



THE EFFECTS OF STATE DEVELOPMENT BANKS ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES

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Abstract: The views regarding the role and the need for state development banks have evolved in the 20th century, from considering their role as very important in the 1950s, through the stance of their inadequacy and ineffectiveness, to a renewed interest for public development banks at the beginning of 21st century. In this study we will concentrate on the state development banks as an important instrument of state financial support to small and medium sized enterprises (SMEs). The Republic of Srpska Investment-Development Bank (RSIDB) provided the empirical context for our research. By applying the Mann-Whitney U Test and the correlation analysis the authors examined the effect of RSIDB loans on certain business performance indicators of SMEs. From the results of Mann-Whitney U Test it can be concluded that the average sales, number of employees and net profit in the five-year period after using the RSIDB loan is statistically significantly higher for the RSIDB borrowers compared to non-borrowers. The results of correlation analysis show that there is statistically significant positive correlation of medium strength between the use of RSIDB loans and the total sales, net profit and number of employees in the 5-year period after using the RSIDB loan. The study showed the positive impact of RSIDB loans on the growth of sales, net profit and employment of SME borrowers.

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1. Introduction

Different studies emphasised the significance of small and medium-sized enterprises (SMEs) and entrepreneurship in promoting economic development, income and employment as well as in reduction of poverty (Storey & Johnson,

1987; Acs & Audretsch, 1988; Carree & Thurik, 2010; Ayyagari et al., 2011). In developing countries, small and medium enterprises account for more than ninety percent of all enterprises, more than sixty percent of the total employment and more than sixty percent of GDP, as shown in IFC research (IFC, 2010).

In transition economies neoliberal policies of privatisation, liberalisation of trade and capital markets, deregulation and minimisation of the role of the state have led to the collapse of large enterprises and conglomerates, to a large number of bankruptcies and liquidations and, consequently, to deindustrialisation, leading to a high unemployment rate and a decline in life standard of the population. The survived enterprises and the weak private sector that is developing, compete with businesses from developed economies that had continuous development, as well as with large transnational companies, not only in foreign markets, but also in the domestic market. While the importance of SMEs has increased since the 1980s, the dominant economic structure remains largely oligopolistic (Stiglitz, 2016). In the USA "several hundred major corporations dominate the economy" (Samuelson & Nordhaus, 2015, p.119). In the EU, too, large enterprises continue to play a significant role in creating an added value and employment. In 2016, large enterprises participated with 43.2% in added value and with 33.4% in total employment in the EU (European Commission, 2017).

In many transition economies almost the entire structure of the economy is made up of small and medium enterprises. For example, in Bosnia and Herzegovina 99% of enterprises are micro, small and medium (Central Bank of BiH, 2016). If transition economies want to develop their own economy, they have no choice but to develop the existing economic structure, i.e. their small and medium sized enterprises. How, under such conditions, can the state help SMEs to survive and strengthen?

The objective of the paper is to explore the effect of state development banks on the SMEs performance and growth. The subject of the study is to analyse the impact of the Republic of Srpska Investment-Development Bank (RSIDB) loans on selected business performance indicators of SME borrowers: sales, profit and employment.

The paper is structured as follows. After the introductory section, Part 2 provides a literature outline. Part 3 describes the empirical context of the Republic of Srpska, while Part 4 describes the methodology of research. The results of the research are presented in Part 5, while conclusions are presented in Part 6.

2. Literature Review

Access to funding is one of the most important difficulties for the growth of small and medium enterprises. Especially in developing countries, the capital is critical missing element to SMEs (Ferranti & Ody, 2007). Enhancing access to finance is a

key area of public policy support for small businesses (Stiglitz, 1996; Storey, 2008). Beck et al. (2008) find that certain characteristics of the banking system create unfavorable lending conditions for SMEs, such as: less exposure to small businesses compared with large one, charging higher interest rates and fees to SMEs and having more non-performing loans.

Provision of funding sources for SMEs is recognised as a particular problem in transition countries (Leeds et al., 2003). Ateljević et al. (2014) explored the factors that had a constraining effect on the development of SME sector in Serbia. They find that public financial support is very important for the growth of SMEs in Serbia. Strengthening incentives by the Republic of Serbia Development Fund causes increase in gross value added and growth of small and medium sized enterprises.

Along with growth of the SME sector, the government has been proactive in providing the support mechanisms for SMEs and entrepreneurs (Hallberg, 1999; Stiglitz & Ellerman, 2000; Storey, 2008; Smallbone & Welter, 2010).

In this study we will concentrate on the state development banks as an important instrument of state financial support to SMEs.

The views regarding the role and the need for state development banks have evolved in the 19th and 20th century, and were related with dominant theories of economic development. Industrialisation in many countries in the 19th century and in the beginning of the 20th century was realised by long term loans provided by state development banks (Ozturk et al., 2010). The Keynesianism as dominating development paradigm in the 25 year period after the World War II (Palley, 2004), as well as the demands for reconstruction in that period, initiated another trend of state development banks (Yeyati, 2004).

Keynes' (John Maynard Keynes, 1883-1946) ideas influenced both economic theory and economic policy. According to Keynes, the central controls needed to provide full employment involved a great enlargement of the state functions. One of these important government's function is investment. In its famous General Theory Keynes quote: "It is the policy of an *autonomous rate of interest*, unimpeded by international preoccupations, and of a *national investment programme* directed to an optimum level of domestic employment which is twice blessed in the sense that it helps ourselves and our neighbors at the same time..." (Keynes, 1936, p. 217). Concerning the determination of the volume of investment he says: "I conclude that the duty of ordering the current *volume of investment cannot safely be left in private hands*" (Keynes, 1936, p. 200). Keynes, therefore, found an important role of the state in determining the volume of investment.

The theories and models of other development economists of that period, such as Arthur Lewis, Gunnar Myrdal, Paul Rosentein-Rodan, Walter Rostow, Alexander Gerschenkron, highlighted the significance of investment, promoted

intervention of state in high-priority industries and emphasised the need for state development banks to direct the needed capital (Bruck, 1998; De Ollouqui, 2013). By the 1970s, forty percent of the largest banks' assets in developed countries and sixty five percent of assets of the largest banks in developing nations were owned by the state (Yeyati, 2004).

Following the predominant neoliberal economic policy codified in the Washington Consensus in the late 1980s and 1990s, there was a shift in considering the role of the state in the economy. Economic policy oriented toward reducing the state's role in the economy, toward privatisation and liberalisation of markets. This led to a wave of privatisations and liquidations of public banks in many countries (Gutierrez et al., 2011).

At the beginning of the 21st century the renewed interest and need for public development banks has been noticeable not only in developing countries but also in developed one. The public development banks had a countercyclical role in the global financial crisis which started in 2008 (Ozturk et al., 2010; De la Torre et al., 2011; De Luna-Martínez & Vicente, 2012; De Ollouqui, 2013). That was the case with the European Investment Bank (EIB) that provided loans to SMEs in the period of important loan decrease of private banks to small and medium sized enterprises (Griffith - Jones et al., 2011). Also, the World Bank studies show that public banks had a significant role in financing small and medium enterprises in many countries (Beck et al., 2008; Roche et al., 2011).

3. The Empirical Context of the Republic of Srpska

In the economy of the Republic of Srpska, small and medium-sized enterprises (SMEs) and entrepreneurs dominate in the number and the income they generate, as well as in the employment and export. In 2017, SMEs and entrepreneurs accounted for 99,8% of all business entities in the Republic of Srpska, participated with 73% in sales, 76% in net profit, 71% in export, and with 72% in employment (Republic of Srpska Agency for SME Development, 2018). As SMEs generate important percentage of sales, profit, export and employment they are significant factor in the economy of the Republic of Srpska.

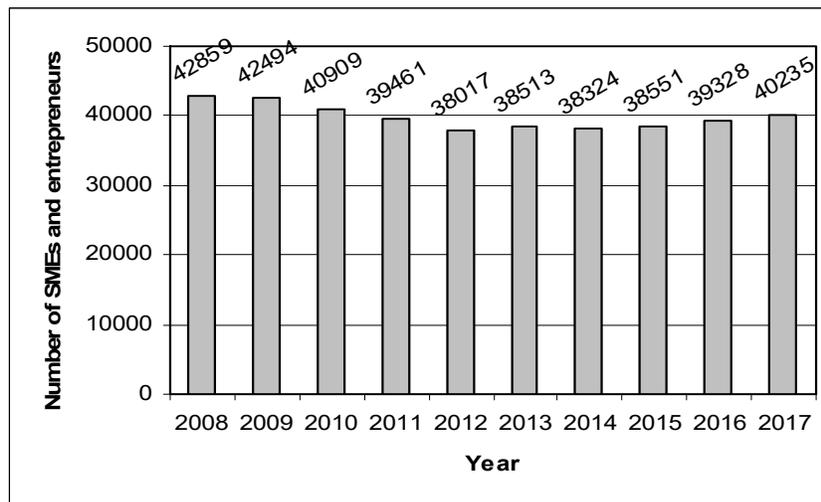
The following table shows the structure of business entities in the Republic of Srpska in the period 2012-2017.

Table 1. The Structure of business entities in the Republic of Srpska in the period 2012-2017

| Type of business entity | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---------------------------------------|------|------|------|------|------|------|
| 1.SMEs | 39,9 | 40,3 | 41,9 | 42,9 | 43,6 | 43,6 |
| 2.Entrepreneurs | 59,9 | 59,5 | 57,8 | 56,9 | 56,2 | 56,2 |
| 3. Total SMEs and entrepreneurs (1+2) | 99,8 | 99,8 | 99,8 | 99,8 | 99,8 | 99,8 |
| 4.Big companies | 99,8 | 99,8 | 99,8 | 99,8 | 99,8 | 99,8 |
| TOTAL (3+4) | 0,17 | 0,17 | 0,17 | 0,18 | 0,18 | 0,22 |

Source: Author, based on the Annual reports for SMEs and entrepreneurs in the Republic of Srpska for years 2012-2017

The following Figure shows the number of SMEs and entrepreneurs in the Republic of Srpska in the period 2008-2017.

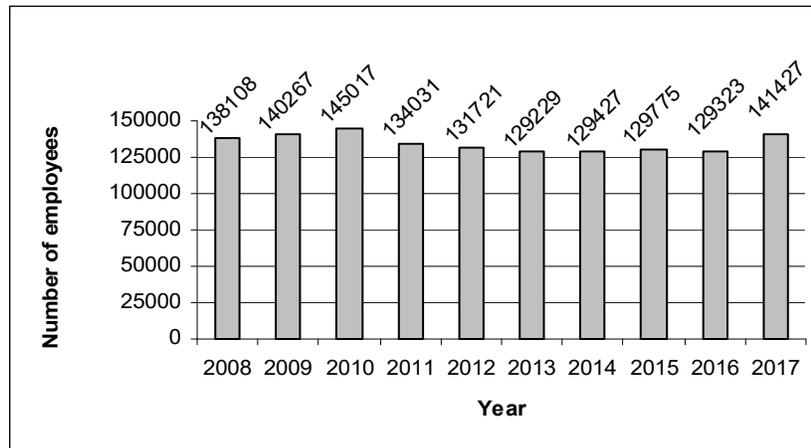
Figure 1. The number of SMEs and entrepreneurs in the Republic of Srpska in the period 2008-2017

Source: Author, based on the Annual reports for SMEs and entrepreneurs in the Republic of Srpska for years 2008-2017

Analysing the total number of SMEs and entrepreneurs in the Republic of Srpska in the period from 2008 to 2015, we can observe that in the period 2008-2012 the number of SMEs and entrepreneurs has been decreasing, from 42 859 in 2008 to 38 017 in 2012, in the period from 2013 to 2015 the number of SMEs and

entrepreneurs stagnated to around 38 500, while in the period 2016-2017 there has been a slight increase in the number of SMEs.

Figure 2. Number of employees in the SMEs and entrepreneurs in the Republic of Srpska in the period 2008-2017



Source: Author, based on the Annual reports for the SMEs and entrepreneurs in the Republic of Srpska for years 2008-2017

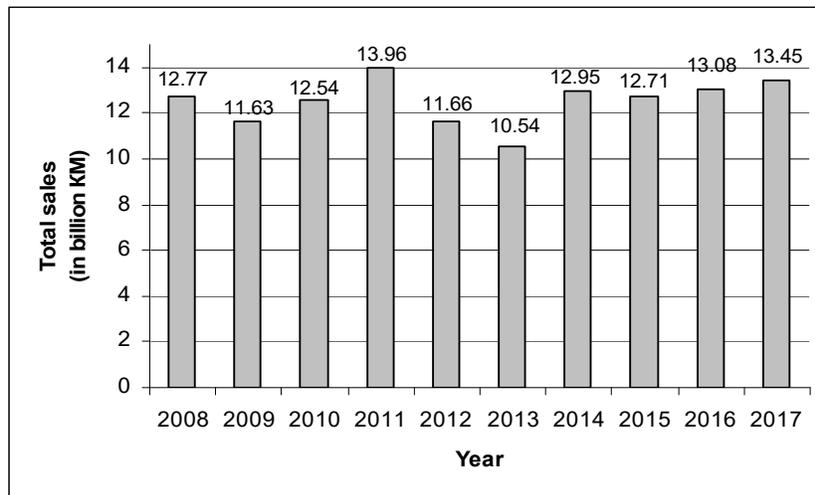
In Figure 2 we see that the number of employees in the SME sector and entrepreneurs slightly increased in the period 2008-2010 from 138.108 employees in 2008 to 145.017 employees in 2010, then it has been falling in the period 2011-2013, and stagnating in the period 2014-2016. In 2017, there was an increase in the number of employees in the SME sector and entrepreneurs for 9.36% related to previous year, which represents the second highest value of the observed 10-year period.

Total sales generated by SMEs and entrepreneurs oscillated in the observed period, with the highest value realised in 2011 in the amount of KM 13,96 billion, and with the lowest value realised in 2013 in the amount of 10,54 billion of KM. In 2016 and 2017 there was an increasing trend of total sales, amounting to 13,45 KM billion in 2017, which represents the second highest value of the observed 10-year period.

In Bosnia and Herzegovina (BiH) and the Republic of Srpska, as one of its two entities, the authorities have a limited influence on macroeconomic policy. Out of three basic instruments of macroeconomic policy: “monetary policy, tax policy and exchange rate policy” (Samuelson & Nordhaus, 2015, p. 408), BiH has the influence only on tax policy. With the implementation of the orthodox currency board in BiH, monetary independence has been lost, as well as the monetary policy

as a macroeconomic instrument. The only instrument of monetary policy is mandatory reserve, which is without impact because banks hold significantly more funds above mandatory reserve in their accounts with the Central Bank. For example, the total bank reserves at the end of 2016 were 4,20 billion KM, out of which the mandatory reserve is 2,01 billion KM, and the funds above the mandatory reserve 2,19 billion KM (Central Bank of BiH, 2017). Also, fixed exchange rate of KM linked with EUR disable any exchange rate policy.

Figure 3. Sales trend of SMEs and entrepreneurs in the Republic of Srpska in the period 2008-2017



Source: Author, based on the Annual reports for the SMEs and entrepreneurs in the Republic of Srpska for years 2008-2017

The banking sector finances consumer spending with high interest rates, and very cautiously finances business sector, causing insufficient investment in production. As stated in the Annual Report of the Central Bank of BiH for 2015 "... the banking sector does not follow the part of the economy that contributes to the growth of industrial production.... The annual growth rate of loans to private non-financial companies was largely negative, indicating a stagnation of investments and stricter conditions for the approval of new loans" (Central Bank of BiH, 2016, p. 28). It is obvious that there is *a problem of insufficient investments* in BiH, although there is significant amount of savings, which has a steady growth.

In such conditions, we will explore the impact of state development banks as an important instrument for stimulation of investment and, consequently, the domestic employment.

3.1. The Republic of Srpska Investment-Development Bank

The Republic of Srpska Investment-Development Bank (RSIDB) provided the empirical context for our research.

The Republic of Srpska Investment-Development Bank was founded in December 2006 by the Republic of Srpska Government. The RSIDB strategic objectives are encouraging investment and stimulation of the Republic of Srpska development. Support to small and medium enterprises, support to production to reduce the trade deficit and support to employment increase are among several identified priority objectives.

Between April, 2008 and 12th April 2018 the RSIDB approved 10.254 loans in the amount of 1,54 billion KM (EUR 787 million) through different credit lines: loans for start-up activities, loans for micro business in agriculture, loans for agriculture, loans for SMEs, housing loans, loans to local governments etc (Republic of Srpska Investment Development Bank, 2018). The participation of RSIDB loans in total loans to business sector in the Republic of Srpska has increased significantly in previous years. While in 2008 it amounted to 6%, in 2014 it was increased to 22.5%, while in April 2018 the share of RSIDB loans in total loans to enterprises in the Republic of Srpska rose to 40%.

The Republic of Srpska Investment-Development Bank is the most important tool of state funding for small and medium enterprises and entrepreneurship in the Republic of Srpska. The aim of this paper is to explore the effect of the RSIDB on the SMEs performance and growth.

4. Methodology of research

In an effort to explore the effect of the Republic of Srpska Investment-Development Bank loans on selected business performance indicators of SME borrowers: sales, profit and employment, we will empirically test the following hypotheses:

H1: The RSIDB loans had a positive impact on the *sales growth* of SME borrowers.

H2: The RSIDB loans had a positive impact on the *net profit growth* of SME borrowers.

H3: The RSIDB loans had a positive impact on the *employment growth* of SME borrowers.

The sample consists of 170 SMEs from the Republic of Srpska, out of which 113 SMEs used RSIDB loan in year 2008 as the first year of RSIDB operation (RSIDB borrowers), and a control group of 57 SMEs that did not use RSIDB loan in the period 2008-2013 (RSIDB non-borrowers or the control group). The group

of RSIDB borrowers consist of all SME's borrowers of RSIDB from the year 2008, except 3 enterprises that have achieved extremely high or extremely low values of selected indicators in the observed 5-years post loan period. The control group was selected by random sample method stratified by type of business activity, geographic disperse and organisational form (limited liability or stock holder company) that correspond to a group of users.

Table 2. Descriptive Statistics

| | N | Min | Maximum | Mean | Std. Deviation |
|--|-----|-----|----------|------------|----------------|
| Average sales before the RSIDB loans in the period 2003-2007 | 170 | 0 | 21047016 | 1392528,26 | 2566629,32 |
| Average sales after the RSIDB loans in the period 2009-2013 | 170 | 0 | 25467302 | 1849644 | 3115322 |
| Average number of employees before the RSIDB loans in the period 2003-2007 | 170 | 0 | 419,7 | 26,057 | 45,4382 |
| Average number of employees after the RSIDB loans in the period 2009-2013 | 170 | 0 | 274,0 | 29,688 | 47,1964 |
| Average net profit before the RSIDB loans in the period 2003-2007 | 170 | 0 | 1277405 | 89512,16 | 197265,98 |
| Average net profit after the RSIDB loans in the period 2009-2013 | 170 | 0 | 2725347 | 103946,26 | 288791,59 |
| The RSIDB loan amount | 170 | 0 | 5000000 | 556618,09 | 1027070,5 |

Source: SPSS output

The data sources were:

- a) The RSIDB loan database available on the RSIDB website www.irbrs.org,
- b) The Republic of Srpska Chamber of Commerce and Industry for information on sales, net profit and employment,
- c) The database of the Republic of Srpska Economic Register available at www.business-rs.ba that was used for the selection of the control group.

We collected information on sales, profit and employment from the financial reports for 170 SMEs in the 11-year period, from 2003 to 2013, that means from the 5-year period before using the RSIDB loan (2003-2007) to the 5-year period after using the RSIDB loan (2009-2013).

In Table 2 the descriptive statistics of the sample is presented.

The value of the variables is given in the Attachment.

The statistical tests that we will use in the data analysis are Kolmogorov-Smirnov test, Man-Whitney U Test and the correlation analysis. We will explore whether there is a statistically significant correlation between the public financial support in the form of RSIDB loans and performance indicators of SMEs borrowers (sales, profit and employment). These statistical tests were carried out by the statistical programme SPSS (*Statistical Package for the Social Sciences, Version 22*).

5. Results and discussion

In order to be able to make a decision about the type of statistical tests we will use (parametric or non-parametric), the authors examined the distribution normality of variables. Kolmogorov-Smirnov is a test used to estimate the distribution normality. By the Kolmogorov-Smirnov test we will examine the normal distribution of the following variables:

- average sales after RSIDB loans in the period 2009-2013
- average number of employees after RSIDB loans in the period 2009-2013
- average net profit after RSIDB loans in the period 2009-2013
- RSIDB borrower / RSIDB non-borrower.

For each of the four variables, the Kolmogorov-Smirnov test examined the zero hypotheses that the variable has a normal (i.e. Gauss) distribution, with a calculated Mean and Standard Deviation, as well as a Significance Level (Asymp. Sig-2-tailed) shown in the table above. Since the selected significance level is 0.05, this means that the zero hypothesis is accepted if the level of significance is bigger than 0.05. Otherwise, when the level of significance is less than 0.05, the zero hypotheses is rejected. The rejection of the hypothesis allows us to claim with 95% confidence that the data have no normal distribution.

The results of the Kolmogorov-Smirnov test are presented in the following table.

Table 3: Kolmogorov-Smirnov test

| | | Average Total Sales after RSIDB loan 2009-2013 | Average Number of Employees after RSIDB loan 2009-2013 | Average Net Profit after RSIDB loan 2009-2013 | RSIDB borrower / RSIDB non-borrower |
|----------------------------------|----------------|--|--|---|-------------------------------------|
| N | | 170 | 170 | 170 | 170 |
| Normal Parameters ^{a,b} | Mean | 1849644,26 | 29,688 | 103946,26 | ,66 |
| | Std. Deviation | 3115321,57 | 47,1964 | 288791,59 | ,473 |
| Test Statistic | | ,276 | ,265 | ,359 | ,425 |
| Asymp. Sig. (2-tailed) | | ,000 ^c | ,000 ^c | ,000 ^c | ,000 ^c |

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

The level of Significance (Sig.) is 0,05.

Source: SPSS output

For all variables tested in table 3 the significance level is less than 0.05 (Asymp. Sig. 2-tailed = 0.000 < 0.05), which means that the test rejects the distribution normality hypothesis for all tested variables, which allows us to claim with 95% confidence that *the data have no normal distribution*.

5.1. Mann-Whitney U test

Mann-Whitney U test is used to compare differences between two independent groups when the dependent variable has no normal distribution¹. With this test, we will examine whether the business performance indicators (sales, employment and profit) in the five-year period after use of the RSIDB loans differ for RSIDB borrowers and non-borrowers. The sample is, therefore, divided into two groups: RSIDB borrowers and RSIDB non-borrowers. The use/non-use of a RSIDB loan is an independent dichotomous variable.

Dependent variables are:

- Average sales in the five-year period after using the RRSIDB loan (2009-2013)

¹ <https://statistics.laerd.com/spss-tutorials/mann-whitney-u-test-using-spss-statistics-2.php>

- Average number of employees in the five-year period after using RRSIDB loan (2009-2013)
- Average net profit in the five-year period after using the RRSIDB loan (2009-2013).

Table 4. Mann-Whitney U Test - Ranking table:

| Ranks | RSIDB Borrower 1, RSIDB Non-borrower 2 | N | Mean Rank | Sum of Ranks |
|---|---|-----|-----------|--------------|
| Average sales in the five-year period before the RSIDB loan (2003-2007) | RSIDB Borrowers | 113 | 94,10 | 10633,50 |
| | RSIDB Non-borrowers | 57 | 68,45 | 3901,50 |
| | Total | 170 | | |
| Average sales in the five-year period after the RSIDB loan (2009-2013) | RSIDB Borrowers | 113 | 102,95 | 11633,50 |
| | RSIDB Non-borrowers | 57 | 50,90 | 2901,50 |
| | Total | 170 | | |
| Average number of employees in the five-year period before the RSIDB loan (2003-2007) | RSIDB Borrowers | 113 | 92,83 | 10490,00 |
| | RSIDB Non-borrowers | 57 | 70,96 | 4045,00 |
| | Total | 170 | | |
| Average number of employees in the five-year period after the RSIDB loan (2009-2013) | RSIDB Borrowers | 113 | 102,61 | 11595,00 |
| | RSIDB Non-borrowers | 57 | 51,58 | 2940,00 |
| | Total | 170 | | |
| Average net profit in the five-year period before the RSIDB loan (2003-2007) | RSIDB Borrowers | 113 | 95,12 | 10748,50 |
| | RSIDB Non-borrowers | 57 | 66,43 | 3786,50 |
| | Total | 170 | | |
| Average net profit in the five-year period after the RSIDB loan (2009-2013) | RSIDB Borrowers | 113 | 100,14 | 11316,00 |
| | RSIDB Non-borrowers | 57 | 56,47 | 3219,00 |
| | Total | 170 | | |

Source: SPSS output

The ranking table gives the mean rank and the sum of ranks for the two tested groups (the RSIDB borrowers and the RSIDB non-borrowers). It shows which group has higher levels of given indicator (sales, number of employees and net profit), which is a group with a higher mean rank.

It is evident that the mean ranks for all three variables of the RSIDB borrowers *increased* in the five-year period after using of the RSIDB loans (2009-2013)

comparing to the pre-loan period (2003-2007): the mean rank for average sales in the post-loan period is 102.95 compared to 94.10 in the previous period, for average number of employees the mean rank is 102.61 vs. 92.83 in the previous period, and for average net profit the mean rank is 100.14 vs. 95.12 in the previous period.

On the contrary, the mean ranks for all three variables of the RSIDB non-borrowers *decreased* in the five-year period after using of the RSIDB loans (2009-2013) comparing to the pre-loan period (2003-2007): the mean rank for average sales in the period 2009-2013 is 50.90 comparing to 68.45 in the period 2003-2007, for average number of employees the mean rank is 51.58 vs. 70.96 in the previous period, and for the average net profit the mean rank is 56.47 vs. 66.43 in the previous period.

Table 5. Man Whitney U Test Statistics^a

| | Average sales in the period 2003-2007 | Average sales in the period 2009-2013 | Average number of employees in the period 2003-2007 | Average number of employees in the period 2009-2013 | Average net profit in the period 2003-2007 | Average net profit in the period 2009-2013 |
|-------------------------------|---------------------------------------|---------------------------------------|---|---|--|--|
| Mann-Whitney U | 2248,500 | 1248,500 | 2392,000 | 1287,000 | 2133,500 | 1566,000 |
| Wilcoxon W | 3901,500 | 2901,500 | 4045,000 | 2940,000 | 3786,500 | 3219,000 |
| Z | -3,209 | -6,509 | -2,735 | -6,383 | -3,590 | -5,479 |
| Asymp. Sig. (2-tailed) | ,001 | ,000 | ,006 | ,000 | ,000 | ,000 |

a. Grouping Variable: RSIDB Borrowers 1, RSIDB Non-borrowers 2
The level of Significance (Sig.) is 0,05.

Source: SPSS output

The results of the Mann-Whitney U Test are presented in Table 5. The SPSS calculated the values of Mann-Whitney U test, as well as the values of Wilcoxon's W, which represent the sum of rankings for a smaller sample, in this case for a sample of the RSIDB non-borrowers. The Mann-Whitney U Test examined the zero hypotheses for all variables that the distribution of the variable is the same for the RSIDB borrowers and for the RSIDB non-borrowers.

For all variables, the test result is statistically significant at the level Asymp. Sig. (2-tailed)<0.05. This means that all tested zero hypotheses that the distribution of the variable is the same for RSIDB borrowers and non-borrowers are rejected.

As we have seen, the distributions of RSIDB borrowers and non-borrowers have significantly different mean ranks for all tested variables.

From the results of Mann-Whitney U Test, it can be concluded that the average sales, number of employees and net profit in the five-year period after using the RSIDB loan are statistically significantly higher for the RSIDB borrowers compared to non-borrowers.

5.2. Correlation analysis

Since the assumption of the normality of the distribution of the variables is violated, as showed by the Kolmogorov-Smirnov test, the authors will explore the strength and the direction of the relation between the variables by non-parametric correlation: Kendall's tau_b and Spearman's rho coefficients of correlation. We will explore whether there is a statistically significant correlation between the use of RSIDB loans and the SMEs performance indicators: sales, profit and employment in the 5-year period after using the RSIDB loan.

By non-parametric correlation analysis, we will examine the strength and direction of the relation between:

- The use of the RSIDB loan and the average sales in the 5-year period after loan (2009-2013),
- The use of the RSIDB loan and the average number of employees in the 5-year period after loan (2009-2013),
- The use of the RSIDB loans and the average net profit in the 5-year period after loan (2009-2013).
- The use of the RSIDB loans is presented through the dichotomous categorical variable "RSIDB Borrower/ RSIDB Non-borrower".

As there is no full agreement in the statistical literature on the interpretation of the correlation coefficients, we will take the interpretation of correlation coefficient scale according to Cohen (1988):

- 0.10 to 0.29 small (poor) correlation,
- 0.30 to 0.49 medium (moderate) correlation,
- 0.50 to 1.0 large (strong) correlation of variables.

The following table shows the results of the non-parametric correlation analysis with correlation coefficients Kendall's tau b and Spearman' rho, the statistical significance (Sig. 2-tailed) and the sample size (N).

Table 6. Correlation coefficients
(Use of the RSIDB loan vs Performance indicators in the 5-year period after loan)

| | | | Average Total Sales after RSIDB loan 2009-2013 | Average Number of Employees after RSIDB loan 2009-2013 | Average Net Profit after RSIDB loan 2009-2013 |
|-----------------|-----------------|-------------------------|--|--|---|
| Kendall's tau_b | RSIDB Borrower/ | Correlation Coefficient | ,410** | ,403** | ,350** |
| | RSIDB borrower | Non-Sig. (2-tailed) | ,000 | ,000 | ,000 |
| | | N | 170 | 170 | 170 |
| Spearman's rho | RSIDB Borrower/ | Correlation Coefficient | ,501** | ,491** | ,421** |
| | RSIDB borrower | Non-Sig. (2-tailed) | ,000 | ,000 | ,000 |
| | | N | 170 | 170 | 170 |

**Correlation is significant at the level of 0.01 (Sig. 2-tailed).

Source: SPSS output

The results of correlation analysis show that:

1) There is *statistically significant positive correlation of medium strength* between the use of RSIDB loans and *total sales* in the 5-year period after using RSIDB loan:

Correlation coefficient Kendall's tau_b $\tau_b=0,410$, Sig.= 0,000 => Sig. <0,01,

Correlation coefficient Spearman's rho $\rho=0,501$, Sig.= 0,000, => Sig. <0,01.

2) There is *statistically significant positive correlation of medium strength* between the using of RSIDB loans and *net profit* in the 5-year period after using RSIDB loan:

Correlation coefficient Kendall's tau_b $\tau_b=0,350$, Sig.= 0,000 => Sig.<0,01,

Correlation coefficient Spearman's rho $\rho=0,421$, Sig.= 0,000 => Sig.<0,01.

3) There is *statistically significant positive correlation of medium strength* between using of RSIDB loans and the *number of employees* in the 5-year period after using RSIDB loan:

Correlation coeff. Kendall's tau_b $\tau_b=0,403$, Sig.= 0,000 => Sig.<0,01,

Correlation coeff. Spearman's rho $\rho=0,491$, Sig.= 0,000 => Sig.<0,01.

6. Conclusion

The state development banks have had a significant role in the industrialisation of many countries in 19th and at the beginning of 20th century. Also, Keynesian interventionist economic policies after the Second World War in many Western economies involved a broadening of the state roles, highlighted the significance of *national investment programmes* aimed at an optimum level of domestic employment and developed state development banks in order to direct the needed capital to priority sectors. Neo-liberal economic policy codified in the Washington Consensus in the late 1980s and 1990s that oriented toward reducing the state's role in the economy led to a wave of privatizations and liquidations of public banks in many countries. After the global credit crisis that began in 2008 the renewed interest and need for public development banks has been noticeable.

The empirical study on the example of the Republic of Srpska Investment Development Bank and the representative sample of 170 SMEs confirmed all three set hypothesis of the research. The study confirmed that the RSIDB loans had positive impact on sales growth, net profit growth and employment growth of SME borrowers. The results of correlation analysis showed that there was statistically significant positive correlation of medium strength between the use of RSIDB loans and total sales in the 5-year period after using RSIDB loan, between the use of RSIDB loans and net profit, as well as between the use of RSIDB loans and employment.

In transition and developing economies with SMEs facing the lack of financing by private banks, state development banks can be an important instrument for stimulation of investment and domestic employment.

Some of recommendations for authorities in order to support public development banks to be successful would be: to define a clear mandate of public development banks linked with government policy on selected economic sectors, professional and competent management with independent boards, and protection from political pressures to finance bad projects. State development banks can be an important instrument for supporting SMEs growth and performance.

References

- Acs, Z.J. & Audretsch, D.B. (1988). *Innovation in large and small firms: An empirical analysis*. *American Economic Review* 78(4):678–690.
- Ateljević, J., Stefanović, S., Ivanović-Đukić, M. & Janković-Milić, V. (2016). Researching the Entrepreneurial Sector in Serbia. In: Ateljević, J. & Trivić, J. (Eds.), *Economic Development and Entrepreneurship in Transition Economies* (pp.129-146). Springer, Cham.
- Ayyagari, M., Demircuc-Kunt, A. & Maksimovic, V. (2011). Small vs. Young Firms across the World: contribution to Employment, Job creation, and Growth. The World Bank

- Бањалучка берза (Banja Luka Stock Exchange), <http://www.blberza.com/Pages/issuerdata.aspx?code=tlkm>
- Beck, T., Demirgüç-Kunt, A. & Soledad Martínez Peria, M. (2008). *Bank financing for SMEs around the world: drivers, obstacles, business models and lending practices*. Washington DC: The World Bank.
- Bruck, N. (1998). The Role of Development Banks in the Twenty-First Century. *Journal of Emerging Markets* 3:39–67.
- Carree, M.A. & Thurik, R.A. (2010). The impact of entrepreneurship on economic growth. In: Audretsch, D.B. and Acs, Z.J. (Eds.) *Handbook of Entrepreneurship Research* (pp. 557-594). Springer Verlag, Berlin, Heidelberg.
- Central Bank of Bosnia and Herzegovina (2016). Annual Report for 2015. Sarajevo
- Central Bank of Bosnia and Herzegovina (2017). Annual Report for 2016. Sarajevo
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Lawrence Erlbaum Associates
- De Ferranti, D. & Ody, A.J. (2007). *Beyond microfinance: getting capital to small and medium enterprises to fuel faster development*. The Brookings Institution.
- De la Torre, A., Feyen, E. & Izel, A. (2011). *Financial Development: Structure and Dynamics*. The World Bank.
- De Luna-Martínez, J. & Leonardo Vicente, C. (2012). *Global Survey of Development Banks*. World Bank Policy Research Working Paper no. 5969. The World Bank. Washington DC.
- De Olloqui, F. (2013). *Public Development Banks: toward a new paradigm?* Inter-American Development Bank, Washington DC.
- European Commission (2017). *Annual Report on European SMEs 2016/2017*.
- Griffith-Jones, S., Tyson, J. & Calice, P. (2011). The European Investment Bank and SMEs: key lessons for Latin America and the Caribbean. United Nations
- Gutierrez, E., Rudolph, H., Homa, T. & Beneitl, E.B. (2011). *Development Banks: Role and Mechanisms to Increase their Efficiency*. Policy Research Working Paper 5729, The World Bank, Washington DC.
- Hallberg, K. (1999). Small and medium scale enterprises: a framework for intervention. The World Bank
- International Finance Cooperation (2010), *Scaling-Up SME Access to Financial Services in the Developing World*, World Bank Group, G 20 Seoul Summit
- Keynes, J.M. (1936). The General Theory of Employment, Interest, and Money <http://etext.library.adelaide.edu.au/k/k44g/k44g.html><http://etext.library.adelaide.edu.au/k/k44g/k44g.html>
- Leeds, R. & Sunderland, J. (2003). Private Equity Investing In Emerging Markets. *Journal of Applied Corporate Finance* 15(4):111-119
- Öztürk, H., Gultekin-Karakas, D. & Hisarcıklilar, M. (2010). The Role of Development Banking in Promoting Industrialization in Turkey. *Région et Développement* n° 32-2010, 153-178
- Palley, T. (2004). *From Keynesianism to Neoliberalism: Shifting Paradigms in Economics*. <http://www.thomaspalley.com/docs/articles/selected/Neo-liberalism%20-%20chapter.pdf>
- Rocha, R.R., Farazi, S., Khouri, R. & Pearce, D. (2011). Bank Financing for SMEs in the Middle East and North Africa Region: Evidence from a Joint Survey of the World

- Bank and the Union of Arab Banks. World Bank Policy Research Working Paper No. 5607. The World Bank, Washington DC.
- Republic of Srpska Investment Development Bank (2018). Loan database. Retrieved from: <http://www.irbrs.org/PlasiraniKreditiBaza/PlasiraniKreditiIzvjestaji.aspx?p=3&lang=cir>, April 2018
- Samuelson, P.A. & Nordhaus, D. W. (2015). *Ekonomija*. 18. izdanje. Mate. Beograd
- Smallbone, D. & Welter, F. (2010). Entrepreneurship and the role of government in post-socialist economies: some institutional challenges. *Historical Social Research*, 35(2): 320-333.
- Stiglitz, J. (1996). Some Lessons from the East Asian Miracle. *The World Bank Research Observer*. vol. 11. no. 2. pp. 77-151.
- Stiglitz, J. & Ellerman, D. (2000). New bridges across the chasm: macro and micro-strategies for Russia and other transitional economies. *Zagreb International Review of Economics and Business*, 3(1): 41-72.
- Stiglitz, J. (2016). The new era of monopoly is here. *The Guardian*. 13 May. <https://www.theguardian.com/business/2016/may/13/new-era-monopoly-joseph-stiglitz>.
- Storey, D.J. & Johnson, S.G. (1987). *Job Generation and Labour Market Change*. Basingstoke: Macmillan.
- Storey, D.J. (2008). *Entrepreneurship and SME policy*. Warwick Business School, World Entrepreneurship Forum.
- Влада Републике Српске, Годишњи извјештај за област малих и средњих предузећа и занатско-предузетничке дјелатности у Републици Српској за године 2008-2017 (Annual reports on small and medium enterprises and entrepreneurs in the Republic of Srpska for years 2008-2017)
- Yeyati, E.L., Micco, A. & Panizza, U. (2004). *Should the Government be in the Banking Business? The Role of State-Owned and Development Banks*. Inter-American Development Bank, Washington, DC.

UTICAJ DRŽAVNE FINANSIJSKE PODRŠKE NA POSLOVANJE MALIH I SREDNJIH PREDUZEĆA

Apstrakt: Gledišta o ulozi i potrebi za državnim razvojnim bankama mijenjala su u XX vijeku od shvatanja o njihovoj neophodnosti 1950-ih godina, preko gledišta da one stvaraju neefikasnosti i distorzije, do ponovnog zanimanja za državne razvojne banke početkom XXI vijeka. U ovom radu pažnja je usmjerena na državne razvojne banke kao važan instrument državne finansijske podrške malim i srednjim preduzećima (MSP). Empirijski kontekst za naše istraživanje obezbijedila je investiciono-razvojna banka Republike Srpske (IRBRS). Primjenom Men-Vitni testa i korelacione analize istražili smo uticaj kredita IRBRS na odabrane pokazatelje poslovanja malih i srednjih preduzeća. Iz rezultata testa Men-Vitni može se zaključiti da su prosječan ukupan prihod, broj zaposlenih i neto dobit u petogodišnjem periodu nakon korištenja kredita IRBRS statistički značajno veći kod korisnika kredita IRBRS u poređenju sa ne-korisnicima kredita IRBRS. Takođe, rezultati korelacione analize pokazuju da postoji statistički značajna pozitivna korelacija srednje

jačine između korišćenja kredita IRBRS sa jedne strane i ukupnog prihoda, neto dobiti i broja zaposlenih u petogodišnjem periodu nakon korišćenja kredita IRBRS, sa druge strane. Istraživanje je pokazalo pozitivan uticaj kredita IRBRS na rast ukupnog prihoda, neto dobiti i zaposlenosti kod malih i srednjih preduzeća korisnika kredita.

Ključne reči: državne razvojne banke, mala i srednja preduzeća, pokazatelji uspešnosti poslovanja, ukupan prihod, dobit, broj zaposlenih.

Author's biography

Jadranka Petrović is a PhD candidate at the Faculty of Economics, University of Banja Luka. She graduated from the Faculty of Economics, University of Banja Luka in 1996 and finished the postgraduate studies at the Faculty of Economics, University of Belgrade in 2010. She has been working in various institutions and organisations: in the Chamber of Commerce and Industry of Banja Luka Region, in UNIDO Business Development Center as a consultant, in the Republic of Srpska Employment and Development Foundation as a project manager of the World Bank Private Sector Credit Project and in the Netherlands Development Organization as a consultant. She published several papers in journals and proceedings from the conferences. Her research interests include development theories and policies, institutional support to entrepreneurship and SMEs and financial management.

Appendix 1: Data (variables) used in SPSS tests

| Enterprise | Average sales in the five-year period before the RSIDB loan (2003-2007) | Average sales in the five-year period after the RSIDB loan (2009-2013) | Average number of employees in the five-year period before the RSIDB loan (2003-2007) | Average number of employees in the five-year period after the RSIDB loan (2009-2013) | Average net profit in the five-year period before the RSIDB loan (2003-2007) | Average net profit in the five-year period after the RSIDB loan (2009-2013) | Dummy variable (RSIDB Non-borrower-0, RSIDB Borrower - 1) | Amount of RSIDB loan (in KM) |
|------------|---|--|---|--|--|---|---|------------------------------|
| 1 | 374,848 | 1,444,815 | 15.7 | 37.7 | 49,823 | 10,033 | 1 | 500,000 |
| 2 | 2,886,368 | 1,867,563 | 39.3 | 32.0 | 117,619 | 39,787 | 1 | 42,051 |
| 3 | 1,340,355 | 2,564,958 | 13.3 | 51.0 | 191,809 | 141,453 | 1 | 495,000 |
| 4 | 5,788,686 | 6,462,485 | 14.8 | 19.8 | 150,041 | 71,301 | 1 | 152,860 |
| 5 | 2,206,218 | 2,227,517 | 18.5 | 17.8 | 81,244 | 10,486 | 1 | 300,000 |
| 6 | 5,021,244 | 6,115,010 | 62.7 | 79.0 | 76,209 | 376,396 | 1 | 2,200,0 |
| 7 | 4,684,571 | 7,758,150 | 80.2 | 113.7 | 738,351 | 354,745 | 1 | 3,750,0 |
| 8 | 10,219 | 6,408 | 0.7 | 0.4 | 275 | 86 | 1 | 50,000 |
| 9 | 207,544 | 252,141 | 16.0 | 16.0 | 8,617 | 4,601 | 1 | 300,000 |
| 10 | 1,567,581 | 1,925,991 | 23.2 | 35.0 | 39,781 | 4,069 | 1 | 300,000 |
| 11 | 2,167,734 | 2,949,933 | 44.6 | 52.0 | 576,193 | 168,015 | 1 | 3,000,0 |
| 12 | 2,568,627 | 4,584,965 | 70.8 | 90.8 | 72,945 | 149,512 | 1 | 398,168 |
| 13 | 123,587 | 370,979 | 6.0 | 10.8 | 5,480 | 2,209 | 1 | 160,000 |
| 14 | 1,462,336 | 2,186,383 | 37.0 | 50.8 | 51,689 | 139,968 | 1 | 400,000 |
| 15 | 2,053,380 | 519,915 | 57.8 | 23.4 | 381,831 | 0 | 1 | 451,591 |
| 16 | 1,604,740 | 4,233,469 | 21.7 | 39.8 | 188,839 | 426,466 | 1 | 900,000 |
| 17 | 713,814 | 938,464 | 10.7 | 16.2 | 94,587 | 61,929 | 1 | 45,000 |
| 18 | 1,426,874 | 1,725,149 | 32.8 | 37.0 | 106,058 | 127,117 | 1 | 300,000 |
| 19 | 2,501,658 | 551,358 | 56.7 | 20.6 | 71,280 | 7,149 | 1 | 250,000 |
| 20 | 537,773 | 3,159,461 | 9.8 | 22.4 | 181,198 | 815,041 | 1 | 500,000 |
| 21 | 720,552 | 676,015 | 19.8 | 7.2 | 20,828 | 5,377 | 1 | 300,000 |
| 22 | 5,852,701 | 6,818,346 | 97.0 | 138.2 | 615,517 | 172,492 | 1 | 5,000,0 |
| 23 | 190,731 | 84,565 | 6.7 | 3.0 | 8,384 | 1,821 | 1 | 250,000 |
| 24 | 478,793 | 581,221 | 9.0 | 8.8 | 5,629 | 5,629 | 1 | 300,000 |
| 25 | 0 | 269,456 | 0.0 | 4.2 | 0 | 4,405 | 1 | 2,492,0 |
| 26 | 8,660,378 | 11,753,384 | 221.9 | 274.0 | 849,998 | 830,079 | 1 | 500,000 |
| 27 | 698,384 | 2,536,313 | 19.9 | 66.4 | 93,377 | 180,188 | 1 | 123,503 |
| 28 | 770,496 | 947,526 | 12.8 | 14.4 | 81,265 | 29,222 | 1 | 250,000 |
| 29 | 852,008 | 1,816,649 | 53.8 | 57.0 | 126,395 | 397,940 | 1 | 100,000 |
| 30 | 492,896 | 2,845,601 | 16.5 | 50.6 | 20,258 | 160,500 | 1 | 500,000 |
| 31 | 2,531,559 | 2,849,249 | 50.0 | 72.8 | 218,913 | 48,280 | 1 | 500,000 |
| 32 | 685,302 | 1,204,786 | 14.3 | 10.2 | 14,346 | 38,583 | 1 | 65,000 |
| 33 | 136,292 | 1,940,305 | 4.2 | 65.0 | 2,015 | 166,613 | 1 | 500,000 |
| 34 | 1,326,162 | 892,459 | 69.0 | 42.8 | 27,678 | 9,029 | 1 | 900,000 |
| 35 | 70,127 | 1,094,510 | 1.5 | 12.0 | 7,372 | 33,039 | 1 | 3,000,0 |
| 36 | 641,988 | 903,079 | 15.2 | 17.2 | 44,152 | 62,617 | 1 | 200,000 |
| 37 | 318,647 | 692,431 | 6.5 | 8.3 | 56,503 | 362,154 | 1 | 80,000 |
| 38 | 1,320,450 | 7,743,670 | 26.8 | 120.5 | 49,821 | 699,319 | 1 | 1,000,0 |
| 39 | 673,839 | 1,026,011 | 7.5 | 12.0 | 21,215 | 18,264 | 1 | 1,000,0 |
| 40 | 1,501,769 | 1,341,239 | 32.6 | 34.0 | 39,535 | 18,232 | 1 | 1,000,0 |
| 41 | 172,454 | 572,467 | 0.6 | 3.8 | 9,537 | 6,514 | 1 | 300,000 |
| 42 | 1,135,911 | 6,803,375 | 22.6 | 83.3 | 499,949 | 2,725,34 | 1 | 900,000 |
| 43 | 51,794 | 42,953 | 3.5 | 3.2 | 3,334 | 803 | 1 | 150,000 |
| 44 | 764,546 | 2,281,922 | 7.5 | 15.6 | 22,828 | 196,130 | 1 | 490,000 |

| | | | | | | | | |
|----|-----------|------------|-------|-------|----------|----------|---|---------|
| 45 | 166,412 | 775,265 | 2.3 | 19.5 | 13,544 | 8,857 | 1 | 50,000 |
| 46 | 10,062,95 | 25,467,302 | 122.5 | 227.7 | 796,434 | 1,082,56 | 1 | 5,000,0 |
| 47 | 2,015,796 | 1,213,600 | 15.8 | 20.6 | 159,445 | 0 | 1 | 5,000,0 |
| 48 | 1,441,315 | 865,971 | 42.2 | 12.5 | 104,041 | 6,318 | 1 | 450,000 |
| 49 | 4,095,102 | 9,597,414 | 91.7 | 198.0 | 367,942 | 523,284 | 1 | 350,000 |
| 50 | 3,403,743 | 4,269,892 | 69.4 | 77.0 | 101,279 | 8,236 | 1 | 500,000 |
| 51 | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 1 | 300,000 |
| 52 | 1,022,244 | 1,019,638 | 10.8 | 11.1 | 5,752 | 2,707 | 1 | 300,000 |
| 53 | 845,668 | 1,514,882 | 8.2 | 12.2 | 117,645 | 88,809 | 1 | 50,000 |
| 54 | 183 | 4,604 | 0.0 | 1.0 | 0 | 0 | 1 | 150,000 |
| 55 | 573,017 | 1,129,946 | 28.0 | 50.2 | 27,048 | 125,487 | 1 | 180,000 |
| 56 | 865,229 | 796,373 | 9.8 | 11.2 | 78,487 | 14,051 | 1 | 100,000 |
| 57 | 1,208,406 | 3,252,535 | 8.3 | 11.6 | 47,230 | 251,260 | 1 | 500,000 |
| 58 | 517,743 | 8,920,665 | 28.9 | 231.5 | 0 | 387,375 | 1 | 2,700,0 |
| 59 | 131,066 | 226,822 | 5.3 | 3.6 | 0 | 0 | 1 | 550,000 |
| 60 | 776,747 | 802,242 | 7.3 | 13.4 | 110,546 | 27,091 | 1 | 150,000 |
| 61 | 5,128,733 | 9,971,722 | 129.7 | 216.0 | 564,976 | 515,621 | 1 | 3,500,0 |
| 62 | 90,732 | 151,263 | 1.9 | 2.9 | 15,518 | 10,182 | 1 | 200,000 |
| 63 | 363,720 | 1,049,684 | 19.0 | 35.6 | 5,914 | 35,025 | 1 | 1,200,0 |
| 64 | 402,191 | 976,068 | 1.6 | 6.0 | 27,646 | 66,975 | 1 | 420,000 |
| 65 | 582,317 | 1,202,795 | 7.5 | 15.4 | 61,728 | 256,277 | 1 | 500,000 |
| 66 | 1,257,625 | 1,765,916 | 6.3 | 9.8 | 51,129 | 21,424 | 1 | 110,000 |
| 67 | 269,571 | 135,361 | 2.4 | 2.2 | 6,098 | 2,393 | 1 | 50,000 |
| 68 | 80,071 | 228,993 | 15.0 | 15.0 | 0 | 0 | 1 | 5,000,0 |
| 69 | 575,939 | 217,426 | 9.3 | 10.0 | 6,275 | 4,267 | 1 | 1,000,0 |
| 70 | 178,434 | 329,772 | 3.5 | 5.8 | 17,882 | 37,144 | 1 | 202,502 |
| 71 | 345,613 | 785,199 | 4.4 | 10.8 | 15,898 | 29,915 | 1 | 3,000,0 |
| 72 | 400,251 | 316,008 | 4.8 | 2.8 | 11,269 | 506 | 1 | 300,000 |
| 73 | 238,968 | 509,608 | 2.7 | 6.4 | 29,334 | 18,457 | 1 | 200,000 |
| 74 | 2,675,941 | 1,381,596 | 41.2 | 25.2 | 17,974 | 188 | 1 | 500,000 |
| 75 | 4,371,177 | 5,877,996 | 65.4 | 90.4 | 463,806 | 258,774 | 1 | 3,000,0 |
| 76 | 1,161,385 | 1,419,337 | 26.7 | 36.4 | 25,355 | 20,173 | 1 | 306,000 |
| 77 | 1,042,691 | 1,196,690 | 13.5 | 14.3 | 19,017 | 81,045 | 1 | 200,000 |
| 78 | 6,764,566 | 9,355,493 | 57.5 | 60.2 | 1,222,13 | 1,647,43 | 1 | 3,000,0 |
| 79 | 1,725,535 | 2,729,781 | 20.0 | 42.9 | 89,533 | 168,410 | 1 | 320,000 |
| 80 | 6,395,418 | 9,572,910 | 27.2 | 35.4 | 316,562 | 278,431 | 1 | 500,000 |
| 81 | 963,053 | 1,164,203 | 21.9 | 29.5 | 76,648 | 23,072 | 1 | 100,000 |
| 82 | 161,676 | 365,996 | 2.5 | 8.1 | 20,098 | 11,394 | 1 | 1,800,0 |
| 83 | 647,591 | 776,076 | 17.4 | 24.7 | 37,024 | 31,200 | 1 | 600,000 |
| 84 | 0 | 8 | 0.2 | 0.4 | 0 | 0 | 1 | 100,000 |
| 85 | 48,085 | 35,292 | 3.7 | 2.9 | 7,323 | 3,739 | 1 | 50,000 |
| 86 | 1,580,118 | 1,306,200 | 27.1 | 25.7 | 76,746 | 13,179 | 1 | 650,000 |
| 87 | 5,289,935 | 8,297,761 | 16.8 | 39.4 | 228,745 | 164,207 | 1 | 2,300,0 |
| 88 | 720,680 | 2,195,578 | 8.0 | 20.8 | 42,283 | 240,895 | 1 | 250,000 |
| 89 | 45,948 | 539,774 | 2.3 | 13.6 | 0 | 34,080 | 1 | 300,000 |
| 90 | 98,244 | 1,105,900 | 0.0 | 1.4 | 7 | 68,521 | 1 | 500,000 |
| 91 | 310,287 | 169,669 | 6.2 | 7.2 | 14,233 | 10,371 | 1 | 400,000 |
| 92 | 10,392 | 219,957 | 0.1 | 2.0 | 247 | 3,048 | 1 | 500,000 |
| 93 | 0 | 56,806 | 0.2 | 1.4 | 0 | 1,385 | 1 | 300,000 |
| 94 | 1,113,751 | 1,041,509 | 33.1 | 23.2 | 64,707 | 20,299 | 1 | 1,012,0 |
| 95 | 45,845 | 3,449,859 | 2.7 | 28.6 | 4,447 | 203,743 | 1 | 50,000 |
| 96 | 227,386 | 455,304 | 3.0 | 5.8 | 42,045 | 59,898 | 1 | 150,000 |

| | | | | | | | | |
|-----|-----------|------------|-------|-------|----------|---------|---|---------|
| 97 | 42,827 | 194,037 | 1.7 | 3.3 | 2,004 | 5,056 | 1 | 300,000 |
| 98 | 0 | 142,408 | 0.0 | 1.4 | 0 | 242 | 1 | 47,400 |
| 99 | 675,061 | 1,519,618 | 8.3 | 21.0 | 57,828 | 81,563 | 1 | 350,000 |
| 100 | 311,973 | 292,808 | 24.3 | 10.6 | 0 | 0 | 1 | 140,000 |
| 101 | 2,015,110 | 2,666,833 | 76.8 | 73.0 | 1,941 | 817 | 1 | 330,000 |
| 102 | 3,307,273 | 3,413,083 | 79.5 | 92.4 | 90,748 | 18,288 | 1 | 1,300,0 |
| 103 | 83,566 | 559,150 | 9.7 | 34.8 | 431 | 598 | 1 | 120,000 |
| 104 | 779,498 | 1,425,229 | 42.7 | 51.0 | 2,936 | 11,139 | 1 | 100,000 |
| 105 | 8,369,668 | 12,674,916 | 210.3 | 167.0 | 77,158 | 25,286 | 1 | 2,800,0 |
| 106 | 608,614 | 532,405 | 20.7 | 15.4 | 59,974 | 159 | 1 | 600,000 |
| 107 | 1,073,003 | 988,524 | 21.8 | 20.8 | 71,044 | 0 | 1 | 500,000 |
| 108 | 261,989 | 3,389,045 | 7.7 | 19.0 | 1,304 | 27,061 | 1 | 1,800,0 |
| 109 | 141,474 | 1,022,042 | 2.0 | 13.0 | 3,987 | 59,439 | 1 | 142,000 |
| 110 | 547,899 | 414,558 | 28.3 | 17.8 | 1,298 | 0 | 1 | 600,000 |
| 111 | 1,787,983 | 3,030,896 | 43.5 | 74.8 | 27,494 | 44,670 | 1 | 700,000 |
| 112 | 15,940,46 | 5,192,278 | 89.8 | 62.6 | 121,958 | 0 | 1 | 1,000,0 |
| 113 | 4,567,110 | 1,662,369 | 90.3 | 44.0 | 11,875 | 0 | 1 | 500,000 |
| 114 | 253,708 | 423,839 | 1.5 | 2.0 | 11,973 | 16,341 | 0 | 0 |
| 115 | 0 | 258,266 | 0.2 | 4.6 | 0 | 16,131 | 0 | 0 |
| 116 | 654,096 | 0 | 4.0 | 0.0 | 14,879 | 0 | 0 | 0 |
| 117 | 93,563 | 285,673 | 3.3 | 7.4 | 33,881 | 9,400 | 0 | 0 |
| 118 | 3,837,204 | 689,661 | 120.1 | 73.2 | 180,560 | 4,911 | 0 | 0 |
| 119 | 24,352 | 8,191 | 1.3 | 0.6 | 1,881 | 117 | 0 | 0 |
| 120 | 758,448 | 382,744 | 7.0 | 3.2 | 7,561 | 719 | 0 | 0 |
| 121 | 1,855,623 | 126,456 | 15.5 | 2.0 | 28,201 | 0 | 0 | 0 |
| 122 | 876,968 | 18,813 | 20.8 | 2.7 | 8,310 | 0 | 0 | 0 |
| 123 | 746,962 | 1,027,516 | 10.0 | 10.1 | 64,779 | 119,116 | 0 | 0 |
| 124 | 238,705 | 465,142 | 0.5 | 1.0 | 7,524 | 17,032 | 0 | 0 |
| 125 | 2,755 | 0 | 0.7 | 0.0 | 0 | 0 | 0 | 0 |
| 126 | 81,285 | 3,147 | 2.7 | 0.4 | 6,364 | 0 | 0 | 0 |
| 127 | 345,607 | 567,059 | 17.8 | 22.2 | 29,858 | 34,349 | 0 | 0 |
| 128 | 826,883 | 70,900 | 20.7 | 2.1 | 39,571 | 3,350 | 0 | 0 |
| 129 | 99,531 | 6,501 | 2.3 | 0.6 | 2,564 | 0 | 0 | 0 |
| 130 | 87,732 | 0 | 0.6 | 0.0 | 2,350 | 0 | 0 | 0 |
| 131 | 1,103,981 | 1,287,335 | 25.0 | 20.2 | 33,206 | 79,421 | 0 | 0 |
| 132 | 947,873 | 698,701 | 9.3 | 4.8 | 7,201 | 10,609 | 0 | 0 |
| 133 | 88,368 | 43,675 | 2.1 | 1.8 | 4,911 | 4,695 | 0 | 0 |
| 134 | 62,026 | 108,563 | 2.3 | 5.0 | 402 | 4,356 | 0 | 0 |
| 135 | 689,165 | 302,875 | 9.2 | 7.2 | 18,191 | 6,227 | 0 | 0 |
| 136 | 152,898 | 67,514 | 10.6 | 3.2 | 2,147 | 349 | 0 | 0 |
| 137 | 0 | 823,713 | 0.0 | 20.6 | 0 | 0 | 0 | 0 |
| 138 | 205,037 | 22,758 | 2.1 | 1.0 | 19,901 | 0 | 0 | 0 |
| 139 | 313,679 | 113 | 12.8 | 0.4 | 19,733 | 0 | 0 | 0 |
| 140 | 21,047,01 | 8,853,244 | 419.7 | 207.3 | 1,277,40 | 0 | 0 | 0 |
| 141 | 235 | 0 | 0.0 | 0.0 | 144 | 0 | 0 | 0 |
| 142 | 459,692 | 148,522 | 14.6 | 8.0 | 6,198 | 2,760 | 0 | 0 |
| 143 | 177,399 | 23,105 | 3.8 | 2.3 | 4,709 | 0 | 0 | 0 |
| 144 | 0 | 89,195 | 0.0 | 1.0 | 0 | 17,393 | 0 | 0 |
| 145 | 1,839,620 | 144,990 | 20.6 | 4.2 | 67,723 | 0 | 0 | 0 |
| 146 | 374,252 | 828,621 | 7.5 | 8.0 | 11,461 | 48,664 | 0 | 0 |
| 147 | 322,114 | 96,457 | 7.5 | 3.0 | 11,030 | 699 | 0 | 0 |
| 148 | 0 | 368,564 | 0.0 | 1.0 | 0 | 19,496 | 0 | 0 |

| | | | | | | | | |
|-----|-----------|-----------|------|------|---------|---------|---|---|
| 149 | 69,562 | 47,451 | 2.5 | 1.8 | 1,664 | 888 | 0 | 0 |
| 150 | 117,849 | 54,001 | 5.7 | 2.6 | 3,958 | 8,150 | 0 | 0 |
| 151 | 0 | 1,557,646 | 0.0 | 12.4 | 0 | 251,950 | 0 | 0 |
| 152 | 424,431 | 400,487 | 12.2 | 12.0 | 8,648 | 2,770 | 0 | 0 |
| 153 | 491,237 | 83,004 | 14.2 | 4.6 | 14,693 | 0 | 0 | 0 |
| 154 | 1,068,000 | 3,125,647 | 8.0 | 12.4 | 87,022 | 692,166 | 0 | 0 |
| 155 | 68,723 | 151,449 | 1.2 | 3.4 | 4,391 | 4,299 | 0 | 0 |
| 156 | 976,313 | 1,486,049 | 8.1 | 14.5 | 32,862 | 39,328 | 0 | 0 |
| 157 | 916,154 | 3,289,700 | 19.7 | 54.0 | 132,120 | 16,595 | 0 | 0 |
| 158 | 2,315,616 | 20,947 | 32.2 | 1.0 | 653,918 | 90 | 0 | 0 |
| 159 | 729,945 | 81,124 | 47.5 | 9.0 | 83,995 | 0 | 0 | 0 |
| 160 | 32,573 | 0 | 0.5 | 0.0 | 0 | 0 | 0 | 0 |
| 161 | 76,106 | 87,811 | 1.0 | 3.4 | 1,251 | 53 | 0 | 0 |
| 162 | 15,530 | 88,027 | 0.8 | 4.6 | 443 | 1,427 | 0 | 0 |
| 163 | 1,438,660 | 260,818 | 83.5 | 18.0 | 566 | 0 | 0 | 0 |
| 164 | 3,661,585 | 5,184,639 | 12.3 | 12.4 | 32,134 | 1,354 | 0 | 0 |
| 165 | 81,812 | 42,276 | 57.3 | 1.6 | 258 | 1,410 | 0 | 0 |
| 166 | 1,243,232 | 879,484 | 48.2 | 40.0 | 156,042 | 7,069 | 0 | 0 |
| 167 | 418,654 | 36,052 | 17.8 | 1.0 | 1,941 | 0 | 0 | 0 |
| 168 | 609,906 | 379,827 | 26.7 | 14.2 | 2,313 | 2,153 | 0 | 0 |
| 169 | 1,032,007 | 5,442 | 72.5 | 1.2 | 7,537 | 54 | 0 | 0 |
| 170 | 126,198 | 42,281 | 17.2 | 0.0 | 0 | 0 | 0 | 0 |