



**AgEcon** SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

## SOURCES OF INVESTMENT FINANCING AND THEIR IMPACT ON ECONOMIC GROWTH OF THE REPUBLIC OF SERBIA

*Aleksandra Tešić<sup>1</sup>, Dragan Ilić<sup>2</sup>, Rajko Tepavac<sup>3</sup>*

### Abstract

*The aim of this paper is to point out to the important issues of investments in Serbia, with particular focus on the fact that investments can never be the objective but only the generator of economic growth, its pace, development structure and stability. With this in mind and depending on economic cycle and its phases, the connection between the amount and structure of investments and economic growth is studied as well as the investment behaviour as part of global demand and spending in the function of total consumption.*

*In the analysis of investments and their financing effects on economic growth of Serbia, relevant studies and articles were used, together with the reports and publications of competent institutions. The results of the analysis indicate the crisis of investments and their financing method in Serbia which has been accumulating for many years now, with an increasing foreign debt arising from predominantly external investment financing. The main conclusion is that for every economy, programming and monitoring of necessary investments, their economic, technical and regional structure as well as financing system is of strategic importance.*

**Key words:** *economic growth, foreign direct investments, investment portfolio, savings.*

**JEL:** *E22*

### Introduction

Investments are the generator of economic growth, its pace, development structure and stability. It is proven in theory and empirically confirmed in the development processes of almost all world economies that a higher investment rate produces effects

---

1 Aleksandra Tešić, Ph.D., Associate Professor, Faculty of Economics and Engineering Management, University Business Academy Novi Sad, Phone: +381 69 200 09 54, E-mail: [prof.aleksandra.tesic@gmail.com](mailto:prof.aleksandra.tesic@gmail.com)

2 Dragan Ilić, Ph.D., Assistant Profesor, Faculty of Economics and Engineering Management, University Business Academy Novi Sad, E-mail: [prof.dragn.ilic@gmail.com](mailto:prof.dragn.ilic@gmail.com)

3 Rajko Tepavac, Ph.D., Associate Professor, Faculty of Economics and Engineering Management, University Business Academy Novi Sad.

on a higher growth rate i.e. bigger share of investments in the gross domestic product enables higher growth rates. However, when analysing this pattern, it is possible to ask a couple of additional questions:

- is there, and if yes, what is the investment limit in the gross domestic product which will not jeopardize other forms of spending and economy stability;
- is it possible in the long-term to strike a balance between spending and investments, which will ensure an optimum growth and optimum ratio of current to investment spending;
- how can both an optimum and stable growth be achieved and, if possible, full employment and balance in external economy i.e. how a particular investment structure affects import and export composition;
- how to achieve the level of investments which will act as an actual generator of development alongside the striking of balance between savings and investments in the long term;
- how to ensure the formation of optimum investment structure and its effects on the quality and dynamics of economic growth;
- what is the investment functional structure and behaviour of particular forms of investments in the development process (crisis, prosperity, accelerated development, slow or sluggish development). Namely, there are real investments (capital assets), financial investments and workforce investments (high expertise in new technologies and financial transactions). These two forms of investments are largely neglected, although they are becoming predominant in the investment structure with very complex effects on numerous macroaggregates and relations in economy and society.

### **Investments and economic growth**

In modern economies, it is of great importance to provide optimum relation and manage an efficient policy of: 1) real investments (investments in capital assets and reserves) and 2) financial investments (deposits, cash, shares, bonds) - mainly considered to be a speculative economy and directly related to cash redistribution and savings. Not until the second phase that the savings are targeted toward real capital via stock exchange transactions.

These relations are very complicated in the generation of gross domestic product and behaviour and formation of its components (spending and investments, i.e. savings). The relations seem to be even more complicated in the modern open economies where the available gross domestic product is “adjusted” by import of capital while export of capital adjusts spending. Therefore, import and export of capital is very important, especially its targeting, use and effects on national economy: be it directed toward the increase of consumer spending, to cover budgetary expenses and deficits or for investments (whereby it is very important whether or not it is being used for productive or non-productive investments).

The above mentioned implies that investments do not only generate development, but also the process of economy modernization i.e. restructuring and technological process. In relation to other forms of final spending (consumer and general spending), the investments

have a multiplier effect on gross domestic product. It is a well-known effect of investment multiplier, which is connected to the accelerator effect on spending.<sup>4</sup>

For illustrative purposes and further analysis, below are main relations in construction of spending function in a few developed economies and in Serbia in a longer period.

**Table 1.** Structure of gross domestic product use

Indicator	1980	1990	2005	2010	2011
<b>USA</b>					
Personal consumption	63,1	65,3	65,5	58,1	56,3
Current state expenditures	19,1	18,0	16,9	19,6	22,1
Investments	17,4	15,5	16,4	16,6	14,0
Export	5,7	7,1	6,9	7,0	6,6
Import	5,5	5,1	6,0	8,0	12,2
<b>EEC (EU)</b>					
Personal consumption	59,1	61,0	60,6	58,4	57,7
Current state expenditures	15,2	16,1	15,9	16,2	19,4
Investments	23,1	21,0	19,9	18,1	16,3
Export	22,8	28,3	30,2	28,2	26,6
Import	22,1	26,1	27,2	26,4	24,8
<b>GERMANY</b>					
Personal consumption	58,5	57,0	55,9	56,1	54,4
Current state expenditures	15,8	18,2	17,3	18,6	19,8
Investments	26,4	22,9	22,0	20,0	18,1
Export	22,0	28,1	29,9	26,3	25,9
Import	20,6	25,7	27,3	25,9	24,1
<b>JAPAN</b>					
Personal consumption	55,2	54,0	52,1	52,0	51,1
Current state expenditures	8,2	8,8	8,4	8,9	9,9
Investments	34,9	32,2	30,8	27,1	24,4
Export	11,2	14,7	17,4	18,2	16,3
Import	9,9	10,9	11,0	12,6	11,4
<b>SERBIA (YUGOSLAVIA)</b>					
Personal consumption	55,5	53,9	53,7	56,2	58,4
Current state expenditures	9,3	9,0	9,4	11,8	16,8
Investments	31,9	31,8	18,9	15,5	12,4
Export	13,3	13,7	12,1	14,1	12,2
Import	22,8	26,0	22,3	25,2	24,1

Source: IMF – International Financial Statistics, 1980-2011 and Statistical Yearbook of the Republic of Serbia for 2012, Table 6.19.

Data in the Table 1 indicate that investments are not ‘overstretched’, while the consumer spending in all economies, save for Serbia, recorded a drop of between 2 and 7 percentage points. The drop in investments and ‘propensity to invest’ is connected with the global financial crisis, restrained real capital investments, and is also the consequence of stock

4 Komazec, S. (1994): *Makroekonomija*, Institut BK, Beograd, pp. 113-130.

exchange crisis and investments in financial instruments.<sup>5</sup> In addition, Serbian economy faces many challenges concerning depreciation, low labour productivity and widening gap between nominal and real aggregates in economy.

### **Economic cycles, crisis and investments**

Modern economic systems are characterised by financial market imperfections as the rise in unemployment and decline in the demand for consumer goods, with the corresponding increase in savings seems almost automatically recessive. Ever-present rise in savings is not automatically transferred to the capital market, as there is no sufficient demand and wish to invest due to diminished product realization opportunities, higher investment risk and aggravation of all development performances.<sup>6</sup>

Behaviour of corporations and capital markets in the function of corporate financing is an issue which is not sufficiently researched in a modern theory, particularly in terms of qualitative analysis. Therefore, we shall separately analyse the behaviour of capital and financing in the crisis phase, particularly in the phase of high boost.

### **Crisis phase of the cycle and behaviour of capital**

Crisis phase of the cycle is characterised by securities market exodus (increased sale of securities), increased liquidity preference and difficult investment of securities (collection of the capital required for investments is impeded). On the other hand, the cost of capital soars, banks curtail new lending, the collection of mature loans increases – resulting in conversion of loan into a cash form. Tendency of a corporation to retain money grows, self-financing increases, however, not for the purpose of financing new investments but to cover the changed investment structure. Namely, corporations lead the policy of adequate investments in means of production (real capital), reserves and financial assets, which in different cycle phases leads to fluctuations and change in the structure of total investments. Cyclic fluctuations of investments into different forms of assets are determined by current boost, business opportunities and corporate decisions on the utilization of available financial resources. In the lack of own resources, required capital is simultaneously secured on the banking loan market and by issue of shares.<sup>7</sup>

In the phase of depression and the beginning of revival, when profit is still low, business opportunities weaken, investments into real capital drop, whereas liquidity and change in investment structure to the benefit of financial investments grow. The crisis dramatically reduces the amount of financial assets accepted in the capital market

---

5 Arestis, P., Sawyer, M. (2004): *Re-examining Monetary and Fiscal Policy for the 21st Century*, Edward Elgar Publishing Inc., Northampton Massachusetts 01060 USA and Louth, Lincolnshire, UK. Printed and bound in Great Britain by MPG Books Ltd, Bodmin, Cornwall, pp. 35-38.

6 International Monetary Fund, *A New Look at the Role of Sovereign Credit Default Swaps*, Chapter 2m, April 2013, pp. 2-6, <http://www.imf.org/external/pubs/ft/gfsr/2013/01/index.htm>

7 Komazec, S., Ristić, Ž. (2009): *Ekonomija kapitala i finansiranje razvoja*, EtnoStil, Beograd, pp. 278-281.

by industrial corporations.

Increased investments into instruments of labour and reserves play an important role in the distribution of cash capital, depending on the behaviour of different forms of capital in the total cyclic capital movements. When business agreements are secured, the investments into production capital increase, the uncertainty in prosperity leads to increased investments into commodity capital, whereas a growth into a cash capital appears as the remnant of the previous two investment forms. The crisis significantly modifies complex relationship between industrial and loan capital, forcing corporations to become more independent from the loan capital market.

In the phase of crisis the share and absolute loan supply of corporations drop. In the phase of depression, the accumulated surplus of share capital is often used to decrease the dependency from external financing. The activity on the loan capital market slides. As the difficulties in the turnover of total capital grow, corporations increasingly rely on their own funds with minimum utilization of external sources – mostly short-term bank loans for current payments and preservation of liquidity.<sup>8</sup>

### **Boom and investment financing**

In the prosperity phase, particularly its final stage, when the presence of crisis is already felt in its disguised forms and big business tries to implement its investment programmes, namely, when in fierce competition, corporations increase their production capacities, implement fast modernization to preserve the market and performance, fail to timely respond to initial deviation of demand from mass production – the gap appears between equity investments and decrease in market demand. The growth of profit and income is slowed down and partly veiled by a sudden growth of commercial loans. This leads to actual notional profit and growth of investments into financial assets which increasingly become less liquid and, by their nature become investments into reserves rather than into liquid assets. Generation of surplus real capital (reserves and illiquid financial assets) produces difficulties in the turnover of total industrial capital and hyperaccumulation of capital assets.<sup>9</sup>

High boost and favourable development conditions result in increased use of loan capital market by corporations. Loan capital market is becoming a significant factor in total investment financing. Schumpeter has explained in details credit expansion policy, its negative effects and dynamic role it assumes in the economy.<sup>10</sup>

Marginal propensity to invest, in nominal and real terms, is significantly lower than the average. It is a consequence of decreasing orientation in targeting domestic savings funds and borrowed funds towards investments. Domestic sources give place to foreign

---

8 Begg, D., Vernasca, G. et al (2011): *Economics*, Tenth Edition, McGraw-Hill, New York, pp. 614-629.

9 Mishkin, S., Frederic (2004): *The Economics of Money, Banking and Financial Markets*, 7<sup>th</sup> edition, Pearson Addison Wesley, pp. 148.

10 Schumpeter, J., *Theory of Economic Development*, [http://findarticles.com/p/articles/mi\\_qa3913/is\\_200204/ai\\_n9083256/pg\\_2/?tag=mantle\\_skin;content](http://findarticles.com/p/articles/mi_qa3913/is_200204/ai_n9083256/pg_2/?tag=mantle_skin;content)

sources (loans, direct investments, portfolio investments), which weakens material basis of economy and its "growing" or self-financing power.<sup>11</sup>

Cyclical behaviour of production and all forms of employed capital is reflected through the appearance of hyperproduction crisis of commodity capital, via a complex system of relations between industrial and loan capital. The amount and terms of bank and mortgage loans account for about 2/5 of total external financing. The remaining part is constituted of sources based on securities issue. Industrial crisis and crisis of real capital inevitably lead to shocks in credit financing sphere. For this reason, it is interesting to analyse modern economies and characteristic behaviour of their internal resources and investments in different phases of economic cycle.

In the prosperity phase, credit expansion results in fast growth of industrial production (though, credit expansion may prolong the period in which hyperproduction takes on its disguised form), indebtedness of non-financial corporations increases rapidly, whereas the interest in self-financing weakens. Therefore, self-financing depends on cyclic movement of profit, especially since depreciation is loosely connected with cyclic fluctuations, thus linking self-financing to undistributed profit.<sup>12</sup>

As a result, investment in elements of production capital decreases in the period of crisis, but increases in the prosperity phase. Increase in self-financing, if considered as an investment of own funds into real capital, grows in recovery and prosperity phase, and slows down at the end of the recovery phase. The increase in self-financing in the time of crisis is forced due to the increase in "liquidity preference" and decrease in real investments, and due to caution of corporations in income distribution by creating reserves to bridge the crisis phase and difficulties in all forms of capital turnover.

### **Investments and borrowing**

As previously mentioned, the investments are the generator of economic growth, especially due to their multiplier effect on the set of economy macro aggregates. To that extent, it is necessary to analyse the following key elements of investment process:

- the amount and rate of gross and net investments;
- investment financing sources;
- structure of investment spending (equipment, import and export, technical structure of investments, economic structure of investments and the like);
- investment effects on spending, income, employment, growth, export, import and other forms of spending; and
- realisation of investments.

The investments statistics, which by all its important elements used to be kept in the Bureau

---

11 Nikolić, A. (2011): *Upravljanje investicijama*, FIMEK, Univerzitet Privredna akademija u Novom Sadu, pp. 44-55.

12 Blanchard, O., Amighini, A., Giavazzi, F. (2010): *Macroeconomics – A European Perspective*, Prentice Hall, International, First Edition, pp. 307-318.



for the Settlement of Payments, nowadays is trying to analyse this area through indirect indicators of investment movements via long-term and medium-term industry and bank borrowing abroad and domestic investment bank loans and long-term loans granted to the citizens. However, this does not allow actual investment data analysis, particularly the analysis of economical, technical and regional investment structure, let alone the effects of investment. Therefore, investment spending is tried to be indirectly viewed and analysed through the use of medium-term and long-term bank loans granted to industry and citizens. The results of this approach are explained below. During the financial crisis 2007-2012, the banks in Serbia approved 933.6 billion Dinars of long-term and medium-term loans to enterprises (companies) and 399.5 billion Dinars to citizens. The amount of loan, which is still present in these two sectors, amounts to 1,704.1 billion Dinars.

**Table 2.** Long-term and medium-term bank loans (in bln. RSD)

Year	Companies	Citizens	Other	Total investment credit
2007	185,4	253,3	17,3	456,0
2011	495,4	527,6	117,0	1.140,0
2012	1.119,0	652,8	388,3	2.160,1
<b>The rise in credit</b>	933,6	399,5	371	1.704,1

Source: NBS, Statistical Bulletin No. 2, 2012 and Balance Sheet of the Banking Sector at the end of 2012, Macroeconomic analysis and trends, Table of Bank Investment. <http://www.ecinst.org.rs/sites/default/files/mat-kratki/temabrojamat220.pdf>

If loan supply denominated in Dinars is converted into Euros, according to the mean exchange rate, this amounts to approximately 15 billion Euros of investment spending, which cannot be the indicators of investments into fixed funds, especially in terms of their structure, quality, and branch and regional earmarking of funds. Interestingly enough, in this period, foreign direct investments (mainly from sale of enterprises and banks) also amount to approximately 15 billion Euros. Borrowings of industry abroad (and of other sectors) *make up for* the lack of national savings (accumulation), which results in the soaring of foreign debt.<sup>13</sup>

**Table 3.** Structure of foreign debt per sectors (in millions EUR)

Indicator	2001	Structure	2012	Structure	Change 2001-2012
<b>Public sector</b>	10.256	93,5	10.900	42,4	+644
(NBS)	309		1.596		1.287
SPU	-		453		453
Short-term	150		-		-150
<b>Enterprises</b>	607	5,5	9.930	38,6	+9.323
Long-term	38		9.832		+9.794
Short-term	569		98		-471

13 Đurić, D., Živkov, D., Kolar, S. (2011): *Problemi fiskalnih neravnoteža i mogući rizici koji proizilaze u postkriznom periodu*, Ekonomika poljoprivrede, vol. 58, br. 2, pp. 299-309.



Indicator	2001	Structure	2012	Structure	Change 2001-2012
<b>Banks</b>	105	1,0	4.891	19,0	+4.786
Long-term	10		4.277		+4.267
Short-term	95		614		+519
<b>Total debt</b>	10.968	100	25.721	100	+14.753

Source: Public Finance Bulletin, December 2011, pp. 21, table 8 for 2012 according to the balance at the end of October.

The Table 3 shows that during the analysed period, enterprises used approx. 10 billion Euros of long-term loans, whereas banks used 5 billion Euros. That amounts to approx. 15 billion of “additional” accumulation (savings) for investment financing. Simultaneously, the income of 20 billion Euros was realized by foreign remittances and 17.5 billion Euros by regular net foreign loans. In the analysed period, this amounts to approx. 53 billion Euros or almost 70 billion Dollars. That kind of capital inflow and domestic investment credit in the period 2001-2012 produced a modest average growth rate of approx. 3% and gross investment rate of 16.7%. The main concern regarding these data is that they do not show the type of investments and which sectors they targeted. It is often emphasized in public that the amount of foreign investments required to achieve the economic growth rate of 6-7% is between 3 and 5 billion Euros per annum.<sup>14</sup>

If the growth of gross domestic product had been higher, the share of investments in GDP would have been adequately lower. It is considered that the required and desirable gross investment rate should be above 25% of gross domestic product. However, there are at least two questions to be asked regarding this issue: (a) since investments are actually modest, what happened to such large sources of investment funds and (b) what happened to depreciation in such financing system? If we include depreciation funds in financing, with their share in gross domestic product of between 14% and 16%, then net investment rate above depreciation is between 2.2% and 4.2%. Net investment rate is rather low, while total employment was reduced by 400 thousand of then employed persons, and if we consider industry, that number was 555 thousand. The unemployment rate in that period increased from 12.8% in 2001 to 23.7% at the end of 2011, and approx. 26% in 2012.

It should be emphasized that the structure of loans granted to enterprises is unfavourable and it cannot be attributed to a bigger impact on dynamization of economic growth. Namely, the amount of 1.9 billion Euros accounts for financial intermediation, 2.1 billion Euros relates to real estate business and rental while 1.7 billion accounts for trade. Processing industry accounts only for 935 million (food and beverage industry taking almost a half).<sup>15</sup>

Movement of investments in Serbia in the last decade of its development, especially of gross and net investments as well as total investments in capital assets, are shown in the following table (calculated according to different publications).

14 E.g.: *Postkrizni model ekonomskog rasta i razvoja Srbije 2011-2020*, Ekonomski institut - MAT i Ekonomski fakultet – FREN, avgust 2010, pp. 48.

15 Bulletin Public Finances no. 12, 2011, pp. 21 and October 2012.

**Table 4.** Investments in capital assets (amounts in billion RSD)

Year	Investments in capital assets	Gross investment rate	Depreciation in GDP (%)	Net investments	Net investment rate
2001	81,5	19,4	15,6	-40,7	-5,2
2002	120,4	11,8	14,3	-25,3	-2,3
2003	188,6	16,1	13,9	25,4	2,2
2004	253,3	17,7	15,4	33,3	2,3
2005	303,8	17,3	15,1	38,7	2,2
2006	379,8	19,7	13,7	89,8	6,0
2007	448,1	24,3	18,5	125,3	10,8
2008	532,4	23,8	14,8	138,5	9,0
2009	510,2	16,2	14,6	114,1	1,6
2010	522,8	14,8	15,1	51,8	-0,3
2011	482,6	12,6	...	...	...

Source: SGS 2012, Table of investments and GDP, Public Finance Bulletin, No. 4, 2012

Gross investment rate in the period of new financial crisis drops significantly from 24.3% in 2007 to 12.4% in 2011. This includes net investments, as well. If we consider inflation rate, which in particular years was two or three times higher than depreciation rate, it is clear why real investment value has been decreasing in the past years. Therefore, in the process of investing and very slow and sluggish development, the capital is not replenished; instead, its value melts down and decreases.<sup>16</sup>

### Foreign direct investments and portfolio investments

Foreign direct investments (FDI) include the control of domestic residents over an enterprise acting as a foreign resident. This concerns the acquisition of control over an enterprise abroad.<sup>17</sup> According to the Economy Development Programme in Serbia from 2009 until the end of 2012, the expected amounts of foreign direct investment are the following:

	Planned	Realized
- in 2009	1.200 million EUR	1.373 million EUR
- in 2010	1.500 million	860 million
- in 2011	1.800 million	1.514 million
- in 2012	2.200 million	800 million

Direct investments and portfolio investments are not defined.

16 Komazec, S. (2010): *Inostrani kapital – razvojni doping ili dužnička kriza*, Asterix, Beograd, pp. 182, 241.

17 Kovačević, R. (2000): *Strane direktne investicije i međunarodno tržište kapitala*, Jugoslovensko bankarstvo, br. 3-4, pp. 3-24.

The following data, provided in the table below, indicate whether FDI increased the supply of funds and launched total investments and what is their share in total investments and gross domestic product.

**Table 5.** Foreign direct investments, gross domestic product and gross domestic investments (in millions of RSD, foreign currency according to current exchange rate)

Indicator	2005	2006	2007	2008	2009	2010	2011
Gross domestic product	1.887	1.962	2.277	2.601	2.713	2.987	3.293
Gross investments in fixed funds	303	380	448	533	510	523	483
Net investments	39	90	125	122	114	52	...
Gross investment rate	17,3	19,7	24,3	23,8	16,2	14,8	12,4
Net investment rate	2,2	6,0	4,5	9,0	1,6	-0,3	...
FDI	215,7	259	127	192	137	86	151
FDI share in GDP	6,1	14,8	6,2	5,4	4,8	2,9	4,5
FDI share in gross investments	32,0	52,0	22,0	31,0	26,8	16,4	31,0

*Source:* Table compiled by the author using numerous issues of NBS Bulletin and Public Finance Bulletin.

In the period 2005-2011, foreign direct investments in Serbia amounted to 13.7 billion Euros. In the structure of foreign direct investments, the biggest investments were in financial sector (37%) due to capital increase in banks followed by investments in services and telecommunications (29%), whereas FDI in industry amounted to only 18% (primarily owing to privatization of enterprises). While in 2008 our economy saw a FDI inflow of 1.824 million Euros or 2.572 million Dollars, in the same year, the inflow of Slovakia was 13 billion Dollars, the Czech Republic 11.4 billion, Poland 7.7 billion, and Hungary 6.8 billion. From 1994 to 2008, Hungary attracted approx. 64 billion Dollars of FDI.<sup>18</sup>

In the analysed period, the share of FDI in gross domestic product was between 2.9% and 14.8%, i.e. 6.4% on average, for the whole period. The share of FDI in gross investments ranges from 16% to 52% depending on the year and approx. 30% considering the whole period. That basically means that domestic savings practically disappeared from investment financing system (save for depreciation).

In order to get a clearer picture of their class in investment financing in Serbia, and to simultaneously exclude exchange rate fluctuations, they are provided below in foreign currency.

<sup>18</sup> International Monetary Fund, *World Economic Outlook*, October 2012, [www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx](http://www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx)

**Table 6.** Share of foreign direct investments in gross domestic product and gross investments (in million EUR)

Indicator	2005	2006	2007	2008	2009	2010	2011	2012
GDP	20.365	23.305	28.468	32.668	28.883	29.024	32.993	30.074
FDI	1.250	3.323	1.821	1.824	1.373	860	1.514	800
Share of FDI in GDP	6,1%	14,8%	6,2%	5,4%	4,8%	2,9%	4,5%	2,7%
Share of FDI in gross domestic investments	32%	62%	22%	31%	26,8%	16,4%	31,0%	...

Source: Ministry of Finance of the Republic of Serbia, Public Finance Bulletin, no. 101, January 2013

The lies in a very adverse structure of FDI, since *Greenfield* investments (investments in building new facilities) have almost a symbolic share. Foreign capital enters Serbian economy usually through privatization of existing enterprises and banks. *Greenfield* investments are the initiator and stimulator of economic development<sup>19</sup>, although so far, there have been but a few. Therefore, these investments mostly went to the purchase of state and socially-owned capital through privatization.<sup>20</sup>

Portfolio investments are a form of international investments where primary motive of investor is not a control over an enterprise but the generation of income. The difference between direct investments and portfolio investments is essential.

The sole motive of a portfolio investor is constant income generation from the capital invested in security purchases (of companies, government, insurance companies and the like). Those are fixed-interest securities. It all comes down to „cutting out coupons“ from their securities. Portfolio investor and depositor are driven by almost the same motivation. Unlike direct investor, portfolio investor does not strive to directly develop business and capture the market.<sup>21</sup>

**Table 7.** Portfolio investments in Serbia (in million EUR)

Indicator	2007	2008	2009	2010	2011	2012
Assets	-3	-28	-5	-30	67	57
Liabilities	682	-63	-46	69	1.552	0
Portfolio investments – net	679	-91	-51	39	1.619	57

Source: NBS, Statistical Bulletin, January 2013, table 14a

Portfolio investments are uncertain and quite variable additional source of financing, especially since they are closely risk-related. So far, in investment policy and attraction of foreign capital, portfolio investments have had a modest, almost symbolic character, save for 2011 (bond issue in Euros to cover budget).

19 Kindlberger, Č. (1998): *Međunarodna ekonomija*, Beograd (prevod), pp. 411.

20 Horvat, B. (2008): *Dinamičan ekonomski rast*, Evropski centar za mir i razvoj, Beograd, pp. 242-244.

21 Group of authors: *Tržište novca i kapitala*, VBPS, Beograd, 2010, pp. 260, 262.

### **Capital inflow and sources of investment financing**

In the last decade of development Serbia has seen an inflow of about 80 billion Dollars (64 billion Euros) for various purposes. Foreign direct investments amount to as much as 14.7 billion Euros; investment portfolio to 2.9 billion Euros; inflows from privatization (liability-driven investments) to 1.3 billion Euros; net use of investment loans abroad 45 billion Euros, and when debt amortization is deducted, this amounts only to 14.8 billion Euros (of which 9.9 billion in economy sector and 4.9 billion through banking sector); domestic investment loans 11.4 billion Euros. This totals (without remittances from abroad which we do not treat as investments but as current spending) to about 44 billion Euros (with remittances from abroad the total inflow amounts to 64 billion Euros). Namely, in this decade, the remittances have accounted for about 20 billion Euros; on account of donations there have been 1.8 billion, however, we did not include them into investment potential. When all of the aforementioned is taken into account, for all purposes, this totals to 65.8 billion Euros.

Naturally, here it will be reasonable to ask a couple of questions: (1) Where did this large redirection of assets end up? (2) Where did, in all of that, economy accumulation disappear? (c) What happened to funds for depreciation purposes in economy which, in these ten years, amounted to about 25 billion Euros? If gross investments in capital assets (without reserves) are estimated to about 50 billion Euros in this decade, this means that a considerable portion of own funds (for amortization) has been channelled to the current spending.

The issue remains whether such amount of gross investments (their technological, economic, regional and other structure are not known) could start economic growth and address the issue of high unemployment rate i.e. find the way out of the developmental crisis. Since the noose of foreign debts is tightening, with high liabilities arising from debts, a considerably higher rate of economic growth is required to loosen this debt noose, duly service debts and gradually generate financial surplus and savings for domestic investment funding. The rate of economy self-financing is extremely low. All of the aforementioned requires a general swing in the development-generating investment sector, both in complex analysis of investments and combining the sources of financing with the analysis of investment effects.

### **Conclusion**

Foreign capital in the financing of economic development and gross domestic investments can only be a supplementary and not the main source of financing. As foreign capital is driven by its own interests, no national economy has managed to develop solely based on the import of foreign capital:

- capital generates an increasing dependence on both new capital import and the total import of debtor country;
- capital draws more profit compared to the country of origin or other countries;
- in already highly indebted countries the utilization of capital is often connected with political give-and-take policies, blackmails and the like;
- more often than not, in addition to being profit-driven, capital additionally counts

- on the exploitation of natural resources of the debtor;
- exodus of capital is very common, particularly in countries where there is high political and financial risk;
- foreign capital often enters into lucrative activities leading to development disproportions.

In its macroeconomic policy, Serbia has chosen an open economy model for commodity and financial capital. High credit and capital dependency from foreign creditors has been created in both public and private sector. The share of foreign capital in the financing of domestic investments is high as well as liabilities for utilized capital, which has created a highly indebted economy. Domestic savings participate in investment financing with a small percentage, except through foreign bank loans where foreign savings are concentrated. In addition, economy has an increasingly lower rate of gross investments, whereas in some years disinvestment has been recorded in connection with net investments. Emergence of financial crisis has produced gradual decline in foreign capital inflow. Due to inadequate investment structure investment effectiveness drops, economic growth rate slows down and unemployment is on the rise.

Since there is no long-term development strategy which would make investments the main lever of dynamization, modernization and change in development structure, it is only natural that the concept for the creation of structure of required investment funding sources is lacking. Development model and the funding concept of selected projects must be fundamentally changed. The utilization of foreign capital and taking foreign loans must take into account all the aforementioned factors, particularly the control of capital utilization, terms and effects of its use as well as the effects the accumulation outflow has on the economy.

### Literature

1. Arestis, P., Sawyer M. (2004): *Re-examining Monetary and Fiscal Policy for the 21st Century*, Edward Elgar Publishing, Inc., Northampton Massachusetts 01060 USA and Louth, Lincolnshire, UK, Printed and bound in Great Britain by MPG Books Ltd, Bodmin, Cornwall, pp. 35-38.
2. Begg, D., Vernasca, G., et al (2011): *Economics*, Tenth Edition, McGraw-Hill, New York.
3. *Bulletin Public Finances*, No. 12, 2011, pp. 21 and October 2012.
4. Blanchard, O., Amighini, A., Giavazzi, F. (2010): *Macroeconomics – A European Perspective*, Prentice Hall, International First Edition, pp. 307-318.
5. Group of authors: *Tržište novca i kapitala*, VBPSŽ, Beograd, 2010.
6. Horvat, B. (2008): *Dinamičan ekonomski rast*, Evropski centar za mir i razvoj, Beograd.
7. International Monetary Fund (2013): *A New Look at the Role of Sovereign Credit Default Swaps*, Chapter 2m, April 2013, pp. 2-6, [www.imf.org/external/pubs/ft/gfsr/2013/01/index.htm](http://www.imf.org/external/pubs/ft/gfsr/2013/01/index.htm)
8. International Monetary Fund, *World Economic Outlook* October 2012, [www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx](http://www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx)

9. Kindlberger, Č. (1998): *Međunarodna ekonomija*, Beograd (prevod).
10. Komazec, S., Ristić, Ž. (2009): *Ekonomija kapitala i finansiranje razvoja*, EtnoStil, Beograd.
11. Komazec, S. (2010): *Inostrani kapital – razvojni doping ili dužnička kriza*, Asterix, Beograd.
12. Komazec, S. (1994): *Makroekonomija*, Institut BK, Beograd.
13. Mishkin, S., Frederic (2004): *The Economics of Money, Banking and Financial Markets*, 7<sup>th</sup> edition, Pearson Addison Wesley.
14. Nikolić, A. (2011): *Upravljanje investicijama*, FIMEK, Univerzitet Privredna akademija u Novom Sadu.
15. *Postkrizni model ekonomskog rasta i razvoja Srbije 2011-2020*, Ekonomski institut - MAT i Ekonomski fakultet – FREN, avgust 2010.
16. Kovačević, R. (2000): *Strane direktne investicije i međunarodno tržište kapitala*, Jugoslovensko bankarstvo, No. 3-4, pp. 3-24.
17. Schumpeter, J., *Theory of Economic Development*, [http://findarticles.com/p/articles/mi\\_qa3913/is\\_200204/ai\\_n9083256/pg\\_2/?tag=mantle\\_skin;content](http://findarticles.com/p/articles/mi_qa3913/is_200204/ai_n9083256/pg_2/?tag=mantle_skin;content)
18. Stiglitz, J., *Whither Reform? Ten Years of the Transition*, World Bank Annual Bank Conference on Development Economics, Washington, D.C., April 28-30, 1999., pp. 1 and 34, <http://siteresources.worldbank.org/DEC/Resources/84797-1251813753820/6415739-1251814010799/stiglitz.pdf>
19. IMF – International Financial Statistics, 1980-2011 and Statistical Yearbook of the Republic of Serbia for 2012, table 6.19.
20. National Bank of Serbia, Statistical Bulletin, No. 2, 2012.
21. National Bank of Serbia, Balance Sheet of the Bankig Sector at the end of 2012, Macroeconomic analysis and trends, Table of Bank Investments. [www.ecinst.org.rs/sites/default/files/mat-kratki/temabrojamat220.pdf](http://www.ecinst.org.rs/sites/default/files/mat-kratki/temabrojamat220.pdf)
22. Statistical Yearbook of the Republic of Serbia for 2012, Statistical Office of the Republic of Serbia, Belgrade, 2012.
23. Ministry of Finance of the Republic of Serbia, Public Finance Bulletin, No. 4. 2012, No. 101, January 2013.
24. Đurić, D., Živkov, D., Kolar, S. (2011): *Problemi fiskalnih neravnoteža i mogući rizici koji proizilaze u postkriznom periodu*, Ekonomika poljoprivrede, vol. 58, br. 2, pp. 299-309.



## IZVORI FINANSIRANJA INVESTICIJA I NJIHOV UTICAJ NA EKONOMSKI RAST REPUBLIKE SRBIJE

*Aleksandra Tešić<sup>22</sup>, Dragan Ilić<sup>23</sup>, Rajko Tepavac<sup>24</sup>*

### Rezime

*Cilj rada je da ukaže na važne probleme investiranja u Srbiji, s posebnim naglaskom na činjenicu da investicije nikada ne mogu biti cilj ekonomskog razvoja, one su samo generator privrednog razvoja, njegovog tempa, strukture razvoja i stabilnosti. Imajući u vidu ove stavove, istražuje se povezanost visine i strukture investicija i ekonomskog rasta, ponašanje investicija kao dela globalne tražnje i potrošnje u funkciji ukupne potrošnje, zavisno od ekonomskog ciklusa i njegovih faza.*

*U razradi efekata investicija i njihovog finansiranja na ekonomski rast privrede Srbije, korišćene su relevantne studije i članci, kao i izveštaji i publikacije nadležnih institucija. Rezultati analize ukazuju na krizu investiranja i metodâ njihovog finansiranja u Srbiji, koja se kumulira već niz godina, sa sve većim inostranim dugom po osnovu dominantno eksternog finansiranja investicija. Osnovni zaključak je da je za svaku privredu od strateškog značaja programiranje i praćenje potrebnih investicija, njihove ekonomske, tehničke i regionalne strukture, ali i sistema finansiranja.*

***Ključne reči:*** ekonomski rast, strane direktne investicije, portfolio investicije, štednja.

---

22 Prof. dr Aleksandra Tešić, Fakultet za ekonomiju i inženjerski menadžment, Univerzitet Privredna akademija u Novom Sadu, Telefon: +381 69 200 09 54, E-mail: [prof.aleksandra.tesic@gmail.com](mailto:prof.aleksandra.tesic@gmail.com)

23 Doc. dr Dragan Ilić, Fakultet za ekonomiju i inženjerski menadžment, Univerzitet Privredna akademija u Novom Sadu, E-mail: [prof.dragn.ilic@gmail.com](mailto:prof.dragn.ilic@gmail.com)

24 Prof. dr Rajko Tepavac, Fakultet za ekonomiju i inženjerski menadžment, Univerzitet Privredna akademija u Novom Sadu.

**CONTENT**

1. Gajić Boško, Tomić Zorica, Sredojević Zorica  
**A SIMPLE METHOD ESTIMATES AND ECONOMIC INDICATORS  
OF PHOTOVOLTAIC SYSTEMS FOR DRIP IRRIGATION . . . . . 223**
2. Milojević Ivan, Vukoje Aleksandra, Mihajlović Milan  
**ACCOUNTING CONSOLIDATION OF THE BALANCE BY  
THE ACQUISITION METHOD . . . . . 237**
3. Pejanović Radovan, Glavaš-Trbić Danica, Tomaš-Simin Mirela  
**ABOUT THE CAUSES OF AGRICULTURE CRISIS IN  
THE REPUBLIC OF SERBIA . . . . . 253**
4. Vukoje Veljko, Psodorov Đorđe, Živković Jasmina  
**PROFITABILITY OF PRODUCTION OF PASTA  
FROM SPELT FLOUR . . . . . 265**
5. Borec Andreja, Prišenk Jernej  
**MODELS OF PARTNERSHIPS AND ORGANISATIONAL FORMS IN  
SHORT FOOD SUPPLY CHAINS IN THE SLOVENIAN MOUNTAINS . 277**
6. Ene Corina  
**THE RELEVANCE OF TRACEABILITY IN THE FOOD CHAIN . . . . 287**
7. Erokhin Vasily, Ivolga Anna  
**NEW DEVELOPMENTS IN RUSSIA-EU TRADE  
WITH AGRICULTURAL GOODS:  
INFLUENCES OF TRADE INTEGRATION . . . . . 299**
8. Grujić Biljana, Roljević Svetlana, Kljajić Nataša  
**CATEGORIZATION OF POVERTY IN  
THE REPUBLIC OF SERBIA IN THE PERIOD 2006-2010 . . . . . 309**

9. Jovanić Tatjana  
**AGRI-ENVIRONMENTAL LEGISLATIVE FRAMEWORK  
IN SERBIA IN LIGHT OF THE HARMONISATION WITH EU LAW . . .321**
  
10. Looijen Arnold, Heijman Wim  
**EUROPEAN AGRICULTURAL CLUSTERS: HOW CAN EUROPEAN  
AGRICULTURAL CLUSTERS BE MEASURED AND IDENTIFIED? . . .337**
  
11. Majstorović Aleksandar, Dukić Dragan, Zogović Mihajlo  
**AN AGRICULTURAL LAND VALUE ASSESSMENT MODEL. . . . .355**
  
12. Papić Brankov Tatjana, Tanjević Nataša  
**CORRUPTION IN THE LAND SECTOR . . . . . 365**
  
13. Pejovic Igor, Jovanović Vladimir  
**NEW FISCAL ROLE OF THE GOVERNMENT IN  
THE TRANSITION OF THE AGRICULTURE IN SERBIA . . . . . 379**
  
14. Sudarević Tomislav, Vlahović Branislav, Šurjanović Ivan  
**THE ATTITUDES TOWARD APPLICATION OF VIRAL  
MARKETING IN THE FOOD INDUSTRY IN SERBIA . . . . . 389**
  
15. Tešić Aleksandra, Ilić Dragan, Tepavac Rajko  
**SOURCES OF INVESTMENT FINANCING AND THEIR IMPACT  
ON ECONOMIC GROWTH OF THE REPUBLIC OF SERBIA . . . . . 403**
  
16. Živković Dragić, Rajić Zoran, Jelić Sreten, Jandrić Mersida  
**ORGANIZATIONAL AND ECONOMIC CHARACTERISTICS OF  
PRODUCTION AND MEAT PROCESSING COMPANY . . . . . 419**
  
17. **List of reviewers in 2012 . . . . . 427**