

Nihad Ahmić
International Burch University
Bosnia and Herzegovina
nihad.ahmic@stu.ibu.edu.ba

Abstract: The present research study focuses on the Twitter activity of National Rally (formerly called National Front) political leader and a presidential candidate of 2017 French presidential elections, Marine Le Pen. The study examines her activity on social networking and microblogging site Twitter before the French presidential elections in 2017. Since its emergence in 2006, Twitter has become a popular platform for different purposes of political communication. It is widely used by politicians all around the world, mainly for sharing short political announcements, quick reactions on important news and events, and for self-mediated communication with supporters. Being very convenient for mass communication, it has been widely used by populist parties and leaders who use the platform to popularize their political stances through extensive tweeting. This study will analyze the tweeting activity of Marine Le Pen during her presidential campaign to decode her political discourse through analysis of the most popular tweets during the last month of the campaign. Each tweet exhibiting a certain function is related and measured upon four common elements of populist communicative style. The framework upon which Marine Le Pen's tweets will be measured is borrowed from the similar research on the left-wing populist party in Spain (Podemos), only that this study will solely focus on functions of Marine Le Pen's most popular (liked) tweets before the presidential election in 2017. The outcomes of the analysis indicate an immense presence of right-wing populism communicative elements during election campaigning such as nationalism, anti-elitist sentiments, and opposition to (Muslim) immigration and otherness. In the end, these findings confirm our doubts about Marine Le Pen's mainstream political discourse and raise the caution of "blowing hot and cold" populist politics.

Keywords: political communication, elections, populism, Marine Le Pen, social media.

Introduction

"There are more ways of killing a cat than drowning it in butter; but this is the sort of thing (as the proverb indicates) we overlook: there are more ways of outraging speech than contradiction merely" puts J.L. Austin in his seminal work "How to do things with words" published in 1975 (Austin, 1975: 48). In this quote, he illustratively refers to the power of spoken words and sentences in our daily lives and their various performative outcomes on listeners. Today, as the Internet has become a ubiquitous communication medium, it is hardly possible to grasp the consequences of daily produced discourses. However, certain messages and produced sentences, such as those by political leaders that hold social positions with the highest responsibilities, require special attention as their sayings could lead to far-reaching ramifications.

In the 21st century, political communication has been shifted to online platforms such as Facebook or Twitter, where the reach of sent messages (written or spoken) counts in millions.

All the mentioned parameters have opened the door to the politics of populism which famous American political scientist Francis Fukuyama has defined as "the label political elites attach to policies supported by ordinary citizens that they don't like" and called it as "inherent element of democracy" (Lehne, 2017) rather than labelling it as a social pathology. You can now often hear that we live in the 'era of populism' where the trend of populist politics is only rising with the rise of online communication.

Not ignoring the complexity of populism as a general term, the approach in this work aims to advance our understandings of populism by analysing its manifestation within a specific place, time and actor. The analysis of specific types of populism targeted by this work will bring focus to populism's instantiations in specific cases in ways that expose performative structures through which leaders appeal to emotions of the masses. More precisely, this study offers a targeted analysis of the discourse of Marine Le Pen, the leader of the French National Rally, and a political actor widely described as a populist across popular media.

Literature Review

National Rally has its origins in 1972 when it was formed by Marine Le Pen's father Jean-Marie Le Pen, who for a long time has been and remained the symbol of the party. During the 70s, NR did not have any serious position in France's politics and, as Peter Davies notes in his thorough historical retrospective on National Rally's ideology, it was politically irrelevant (Davies, 1999). The party would rarely get more than 1 percent in national elections and the most disastrous moment happened in 1981 when the president of the party could not secure 500 votes to run for the Presidential elections.

After the internal squabbles within the party in 1998, dividing the party's vote during 1999 European parliamentary elections, the party went through a crisis that was reflected through a significant decrease of members and important NR activists. Around these times, in 2000, Marine Le Pen became the president of *Génération Le Pen,* which was an association close to the party that struggled against "demonization" of NR (Crepon, 2012). The results in 2007 elections where NR received only 10,75 % of the vote, indicated that it was necessary to come up with a new strategy. Marine Le Pen had a goal to revitalize the image of the party by improving its democratic legitimacy and setting up a new ideological path. In the following elections, her strategy proved to be influential and gained more support for the party (Williams, 2006)

Although Marine Le Pen did not give up nationalist and populist rhetoric, she has altered the NR's discourse and highly popularized far-right ideas in the country (Stockemer, 2017). Her strategy helped the party to get 14,7 % of the vote in regional legislative elections and 9,8 % in European elections in 2004. Interestingly, other conventional right-wing parties were outvoted by the left at both elections (Evans & Ivaldi, 2005). These electoral victories strengthened Marine Le Pen's position in the party and encouraged her to continue her "battle" to her father's politics and rhetoric (Dézé, 2012). Receiving 11,546 votes (67,65 %) in 2011 NR's elections for a new president, Marine Le Pen proved that the "de-demonization" strategy was successful.

Populism of National Rally through its development has been defined as a heritage populism. It is characterized by the national and cultural awareness that is motivated by the uprising wave of globalization. Professor Reynié notices that the main difference that happened to the performative power of the heritage populism within a new political leader of National Rally is

that she has completely abandoned its core principles that once were considered as its primary goal. While the former leader of National Rally tended to abolish liberal democracy by far-right performances and protests, Marine Le Pen positioned herself confidently "as the chief protectors of liberty, blaming the elite and the mainstream parties for failing to uphold the values and rules of liberal society and for being complacent about the rise of multiculturalism and Islamism" (Reynié, 2017).

Methodology

The first approach to the study of populist political communication style was accomplished by a quantitative examination of the content (tweets) that Marine Le Pen produced during the campaign for 2017 French presidential elections. Each tweet has been selected for the analysis based on its popularity (favourites). Further categorization of the selected tweets was based on rather a qualitative analysis of their content using critical discourse and performativity theory. After that, tweets that shared discursive meanings have been put into a category that was named according to the content and the quantitative tables were created. In the end, I have presented qualitative comments that described the analysed content in the context of the discursive functions that have been found. Finally, these discursive functions have been analysed for the presence of populist elements following an unofficial but scientific-based framework. Namely, researchers have found common ground of political communication style of populism and divided it into four components that are explained in detail in the table below (Table 1)

Table 1: Four common elements of populist communication style

Four common components of populism	Main characteristics
The communicative construction of "the people"	- a generalized claim to represent 'THE people' in the sense of a homogenized ideal based on nativist ideologies - a revisionist view of history - the rhetoric of exclusion that is based on the political discourse about strangers within and outside the 'body' - a specific understanding of the 'demos/people,' thus denying complexity within society 'We' against 'Them' - continuous self-representation of right-wing parties as the 'saviors of the Occident' who defend the man/woman on the street against both 'those up there' and 'the Barbarians' who might take away their jobs and disintegrate the domestic way of life and culture.

The Anti-elitism	• introduction of non-traditional social divisions • fear of globalization reflected through the rise of nationalism and chauvinism • fierce criticism of the current mainstream parties • an opposition to "international world" and pluralism • aggressive resistance towards a multicultural society
The exclusion of out groups	• scapegoating of racial, religious or other minorities • fierce and exclusionary rhetoric towards non-native nationals who observe the different lifestyle • exposure of minorities as "a national or cultural threat." • highlighting of social division that is based on nativist *body politics* • construing of border politics where walls of stone, brick, and cement are being constructed to keep the 'others' out and protect *"the body of the nation"*
The narrative of "the crisis"	• anti-establishment sentiments that appeal to the current (mainly economic) struggles of the nation • anti-intellectual approach to complex economic problems such as lack of jobs or unemployment • presenting "the crisis" as the consequence of the opposition parties' irresponsibility, inadequacy, and failure • using media to accentuate the "power of crisis" and spread the feeling of danger into the public • presenting own's measures as the perfect response to the emerged crisis

Source: Block & Negrine (2017); Jagers & Walgrave (2007); Moffitt & Tormey (2014); Rooduijn (2014); Wodak (2015)

Data analysis

For data collection of Marine Le Pen's political tweets before the 2017 French presidential election, I used Twitonomy, which is a powerful online tool for data analytics on the Twitter platform. Generally, Twitter only allows access to 7-day old tweets and provides their analytics. This powerful tool has access to the Twitter API that allows it to collect all Twitter activity of a specific user.

There are numerous measurable variables within Twitter data such as followers, visits, number of tweets and retweets, the most influential tweeters, keywords in the form of hashtags or mentions, trending topics, etc. However, for the sake of this research, "Favourited Tweets" was the guiding variable in the selection of tweets that were analyzed. The analysis covered one month before the election day (23rd of April), starting from the 23rd of March, Totally, 887 tweets were collected, and the analysis was performed on the top 110 tweets sorted by the number of favourites of each tweet.

Results

Through the analysis of each tweet separately, referring to critical discourse and performativity theories, I have created the framework that divided 110 tweets into seven categories where each category represents the structure of the political tweet. All these categories are briefly described in the Table 5.1, and for each category, there is an example provided.

Table 2: Categories Used to Study the Function of Political Tweets

Function	Description	Number of tweets
Warnings and mobilization against terrorism	Tweets that warn about the dangers of terrorism and mobilize the fight against it. Example: **"The fight against terrorism begins with regaining our national borders and stopping with naivety."**	24
'Othering' of Muslims	Tweets that contain hatred and negative feelings expressed against Islam and, as Marine Le Pen put it, Islamist ideology. Example: **"Street prayers are forbidden in our country and therefore the law must be enforced!"**	16
Merging the Party and the People	Tweets directly looking for votes or mobilizing supporters and volunteers. Example: **"There were very strong things between us during this campaign, we have an appointment with France on Sunday, vote, vote!"**	10
'Othering' of immigrants and foreigners	Tweets that oppose immigrants and immigration policies. Example: **"We do not have the means to receive foreigners from our homes while we have 7 million unemployed and 9 million poor"**	10
Patriotism and Nationalism	Tweets that accentuate patriotism, nationalism, and oppose supranational organizations and globalization. Example: **"I want to return to the French the keys of the house of France, if they trust me to elect me."**	17
Electoral program and personal campaigning[7]	Tweets on future political proposals or program proposals. Example: **"Discover the 10 immediate actions that I will implement right from my election"**	23
Warnings and	Tweets that warn about the dangers of terrorism and	24

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[7] "Electoral program and personal campaigning" function did not include any important content that could be analysed and put into the context of populism as a communicative phenomenon. While it is presented in the final table, due to its irrelevancy, it is not included in the detailed analysis.

| mobilization against terrorism | mobilize the fight against it. Example: **"The fight against terrorism begins with regaining our national borders and stopping with naivety."** | |

Source: Author's own work

As we can notice in the table, Marine Le Pen's political discourse on Twitter revolves around themes that are mainly found within the right-wing populist narrative, such as the immigration issues, Islamophobic rhetoric and the narrative of crisis with the focus on the dangers of "Islamist terrorism." 50 of the total 110 analysed tweets cover these three categories and take up 45,45 % of Marine Le Pen's top resonated content.

Warnings and mobilization against terrorism

In the program of 2017 French Presidential and Parliamentary elections, Marine Le Pen has put a significant focus on security policies. Although the scope of the policies that she has proposed in her program is wide, the key focus on her social media activity turned to the warnings and fierce rhetoric against terrorism. Some of her tweets only describe the dangers of terrorism while others, directly or indirectly, call for certain actions such as expelling foreign citizens. When referring and raising the awareness of terrorist dangers, Marine Le Pen primarily focuses on the possible terrorist threats that might come from "the Islamist ideology." There are two main events within this function that Marine Le Pen continuously refers to and use them extensively to oppose terrorism and Islamism. The first one is the Champs-Élysées attack that happened just before the election on 20th April and for which ISIS has claimed responsibility and the second one is related to "S card/files". The tweet that is typical of Marine Le Pen's rhetoric within the discourse of national security is the following message:
- **"I will never ask the French to get used to terrorism; I will put Islamic fundamentalism on its knees!"**

Here, she explicitly equalizes Islamic fundamentalism with the general term of terrorism as if there are no other types of terrorism. In this manner, she resorts to well-known populist generalizations and scapegoating of certain groups, in this case, Muslims, to gain popularity.

"Othering" of Muslims

By creating an open enmity towards Islam and Muslims, Marine Le Pen is excluding people, their symbols, culture, and religion from her imagination of "true" secular society, explicitly employing the language of exclusion (forbidding, banning, expelling, closing, rejecting, fighting, etc.). We argue that, as it was the case with the 2012 presidential election, Marine Le Pen continues to defend French secularism (idea of laïcité) presenting it as the underlying leitmotif of the party.
We conclude that Marine Le Pen's main discursive tools to oppose Islam as a culture or a lifestyle are still deeply driven by the idea of laïcité. Marine Le Pen succeeded to mask out the former beliefs of her party and thus gained popularity from a wider public including supporters of both left and right ideologies. As a result, in almost each of the tweet grouped by this discursive function there is an evidence of "a new laïcité" under Marine Le Pen with highly accentuated anti-Muslim narrative and negative attitudes against immigrants and Islam.

"Othering" of immigrants and foreigners

The first noticeable thing within these 9 tweets is that Marine Le Pen bases her anti-immigrant rhetoric referring to economic problems of France such as unemployment, lack of imprisonment places, availability of medical resources or family allowances. Despite centring her anti-immigrant rhetoric around struggles of French economy she succeeded in gaining support for her narrative with total of 11,007 favourites for all the tweets categorized by this function. We can argue that her rhetoric in these tweets contain more of protectionism than xenophobia that used to be leitmotif of the former ideological setup of National Rally. Marine Le Pen provides reasons for abolishment and suspension of immigration and the overarching argument is her wish 'to protect France'.

Patriotism and Nationalism

Observing tweets in this section, in certain cases the distinction between populism, patriotism and nationalism is hardly noticeable as often they have a plenty of common elements such as emphasizing the belonging to a certain group that is most commonly described as "a nation". As Marine Le Pen bases her nationalism on protecting the borders, anti-immigration and rejection of ethnic-cultural diversity, we can state that she articulates her populist communication through exclusionary nationalism. One of the tweets that best portrays such rhetoric is the following one:

- **"Dear compatriots of foreign origin who love France [...] I will only consider you French."**

In this tweet we find the articulation of populism that is based on exclusionary nationalism which Marine Le Pen uses to reject any "alien" identity in the space and time of the French nation. While framing immigrants in a very civic tone (Dear compatriots of foreign origin who love France) the usage of the next phrase "only consider you French" shows her true attitude towards people that exhibit other identities and cultures.

Criticizing opponents, media and the current government

Positioning herself (and her party) as the blameless in-group and all others (the current government, the opposition, etc.) as corrupt and guilty, Marine Le Pen created the perfect stage to articulate her populist messages. Through social psychology, this phenomenon of blame attribution can be explained by the process called social categorisation. The social categorisation serves to populist communication style as it creates "out-group homogeneity and in-group serving bias" (Hameleers, Bos & de Vreese, 2016).

In Marine Le Pen's example we can state that she creates the positive feelings for the in-group such as "patriots of France" or herself as "a free woman" and negative feelings for the out-groups such as Mr. Macron or mainstream media. Finally, it can be stated that the populist persuasiveness that is based on blame and criticism is achieved by social identity theory. This theory explains that as the feeling of the people's belonging to a certain in-group is stronger, their self-affirmation and attitude within that in-group will be more positive.

Merging the Party and the People

In this function, the pronoun "we" is dominant through all tweets if the first person is in use and there is rare or no reference to "them" as in the previous table. The most representative tweet that portrays the fundamental elements of populism is the following one:

- **"I need you! I can't do anything without you. If you choose me, I will enforce you and I will give you the floor!"**

Through this tweet we can notice how Marine Le Pen gradually identifies herself with "the people". At the beginning there is the distinction between the leader and the people with the strong emphasis on their mutual connection and need. In the end, when the struggle for the power should successfully finish, "the people" and the leader should become the same.

Marine Le Pen's populist communication style

Presenting the final table that shows which elements of populist communication style (explained earlier in the methodology section) are exhibited by each of discursive functions (Table 3), I put the concluding thoughts on Marine Le Pen's rhetoric on social media and quantitatively presented her communication style on Twitter during the given timeframe.

Table 3: Elements of Populist Political Communication Style in the Functions of Political Tweets by Marine Le Pen

Elements of populist political communication style	Directly related discursive functions
The communicative construction of "the people"	Othering of Muslims Othering of immigrants and foreigners Patriotism and Nationalism Criticizing opponents, media and the current government Merging the Party and the People
The Anti-elitism	Patriotism and Nationalism Criticizing opponents, media and the current government
The exclusion of out groups	Othering of Muslims Othering of immigrants and foreigners Warnings and mobilization against terrorism
The narrative of "the crisis"	Othering of immigrants and foreigners Warnings and mobilization against terrorism

Source: Authors´ own work

Conclusion and discussion

his work had an aim to present the current political atmosphere in Europe, particularly emphasizing the rise of populist communication and its success. Examining the populist communication on social media channels, through socio-linguistic and discourse analysis we have extracted the most favourited tweets that National Rally's president circulated during election campaign. However, limiting our research on only examining the discursive functions through the framework of populist communicative elements, we only covered some instances of the populist manifestations.

The nature of digital media communication as well as the fact that the dataset was translated from French to English certainly imply some restrictions to our analysis. Another restriction is the quantity of the dataset, as we only chose around top resonated tweets on Marine Le Pen's Twitter profile. Despite these restrictions, the outcome of the research and discourse analysis affirmatively answered our initial questions and posed more questions that should guide us to broader and deeper understanding of the populist discourse and its modern manifestations.

Combining all of our approaches in this work, we found that the structure of Marine Le Pen's discourse fits the model of populism that was introduced at the beginning. Observing her populist rhetoric and behaviour as a performative ideology of mediatized politics I was able to deconstruct her utterances, symbolism and, above all, her charismatic personality and bring into the light the true resonances of the analysed structures. Thus, the most important findings within her discourse emerged as Muslim's/Immigrant's othering s cultural and security/economic threat, creating the perceptions of a country under attack and portraying herself as the saviour. In this way, she contributed to xenophobia and the creation of perceptions that what we see in international politics is a clash of civilizations.

In the end, the research indicated the theoretical complexity of the populist phenomenon and showed many layers of its practical presence. Above all, it has touched theories from different social science fields for the purpose of deciphering the populist discourse in the modern narratives. Of course, the research on political communication and behaviour across modern channels of digital communication is in its very beginnings and further methodologies will certainly bring better results in the future.

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Online Shopping: Its Impact on Consumer Behavior in Federation of Bosnia and Herzegovina

Bisera Imamović
International Burch University
Bosnia and Herzegovina
bisera.imamovic@outlook.com

Abstract: Throughout a day, billions of people use the Internet, and every single person is a potential consumer in the online market. Therefore, it is crucial to understand how consumers perceive online purchases. The aim of this study was to examine certain factors that have impact on consumer behavior in Federation of Bosnia & Herzegovina when shopping online. Perceived risk, Usefulness and Perceived benefit were identified as important factors. In line with quantitative nature of this study, survey was designed and delivered to 400 people in Federation of Bosnia and Herzegovina. Out of 400 people, 280 of them were shopping online and were used in further analysis. The finding of a research provided useful insights for online stores selling in Bosnia and Herzegovina. Understanding consumer behavior can help increase online shopping. Moreover, findings revealed that perceived risk had a negative impact on the consumer behavior when shopping online, while usefulness and perceived benefit had significant positive impact.

Keywords: Online shopping, Consumer Buyer Behavior, Internet, Factors

Introduction

Throughout a day, millions of people use the Internet, and every single person is a potential consumer in the online market. As already known, the business market is highly competitive, and since there are many providers in the online market, the role of every organization is to understand the needs and wants of potential consumers. Consumer behavior in the field of online shopping is important for marketers in order to gain competitive advantage. Moreover, analyzing and identifying factors which influence consumers to shop online has become crucial in order to capture their demand.
The research study investigates the impact of perceived risk, usefulness and perceived benefit on consumer behavior when shopping online.
The study is structured as follows: firstly, the introductory part was appointed. Secondly, the literature review was provided with important previous findings on online shopping and the factors that have impact on consumer behavior. Thirdly, methodology is presented followed with the results of the study. Finally, conclusions are drawn.

Theoretical Background

The Internet technology has evolved dramatically over the years, and still it keeps on evolving. It has influenced all parts of our lives and it changed the concept of the information

and communication. E – commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform and redefine the relationships to create a value between or among the organizations, and between organizations and individuals(Gupta, 2014). Internet has changed the customers notions of convenience, speed, price, product information and service. As discussed earlier, e – commerce provides consumers more choices, more information and more ways to buy. Small number of Internet users in Bosnia and Herzegovina practice to shop online. The major reasons of not shopping online are distrust, concern for money and product safety. Moreover, we can say that e – commerce arrived in Bosnia and Herzegovina with the online services such as E – kupon.ba, CityDeal.ba, Jupi.ba, etc. Online services have affected more and more users to start shopping online, due to its attractive offers. (Selimovic & Pestek, 2014) When it comes to Bosnia and Herzegovina, there are no statistical data on e – commerce yet. According to the research done by Özlen et al. (2012), out of 350 people who participated in the survey, only 110 said they have bought online at least once. Furthermore, it was found out what items were bought the most online. The results differed when it came to female and male. Females shopped online for clothes while males shopped more for software, books and travel. Also, age played an important role. People in earlier years (19 – 23) were the biggest portion of those who said they bought at least once. Those who had 24 years or more were less likely to be online customers. The research found that discounts were the highest on the list of the things people liked when it came to online shopping. PayPal is used mostly by the ones who shop online. According to Dudovskiy (2015), consumer behavior has become a factor that has a direct impact on the overall performance of the businesses. Moreover, it has become critical due to the fierce competition in retail industry worldwide. Dudovskiy states that the main objective of the consumer behavior is to learn the way how the individuals, groups or organization choose, buy, use and dispose the goods and factors such as previous experience, taste, price and branding on which consumers base their purchasing decision. A research conducted by Zhang et al (2012) showed that perceived risk had a negative effect on consumer buyer behavior while shopping online. According to Gerber et al. (2014) personal risk, performance risk and social risk had an impact on online buying behavior and that past purchasing behavior had impact on future online buying behavior. According to Liao et al (2008) people prefer to avoid mistakes than to engage in risky decision making. Research done by Yi Jin et al. (2014) revealed that perceived usefulness insignificantly influenced online shopping behavior, while it positively influenced online purchase intention. On the other hand, study done by Hernandez et al (2011) stated that perceived usefulness had effect toward the online shopping behavior when it comes to Spain. Furthermore, different research studies by Bigne et al. (2008). Kim & Hong (2010) was to prove if usefulness have significant impact on the intention to purchase via Internet. The results showed that perceived usefulness had significant impact on intention to purchase via Internet. Moreover, Iqbal and Hunjra (2012) investigated customer inclination to purchase online in developing states like Pakistan. It was concluded that perceived benefits considerably affected intentions of the consumers to do transactions online. In other words, perceived benefits had effect on the behavior of customers and online purchasing intention. Arora et al. (2018) showed that perceived benefit had a significant positive impact on online shopping attitude toward woman in India.

The research model was developed from detailed overview of literature review and the key elements of model are:

Figure 1: Illustration of the theoretical concept
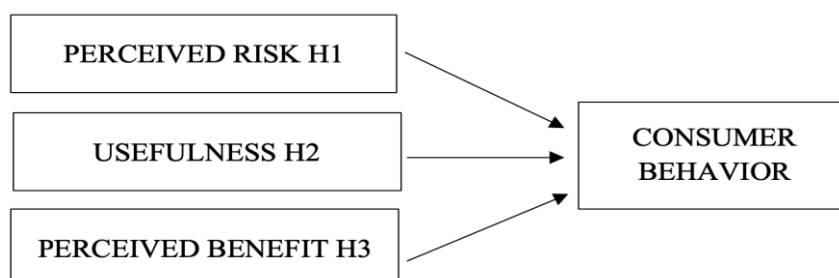
Source: Created by the author

Methodology

Questionnaire design

The research was conducted in the period of March to June 2019 in Federation of Bosnia and Herzegovina by the use of structured questionnaire. The respondents were people living in Federation of Bosnia and Herzegovina who shops online. The total of 400 respondents participated in the survey, but, 280 were shopping online and were included in the further study.

The questionnaire was prepared by the methodology of Shahzad (2015) and Masoud (2013) when preparing questions for perceived risk instrument. Questions for usefulness and perceived benefit were adapted from Amaro & Duarte (2015) and Cheema et al (2013).

Research variables and methods

The following variables were used for the purpose of this research study:

Independent Variable (IV)
      a. Perceived risk
      b. Usefulness
      c. Perceived benefit
Dependent Variable (DV)
      a. Consumer behavior

The independent variables were measured using a 5 – point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The authors used a multiple regression model as a primarily methodological approach. The regression equation is:

$$Y = a+bX1 + bX2 + bX3 + …$$

Where **Y** stands for dependent variable, **X**(s) stands for independent variable(s) and **a,b** for constants to be estimated.

The authors formed and tested the following hypotheses:

H1: Perceived risk has an impact on consumer buyer behavior in Federation of Bosnia and Herzegovina.
H2: Usefulness has an impact on consumer buyer behavior in Federation of Bosnia and Herzegovina.
H3: Perceived benefit has an impact on consumer buyer behavior in Federation of Bosnia and Herzegovina.

Instrument validity

Cronbach's coefficient alpha analysis is most commonly used for evaluating the consistency (Peter, 1979). If the coefficient is low, it means that the sample items was not able to capture the construct. On the other side, if the alpha coefficient is large it means that construct is well correlated. According to (Cortina, 1993) and (Kline, 2013), values for Cronbach's coefficient alpha could reach around and over 0.6 (0.55 to 0.84). As we can see from the tables below, there were fifteen items in total and the Cronbach's coefficient alpha was measured from the results of the survey. Moreover, the table presented below shows us all items were reliable because Cronbach's coefficient alpha was higher than the standard value of .60.

Table 1: Cronbach's coefficient alpha analysis

Measure	Cronbach's Alpha
Perceived risk	.844
Usefulness	.803
Perceived benefit	.763
Consumer behavior	.664

Source: Author analysis

Results and Discussion

Within this chapter, the authors will present the results of research conducted in the Federation of Bosnia and Herzegovina. The following table presents the demographic and online shopping characteristic

Table 2: Demographic and online shopping characteristics

Sample respondents	Number	Percentage
Gender		
Male	131	46.8
Female	149	53.2
Age		
17 to 24	138	49.3
25 to 34	60	21.4

35 to 44	37	13.2
45 to 54	32	11.4
55 to 64	10	3.6
Over 65	3	1.1
Monthly Income		
1000 KM or less	103	36.8
1001 KM – 2000 KM	90	32.1
2001 KM – 6000 KM	73	26.1
6001 KM – more	14	5.0
Level of Education		
No formal or inf. Education	2	0.7
Primary school	5	1.8
High school	49	17.5
Bachelor's Degree	137	48.9
Master's Degree	63	22.5
PhD	24	8.6
Frequency of shopping online		
More than once a week	20	7.1
Once a week	21	7.5
2 – 3 times a month	44	15.7
Once a month	54	19.3
Less than once a month	75	26.8
As little as possible	66	23.6
Payment method		
Debit card	113	40.4
PayPal	78	27.9
Credit card	89	31.8
Companies they buy from		
Companies based in country they live in	60	21.4
Companies based in European countries	117	41.8
Companies based in countries outside the Europe	62	22.1
Don't know	41	14.6
Terms of choosing to shop		
Very convenient and time saving	86	30.7
Low price	106	37.9
Product variety	88	31.4
Annual amount spent online		
Less than 500 KM	104	37.1
501 KM -1000 KM	84	30.0

1001 KM – 2000 KM	36	12.9
2001 KM – 3000 KM	33	11.8
More than 3000 KM	23	8.2
Mostly bought products		
Music, Computer games	171	61.1
Computer products, software	162	57.9
Clothing, accessories	102	61.4
Groceries	172	36.4
Perfume, cosmetics	151	53.9
Electronic goods	153	54.6
Household goods, furniture	121	43.2
Travel	176	62.9
Books	163	58.2
Bike parts	135	48.2
Toys	136	48.6
Lightning	136	48.6
Medicines	135	48.2
Car accessories	136	48.6

Source: Authors´ own work

Data was collected from 400 people living in the Federation of Bosnia and Herzegovina. Out of 400 respondents, 280 was shopping online and were included in further research analysis. To get a better overview of the respondents, demographic questions were added at the beginning. Both males (46.8%) and females (53.2 %) were included in the research, and most were aged between 17 to 24 (49.3%). Moreover, 36,8 % of the respondents' monthly income is less than 1000 KM, and most of them finished a Bachelor's degree (48,9 %). Additionally, the descriptive statistics show that most of the respondents' shops less than once a month online (26,8 %), and the annual maximum amount spent is less than 500 KM (37.1 %). When it comes to payment methods, most of them are using debit cards (40,4%), and they shop in companies based in European countries (41.8 %). Furthermore, respondents' find a low price (37,9%)

one of the main reasons for choosing to shop online. Also, mostly bought products and services over the Internet are travel, clothes, music, computer games, etc.

The regression Analysis

Regression is practical to understand the predictive power of the independent variable on the dependent variable. In other words, regression helps a researcher understand the change of the value of the dependent variable causes the change in the value of independent variable, while other independent variables are not changed. In order to test the hypotheses, a linear regression method was used. From the table below, the results of the regression analysis are shown. Table presents the results of the regression analysis of independent variables:

perceived risk, usefulness, and perceived benefit with the consumer buyer behavior as the dependent variable.

Table 3: Regression Test

Dependent variable:	Consumer behavior
Independent variables:	Perceived Risk, Usefulness, Perceived Benefit
Multiple R =	.396
R^2 =	.157
Adjusted R^2 =	.148
Standard error =	.79759

Source: Authors´ own work

The above presented summary table shows that R, the multiple correlation coefficient using the predictors perceived risk, usefulness, perceived benefit and enjoyment is .396 while R Square is .157. These values show that variance in Consumer Buyer Behavior can be predicted from the combination of factors perceived risk, usefulness, and perceived benefit.

Table 4: ANOVA

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.693	3	10.898	17.130	.000[a]
	Residual	175.579	276	.636		
	Total	208.271	279			
a. Dependent Variable: consumer buyer behavior						
b. Predictors: (Constant), perceived risk, usefulness, perceived benefit						

Source: Authors´ own work

As we can see from the table above, F = 17.130 shows that the predictors / independent factors: perceived risk, usefulness, and perceived benefit combine to predict consumer behavior towards online shopping. Moreover, the value of significance lies between 0% and 5%. The value of significance is .000 showing that all predictor variables combine to predict the consumer buyer behavior very well. As could be seen, the relation between the dependent and independent variables is proved to be significant, and we can proceed.

Table 5: Coefficients

Independent Variable	b	Std. Error	Beta	t	Sig.
(Constant)	1.874	.306		6.127	.000
Perceived Risk	-.113	.053	-.117	-2.114	.035
Usefulness	.146	.055	.151	2.643	.009
Perceived benefit	.310	.057	.311	5.465	.000

Source: Authors´ own work

Table 5 demonstrates and signifies β of perceived risk is -.113, with the significance of .035 that demonstrates that there is significant impact between the perceived risk and consumer behavior while shopping online. The β of usefulness is .146 with the significance of .009 that indicates the significant impact between the usefulness and consumer behavior when shopping online. The β of perceived benefit is .310, with the significance of .000 shows that there is significant impact between perceived benefit and consumer behavior.

Chi – Square Test

Table 6: Chi-Square

	Value	df	Asymp.Sig. (2-sided)
Pearson Chi – Square	14.411[a]	5	.013
Likelihood Ratio	14.613	5	.012
Linear -by-Linear Association	3.298	1	.069
N of Valid Cases	280		
0 cells (0%) have expected count less than 5. The minimum expected count is 9,57.			

Source: Authors´ own work

The results from the previous table indicates the association between gender and frequency of shopping online. There is association between gender and the frequency of shopping online, $x^2(1) = 14.411$, p = .013. The majority of females are shopping as little as possible online, while when we look at the male population, the majority of them shop less than once a month. To conclude, men are buying more compared to women.

Table 7: Chi-Square test

	Value	df	Asymp.Sig. (2-sided)
Pearson Chi – Square	1.294[a]	4	.862
Likelihood Ratio	1.317	4	.859

Linear -by-Linear Association	.329	1	.566
N of Valid Cases	280		
0 cells (0%) have expected count less than 5. The minimum expected count is 10,48.			

Source: Authors´ own work

The results from the previous table indicates the association between gender and maximum amount spent per year on online purchases. There is association between gender and the maximum amount spent per year on online purchases, $X^2(1) = 1.294$, P = .862. Both women and men spend less than 500 KM annually for shopping online.

Table 8: Chi-Square test

	Value	df	Asymp.Sig. (2-sided)
Pearson Chi – Square	7.272[a]	5	.013
Likelihood Ratio	7.311	5	.012
Linear -by-Linear Association	2.524	1	.069
N of Valid Cases	280		
0 cells (0%) have expected count less than 5. The minimum expected count is 36,49.			

Source: Authors´ own work

The results from the previous table indicates the association between gender payment method used when shopping online. There is association between gender and payment method used when shopping online., $x^2(1) = 7.272$, p =. 026.. Moreover, the majority of women are using a debit card as their payment method, while men use PayPal more when shopping online.

Table 9: Chi-Square test

	Value	df	Asymp.Sig. (2-sided)
Pearson Chi – Square	7.750[a]	3	.051
Likelihood Ratio	7.910	3	.048
Linear -by-Linear Association	2.880	1	.090
N of Valid Cases	280		
0 cells (0%) have expected count less than 5. The minimum expected count is 19,18.			

Source: Authors´ own work

The results from the previous table indicates the association between gender and most used companies when shopping online. As could be seen there is no association between gender and the maximum amount spent per year on online purchases. Both man and woman are using mostly companies based in the European Union when shopping online.

Table 10: Chi-Square test

	Value	df	Asymp.Sig. (2-sided)
Pearson Chi – Square	.877[a]	2	.645
Likelihood Ratio	878	2	.645
Linear -by-Linear Association	.086	1	.769
N of Valid Cases	280		
0 cells (0%) have expected count less than 5. The minimum expected count is 40,24.			

Source: Authors´ own work

The results from the previous table indicates the association between gender and reason for choosing to shop online. As could be seen there is no association between gender and reason for choosing to shop online. $X^2(1) = .877$, P = .645. Both man and woman are using are choosing to shop online due to the lower prices.

Discussion

The findings discussed in this chapter revolve around the hypotheses found for the study. The first accepted hypothesis stated that perceived risk had impact on consumer behavior when shopping online. A research conducted by Zhang et al (2012) showed that perceived risk had a negative effect on consumer buyer behavior while shopping online. According to Gerber et al. (2014) personal risk, performance risk and social risk had an impact on online buying behavior and that past purchasing behavior had impact on future online buying behavior. The second hypothesis that was approved states that usefulness has impact on consumer buyer behavior in Federation of Bosnia and Herzegovina. On one hand, research done by Yi Jin Lim et al. (2014) revealed that perceived usefulness insignificantly influenced online shopping behavior, while it positively influenced online purchase intention. On the other hand, research done by Hernandez et al. (2011) showed that usefulness had effect towards the online shopping behavior in Spain. The third hypothesis that states the perceived benefit has impact on consumer buyer behavior in Federation of Bosnia and Herzegovina was accepted. Arora et al. (2018) showed that perceived benefit had a significant positive impact on online shopping attitude toward woman in India.

The study gives practical implications to markets and businesses in the field of online business. It helps marketers see the impact of perceived risk, usefulness and perceived benefit of consumer behavior while shopping online in Federation of Bosnia and Herzegovina. Marketers need to distinguish the way to get to the customers by examination. It is essential for the marketers to understand the relationships of previous experiences when shopping

online, the risks some perceived while other perceived benefits and usefulness. In other words, with the understanding of previous experiences of consumers, marketers can make appropriate actions to make shopping online less risky and increase the benefits and usefulness Internet can offer. Research study done covers the gap between previous researches related to perceived risk, usefulness and perceived benefit, providing a broaden explanation of the variables and its impact on consume behavior when shopping online. Based on the analysis done, the research explained customer behavior and the significance of a set of important variables for online shopping.

Conclusion

Online services have affected more and more users to start shopping online, due to its attractive offers. The main task of this paper was to investigate the impact of perceived risk, perceived benefit and usefulness on consumer behavior in Federation of Bosnia and Herzegovina. All the factors investigated in this research had significant impact on consumer behavior while shopping online. Moreover, it was found out that women tend to shop as little as possible online compared to men. On the other hand, women who shops online are mostly shopping once a month or less than once a month. When it comes to man, the results revealed that most of the man are frequently shopping online like 2 – 3 times a month. Also, it is important to mention that maximum amount spent per year on online purchases for most men and women are not exceeding 1000 KM.

The limitations in this paper were data collection method, sample size and constructs. The study main focus was on consumer behavior in Federation of Bosnia and Herzegovina. The findings were limited to 280 respondents. Moreover, there are numerous factors that has impact on consumer behavior, and this research had only three: perceived risk, usefulness and perceived benefit. Furthermore, online survey was main method used to collect data. There was lack of monitoring and some results might be untruthful or incomplete.

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Determining the Relations between Work-Leisure Conflict, Leisure Participation, Job Burnout and Overall Life Satisfaction

Jelena Tepavčević
Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad
Novi Sad, Serbia
jelenat91@gmail.com

Svetlana Vukosav
Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad
Novi Sad, Serbia
cecamobr@yahoo.com

Maja Mijatov
Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad
Novi Sad, Serbia
majamijatov@gmail.com

Milan Bradić
Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad
Novi Sad, Serbia
milanbradic@gmail.com

Vuk Garača
Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad
Novi Sad, Serbia
vuk_garaca@yahoo.com

Abstract: The lifestyle is often determined by the manner of spending the leisure time. On the other hand, the leisure activities are determined by diverse subjective factors such as social position, education degree and usual life habits, but also by the various objective factors, such as cultural heritage within specific environment, as well as the current offer and possibility of participating in concrete leisure activities. Work and leisure participation are two opposite constructs, and there is often a conflict between them. Nowadays, establishing a balance between the work and leisure participation became one of the important issues, which resulted in increased interest of numerous authors related to researching this topic. The survey research was conducted in Vojvodina on the sample of 353 respondents. The main aim of this research was focused on determining the correlation between the factors, termed as Work-leisure conflict (WLC), Leisure participation (LP), Job burnout (JB) and Overall life

satisfaction (OLS). The research results showed that there is a negative correlation between WLC and LP, as well as the positive one between WLC and JB. Correlation between WLC and OLS was not significant. Besides theoretical contribution, the research results provide practical implications in the sense of determining the necessary information, which could contribute to decreasing the level of conflict at work, on the one hand, and stimulating participation in leisure activities, on the other.

Keywords: work-leisure conflict, job burnout, leisure participation, life satisfaction

Introduction

Work and non-work spheres are considered as two separate entities. That is the main reason why employees were expected to separate their work and private roles (Allen et al., 2014; Ashforth et al., 2000). Nowadays, establishment of the balance between work and leisure activities, considered as a part of the non-work sphere, became one of the important issues. Consequently, different authors focused their research in exploring these topics (Knecht et. al., 2016; Simmons et al., 2016). Conflict between work and non-work spheres could induce far-reaching consequences. Some empirical studies showed that individuals with expressed conflict between work and non-work tasks are more likely to feel depressed, or to suffer from different health problems, including the stress, but they are also less satisfied with their work, family and overall life (Amstad et al., 2011; Michel et al., 2009). Importance of leisure activities, for providing the adequate mental, cognitive and social development, is an important topic in majority of contemporary societies. Participation in leisure activities, as well as orientation towards different hobbies are important, not only for fun, but also because these activities could refresh the body and mind, on the basis of maintaining the good health, as well as the good mood, which could further be reflected on the quality of the business performances. In general, overall well-being and reduction of stress could be shaped by the activities conducted during the leisure time (Iwasaki et al., 2006). These benefits could emerge as a result of positive emotions initiated by leisure activities that might allow individuals to feel better and resistant to stress (Iwasaki & Schneider, 2003).
Researches dealing with the topic of the leisure time indicated that work-leisure conflict might have significant impact on work and non-work domains in the field of tourism and hospitality, by pointing the possible influences on employees' involvement in leisure activities and gaining the job satisfaction (Lin et al., 2013; Lin et al., 2015). If individuals have too much work, it means that they will have less time for leisure activities, which might cause a decrease in leisure satisfaction and an increase in job dissatisfaction, at the same time (Lin et al., 2013; Rice et al., 1992). On the other hand, previous researches pointed to the fact that leisure activities could create pleasure by generating the positive feelings and increasing the psychological well-being of individuals (Gilbert & Abdullah, 2004; Lloyd & Little, 2010).

Literature review

Different authors pointed to a positive correlation of well-being and leisure activities, especially among tourism and hospitality employees, because it could provide stress relief, by increasing the positive and reducing the negative emotions, as well as by improving the mental and physical health of employees, often faced with emotional exhaustion, as a

consequence of direct interaction with the customers throughout completing their business tasks (Coleman & Iso-Ahola, 1993; Iwasaki & Mannell, 2000; Trainor et al., 2010). However, disproportion between work and leisure might increase the conflict between work and non-work roles of the employees (Greenhaus & Beutell, 1985). This conflict might be further affected and increased, when there is no balance between the family, work and leisure time (Thompson & Bunderson, 2001).

Work-leisure conflict is usually considered as an extension of work-family conflict. Work-family conflict is indicating that business roles are more dominant, comparing to other aspects of life, which could further affect the time, energy, vitality and opportunities for participating in different leisure activities of employees, not only in tourism and hospitality, but also within the other sectors (Wong & Lin, 2007). Previous studies also showed that aforementioned conflict might cause employees' job burnout, that actually occurs as a consequence of intensive job demands and work overload (Kim & Lee, 2009; Schaufeli et al., 2009). Such and other inadequate work conditions, often represented in the sector of hospitality (work overtime and work during the weekends and holidays) might affect the hospitality employees' time for participating in the leisure activities (Lin et al., 2013). In respect to that, it could be said that employees in this sector are often faced with difficulties of making the balance between the work and family life, in wider, and work and leisure, in narrow terms (Namasivayan & Zhao, 2007; Yavas et al., 2008).

Besides that, work-leisure conflict is also considered as a form of inter-role conflict, which is a consequence of incompatibility of requests, rising from work and leisure roles (Tsaur et al., 2012). In respect to that, in the study conducted by Fernandez-Ballesteros et al. (2001), authors examined the influence of employees' socio-demographic characteristics and psychological factors on their overall life satisfaction. According to the research results, they found that life satisfaction is affected by the leisure satisfaction, as well as by the level of physical activity and social contacts of the respondents (Fernandez-Ballesteros et al., 2001). Furthermore, Hawkins et al. (2004) conducted the research in the USA and Australia with the aim of determining the contribution of leisure activities to their overall life satisfaction. Authors identified a correlation between life satisfaction and leisure activities, leisure constraints and leisure satisfaction. The highest correlation was found between leisure time, on the one hand, and life satisfaction, on the other (Hawkins et al., 2004).

Testing the importance of various job stress-related variables in a prediction of work-leisure conflict among tourism employees was the main aim of the study conducted by Wong and Lin (2007). Results of their research showed that job demands have positive impacts on work-leisure conflict, while job control and supervisor support have direct negative effects on work-leisure conflict. In other words, increase of job demands caused an increase of work-leisure conflict, while increase of job control and supervisor support led to a decrease of work-leisure conflict (Wong & Lin, 2007).

In the study conducted by Lin et al. (2013), leisure benefit system satisfaction is considered as a moderator between the quality of life and the presence of work-leisure conflict among the front-line hospitality employees. Their findings indicated that work-leisure conflict is negatively correlated with the quality of life, while there is a positive correlation between the leisure benefit system satisfaction and the quality of life (Lin et al., 2013). Furthermore, Lin et al. (2014) also examined relationship between the work-leisure conflict and the well-being among the employees in hospitality and tourism industry. They found a positive relationship between the work-leisure conflict and job burnout among tourism and hospitality employees,

while negative correlation was recorded between the leisure participation and job burnout (Lin et al., 2014).

Wang (2017) explored relationships between the leisure travel outcomes, domains of life satisfaction and overall life satisfaction. This author conducted the research among the young Chinese travelers and the research results of his study pointed to the fact that overall life satisfaction is enhanced on the basis of three main goals: physical satisfaction, social satisfaction and satisfaction related to career development (Wang, 2017). Our research was conducted with the aim of identifying the influence of status/recognition and overall life satisfaction on existence of work-leisure conflict, on the sample of employees within the different sectors, due to the fact that there is a belief that leisure time is often related with possibilities for travelling, while the choice of specific destination, could be perceived by the others as a status symbol.

Mansour and Mohanna (2018) researched relationship between the work-family conflict, work-leisure conflict, stress and the quality of services among the employees with direct interaction with the customers within the hotel industry in France. They found that stress, caused by job demands, mediated relationship between the work-family conflict, work-leisure conflict and the quality of service. They also found positive impact of work-family conflict and work-life conflict on the stress caused by the job (Mansour & Mohanna, 2018).

Methodology

The questionnaire, used within this study, for researching the work-leisure conflict, could be divided into the two parts. The first part was related to socio-demographic characteristics of the respondents, such as gender, age, education degree and work status. The second part of the questionnaire represents a synthesis of constructs adopted from two studies. Thus, items for measuring the work-leisure conflict, job burnout and leisure participation are adopted from the study conducted by Lin et al. (2014), who researched relationships of the work-leisure conflicts and well-being. Besides that, items for measuring the status/recognition and overall life satisfaction were adopted from the study conducted by Wang (2017), whose main goal was to examine relationship between the leisure travel outcomes, life satisfaction and overall life satisfaction. For expressing the level of their agreement/disagreement with the items, respondents provided their answers by using the five-point Liker scale (1 – completely disagree, 5 – absolutely agree).

According to the previous findings regarding the main constructs of the research, the following hypotheses were established:

H1: *Employees' work-leisure conflict is negatively associated with their leisure participation.*
H2: *Employees' leisure participation is positively associated with their overall life satisfaction.*
H3: *Employees' leisure participation is negatively associated with their job burnout.*
H4: *Employees' work-leisure conflict is positively associated with their job burnout.*

The survey research was conducted during the summer of 2018, by using the online forms of the questionnaire. The questionnaires were distributed through the social network Facebook. The survey was conducted mostly among the employees in tourism and hospitality sector, but the sample also covered the other sectors, such as education, informational technologies and

health care. The sample obtained 353 respondents. The main problem during the research was related to completing the questionnaires. The procedure was time-consuming, due to the fact that survey research was conducted in on-line form, without direct interaction between the authors and the respondents.

Results

As already mentioned, the first part of the questionnaire was related to the respondents' socio-demographic characteristic. The research results, represented within the Table 1 are pointing to the main characteristics of the respondents. It could be noticed that females represent majority of the sample (67.4%), comparing to the male respondents (33.6%). Besides that, 77.3% of the sample is consisted of the respondents aged between 21 and 40 years. Majority of the respondents gained the high school education degree (45.9%) and they are followed by the respondents with gained faculty education degree (21.2%). Employed respondents represent majority of the sample (77.9%). About 18.4% of them are employed within the sectors of tourism and hospitality and they are followed by the respondents employed within the sector of education (12.2%). Students (13.3%) and unemployed (5.9%) represent minority of the sample. Category termed as Student/Employed (2.8%) is consisted of part-time employed students that are usually working several hours per day, due to their duties and tasks related to their study program.

Table 1: Socio-demographic characteristics of the respondents

Gender	Frequency	Percent
Males	115	32.6
Females	238	67.4
Age		
Up to 20	10	2.8
21-30	149	42.2
31-40	124	35.1
41-50	50	14.2
51-60	16	4.5
Over 60	4	1.1
Education		
High school	162	45.9
College (Two years)	53	15.0
Faculty (four years)	75	21.2
Master	50	14.2
PhD	13	3.7
Work Status		
Students	47	13.3
Employed	275	77.9
Unemployed	21	5.9
Student/Employed	10	2.8

Source: Authors´ own work

According to the research results, represented within the Table 2, the highest mean value was recorded for the factor Overall Life Satisfaction (3.48), while the lowest mean value was recorded for the factor Job Burnout (2.44). Research results represented within the Table 2 are pointing to the items that are grouped within each factor.

Factor Work-Leisure Conflict (2.71) obtained five items. The highest mean value within this factor was recorded for the item "*I do not have energy to participate in leisure activities because of my job*" (2.94). On the other hand, the lowest mean value was recorded for the item "*I have never been in a suitable frame of mind to participate in leisure activities because of my job*" (1.99). Relatively low mean values of all items within this factor, as well as the overall mean value of the entire factor are indicating the low level of work-leisure conflict among the respondents.

Factor Leisure Participation (2.77) obtained six items which measured participation in different leisure activities, such as mass media, outdoor, cultural, sport, social and hobby activities. The highest mean value (3.18) was recorded for the item "*I often participate in hobby activities*". "*I often participate in cultural activities*" is the item with the lowest mean value within this factor (2.33). Unlike the other things in life, people could often change their hobbies and try the new types of hobby activities, which is in accordance with current individual's affinities. Besides hobbies, respondents expressed their interest in participating in various social activities (3.14). Based on these values, it could be concluded that respondents mostly participate in their hobby activities and social activities, compared to the other types of activities.

Factor Job Burnout (2.44) obtained six items that were used for measuring degree of emotional exhaustion and depersonalization. Within this factor, the lowest mean value (1.96) was recorded for the item "*I feel I have become uncaring toward people since I took this job*", while the highest mean value was recorded for the item (2.92) "*I feel burned out from my work*". Job burnout could be accompanied by different mental and physical health symptoms, which could further affect individual's normal functioning. Relatively low mean value of this factor is indicating that degree of job burnout among the respondents is generally low.

The fifth factor is Overall Life satisfaction (3.48) and it obtained five items which are related to individual's overall feelings about life. *"Travel makes me feel satisfied with my life"* got the highest mean value (3.82), while the lowest mean value (3.05) was recorded for the item "*My actual life approximates my ideal life in many ways*". Considering the mean values of individual items, it could be concluded that respondents are mainly satisfied with their lives.

By testing the reliability of the questionnaire and by considering the research results of Cronbach alpha coefficients, represented within the Table 2, it could be noticed that recorded coefficients exceed recommended value of 0.7, which is pointing to high reliability (Kaiser, 1974).

Table 2: Results of descriptive statistical analysis

CONSTRUCTS	Mean	Std. Deviation
WORK-LEISURE CONFLICT (α = 0.90)	*2.71*	*1.15*
I do not have enough time for leisure activities because of my job.	2.93	1.37
I do not have enough time to participate in leisure activities with my family/friends because of my job.	2.90	1.35

I do not have energy to participate in leisure activities because of my job.	2.94	1.41
I am not able to participate in leisure activities because of my job.	2.79	1.40
I have never been in a suitable frame of mind to participate in leisure activities because of my job.	1.99	1.29
LEISURE PARTICIPATION (α = 0.76)	*2.77*	*0.89*
I often participate in mass media activities (watching the TV, watching the movie, listening to the radio, attending the concert).	3.03	1.36
I often participate in outdoor activities (camping, fishing, hiking, walking, bungee jumping).	2.39	1.32
I often participate in cultural activities (go to the library, social service activity, acting).	2.33	1.29
I often participate in sports activities (surfing, going to the gym, jogging, dancing).	2.52	1.51
I often participate in social activities (chatting, shopping, participating in religious actives).	3.14	1.28
I often participate in hobby activities (playing the music, drawing, collecting something, handcrafts).	3.18	1.07
JOB BURNOUT (α = 0.90)	*2.44*	*1.12*
I feel emotionally drained from my work.	2.77	1.45
I feel used up at the end of the workday.	2.79	1.46
I feel burned out from my work.	2.92	1.46
I feel I treat some customers as if they are impersonal „objects"	2.12	1.34
I feel I have become uncaring towards people since I took this job.	1.96	1.24
I worry that this job is hardening me emotionally.	2.07	1.30
STATUS/RECOGNITION (α = 0.74)	*3.15*	*1.04*
Travel is an award and recognition to my hard work.	3.48	1.42
Travel is supported by the family members.	3.81	1.30
Colleagues and friends speak highly of my travel experience.	2.70	1.40
Posting travel experience to social media can get more attention.	2.63	1.43
OVERALL LIFE SATISFACTION (α = 0.84)	*3.48*	*0.99*
Travel makes me feel better about my life conditions.	3.70	1.32
Travel makes me feel satisfied with my life.	3.82	1.28
Travel makes me feel my pursuit/wish for good life is accomplished.	3.58	1.32
My actual life approximates my ideal life in many ways.	3.05	1.13
If I can start over my life, I will not make many changes of my current life.	3.25	1.30

Source: Authors´ own work

Further analyses were oriented towards identifying the Pearson's correlation coefficient in order to determinate degree of correlations between the factors. Representation of correlation coefficients, as well as the levels of significance, is represented within the Table 3. High positive correlation (0.70) is recorded between the factors Work-Leisure Conflict and Job

Burnout ($p < 0.01$), *which confirmed H4*. Also, high correlation (0.66) was recorded between the factors Status/Recognition and Overall Life Satisfaction ($p < 0.01$). Existence of negative medium correlation was recorded between the factors Work-Leisure Conflict and Leisure Participation ($p < 0.01$) *confirmed H1*. The medium negative correlation (-0.33) was recorded between Job Burnout and Leisure Participation ($p < 0.01$), which *confirmed H3* and pointed to the nature of relationship between these two factors, or more precisely that increase of job burnout led to a decrease in participation in leisure activities. Positive medium correlation (0.32) was recorded between the factors Leisure Participation and Overall Life Satisfaction ($p < 0.01$), *which confirmed H2*. Besides that, there is a high positive correlation between Leisure Participation and Status/Recognition (0.66).

Table 3: Correlation between factors

	Work-Leisure Conflict	Leisure Participation	Job Burnout	Status/ Recognition	Overall Life Satisfaction
Work-Leisure Conflict	1	-.42**	.70**	-.01	.05
Leisure Participation		1	-.38**	.33**	.32**
Job Burnout			1	.01	.06
Status/Recognition				1	.66**
Overall Life Satisfaction					1

**correlation is significant at level 0.01

Source: Authors´ own work

Discussion and conclusion

Leisure represents important aspect of individual's everyday life and it might greatly affect the quality of overall life and satisfaction with it. As people increasingly became aware of importance of well-being and the quality of life, this topic became the subject of numerous researches. In respect to that, different authors researched the impact of leisure on life satisfaction (Fernandez-Ballesteros et al., 2001; Chick et al., 2015; Lin et al., 2013, 2015) and concluded that there is an association between these two constructs. Groups of authors also researched the work-leisure conflicts among tourism employees (Lin et al., 2014; Lin et al., 2015) and they indicated the tendency of conflict between work and leisure time, on the basis of the nature of the work.

Findings of this study showed positive correlation between Work-Leisure Conflict and Job Burnout and negative correlation between Job Burnout and Leisure Participation, which resulted in accepting the H3 and H4. These results are in accordance with findings obtained in the study conducted by Lin et al. (2014). According to the research results of this study, Leisure Participation positively shaped Overall Life Satisfaction, which could be explained by the fact that participation in leisure activities, especially in a concrete hobby, could release them from stress and help them in increasing the overall life satisfaction. Positive correlation between Leisure Participation and Overall Life Satisfaction indicated that intensive

participation in leisure activities could increase overall life satisfaction. Existence of negative correlation between Work-Leisure Conflict and Leisure Participation was expected. Respectively, increase of the work-leisure conflict might reduce possibilities of participation in leisure activities.

Nowadays, demands of different jobs have changed. Irregular working schedules, as well as atypical working hours, are just some of the main characteristics of working in the modern age. That is why employed people have less free time and energy for participating in the leisure activities. One of the practical solutions could be represented in the form of organizing the appropriate leisure activities (such as sports activities, watching the movies, attending the different exhibitions, team-buildings) by companies in order to reduce the presence of work-leisure conflicts among the employees. These activities could help in increasing the employees' energy and their motivation for work, which could further result in higher business commitment and better business performances.

However, this study has several limitations. First, the survey research was conducted on the basis of using the social network, without direct contact between the authors and the respondents. Another recommendation for future research is to include additional variable, such as the number of working hours. Finally, employees from different sectors were included in this research, so it is recommended to expand the sample and to include the employees from specific industry, in order to obtain the research results for concrete sector, which could provide further understanding of relationship between job burnout, work-leisure conflict and leisure participation.

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Efficiency in Public Sector of Bosnia and Herzegovina through the Lens of Fiscal Federalism: Exploring the Basic Principles of Fiscal Federalism in one of the most Federalist Countries in the World

Mirza Kršo
Sarajevo School of Economics and Business
Bosnia and Herzegovina
mirza.krso@efsa.unsa.ba

Dževad Šašić
Faculty of Administration
Bosnia and Herzegovina
dzevad.sasic@fu.unsa.ba

Abstract: Bosnia's fiscal system structure originates from the constitutional framework defined by the Dayton Peace Agreement, and it follows the complex structure of multiple government levels, both horizontally and vertically. With this historical fact in mind we present the argument that the organic, or at least functional evolution of the fiscal system never took place to this day. This paper suggests, examining Bosnia`s case, that strong framework of political federalism is not a sufficient condition for the development and success of fiscal federalism. In many ways Bosnia's fiscal system issues are a sui generis case, but there is much to learn and adopt from existing relevant theoretical and practical experience, equally so from successes and failures of fiscal federalism throughout history. This paper attempts to fill the existing gap in relevant literature regarding fiscal federalism effects in transitional economies. Specifically, it tries to draw a clear distinction between political dimension of federalism and its fiscal aspect. Then, it sketches a theoretical overview of crucial developments in the theory of fiscal federalism pertinent to Bosnian circumstances. Tackling the issues of soft budget constraints, intergovernmental grant schemes, and the definition and choice of appropriate tax base through the efficiency lens, we argue that the existing system did not adopt best practices of fiscal federalism and is resulting in suboptimal efficiency outcomes.

Keywords: Fiscal federalism, soft budget constraints, intergovernmental grant schemes, tax base

Introduction

Bosnia and Herzegovina (Bosnia) has a very rich and interconnected tradition of changing political philosophies and systems, sovereignty paradigms, borders, as well as societal and economical organization (Malcolm, 1996). For the largest part of it, somebody else other than its citizens was in charge of making, designing, and implementing such decisions (e.g., Ottoman and Austro-Hungarian empires, Communist Party of Yugoslavia via the central government in Belgrade, etc.). With almost no experience in democracy, it has welcomed independence with a lot of social, legal, and economic issues and without adequate institutions in either of those areas. Organic growth and dialogue oriented toward finding solution(s) through democratic process were brutally interrupted by another foreign aggression. The war was concluded without solving any of the initial issues, and adding

severe destruction to Bosnia`s human, cultural, and economic tissue. The international community that brokered peace agreement imposed a very convoluted constitutional framework, establishing a form of protectorate with unclear mission and mixed results at best (Belloni, 2001).

The above excerpt is crucial for understanding the origins of federalism in Bosnia, and is oftentimes overlooked. Whatever the state of play and analysis findings or optimizing reform(s) recommendations, those aforementioned starting positions remain. That is, there was no domestic political option that ever considered federalism as the best solution for Bosnia. In fact, every political elite in the past thirty years to this day was vehemently opposed to federalization imposed by the international community primarily as a tool, not an ideology (Keil, 2016). Fiscal federalism in Bosnia's experience shares the same enthusiastic support, common roots, and limits as its political predecessor.

Sketches of this framework are relatively easy to illustrate, as presented in Figure 1, but the true complexity stretches far beyond simple division between government levels, and crucial features will be discussed in the following paragraphs[8]. In any case, it is possible to distinguish between four major levels of governmental organization; 1) state government, or central level, 2) entity level with two Entities (Federation of BiH and Republic of Srpska (RS)) which are fiscally asymmetrically structured – FBiH has a three-tier fiscal system and RS a two-tier structure, 3) canton level in FBiH, 4) local level, municipalities, 136 of them, with 72 in FBiH, and 64 in RS. In total, there are 173 different administrative units in the Bosnia`s public sector. There is also a trend in strengthening the position of cities, both constitutional and financial, at the expense of the canton`s (e.g. City of Sarajevo vs. Canton Sarajevo), but it might still be too soon to talk about a fifth level of federalism in Bosnia.

The uniqueness of Bosnia`s federalism is evidently not in numbers given that there are countries with much higher total number of administrative units (e.g., Spain, Canada). What is truly specific in Bosnia`s case is a very weak political and fiscal authority of the central government (Werner, Guihéry & Djukic, 2006)[9]. From the very inception of the fiscal system, Bosnia has been truly decentralized in a sense that lower levels were structured as independent from the central government, and they are effectively serving opposite political visions with very poor unifying record and intent (Fox & Wallich, 1999).

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[8] One important feature has already been mentioned above, that is top-bottom approach in design and implementation of federalism in Bosnia.
[9] Nine Constitutional Court of Bosnia rulings remain unimplemented, most of which have to do with complex political setting (e.g., OHR, 2018)

Figure 1: Illustration of Federalist Framework of Bosnia and Herzegovina
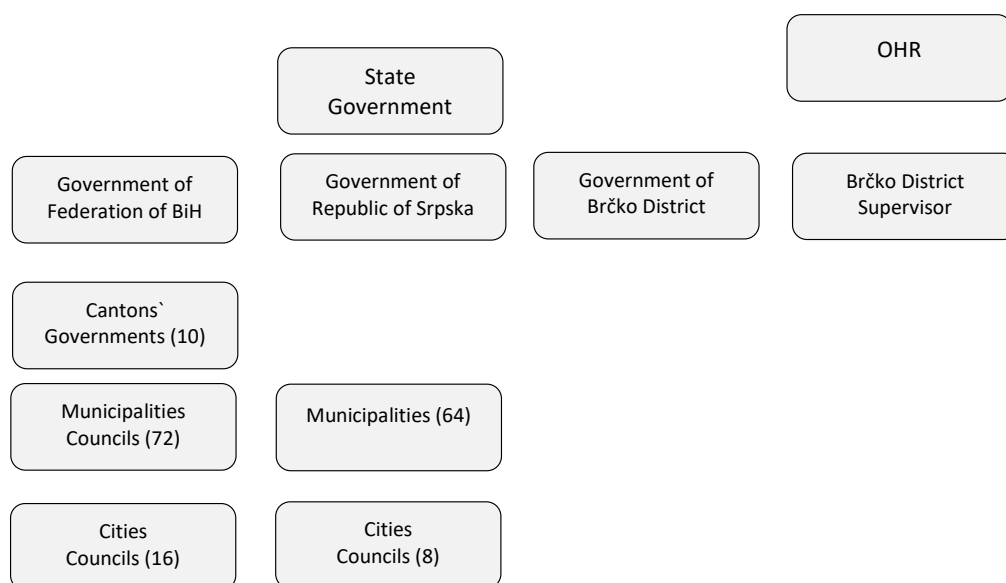
Source: Based on Fox & Wallich, (1999) and/or Werner, Guihéry & Djukic (2006)

It is then evident that without clear and shared political mission and vision of the future, functional fiscal system design becomes a challenge. Federal framework can emphasize those problems if it is also required to efficiently serve the economy and to perform as an effective platform for public goods and services delivery to the citizens, instead of simply being a barrier to centrifugal forces in political arena.

Higher levels of the government are the first ones where those problems could arise, and indeed Bosnia's experience confirms that. Widespread dissatisfaction is reflected in legal actions of different government levels against each other based on the claims of unfair treatment with regard to distributing public revenues, taking over each other's constitutional and fiscal authorities, etc. On the other hand, local levels would be expected to seize the opportunities of decentralization (Bahl, 2008) on the assumption that there is intrinsic independence embedded in their status and prerogatives. Unfortunately, there is very little reason to believe in that in Bosnian experience and even fewer evidence to back up those expectations.

On a more general note, it is clear that there is an overwhelming list of very complex issues in the very design and functions of fiscal and political systems. A present burdened with issues from the recent past and blurred with precarious future, namely uncertain EU and NATO accession, is reflected in the suboptimal design and functioning of fiscal system.

Therefore, the challenge ahead of policy makers and all concerned stakeholders, including researchers, is at least threefold: a) to design an organically functional system of fiscal federalism respecting the given constitutional and political framework and characteristics of Bosnia's economy; b) to solve basic contradictions and shortcomings of fiscal federalism in light of different levels of government being already confronted over existing vertical fiscal imbalances; c) to successfully complete previous two tasks while keeping them compatible with the EU framework of existing fiscal rules and aspiring fiscal union reforms.

Examining the true nature of fiscal federalism in Bosnia will likely be a long and demanding research endeavor that has to keep a constant focus on trying to introduce and optimize the best experiences and practices of fiscal federalism and at the same time mitigate the negative ones. This paper aims to be not simply another effort to specify all the variety/variance or resigned testament of inconceivable constraints in present setting, nor is it a wish list of measures that should (have been) be undertaken. Instead, it is a balanced acknowledgment of existing constraints in an attempt to explore why such a complex federalist setup has resulted in very modest results and practices of fiscal federalism in Bosnia over a respectable timeframe (closing in on third decade).

The next step involves sketching the theoretical review of crucial concepts and research results regarding fiscal federalism, identifying key issues to examine in order to establish the characteristics of the existing system. After that, we focus on its main issues through the efficiency lens (such as distribution challenges and soft budget constraints) in order to underline the main proposition that robust federal framework in Bosnia never resulted in efficient, sustainable, and evolving system of fiscal federalism.

Review of Theoretical Framework of Fiscal Federalism and Related Empirical Work

Perhaps the fact that federalism was an imported and imposed idea and model for Bosnia (Keil, 2016) can explain why so little attention was paid to the theory and experience of fiscal federalism in the design and reforms of fiscal system(s). There is a very modest body of literature devoted to Bosnian experiment with fiscal federalism, with infrequent interest of researchers - almost no authors have produced two or more works on the topic. When reviewing proposals of legislative reforms in related fields in past couple of decades, there is very little mention of fiscal federalism related concerns.

Therefore, it appears that there is a profound need to add to the public debate and policy shaping process, with clear ideas about crucial theoretical features of this field of public finance theory and key developments in the theory of fiscal federalism pertinent to EU and Bosnian circumstances.

To start, let's distinguish clearly between political and fiscal dimension of federalism. According to Feeley & Rubin (2011), political federalism represents a complex system of organization and functioning of polity that alongside central level involves different geographically defined subunits, with certain level of autonomy. Weingast (1995) expands the consideration of political aspects of federalism to economic considerations with fundamental political concerns of economic systems, in which central federalism principle is crucial both for political organization and protection of markets and economic agents from repressive economic behavior of strong central government.

On the other hand, fiscal federalism does not concern itself with political dimensions and nuances of federalism, but rather acknowledges the simple fact of different levels of government, their fiscal functions, and capacities. Therefore, focus is on exploring a whole set of fiscal relations between different levels of government, where priority is given to the issues of optimal allocation of fiscal policy functions, and questions of efficiency and equality.

Oates (2008) finds it useful to distinguish between so called *traditional theory of fiscal federalism* and *second–generation theory of fiscal federalism*. Based upon seminal works of Tiebout (1956), Oates (1972), Musgrave (1959), and others, traditional theory of fiscal federalism builds on the idea of potential benefits of decentralization that stem from more

efficient allocation of resources in public sector. Core concepts are encompassed with Decentralization Theorem (Oates, 1972) which states that if economies of scale is not present in centralized provision of public goods, then their local provision with customized preferences will always be at least equally efficient as the centralized one. While the Theorem provided strong support for decentralization, in the following decades it was scrutinized, especially on its key assumptions, through respectable body of research of second-generation theory of fiscal federalism.

Its critique revolves around the concept of soft budget constraints (Kornai, Maskin & Roland, 2003) and effectively rejects the assumption that public output provision is based on maximization of wellbeing of constituents of given jurisdiction. Leaning on sequential game theory approach, it helped to modify initial propositions of fiscal decentralization (Qian & Roland, 1998) showing that motives of elected officials could be self-oriented with moral hazard type of behavior involved. Also, credibility and sanctions capacities of central government in dealing with those circumstances is key factor for the outcome of the game (Rodden, 2002). After initial enthusiasm regarding decentralization prospects, these conclusions created a much more cautious outlook on effects and potentials of fiscal federalism.

On macro level, heterogeneity in terms of theoretical approaches and empirical findings is not lesser. Baskaran, Feld, & Schnellenbach in their 2016 meta-analysis moved away from the efficiency issues of (de)centralized provision of public outcomes, but explored its effects on growth. Exploring the channels through which decentralization may stimulate growth, and when putting them into contrast with possible mitigating factors of growth in decentralized setting (e.g., corruption, rent-seeking) the researchers were not able to reach a conclusive verdict. Political economics perspective is also addressed, and it similarly points to the multidimensional nature of fiscal federalism whose effects cannot be restricted strictly to the economic considerations, but affect political and social aspects in reverse manner, as well with diverging outcomes.

Their review of the related empirical literature covered large variety of data, samples, and estimation methods used, once again with mixed results. However, two factors are singled out as common denominators of existing issues – appropriate measurement of decentralization and potential endogeneity problems.

On the topic of measurement issues, Martinez-Vazquez, Lago-Peñas, & Sacchi (2017) underline basic concepts of good measures of decentralization: locally raised own revenues, autonomy on expenditure decisions, locally spent national grants, and even number and size of local units. However, translating them into concrete and standardized indicators is a challenging task (Voigt & Blume, 2012).

Same study/survey points to two alternative approaches to measurement of fiscal decentralization. First, Rodden's (2004) categorization of decentralization aspects offers three categories that featured strongly in subsequent research, a) fiscal decentralization through lenses of budget related data, b) policy decentralization exploring true nature and sources of independence of subunits and, c) political dimension of decentralization, similar to the logic of game theory based models based in median voter theorem.

Second, there is a new wave of emerging measures such as The Regional Authority Index - RAI (Hooghe, Marks, & Schakel, 2010) which aggregates partial aspects of decentralization and captures them into single measurement with well-known benefits (e.g. simplicity and

uniformness) and limits (e.g. arbitrary weighted importance of index components) of that approach.

Examination of the nature of fiscal federalism in Bosnia

Regardless of the unclear outcomes of ongoing academic debate about limits, shortcomings, and benefits of fiscal federalism, it remains that over the last few decades many developed countries (Hooghe et al., 2010), and emerging economies (Garman, Haggard, & Willis, 2001) have opted to adapt some form of decentralization of fiscal and political authorities. Similarly, Bosnia has found itself in the midst of uncontrolled experiment of building a fiscal system in a very complex federal framework without clear and measurable goals to achieve, proper debate, empirical analysis, or basic institutions. Fiscal federalism setting in Bosnia`s case was never a matter of choice but an imperative based on constitutional and political arrangements (Keil, 2016).

Most of the literature (e.g. Werner et. al. 2006; Fox & Wallich, 1999; Antic, 2014) seems to take it for granted that Bosnia has a strong fiscal federalism, and focus on illustrating the outskirts of its structure and explaining the complex relations between its elements. What has largely been missing is an examination of intrinsic properties and outcomes of that system.

A starting point in the debate over present and desired future state of fiscal system would be a general measure or estimate of effectiveness of current performance of fiscal system when it comes to the provision of public outputs and satisfaction of its participants. Obviously, such a comprehensive measure in Bosnia`s case is a challenging task with existing chronic lack of relevant data and research. Therefore, this paper will construct the departure point – the negative verdict on Bosnia`s fiscal system performance - on the basis of worldwide declining level of satisfaction with public goods (OECD, 2013), in addition to the incoherent and disillusioned attitudes of domestic experts on tax policy in Bosnia (Lazović-Pita & Štambuk, 2015). We consider this approach appropriate in light of recent trend of usage of subjective well-being data in economic literature, where externalities and public goods effects can be translated into utility terms (Frey, Luechinger, & Stutzer, 2004). Additionally, Figure 2 illustrates general perception of government effectiveness, where Bosnia is by far the worst performer in the region, and is actually worse off than a decade ago.

Figure 2. Government Effectiveness: Percentile Rank
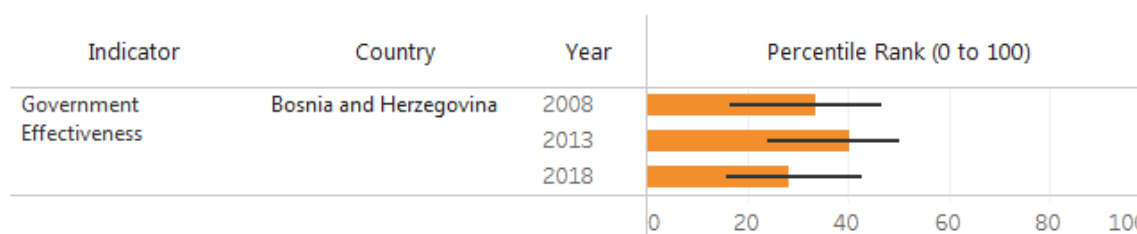
Source: Worldwide Governance Indicators

Also, this position is supported by the stagnant or insufficient economic growth unable to foster significant unemployment reduction and wage convergence with the EU, strong revenue collecting performance mostly misdirected into administration wage bill, with significant arrear accumulation in the public-sector (IMF, 2018).

There is a large gap in measuring levels of domestic fiscal decentralization and evaluating performance of the fiscal system and its possible optimization alterations. Notable exception is fiscal decentralization index (FDI) on the sample of selected countries of Central and Eastern European countries (Lazović-Pita, Pijalović, & Kreso, 2018). Results point to some surprising findings – there is no significant difference between levels of FDI for FBiH and RS; there is a significant level of fiscal autonomy of subunits, and their fiscal importance is quite low. Indeed, (de)centralization asymmetry between FBiH and RS, with shared fiscal and federal framework could represent interesting control-treatment setting, and these findings, if further validated, could go against many existing assumptions regarding fiscal federalism in Bosnia. Obviously, this requires a lot of caution in interpretation, and authors correctly point to the limits of this approach and need for further investigation.

This paper supports the stance that a great number of negative features of Bosnia` fiscal system, both in terms of design and outcomes, stem from the reality that it has never been designed with respect to the postulates of fiscal federalism theory and best practices over the past several decades. This bold statement is open to the test of time, given that currently there is very little attention paid to this phenomenon, both in economic and political science literature. Conceptually, we offer several hypotheses based on comparison between key concepts of fiscal federalism and Bosnian reality.

Weingast (2006) lists conditions for successful functioning of fiscal federalism, among which Bosnia could potentially qualify for meeting only the basic condition of clear hierarchy between different government levels with regard of their policy authorities. Remaining four conditions, that effectively differentiate between different systems of fiscal federalism seem to be, at best, only partially present in Bosnia`s case. Subnational autonomy (political and fiscal), common market, hard budget constraints and institutionalized authority are all present to certain extent but not in their full capacity. Certainly, further research is needed to materialize this anecdotal conviction, but last condition is of special interest to us and will be examined here, in principle.

Basically, this condition assumes existence of institutional barrier to the commanding influence of central level on autonomous behavior and decisions of subunits. In Bosnia`s case the opposite is true, where real power belongs to the entity level of political party organization, and it is spilled over federal structure (Keil, 2016). Weingast (2006) summarizes rich literature with straightforward implication – if a party system is dominated by national elites, it is probable that the latter will exercise their influence undermining autonomy of local governments. This appears to be a correct description of Bosnia`s circumstances where party leaders are the source of true power, deciding on the nominations of local candidates, and dictating the appointments throughout the public sector. Ever since 1995, leaders of major parties have almost exclusively run for presidency (almost a symbolic position with no real authority in domestic issues), without taking prime ministers` responsibilities – appointing and releasing prime ministers of all levels at their will.

This could play major role in explaining why there is more convergence than expected between FBiH and RS in terms of fiscal decentralization. If there is very little real political

autonomy of local jurisdictions, and if political decision making is highly centralized, then fiscal federalism framework and its functioning have to be compromised.

In addition, Thornton (2007) came to the conclusion, based on the sample of OECD countries for the period 1980 – 2000, that when real financial autonomy of different jurisdictions is factored in, impact of decentralization on economic growth is insignificant.

Rodden (2004) rejects static nature and perception of federalism, regardless of the complexity of its form in each concrete example, and suggests a more subtle view of federalism as a continuous process of "distribution and redistribution" of authority and responsibilities. In that light, whatever measures of the level of fiscal federalism and decentralization achieved should play only limited role in evaluation of systems as a whole. For example, decentralization, under right conditions, can indeed serve as a mean to achieving greater efficiency of public sector, but without them could simply amount to increasing overall size of government and diminish accountability between different jurisdictions. Useful catalyst is a form of funding of decentralization. Empirical findings reviewed by Rodden suggest that if decentralization is funded by transfers then it is positively associated with the size of government, which is another worrisome feature of system in place in Bosnia.

These principal features of fiscal federalism in Bosnia will be now discussed through narrowing focus on two major issues pertinent both to the theoretical considerations presented above and Bosnian specific conditions.

Issues Central To Decentralization and Fiscal Federalism Processes In Bosnia

Revenues Distribution

From its introduction in 2006, VAT has become the most important component of tax revenues; comprising 67% of all indirect taxes, and around 40% of all taxes (ITA and MoF FBiH, 2017, 2019). Obviously, modus of distribution of collected revenues was always meant to be a central theme for everyone involved. Historical principle was adopted as a starting point. Formula for distribution of collected indirect taxes is taking into account elements of the size in territory, but mostly of population (total and number of students in elementary and high schools, but not in colleges which are also financed on cantonal level)[10]. Levels of collected sales tax, VAT's predecessor, were basis for coefficient calculations, with later adjustments. While unifying indirect taxes administration has been one of the most important achievements for centralistic forces, modus of distribution of collected taxes is certainly a triumph of decentralization proponents.

Currently, there is a complex and nontransparent scheme for allocation of collected revenue in place (Kreso et al., 2016), with almost no satisfied participants. One specific aspect of it is that several legislative efforts over the past two decades[11]have provided special position for four Cantons (Sarajevo, Posavski, Bosansko-podrinjski and Canton 10), through higher distribution coefficients (2, 1,8; 1,5 and 1,1 respectively) and annual transfers to these three (minus Canton Sarajevo) „fiscally unsustainable cantons".

It seems relevant to examine how these solutions fit to fiscal federalism theory using descriptive statistics collected from CPI database for the period 2005-2017. Weingast's and

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[10] See "Zakon o pripadnosti javnih prihoda u Federaciji Bosne i Hercegovine, 2006.;2009. Službene novine FBiH, br. 22/06, 22/09"

[11] For the detailed list of laws that regulates this field, and its chronology, see (Kreso et al 2016)

Rodden's implications related to political independence of lower jurisdictions of Bosnia were discussed earlier, and fiscal (in)dependence seems to follow suit. As Table 1 shows, autonomous revenue streams for lower levels of government vary from meager 11% to just over one third of total revenues. Expenditure structure in which two most important sections are wages and transfers (CPI, 2017) with unsatisfactory level of capital investment activity, and significant debt service portions, all point to a very modest level of autonomy.

Table 1: Public Revenues Structure in 2017 for Selected Levels of Government in Bosnia

Level of the Government	Indirect Taxes Allocation	Other Taxes	Received Transfers	Donations	Non-Tax Revenues	Debt[12]	Other
FBiH Cantons	59%	25%	2%	0,15%	11%	2%	0,36%
FBiH Municipalities	27%	19%	12%	0,49%	33%	1%	7%
RS Municipalities	34%	10%	5%	1%	22%	23%	4%

Source: CPI database, authors' calculations

Kreso et al. (2016) provide a very detailed overview of comparable practices of revenue distribution, both political and fiscal, with in depth analysis of current distribution scheme, and possible alternatives. General conclusion is that existing outputs are most likely unbalanced, but any provisional reform would probably only make things worse, even if winners and losers would switch places.

In that setting, questions of fiscal imbalances and equalizations come to the forefront.

Vertical fiscal imbalances[13] in Bosnia's fiscal design have at least twofold dimension. First, debt servicing mechanism has a built in imbalance that is being shifted to the lower jurisdictions. Once all the indirect taxes are collected, debt servicing is the first priority so the appropriate amount is subtracted, and what is left is basis for distribution. At the same time, lower levels, cantons and municipalities, are servicing their part of subsidiary debt allocated to them via entity government. That puts them in unfavorable position of effectively double repayment of debt obligation. It is hard to think of a strong enough reason why automatic subtraction has to happen on state level, and not on entity level after the total amount is divided between entities, naturally with appropriate entity's coefficient increase.

Second, intragovernmental transfers for three aforementioned cantons are certainly a form of compounding the distribution mechanism. Their unconditional nature is a strong indicator of imbalances between different levels of governments, and lack of economic logic or analysis behind it simply underlines the political nature of this decision. Also, positive externalities have to be recognized by the system, and jurisdiction producing them should be subsidized for it.

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[12] Data presented does not represent total stock of public debt, but rather a flow in given period (no reviewed jurisdiction possess standardized database for public debt, let alone comparable to standards e.g. MTDS methodology or similar).

[13] Note that Vertical Fiscal Imbalances are here simply understood as specific distribution issues between different levels government, while Horizontal Fiscal Imbalances are observed on the horizon of same government levels (e.g. between 10 cantons in FBiH, or municipalities in FBiH and RS. For theoretical background and treatment of VFI see for example (Eyraud i Lusinyan, 2013) or Cevik (2014)

Horizontal fiscal imbalances are pronounced with special coefficients for all four cantons that have them, but Canton Sarajevo draws the most attention and critique from different, allegedly deprived cantons. There is very little literature or data to go beyond simple perception, but Kreso et al. (2016) suggest that special coefficient of 2 for Sarajevo is not simply justified, but probably undervalued. In either case, we can establish the fact that those imbalances exist, no matter the sign in front of them.

Now, in summary of this system, it is obvious that several different, opposite principles of allocation are integrated in its present version, namely, equalization on horizontal level, principle of derivation in terms of allocation of collected indirect taxes on the account of each jurisdiction's contribution, and political desire to help and stimulate the three cantons.

There are many ways to go about identified vertical and horizontal fiscal imbalances[14], but no matter what the final design, it has to include and satisfy at least two of those three principles (derivation and equalization), and address fiscal needs and capacities to match them. Currently, fiscal needs of jurisdictions are partially built-in in the existing formulas through population proxy but fiscal capacity identification and quantification is not present.

Identifying and measuring fiscal imbalances is quite a difficult challenge for any government. Even if once correctly quantified, their correction is not linear, straightforward path to shared wellbeing. Problems include definition and measuring of fiscal potential and distortions that intervention will cause. Musgrave (1961) offered a list of potential equalization proposals, or plans, which cannot be easily summarized due to their variety and depth. First of all, there are three distinctive possible approaches, 1. Equalization plans (a) equalization of actual outlay or performance, (b) equalization of differentials in need and capacity, c) equalization of potentials for state finance, 2. Pure incentive plans, and 3. Plans relating central fisc to individual citizens of federation. However, it is possible to derive a common denominator – unavoidable distortions and suboptimal equilibriums. There is no silver bullet, no optimal approach, even though some promise a better outcome. Much like in the existing practice in Bosnia, most of the plans focus on redistribution effects, while incentives, levels and quality of public goods offered are residuals. Still, making plans with focus on fiscal efforts of lower jurisdictions and attaching them to matching grants of central government seems as the best starting point and fit to specific conditions and constraints of fiscal federalism in Bosnia.

On the path of pursing this approach, there are at least two important question to answer: questions of tax base and tax rate, and measure(ment) of fiscal capacity.

Complex Bosnian reality seems to "help" answer the first one. To satisfy derivation principle, detailed account of final consumption over different jurisdictions should be the starting point. For various reasons involving statistical reporting, organizational and registration issues for companies, that is not currently possible. Kreso et al. (2016) instead use reported gross personal income over tax jurisdictions. That seems as a reasonable proxy – gross income, before any taxes, deductions and exemptions is probably the as good as it gets indicator of final consumption. Better yet, it is the only indicator that present statistical framework offers and in the medium run we envision little space for improvement.

Finally, fiscal capacity is a simple theoretical concept – potential ability of any jurisdiction to raise revenues, but how exactly to distinguish between historical data and real potential could be quite a different story. In Bosnia, there are municipalities with as little as 6% and as much as 57% of their own created and collected revenues. It is difficult to offer proper explanation

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[14] Again, for comparable practices in the region and the world, and also customized proposals for FBiH, see Kreso et.al. (2016).

of this data at the moment, but there is every reason to be extremely cautious in application of historical method as reliable indicator of fiscal capacity for jurisdiction in Bosnia. Therefore, we find present approach in determining fiscal capacity of jurisdictions in Bosnia as a simple sum of all the received revenues from ITA and direct taxes, or as a total gross income of its citizens, as inappropriate measure and approach. Furthermore, even if fiscal capacity is beyond reasonable doubt, fiscal capacity gap is still to be defined properly. Again, due to the positive externalities effect and free riding, and special coefficients in place, per capita fiscal capacity has to be taken with utmost caution, just as fiscal needs cannot simply be a function of number of inhabitants of a jurisdiction.

We suggest that before any new equalization reform take place, to focus on level of quality and coverage of public services as a starting point. Some errors in determining the average variables are unavoidable, but gains in efficiency and however we define equality could be much greater. Fiscal capacity gap value, either as an index, or a coefficient will remain a central issue, but its structure should be equally important. All the items to consume revenues, such as education, healthcare, security and so on, should be unified to the level of their comparison over jurisdictions and different government levels. Without a system of measuring their performance (institution by institution, sector by sector) as the basis for related benefits received/denied, the cost side of providing public goods will not be addressed properly.

With that in mind, we can conclude that current system of distribution of revenues in Bosnia is not transparent, and almost certainly is not efficient. Present imbalances are result of federal framework, but also of primitive equalization approaches focused on equalizing actual outlays and disregarding performances, with unclear concepts and definitions of fiscal needs and capacities. Unbalanced volumes and structure of revenues seems to be only the problem and priority for equalization schemes, while costs of providing public goods and services are being neglected, regardless of differences in unit cost or needs. For all the public and accompanying political attention around special coefficients and alleged center-periphery problems, it would be at least equally wrong to try to fix them without measuring them correctly first, and then to proceed on the wrong premises.

Distribution issues are only one dimension of complex problem of fiscal federalism functioning in Bosnia. Questions of soft budget constraints, and related challenges are another step in better understanding of present system features and potential threats and possible advantages.

Soft Budget Constraints

Under the Decentralization theorem, and fiscal federalism advocates, decentralization should offer numerous and clear advantages over centralized fiscal systems. According to Rosen & Gayer (2009), those benefits should include adjustment of public goods and services to local preferences, followed by fostering competition between different agencies and jurisdictions with resulting increase in public sector innovations ("fiscal labs"). In Bosnia's case, the present decentralized structure is, most likely, devoid of crucial fiscal federalism benefits due to the weak legal system in combination with no real fiscal autonomy of lower jurisdictions and without clearly defined fiscal responsibilities between them. Lockwood`s (2009) preference matching concept is difficult to take place under such a dependent status of lower jurisdictions, while data collected (CPI, 2017) offers little evidence that fiscal and public

sector innovations are taking place. Smaller jurisdictions in particular are not showing signs of innovation in their revenue streams. If anything, there seems to be strong correlation between the size of a jurisdiction and ways and means to finance its budget separately from those allocated by the central government. Another worrisome practice is that as a rule all jurisdictions are relying on public debt as a supplement to weak internal fiscal capacities. The good news is that capacity to borrow remains curbed, where most of public debt is simply allocated through subsidiary schemes from central government, for the most of FBiH, while in RS, with looser boundaries, jurisdictions seem to slowly but persistently increase their long positions. Also, general fiscal positions are gradually improving (IMF, 2018), with deficits accrued in post 2007 period being overcome.

On the other hand, soft budget constraints, as critique of fiscal federalism suggests, are one of the most realistic threats to efficiency and sustainability of decentralized systems. Therefore, with this in mind, are soft budget constraints real occurrence and potential threat to sustainability of fiscal system in Bosnia? Without empirical evidence, and there has not been any prior efforts, we can only emphasize the importance of this issue for efficient functioning of fiscal federalism, and elevate it to top priority for future research and policy analysis. However, some observations could offer a more educated perspective.

To begin, it is known from vast research evidence that debt finance and strong weight of transfers in revenue structure are ideal environment for soft budget constraints occurrence. From data presented in Table 1, it seems that all relevant lower levels of government in Bosnia qualify. In 2017, around 0.9 percent of GDP was channeled by entity governments in form of subsidies and transfers (Cegar & Parodi, 2019).

Second, system of fiscal rules for any level is either nonexistent, or in the case of few existing rules - there is no corrective arm from higher levels, or a regulator of any kind. It seems that mechanism in place with its "automatic stabilizers" in form of dependency on allocated indirect taxes based revenues and transfers, is the only preventive and corrective force in terms of soft budget constraints. Constant requests for modifying existing formulas, weighs, distribution schemes, etc. with frequent, small interventions in relevant legislature only add to uncertainty and increase already prominent distortions. According to ITA data, percent changes in net ITA revenues can vary significantly on annual basis, (with striking nine percent increase from 2014 to 2015, after equal decrease in 2013-2014). Increasing fiscal responsibilities for lower jurisdiction (Kreso et al., 2016) in combination with modest growth in revenues are creating additional pressure on lower government levels which are hard to sustain in the medium run.

It is worthy to mention that credibility of central government(s) in terms of forcing fiscally irresponsible jurisdictions to own the consequences of such behavior has never been officially tested, so there are no precedents for possible bailouts.

Third, while the problems in determining fiscal potential will be discussed in following sections, it suffices to say that very limited, if any, evidence that fiscally unsustainable cantons are really undercapacitated exists (in contrast to having simply smaller revenues and economic activity level compared to the rest of the cantons). No effort has been invested, at least it was not published, in analyzing what the government considers under fiscal capacity, and it is very likely that total revenues level is a proxy they use. In that case, CPI data indicates that special transfers to those cantons are doing very little to improve their average revenues level, let alone fiscal capacity. Figure 3, post hoc dully noted, simply illustrates exactly that.

Figure 3: Total Revenues in "Fiscally Unsustainable" Cantons (in mil BAM)
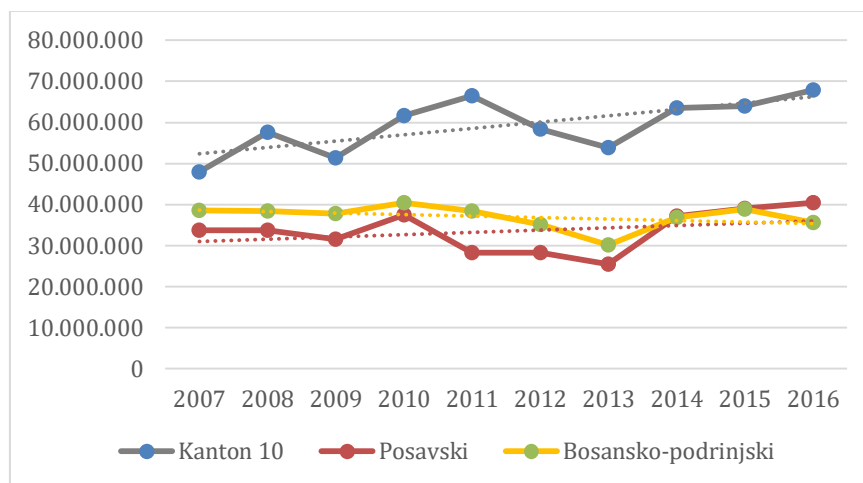
Source: CPI database, authors' calculations

Two more things are important to consider in relation to intergovernmental transfers; question of externalities and flypaper effect.

Most important potential negative externality is obviously soft budget constraint mechanism - possible spillover of burden of deficits and debt from fiscally irresponsible jurisdictions onto taxpayers across the country.

However subtle and often overlooked, positive externalities within the fiscal federalism framework could lead to similarly severe consequences. Namely, public goods and services provided by one government level and enjoyed by taxpayers of other(s), can represent disincentive to the original provider, if not compensated through transfers or grants from central government. This is a well-known intervention from pigouvian taxes – subsidies toolkit. It seems justified to have this in mind in the light of ongoing debate around special position of Sarajevo Canton, even though its special coefficient is simply a derivation from historical position of collected revenues right before introduction of VAT, rather than acknowledgment of positive externalities spillover effect and a systemic attempt to equalize potential negative outcomes.

Flypaper effect or high propensity of local levels to spend funds received through unconditional transfers (in comparison to the increase in the income) is another factor that could compromise incentives for responsible fiscal behavior. It is not clear what exactly motivates this kind behavior - probably mixture of behavioral (Hines & Thaler, 1995) and political considerations, such as Niskenen's budget maximization motives (Inman, 2008), but whatever reason behind it, the effects are real and measurable. Hines and Thaler (1995) have quantified this effect, by summarizing results of previous econometrical studies, where additional dollar from increase of income has marginal tendency to be spent ten times less than a dollar received from unconditional transfers where that tendency is between 50 and 100 percent. Therefore, unconditional transfer scheme, like the one present in case of Bosnia's "fiscally unsustainable" cantons, is more likely than not to amplify soft budget constraints problem.

Finally, as Oates (2008) points out, efficient financial and property markets, in effect, represent hard budget constraints. Underlying logic is that fiscally irresponsible governments would be sanctioned by financial markets in form of higher interest rates charged, or refusal to (re)finance them while asset value would decrease in jurisdictions with fiscal problems.

Only a few jurisdictions in Bosnia have any formal credit potential (e.g. credit rating), or even legal possibility for direct debt financing. Mostly, they write residual debt as a fraction of central government debt, and in milieu of weak or non-existing fiscal rules and corrective arms, that is good news. Therefore, there are almost exclusively two borrowers for governments in Bosnia: a) International financial institutions, WB, EIB, EBRD and IMF, since no other foreign creditor has means to evaluate their credit potential, b) domestic banking sector, both as direct creditor, or as a buyer of bonds and treasury bills for different levels of government, mostly short to mid termed. On the other hand, domestic financial markets are hardly a functional part of Bosnian economy. Once post-war privatization wave was over, financial markets have lost any significance. There is no real price discovery processes taking place and no liquidity or volume to provide financing to private or public sector. Adding high cost of external borrowing for banking sector, due to the country risk reflected in country's credit rating, it becomes very clear why well over 80% is owed to international financial institutions.

Asset evaluation is still waiting to be conducted and regulated according to the best practices in the profession, with first meaningful set of laws expected to be voted on in 2020, also under strong ordinance from IMF.

This means that financial institutions, mostly foreign, rather than markets are holding Bosnia's governments in check, while asset prices adjustment certainly lags to economic and fiscal activity changes.

What is the verdict on soft budget constraints in fiscal system of Bosnia? It is a unique mixture of specific hard constraints, which are mostly "automatic" and explicit, and soft budget constraints which are more subtle and nuanced. First group consists of limited capacity to borrow, total dependency on foreign financial institutions and absolute dependency of lower jurisdictions on indirect taxes allocation. On the other hand, absence of fiscal rules and corrective arm for fiscally irresponsible behavior, unconditional nature of transfers to three cantons along with flypaper effect, inability to define and measure fiscal potential of different jurisdictions and externalities in public goods and services provisions, weak asset evaluation and pricing mechanism, together with sketched lack of dedication of elected officials to work in best public interest, all add to very worrisome network of present soft budget constraints in fiscal system of Bosnia.

Still, no memorable fiscal crisis occurred over the past two decades, and overall fiscal position of central government seems to be improving.

However, some other indicators are calling to caution, like negative ROE on investment in public sector (-0,3 %), total net debt of state owned enterprises around 22% of GDP, and total debt of public sector (with guaranties) estimated over 62 % of GDP, around 1% of GDP in unpaid taxes by SOE (Cegar & Parodi, 2019), with unsustainable pension funds and healthcare system (IMF, 2017), among the most prominent ones. It seems apparent to us that modest improvement in fiscal position and long lasting stability are not necessarily signs of system robustness and soundness, but rather a means of prolonging moment of truth and exposing systemic weakness.

Concluding Remarks

This paper followed a simple premise, namely that strong federal framework does not guarantee an effective fiscal federalism setup based/focused on efficiency, and Bosnian experience seems to confirm that.

Naturally, there are several approaches to examining and determining the level of success of any fiscal system, with issues of efficiency and equity being most prominent. While not without its shortcomings, the focus on efficiency is a choice for this paper. Efficiency without equality, as witnessed many times, is certainly possible, just as equality without efficiency is most likely improbable.

Initially, this paper offered a distinction between political and fiscal dimension of federalism, illustrating with supporting evidence that Bosnia`s adoption of federalism in constitutional design was a forced choice, and fiscal processes had to adapt and follow along. There is indeed reason to believe that federal structure of Bosnia is quite strong but it is a much more difficult task to pass the verdict on level of development and effectiveness of fiscal federalism in Bosnia.

Most of existing literature stops at the task of sketching the complex outline of the existing system, different government levels, schemes of political and fiscal responsibilities, etc. There is a huge void in understanding the effect and output of the existing system, and the starting point for this paper was the conviction that most of the solutions implemented in Bosnia`s fiscal system did not follow best practices from fiscal federalism theoretical and practical experience. After briefly presenting the crucial features and benefits of fiscal federalism, it was explored whether they are represented in Bosnia`s experience, and to what extent. If those benefits cannot be identified, then it would be reasonable to assume that the initial proposition regarding the relationship between political and fiscal dimensions of federalism hold true until empirical findings could help as to validate it or reject it.

The next step was to introduce preconditions for successful implementation of fiscal federalism, and, unfortunately, most of them were found to be missing. What is more, some elements point to the exact opposite direction, such as weak legal system, centralized political decision making, lack of real political and fiscal independence of lower jurisdictions, among the most important ones. Also, some indirect measures of decentralization and satisfaction with existing fiscal system, as well as quality and level of provided public goods and services, were discussed, with the general conclusion remaining a strongly negative one.

Furthermore, this paper also examined two specific issues for performance of fiscal federalism in Bosnia, the distribution of collected revenues and soft budget constraints.

Almost no elements of distribution mechanism satisfy the suggested theoretical and empirical findings for related issues. Most worrisome features here are not the existing vertical and horizontal imbalances, but rather wrong and primitive scheme of equalization devised in attempt to correct them, as well as the existing system of unconditional grants for "fiscally unsustainable" cantons. All of these are sources of distortions and impediments on efficiency. Proper definition of fiscal capacity and fiscal capacity gap, both in terms of value and structure, promoting issue of quality and quantity of provided public goods and services, is an alternative approach that this paper advocates.

Finally, problems of soft budget constraints supplement the presented arguments. After mixed findings on specific dimensions of soft budget constraints; debt finance, dependence on fiscal transfers, weak financial markets and asset evaluation mechanism among few, there is real

temptation to label existing system as robust, or not prone to the soft budget constraint issues. However, again we have offered alternative perspective in which danger of eruption of soft budget constraints is the real one. Continuing the metaphor, problems of huge inefficiency in public sector, accumulated tax debt and high levels of leverage, unsustainable healthcare and pension systems, lack of fiscal rules and corrective arm, unconditional transfers, flypaper effect, etc. indeed represent very strong seismic activity, which could result in quite serious fiscal problems.

Before any future intervention into the existing fiscal system, true reform should take place in the field of data collection, in order to empirically assess the existing conditions and established conclusions and observations. Further research should focus on approximating the measurements of fiscal capacity, fiscal capacity gap, level of vertical and horizontal fiscal imbalances, and properties of potential soft budget constraints. This step would provide for a solid groundwork from which to explore the level of decentralization and its effects, with the intention to have the clear criteria to evaluate the possible reform paths to efficiency improvement.

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