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Table of Contents

1	Int	roduction	4				
2	2 The regional profiles						
3	3 Crowdfunding basics						
4 SERBIA - general information							
4	.1	Regional characteristics and economic situation	7				
4.2		General investment situation	10				
4	.3	Financing of innovation	11				
5 Reg		gional Analysis on crowdfunding	12				
5	.1	CF actors (platforms, initiatives, intermediaries etc.)	12				
5	.2	Available types of CF	12				
5	.3	CF volume of investment	12				
5	.4	Existing Regulation Framework	13				
6	SW	OT analysis of regional CF potential	14				
7 Regional development demand							
7	.1	Investment and business environment	15				
7	.2	Innovation	16				
7	.3	Regulation framework	16				
8 Good practice examples							
9	9 List of references:						

Project co-funded by the European Union funds (ERDF, IPA)



Regional profile

Serbia

1 Introduction

The CrowdStream project

CrowdStream's main objective is to improve the effectiveness of public/private businesssupport for innovative spin-offs & social enterprises to access qualitative alternative financing (crowdfunding). The main project result will be improved cooperation between business-support-organisations and enterprises to guarantee a qualitative access to crowdfunding in the Danube region.

Crowd Stream outputs:

- ✓ Strategies for alternative finance (crowdfunding) in the Danube Region
 - Regional Action Plans
 - Policy recommendations for the region
- ✓ Quality tools for crowdfunding
- Capacity building for innovative small and medium enterprises (SMEs) and business support organizations
- ✓ Pilot actions

Who we are:

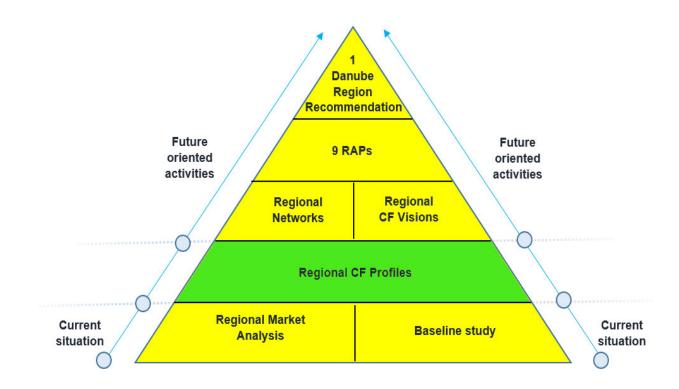
In this partnerships **16 organisations coming from 10 regions** aim at improving framework conditions for the development of alternative financing sources for SMEs in the Danube Region.





How we work:

The regional profiles will guide the project partners towards including relevant stakeholders in regional networks for developing the Regional Action Plan and the long-term targets on CF in their region (Regional CF visions). Those visions will enable the stakeholder groups to work jointly on the development and implementation of the RAPs and recommendations.



2 The regional profiles ✓ Describe the current situation of alternative finance in the partner regions ✓ Identify, inform and involve relevant stakeholders ✓ Support the development of common visions, Regional Action Plans (RAPs) and policy recommendations for the region



3 Crowdfunding basics

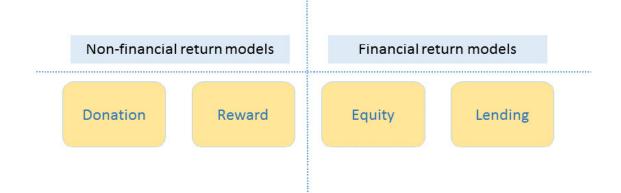
Types of Crowdfunding

Crowdfunding represents an effort from many individuals by offering a small contribution to support a project or a company in raising capital (*European Crowdfunding Network*).



Source: European Commission, Crowdfunding Explained to small and medium sized enterprises

In the case of **non-financial return crowdfunding models** individuals support a project because of emotional aspects of the campaign (donation-based) or they receive a symbolic award (reward model), which is not proportionate to the actual donation (*European Commission, Crowdfunding Innovative ventures in Europe*). The main advantages in the reward model can be attraction of first customers and a fast feedback on the commercial potential.



Financial return crowdfunding models provide an opportunity for the public to invest in start-ups or to offer loans with the expectation of a financial return while accepting some risks. The crowd could invest in early-stage companies (equity-based) or offer loans to SMEs under certain legal conditions (lending-based).



4 SERBIA - general information

4.1 Regional characteristics and economic situation

Innovative sector

According to National Bank of Serbia's study regarding macroeconomic developments in Serbia, the conclusion is that Serbia's economy depends on manufacturing and exports, driven by foreign direct investments (FDI). The FDI are concentrated in a variety of industries including metal processing, building, textile, beverage, electronics and financial. On the expenditure side, household consumption is the main component of GDP and accounts for 76% of its total use, followed by gross fixed capital formation (17%) and government expenditure (18%). According to preliminary data, GDP grew by 2.8% in 2016, largely affected by the activation of earlier investments and a good agricultural season, but also by the still relatively low oil prices and low interest rates. On the production side, GDP growth was led by agriculture, industry, construction and private sector services [1].

Serbia's economic growth is supported by factors such as its very good strategic location and its inexpensive and skilled labour force. A very important factor for economic momentum is that the Republic of Serbia has signed free trade agreements with the European Union, Russia and Turkey. Serbia gives generous grants to foreign investors. A limiting factor for economic growth is the global financial crisis and its impact on the Serbian economy. Key macroeconomic indicators shown in Table 1 give the significant indicators of the overall economic situation in Serbia in the past few years. The period 2009-2016 has been marked by a slow recovery from the economic crisis [2].



Table 1: Key macroeconomic indicators

	2009	2010	2011	2012	2013	2014	2015	Q1 2016	Q2 2016
Real GDP growth (in %) ¹	-3.1	0.6	1.4	-1.0	2.6	-1.8	0.74	3.5	
Consumer prices (in %, relative to the same month a year earlier)	6.6	<mark>1</mark> 0.3	7.0	12.2	2.2	1.7	1.5	0.6	0.4
NBS foreign exchange reserves (in EUR million)	10 602	10 002	12 058	10 915	11 189	9 907	10 378	9 501	9 338
Exports (in EUR million) ³	8 043	9 515	11 145	11 469	13 937	14 451	15 618	3 945	1 442
 growth rate in % compared to a year earlier 	-16.1	18.3	17.1	2.9	21.5	3.7	8.1	11.8	11.3
Imports (in EUR million) ³	13 099	14 244	16 487	16 992	17 782	18 096	18 899	4 515	1 619
 growth rate in % compared to a year earlier 	-28.3	8.7	15.7	3.1	4.7	1.8	4.4	1.7	4.0
Current account balance ³ :									
(in EUR million)	-2 032	-2 037	-3 656	-3 671	-2 098	-1 985	-1 577	-248	-51
as % of GDP	-6.6	-6.8	-10.9	-116	-6.1	-6.0	-4.8	-3.3	-
GDP (in EUR million) ⁵	30 655	29 766	33 424	31 683	34 263	33 319	32 908	7 498	
Unemployment ² (in %)	16.1	19.2	23.0	23.9	22.1	19.26	17.7	19.0	
Wages (average for the period, in EUR)	337.40	330.10	372.50	364.50	388.60	379.30	368.00	353.70	401.60
RS budget deficit/surplus (as % of GDP) ⁴	-3.2	-3.4	-4.0	-5.9	-5.2	-6.3	-2.9	-1.0	
Consolidated fiscal result (as % of GDP) ⁴	-4.4	-4.6	-4.8	-6.8	-5.5	-6.6	-3.8	-1.7	
RS public debt ⁷ (central government, as % of GDP)	32.8	41.8	45.4	56.2	59.6	70.4	75.9	74.9	74.1
RSD/USD exchange rate (period average)	67.47	77.91	73. <mark>3</mark> 4	88.12	85.17	88.54	108.85	1 <mark>1</mark> 1.37	108.33
RSD/USD exchange rate (end of period)	66.73	79.28	80.87	86. <mark>1</mark> 8	83.13	99.46	111.25	108.60	108.15
RSD/EUR exchange rate (period average)	93.95	103.04	101.95	113.13	113.14	117.31	120.73	122.87	122.81
RSD/EUR exchange rate (end of period)	95.89	105.50	104.64	113.72	114.64	120.96	121.63	122.92	122.62

Also, according to The World Bank assessment [3], recent economic developments in Serbia are:

- The Serbian economy benefited from a recovery of consumption (up 1.1%) and exports (up 11.9% year-on-year [y-o-y]) in 2016. As a result, real GDP growth is estimated at 2.8% (y-o-y). Unlike in previous periods, in both 2015 and 2016, private investment provided particular support to growth, which could have been even stronger if not for a recent increase in imports (6.8% in real terms).
- Looking across the **sectors of the economy**, growth in 2016 was broad based. Agricultural output increased by 8.3% y-o-y in real terms in 2016, and value added in industry increased by 3.6% and in services by 2.2% compared to 2015.
- The improved economic performance was reflected in the **labour market**, with employment rates exceeding those from before 2009. Both the activity and the employment rates, at 52.3 and 45.5% in the fourth quarter of 2016, respectively,



have increased over the past two years. The unemployment rate fell to 13% in the fourth quarter, the lowest level since 2008.

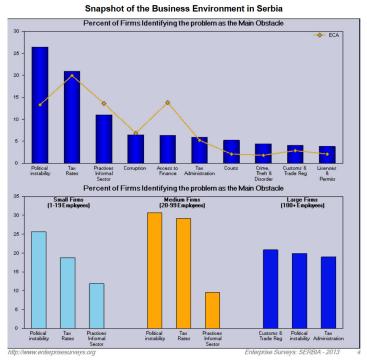
- In 2016, real wages increased by 2.6% (y-o-y) after declining for three consecutive years. However, almost a third of the increase in employment came from the informal sector. Youth unemployment dropped but remains high at 31.2%.
- Since employment and labour income are critical to the welfare of the poor and vulnerable, poverty (measured using the regional line of US\$5/day 2005 purchasing power parity [PPP]) is estimated to have declined from 14.9% in 2014 to 13.6% in 2016. The recovery in agriculture output in 2016 is likely to have had positive impacts on rural poverty, but it is estimated that poverty has not returned to its lowest level, which was seen in 2008.
- Fiscal consolidation continues successfully, and in 2016, the general government budget deficit reached 1.4% of GDP compared to 6.6% in 2014.
- The current account deficit (CAD) shrank by 13% in euro terms in 2016. This came as a result of an improved trade balance (down 12.9%) and despite lower remittances (a drop of 9.4% y-o-y). Foreign direct investment (FDI) reached 5.5% of GDP. The dinar fell slightly (1.5%) against the euro in 2016 [3].

In addition to that, a study done by The World Bank Group (WBG) has important segment about Labor Market Institutions in Serbia [4]. It states that the Systematic Country Diagnostic (SCD) highlights the importance of employment as the main vehicle for lifting the income of the bottom forty percent of the population. It also highlights the importance of building human capital to increase labor productivity and enhance inclusion, including closing education enrolment gaps for low-income groups and Roma in pre-primary and tertiary education. The WBG is a leading partner to the government in knowledge work around the job creation and skills agenda, working on a broad range of reforms from National Employment Service Reform and labor market regulation to addressing current and future skill gaps. These reforms are critical to creating opportunities for youth, women and marginalized groups [4].



Snapshot of the business environment in Serbia presents data from the Enterprise

Surveys conducted by the World Bank [5]. The benchmarks include the averages for the group of countries in Eastern Europe & Central Asia and the Serbia income group. Below is a snapshot of the biggest business environment obstacles as perceived by firms. The first graph presents the top 10 constraints as identified by firms in Serbia benchmarked against the regional average. The second graph shows the top 3 constraints broken down by large, medium, and small firms in Serbia [5].



4.2 General investment situation

Main forms of business organisation in Serbia are:

- The limited-liability company
- The joint-stock company
- Partnerships (general or limited) and
- Branches and representative offices

There is no restriction in foreign ownership for any form of business entity. Also, in any form of business entity, a foreigner may be a director or partner. All business entities must be registered with the Agency for Registration of Business Entities. Capital contributions to business entities may take the form of cash, kind or rights [6].



Investment Climate in Serbia

Since January 2001, Serbia has shown a strong commitment to establishing a modern market economy and re-entering European and global markets. Substantial reforms have been initiated to that end, particularly in creating a business-friendly environment. These include legal and economic reforms in all areas, aimed at ensuring legal security and harmonization with EU legislation and economic policies [2].

In March 2012 Serbia became an EU candidate country. Notwithstanding its current position, the harmonization of local legal and regulatory framework with acquis communautaire, will remain a fundamental factor driving Serbia's stability and economic growth. Steps toward accession into the EU should lead to market improvements in the business environment of the country, enabling greater access to the export markets of EU member states and other countries [2].

Many studies and research are being done about this subject in Serbia, since the current trend in the world is entrepreneurship and how to finance it. Serbia has many promising young people willing to become entrepreneurs, but there are not enough finance support options for them. Serbia needs new source of finance for entrepreneurship and that the traditional financing is not enough. Access to finance is the single most important bottleneck for youth entrepreneurship. Youth are considered to be highly risky and are therefore off the radar for the majority of traditional financial institutions [7].

4.3 Financing of innovation

Innovation/R&D institutions in Serbia are financed by:

1) The State:

- The Government
- Projects from ministries, e.g. Ministry of Education, Science and Technology Development of Republic of Serbia, Ministry of Agriculture and Environmental Protection, Ministry of Economy of Republic of Serbia, etc.
- Innovation Fund- financed by European Union (IPA Projects) and The World Bank
- Development Agency of Serbia- different projects

2) International Projects:



- European Projects: Horizont2020, Erasmus+, COSME, IPA Program, European Fund for Balkan
- Other Projects: Norwegian Embassy in Serbia, Swiss National Science Foundation, International Initiative for Climate, Jacobs Foundation, Humanitarian Innovation Fund, Science for Peace and Security, etc.
- 3) **Private investors:** banks, business angels, investment companies, hubs, venture capital;
- 4) Collaboration between R&D and industry.

5 Regional Analysis on crowdfunding

5.1 CF actors (platforms, initiatives, intermediaries etc.)

In Serbia there are 2 local CrowdFunding Platforms: **Donacije.rs** and **Fandrejzing**. Besides them, people from Serbia can use also an international platform **Indiegogo**, while there are also many Serbian campaigns on **Kickstarter**, but it is not available from Serbia, so Serbian people open companies abroad and start their campaign there.

In Serbia via CrowdFunding to date was collected 653.134 USD. The total number of Serbian campaigns is 570, with 41 successful (7,2%) campaigns. The most numerous projects are in the field of art (32%). The percentage of success on Indiegogo is 3%, and 37% Kickstarter due to its all-or-nothing model. Number of CF campaigns has grown 400% since 2012, while the number of campaign backers in 2016 was 3148, accounting for 0.03% of the population [8].

5.2 Available types of CF

Donacije.rs and Fandrejzing are donation-based. Indiegogo is reward- and equity-based CrowdFunding platform and Kickstarter is reward-based platform.

5.3 CF volume of investment

From 2011 to the present through the two largest crowdfunding platform total was paid 653134 USD. In just four years, from 2012 to 2016, the number of crowdfunding



campaigns in Serbia increased by even more than 400% - from 28 to 143 campaigns. Also, the increase in the number of campaigns and growing number of citizens who are willing to support crowdfunding campaigns, so 3,148 backers decided to financially support projects that they like in 2016, so there was an increase of 164% compared to the year 2012. In the last two years only twenty campaigns were successful, which is still much more than the 5 successful campaigns in the first two recorded years. These data testify that there is a trend of starting a crowdfunding campaign without quality analyzes and preparations and without the assessment if a certain idea or a project is adequate for crowdfunding [8].

5.4 Existing Regulation Framework

Currently, the Law on Investment Funds (original: Zakon o investicionim fondovima) regulates:

- 1) organizing and managing investment funds,
- 2) the establishment and management of closed-ended investment funds,
- 3) the establishment and management of private investment funds,

4) establishment, operating and managing of institutions that are managing investment funds,

- 5) The duties and responsibilities of the custodian bank, in terms of this law,
- 6) The responsibility of the Commission for Securities
- 7) other issues relevant to the field of investment funds.

Also, in the preparation is the Law on Venture Capital (original: Zakon o preduzetničkom kapitalu), which is supposed to further regulate different types of investments in Serbia.



6 SWOT analysis of regional CF potential

STRENGHTS

 Amount of money raised by CF is higher then the amount coming from Investments Angels Size of CF market doubles every year Need for new, alternatvive sources of finance Regional demand for developing CF eco-system Increased presence of CF in public Local examples of good practie which drive demand for CF Numerous potential projects suitable for CF campaigns Numerous innovations that need financing and demonstration of market existing need 	 Unknown concept of CF to the general public Unknown concept of CF to public authority No clear legal regulations for CF Not enough CF platforms in Serbia Serbian companies can apply to only one international CF platform Distrust in online payment Not enough people with cards for online payment Amateur approach to the campaign preparation (therefore only 7,2% of campaigns is successful) 				
OPPORTUNITIES	THREATS				
 Initiatives for changes in inovation eco-system and markets Initiatives for changes in government policy or regulations/legislation Local strong entrepreneurial promotion Popularization of crowdfunding Recognition of online marketing as a support for business development 	 Lack of support from the public authorities Low interest of people to create CF campaign Weak response of people to finance campaigns 				

REGIONAL WEAKNESSES



7 Regional development demand

7.1 Investment and business environment

Many studies and researches are being done about this subject in Serbia, since the current trend in the world is entrepreneurship and how to finance it. Serbia has many promising young people willing to become entrepreneurs, but there are not enough finance support options for them. Serbia needs new source of finance for entrepreneurship and that the traditional financing is not enough [7]. Access to finance is the single most important bottleneck for youth entrepreneurship. Youth are considered to be highly risky and are therefore off the radar for the majority of **traditional financial institutions** [7].

Serbia has several strategic competitive advantages, including knowledge of regional and international markets and access to these markets, excellent conditions for agriculture and tourism potential, position on the main European continental road as well as on one of the leading waterway. Despite the fact that among main objectives of policy of the Government of Serbia are fundamental economic reforms and industry restructuring, country is still facing with major constraints on economic development. Enterprise restructuring has been delayed, foreign direct investment is drastically lower than reported in the previous years, there is a huge trade deficit, unemployment remains high, there is a mismatch between supply and demand in the labor market and labor costs are very high. Investments in new equipment, technology and human resources, does not currently exist in significant proportions [9].

Small and medium enterprises (SMEs), in addition to developing new technologies, are a generator of innovation, job creation, growth and development of national economy and increasing living standards. Given the relatively high share in the total number of enterprises (99.8%), SMEs play a key role in innovativeness and overall economic development of Serbia. The Serbian government creates an environment in which SMEs can generate new ideas. Entrepreneurs should be to turn these ideas into new products, new businesses and new jobs. The implementation of "Strategy of development of competitive and innovative small and medium enterprises for period of 2008-2013" and the project "Improvement of innovativeness and competitiveness of SMEs" contributes to the creation of innovative, competitive and exportoriented SMEs [10]. Because of above



said, Serbia is ready to explore and use alternative sources of financing such as crowdfunding.

7.2 Innovation

Serbia has a big innovative potential, and facts that confirm that are:

- 18 accredited universities,
- 83 accredited research institutes,
- 119 accredited faculties,

- in the SMEs (as the core of innovation in Serbia) work about two-thirds of the total 1.8 million employees [10],

- numerous companies with growing interest in innovation.

Research is a crucial part of higher education in Serbia, and students are being encouraged to think outside the box which resulted in numerous students' teams participating in different competitions such as Hackathon, Girls can code, Open Innovation, different case studies etc. All these research institutions develop different innovative processes, techniques, materials, machines on a daily basis which are mainly financed by the Government, and most often this is not enough.

Companies in Serbia have also a growing interest in collaboration with different laboratories and research teams, since this collaboration brings profit and further growth of both sides. Many companies invest in innovation since it gives them leverage over the competition.

7.3 Regulation framework

There are two laws in Serbia that cover this topic.

First one is **The Law on Innovation Activity** (original: Zakon o inovacionoj delatnosti) which regulates the application of scientific knowledge, technical and technological knowledge, discoveries and inventiveness, in order to support the creation and realization of products, processes and services as driving force of economic development. It defines in more details the principles and goals of centres for technology transfer (TTO)



and ownership over IP rights related to the programs of innovation activity. The TTO is defined as a company set up only to perform the technology transfer for the purpose of application of technological innovations, including the partners and ideas search, commercial potential assessment, assistance in IP protection, etc.

Second one is **The Law on Scientific Research Activity** (original: Zakon o naučnoistraživačkoj delatnosti). This law regulates planning and realization of general interest in scientific research, ensuring the quality and development of scientific research, then establishment, organization and management of organizations engaged in this activity, etc. It then regulates the foundation and work of the institutes, as organization conducting the scientific and research activities of general interest. At the same time, the Law regulates the ownership of IP rights but broader than in the Law on Innovation Activity and include all material and non-material goods. If the research results are produced in the state-funded project, the right for protection of inventions (patent and petty patents) has the organization. Should invention be economically used, researchers shall be entitled to compensation to at least 50% of the profit realized by the organization. If there are more researchers, the profit is shared among them based on individual contribution (if determined) or on equal shares.

The Government acknowledges that alternative financing is necessary for further development of Serbian entrepreneurship, innovation and economy as a whole. Earlier mentioned study⁴ says that The Government is trying to tackle this issue *(microfinance and venture capital)* by allocating certain funds through various state institution. Moreover, Government funds cannot and should not be the sole measure for solving the general issue of poor access to finance. The crucial missing element is **alternative** (nonfinancial) mechanisms that would increase the chances of obtaining financing from existing sources. All this confirms that the willingness and readiness of Serbian society to use and disseminate new, alternative finance mechanisms, such as CrowdFunding, exist.



8 Good practice examples

Three good practice examples from the respective region are described below.



Project co-funded by the European Union funds (ERDF, IPA)



Box 2

Hexiwear - a wearable development kit for the IoT era

- **Company:** MikroElektronika
- **CF platform used:** Kickstarter
- **Topic:** Technology
- Amount of money raised: \$46 150



Short description

Hexiwear is a wearable development kit for the Internet of Things era. A small and sleek, lowpower device packed with sensors to quantify yourself and the world around you. Wirelessly enabled, it can connect both to devices nearby – or to cloud servers far away. It comes with several preloaded apps that give a flying start. From there, it can be used to build a smartwatch, a remote sensor tag, or expand it into a sophisticated smarthome controller. It has:

- Compact wearable form factor
- Low power
- Expandability
- Connectivity
- Availability (open source)
- Community

Recent influence

556 backers



Box 3

COLUMNAE: A Past Under Construction

- **Company:** Moonburnt Studio
- **CF platform used:** Kickstarter
- Topic: Games
- Amount of money raised: €41,807



Short description

COLUMNAE: A Past Under Construction is a Windows/Mac/Linux nonlinear point and click adventure game set in a post-apocalyptic steampunk world. The story of COLUMNAE is set more than a century after an environmental catastrophe made the air on the surface of the earth unbreathable, and the rich locked themselves up in Deus: a closed heavenly settlement built upon gigantic metal pillars called Columnae. Beneath Columnae, a huge apparatus Machina was built to automatically extract underground resources and pump them up via pipes, through Columnae and into Deus. Trying to escape the lethal environment on the surface, those not wealthy enough settled in Columnae, where they now live by parasitizing on resources coming from Machina. Not only unable to enter Deus, but also unwilling to cooperate with people living on nearby Cliffs, the society of Columnae is plagued by corruption, political manipulation, power struggle and poverty.

Recent influence 1039 backers



9 List of references:

[1] National Bank of Serbia, **Macroeconomic Development of Serbia**, url: <u>https://www.nbs.rs/internet/english/18/18/20presentation_invest.pdf</u>

[2] Guide to doing Business in Serbia, url: <u>https://www.pwc.de/de/internationale-maerkte/assets/doing-business-and-investing-in-serbia.pdf</u>

[3] The World Bank, **Research and Innovation to Bolster the Serbian Economy**, url: <u>http://www.worldbank.org/en/news/press-release/2015/02/02/research-and-innovation-to-bolster-serbian-economy</u>

[4] The World Bank Group, **REPUBLIC OF SERBIA: Country Partnership Framework 2016-2020**, url: <u>http://pubdocs.worldbank.org/en/111121446462343202/Serbia-CPF-eng-web.pdf</u>

[5] The World Bank Group, Enterprise Surveys, Serbia Country Profile 2013,

[6] Moore Stephens Europe, **Doing Business in Serbia 2016**,

[7] Danijela Bobić, Youth entrepreneurship in Serbia- Mapping barriers to youth

entrepreneurship, supported by the German Federal Ministry of Economic

Cooperation and Development, Belgrade, 2017

[8] CrowdFunding in Serbia, url: <u>http://crowdfunding.rs/</u>

[9] Dragana Živković, Dragan Manasijević, Nada Štrbac, Milica Niculović, Jelena

Živadinović, Investigation of Value Innovation Potential Under Transitional

Conditions in Serbia, Management and Production Engineering Review, Volume 6, pp. 82–88,

[10] Boban Stojanović, Snežana Radukić, Potential for Innovation and

Competitiveness of Serbian Small and Medium Enterprises