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INSUFFICIENCY OF SERBIAN ECONOMY'S OPERATING PERFORMANCES: MANIFESTATIONS, CAUSES AND MAIN GUIDELINES OF RECOVERY

Insuficijencija poslovnih performansi srpske privrede: manifestacije, uzroci i glavne smernice oporavka

Abstract

Serbia faced the economic crisis with powerless and very fragile economy. The inconvenient transition heritage made the consequences of global economic crisis even worse. The companies that had already experienced serious problems approached to bankruptcy. Other, healthier companies, kept some kind of business activity, but they were faced with the lack of capital. Low activity level disabled generating higher incomes. In this way, the possibility of growth based on internal financing sources was limited. More difficult capital obtaining, by means of share issuance, led the companies, due to insufficiently developed capital market, to borrowing at very high costs. The consequences are very worrying.

In the first part of this paper, we will try to quantify the consequences of Serbian economy's financial staggering. The aim is to visualize the complexity of financial and structural heritage and to show to what extent it is the burden to the growth of Serbian economy. At the same time, elaborations in this part should serve to identify some prerequisites for the creation of favourable business environment, stimulating to investors and able to provide the economy to operate in normal conditions. Finally, in the third part, we point to the basic guidelines in the process of overcoming financial and structural problems.

Key words: *growth, competitiveness, profitability, solvency, liquidity, risk, financial expenses, leverage, bankruptcy*

Sažetak

Srbija je ekonomsku krizu dočekala sa nemoćnom i veoma ranjivom privredom. Nepovoljno tranziciono nasleđe učinilo je da posledice globalne ekonomske krize budu još veće. Preduzeća koja su već imala ozbiljne probleme približila su se stečaju. Druga, zdravija preduzeća zadržala su kakvu-takvu poslovnu aktivnost, ali su se suočila sa nedostatkom kapitala. Nizak nivo aktivnosti onemogućavao je stvaranje većih dobitaka. Na taj način mogućnost rasta na bazi internih izvora finansiranja bila je ograničena. Otežano pribavljanje kapitala emisijom akcija, usled nedovoljne razvijenosti tržišta kapitala, upućivalo je preduzeća na zaduživanje uz vrlo visoke troškove. Posledice su veoma zabrinjavajuće.

U prvom delu rada nastojimo da kvantificiramo posledice finansijskog posrtanja privrede Srbije. Cilj je da učinimo vidljivim koliko je teško finansijsko-strukturno nasleđe i koliko je ono opterećujuće za rast srpske privrede. U isto vreme, izlaganja u ovom delu rada treba da budu u funkciji identifikovanja nekih preduslova za stvaranje povoljnog poslovnog ambijenta koji će biti stimulativan za investitore i koji će omogućiti privredi da posluje u normalnim uslovima. Konačno, u trećem delu ukazujemo na osnovne smernice u procesu prevazilaženja finansijsko-strukturnih problema.

Ključne reči: *rast, konkurentnost, profitabilnost, solventnost, likvidnost, rizik, finansijski rashodi, leveridž, stečaj*

Introduction

Economic crisis is usually and simply defined as a chronic state of abnormally low activity during a relatively longer time period. Thereby, the consequences are very hard and become more and more serious with the prolonged effect of crisis. They reflect in lower GDP, low or negative growth margins, deficit in the balance of payments, higher inflation risk, growth of indebtedness and higher unemployment. National economy is suffering serious losses. In this situation, there are not many of those who are ready to disclose the real losses. Political elite, not only in Serbian case, often declares success everything that is not a total collapse. Damages do not equal only to reported losses and balances of companies and economy. We should add the lost value to such losses, appearing as

the difference between the real production potential and lower activity level in conditions of crisis. Lost salaries, missed investment opportunities, lost incomes and similar damages appearing on these grounds will not be compensated. Here we should add that unachieved projected growth and prolonged effect of crisis increase the investment risk and discourage investors, which definitely postpones the end of crisis.

Serbian economy is also suffering the effects of economic crisis. Serbian economic situation is even more complex due to a history of economic difficulties longer than the current crisis. Occasionally present tendency to "blame" the economic crisis for the financial difficulties of Serbian economy is, of course, wrong, but it seems rather dangerous as well. Thereby, smaller problem is that, in this way, the responsibility for unsuccessful economic policy is purposely shifted towards the uncontrollable factors. Much bigger problem lies in the fact that avoiding facing the causes and volume of financial structural disorders could result in finding inadequate solutions that will resolve the problems by ignoring them. The years of warnings about the accumulated financial structural problems have not been understood right. Projecting growth rates is not only a matter of macroeconomic modelling. The important question is whether Serbian economy with the existing deformities could achieve any growth.

Key determinants of financial difficulties in Serbian economy

Serbian economy had very serious financial structural problems even before the economic crisis. It is well known that the transition in East-European countries is a difficult and complex process. In Serbia, the situation was even more complex due to war exposure, economic sanctions and narrowed market. The decrease of business activity, technical and technological backwardness and fall of competition were the inevitable consequences. Prolonged duration of transition complicated the business climate even further. Present investors' insecurity and the increased investment risk created the unfavourable investment climate and limited the inflow of foreign capital, especially in greenfield investments.

Business failure identification and the identification of early warnings which could indicate financial difficulties within companies and national economies is a common practice in many countries. Early warnings are mostly based on the information contained in the official financial statements. Their use brings the obvious benefits to both individual companies and national economy. The vital interest is to avoid crisis situations or at least to reduce the consequences to the lowest possible level. Based on high-quality information support, the economic-policy regulators can make safer strategic choices. High-quality financial analysis could help them to recognize strategically-relevant fields and create the business climate which would prompt the economic growth. The value of financial indicators is even greater due to a fact that investors pay much attention to them in a decision-making process. Financial performance measures are a sound basis for the recognition of profitable sectors, branches and companies and the decrease of adverse-selection risk.

Projecting the economic growth has to respect the existing economic potentials. Thereby, we mean the disposable capacities (level of write-off, technical and technological backwardness), the availability of working capital, indebtedness level, profit potential, possibility of servicing matured liabilities and so on. Of course, sustainable economic growth implies new profitable projects, raising the competitiveness, significant investments, the inflow of foreign capital, the acceptable relation between the internal and external financing sources and promoting exports. However, ignoring financial structural heritage, i.e. the ability of economy to bear the burden of overcoming the crisis and reach the targeted growth rate, often results in strategically-relevant documents that offer unsuccessful solutions. It is sure that, in any of those projections, we cannot ignore the burdening of companies and the economy with liabilities to creditors, suppliers, state and other interest groups. Also, it is quite sure that the state of financial imbalance is not sustainable in the long run, at least at the level which could provide sustainable growth.

Processes which existentially endanger the functioning of certain companies and the economy as a whole are related to the inability to service liabilities regularly (liquidity

crisis), inability to pay debts (crisis solvency), inability to achieve necessary income level (profitability crisis) and loss of competitiveness (crisis of competitiveness). Undoubtedly, all these processes are mutually and closely related. The above specified sequence of these processes is not random. It does not indicate the sequence in the appearance of financial difficulties, but the level of visibility in their manifestation and the immediate threat of bankruptcy. The appearance of financial difficulties follows the opposite order, beginning with the fall of competitiveness, through the fall of profitability and creation of financial structural imbalance to the inability to service matured liabilities. Liquidity is often stressed first, which is the consequence of the fact that more lasting illiquidity is one of the reasons for opening the bankruptcy proceedings. According to the Law on Bankruptcy Proceedings, permanent payment inability exists when the debtor cannot service his or her cash liabilities within 45 days from the day of their maturity or if he or she stops completely all payments in the sequence of 30 days [29]. Stressing the sequence of the above-mentioned processes does not aim to make some kind of hierarchy. It is calculated mostly in order to understand right the complexity of the problem. Highlighted danger of illiquidity stresses the urgency of resolving this problem. Since liquidity is the consequence and not the cause of the problem, single and unsystematic actions in this field represent just extinguishing the fire and not a long-term solution to the problem. The seriousness of the problems in Serbian economy is much deeper.

How serious are problems in Serbian economy? This is the question imposed by itself. At the same time, it is the question often taken for granted. Nowadays, it is a common statement that the economy is in a difficult situation. Avoiding quantifying the level of deformity will certainly not help. Ignoring the early warnings brought us into a situation that the price of economy's recovery will be much higher and that it will only rise with time. However, prescribing the cure for the solution of problems based on such common statements (and some are inclined to do so) is wrong and dangerous. It is similar to the situation when the doctor would try to cure an obviously ill patient without any deeper tests and establishing diagnosis. In both cases, chances for success are not big.

Analysis of short–term illiquidity risk

In the attempt to identify more precisely the level of financial disorders in Serbian economy, in this paper we will start from perceiving financial structural problems of the economy. It is a convenient analytical method to evaluate performances. Thereby, we do not bring into question our previous statements related to the fact that liquidity is not the first problem in the sequence of their appearance. We will use official financial statements for the period 2006-2011 as the basis for the analysis of economic performances [23]. Thereby, the reviews of key indicators will be given for the economy as a whole, and within this, distributed by the most important sectors. Performances of all other sectors are reported cumulatively. In the same way, the indicators of financial structural position are displayed in Table 1.

Liquidity indicators warn convincingly enough of the problem's complexity as their calculation is based on balance sheet. The values of current ratio and quick ratio are far below the usual general normals (current ratio 2:1, and quick ratio 1:1). Both indicators forecast good or bad financial structural premises in terms of capability to service matured liabilities in due time. With such results which are more or less equally serious in all economic sectors, at this point we can only state that financial deformities are such that the liquidity is almost impossible to maintain. Still, in this paper we will rely more on the analysis of cash flow, in order to evaluate the seriousness of liquidity problem. Cash flow synchronization is crucial to maintain liquidity. Statement of cash flow is far less prone to manipulations compared to balance sheet and income statement and this statement indicates, in a quite explicit way, the level of companies' and economy's exposure to business and financial risks [14, p. 61]. Furthermore, various empirical studies confirm the relevance of cash flows in the processes of evaluating companies' and economy's financial health and in recognizing the early warnings [3], [10].

The movement of key cash flows in 2011 is displayed in Figure 1: cash flow from operations (CFO), cash flow from investing (CFI) and cash flow from financing (CFF). Cash flow from operations has the biggest value in terms of perceiving the capability to settle current liabilities. Good news is that, in the analysis of this cash flow, we

can see that it is positive for the first time after 2007 (at the level of the economy). The situation is similar in individual sectors as well, except in information and communications sector where these cash flows are positive in the whole analysed period and in processing industry where cash flows were negative in 2011. However, after this good news, all others that follow are mostly bad ones. A somewhat deeper analysis reveals that positive CFOs result from the existing income which is, unfortunately, not the consequence of increased core-business profitability, but of decreased financial expenses (we will discuss it later on) and very high growth of operating liabilities. So, operating liabilities rose compared to the previous year by some more than 306 billion dinars. Of course, we would like if positive cash flows came from revenue growth, decrease of receivables and decrease of liabilities to suppliers.

Speaking of the fact that we cannot be satisfied with reported CFOs, there are the indicators like CFO/Current Liabilities and CFO/Total liabilities. Empirical studies show that good values for the first indicator are those which exceed 0.4, and for the second indicator those which exceed 0.2 [7]. Only achievements within the information and communications sector and partially energy sector approach to such values. The situation is alarming in all other sectors, since from total number of reported indicators (sector number and year number) one half has values below zero. The fact that CFO should serve for financing new investments, loan repayment and paying dividends to owners only confirms the seriousness of the situation. Cash-flow synchronization and servicing matured liabilities seems like mission impossible.

After these brief elaborations, there is a logical question imposed: how do many companies and the

Table 1: Indicators of sector's financial positions

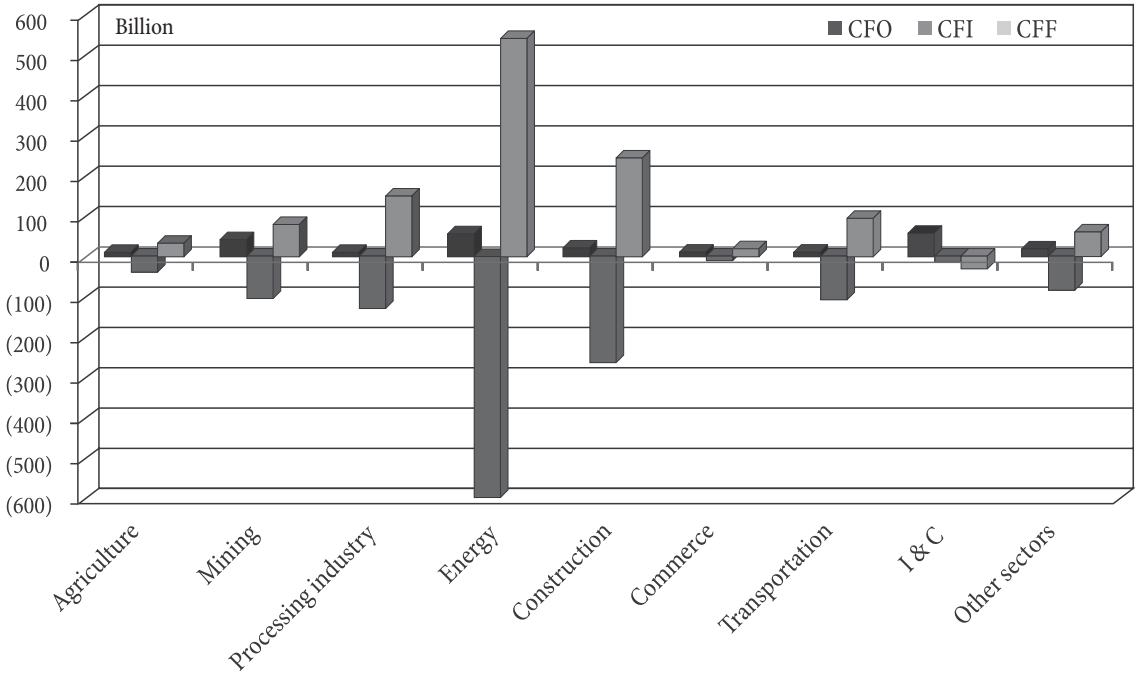
	Indicators	Current Ratio					Quick Ratio					CFO/Current Liabilities					Cash Cycles				
		2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Liquidity	Agriculture	0.96	0.98	0.93	0.89	0.84	0.56	0.60	0.57	0.51	0.47	0.00	(0.07)	(0.05)	0.01	0.02	22.90	34.65	39.67	16.86	5.52
	Mining	0.79	0.61	0.67	0.85	1.14	0.33	0.30	0.33	0.37	0.58	0.03	(0.07)	(0.02)	0.03	0.36	(3.22)	3.99	(33.75)	(24.66)	(1.18)
	Processing industry	1.05	1.05	1.01	1.02	0.98	0.59	0.57	0.58	0.58	0.57	(0.00)	(0.09)	0.00	(0.07)	(0.00)	33.63	43.12	50.16	52.41	50.28
	Energy	1.08	1.00	1.10	0.89	0.89	0.81	0.79	0.89	0.74	0.75	(0.70)	0.21	0.10	0.18	0.22	35.48	31.04	26.18	15.89	2.14
	Construction	0.89	0.90	0.94	0.88	0.88	0.55	0.53	0.52	0.47	0.46	0.10	0.02	(0.01)	(0.08)	0.04	(96.46)	(93.51)	(89.55)	(58.65)	(44.67)
	Commerce	1.01	1.04	1.01	1.01	1.01	0.61	0.63	0.63	0.61	0.60	0.03	(0.10)	(0.00)	(0.05)	0.00	12.80	18.89	24.50	23.42	23.53
	Transportation	0.88	0.84	0.79	0.92	0.88	0.69	0.67	0.62	0.71	0.66	0.18	(0.15)	(0.02)	(0.10)	0.04	(42.83)	(24.29)	(27.22)	(5.49)	0.99
	I & C	1.02	0.80	0.85	0.86	0.77	0.70	0.55	0.60	0.62	0.56	0.50	0.05	0.24	0.25	0.34	(81.15)	(82.68)	(86.78)	(96.25)	(110.63)
	Other sectors	1.17	1.00	0.96	0.99	0.99	0.77	0.64	0.64	0.73	0.75	(0.04)	(0.06)	(0.06)	(0.02)	0.03	(29.30)	(25.56)	(53.99)	(40.76)	(28.06)
	Economy	1.02	0.98	0.97	0.97	0.96	0.62	0.60	0.60	0.61	0.60	0.02	(0.07)	(0.00)	(0.03)	0.05	13.94	18.38	18.61	22.45	22.57
		Fixed Assets Coverage Ratio					Fixed Assets and Inventories Coverage Ratio					CFO to Total Liabilities					Debt/Equity Ratio				
Solvency	Agriculture	0.84	0.82	0.76	0.74	0.70	0.80	0.78	0.77	0.70	0.67	0.00	(0.05)	(0.04)	0.01	0.02	0.85	1.01	1.10	1.30	1.39
	Mining	0.70	0.55	0.34	0.39	0.57	0.73	0.66	0.65	0.71	0.85	0.02	(0.05)	(0.01)	0.02	0.16	0.92	1.37	3.03	2.74	1.48
	Processing industry	0.66	0.62	0.58	0.54	0.48	0.74	0.72	0.71	0.69	0.68	(0.00)	(0.06)	0.00	(0.05)	(0.00)	1.92	2.17	2.39	2.84	3.11
	Energy	0.88	0.86	0.88	0.82	0.85	0.93	0.92	0.94	0.91	0.90	(0.39)	0.12	0.06	0.11	0.13	0.32	0.40	0.43	0.49	0.37
	Construction	0.64	0.60	0.58	0.47	0.63	0.71	0.68	0.70	0.67	0.72	0.08	0.01	(0.00)	(0.05)	0.03	1.71	2.00	2.06	2.72	1.51
	Commerce	0.78	0.74	0.71	0.62	0.67	0.75	0.73	0.71	0.61	0.61	0.03	(0.08)	(0.00)	(0.04)	0.00	1.41	1.79	1.98	3.23	2.96
	Transportation	0.74	0.72	0.69	0.63	0.66	0.92	0.90	0.86	0.87	0.86	0.10	(0.08)	(0.01)	(0.06)	0.02	0.65	0.73	0.89	1.27	1.07
	I & C	0.59	0.53	0.51	0.48	0.44	0.92	0.85	0.86	0.85	0.78	0.24	0.02	0.11	0.12	0.18	1.17	1.45	1.60	1.82	2.25
	Other sectors	0.79	0.65	0.61	0.64	0.66	0.92	0.84	0.84	0.86	0.88	(0.02)	(0.03)	(0.03)	(0.01)	0.02	0.84	1.29	1.45	1.45	1.30
	Economy	0.74	0.69	0.65	0.62	0.66	0.81	0.78	0.77	0.76	0.77	0.01	(0.04)	(0.00)	(0.02)	0.03	1.12	1.40	1.59	1.83	1.51
		Assets Turnover					Inventories Turnover					Receivables Turnover					Payables Turnover				
Efficiency	Agriculture	0.54	0.54	0.48	0.55	0.66	3.85	3.61	3.23	3.49	3.78	3.40	2.89	2.42	2.94	3.72	2.04	1.90	1.63	1.72	1.93
	Mining	0.94	0.76	0.60	0.78	0.71	7.60	5.68	4.69	4.91	4.56	5.56	9.16	6.99	8.82	8.65	3.12	3.65	2.23	2.60	2.96
	Processing industry	0.85	0.86	0.71	0.76	0.79	4.05	3.93	3.27	3.54	3.66	4.11	4.09	3.32	3.45	3.58	2.51	2.63	2.13	2.33	2.41
	Energy	0.37	0.39	0.41	0.47	0.36	9.65	10.99	10.92	13.72	13.98	3.94	3.74	3.13	3.35	3.03	3.85	3.65	2.94	3.05	2.53
	Construction	0.67	0.67	0.52	0.49	0.43	4.16	3.81	2.76	2.47	2.31	3.46	3.35	2.77	2.94	2.88	1.26	1.22	1.03	1.10	1.11
	Commerce	1.21	1.23	1.09	1.20	1.38	6.57	6.28	5.39	5.44	5.58	5.44	5.24	4.37	4.43	4.84	3.32	3.35	2.88	2.90	3.11
	Transportation	0.53	0.59	0.56	0.66	0.63	13.26	14.80	12.53	11.53	9.55	5.83	5.99	4.66	4.65	4.48	2.74	3.32	2.71	3.15	3.07
	I & C	0.60	0.55	0.53	0.54	0.57	8.77	7.96	7.32	7.33	7.24	5.78	5.45	4.86	4.75	4.77	1.96	1.87	1.72	1.64	1.54
	Other sectors	0.44	0.41	0.35	0.36	0.38	4.21	3.56	3.05	3.50	4.35	4.03	3.87	3.21	2.92	2.85	1.77	1.64	1.27	1.35	1.52
	Economy	0.78	0.77	0.67	0.71	0.71	5.45	5.10	4.33	4.56	4.68	4.63	4.52	3.73	3.82	3.94	2.77	2.73	2.23	2.38	2.46

economy as a whole function at all? The answer to this question requires the understanding of operating cycle and cash gap. Operating cycle implies a time period from the moment of inventory purchase, through the production and sales of products, until collection of receivables of good sold. Obviously, we can recognize two important components in the operating cycle. The first one refers to the number of days from inventory purchase to sales of final products and it is called "days inventory held". The second component of operating cycle includes time from the moment of product sales to receivables collection and it is called "day accounts receivable outstanding". The duration of operating cycle clearly points to the need of providing current-assets financing sources. These needs are partly financed from the so-called spontaneous operating liabilities, where the most important position is reserved for suppliers. The remainder between the length of operating cycle and period when we settle liabilities to suppliers (days accounts payable outstanding) is a cash gap. Cash gap points to the time when we should provide other sources for financing the current assets. Short-term loans are usually used to that end.

Generally speaking, fewer days requiring additional financing should mean higher ratio of cash flow from operations to average current liabilities. Thereby, shortening the cash gap could be achieved in two ways: by more efficient production, faster inventory sales and faster receivables charge or by more aggressive use of suppliers in the process of financing the current assets [24, pp. 294-295]. The first way is preferable since it implies raising the efficiency in using current assets. The other option may be very problematic. The analysis of operating cycle and cash gap for Serbian economy and by sectors is displayed in Figure 2.

At first sight, if we measure liquidity from the point of view of cash gap, the situation is very favourable. At the economy level, period which requires additional current-assets financing is encouraging 23 days. In general, the situation is even more favourable if we watch cash gap distributed by sectors. Only processing industry requires 50 days of financing from additional sources while commerce is somewhere near the average for the economy. In all other sectors, cash gap is lower (agriculture, energy, transportation) or even negative (mining, constructions, information and communications, other sectors). Unfortunately, such cash-gap movements are not the consequence of increased efficiency in managing inventories and receivables in any of the analysed sectors. They result from an unscrupulous abuse of suppliers who, in all sectors, bear a great burden of financing the current assets. In processing industry, suppliers collect their sold products in about 5 months on average, in agriculture in more than 6 months, in the information

Figure 1: Analysis of cash flow



and communications sector in about 8 months, while the worst situation is in construction sector where suppliers wait 11 months to collect. The biggest unpleasant surprise is the information and communications sector which has the shortest operating cycle and is the only one to have positive CFOs in all analysed years, but whose suppliers wait to charge even 237 days on average.

Previous analysis points to several important conclusions. Firstly, companies shift operating-cycle financing mostly to suppliers. Secondly, suppliers, mostly due to inefficient collecting of their receivables, cannot close their cash gap, which directs them to short-term borrowing. Thirdly, in such conditions, the illiquidity problem takes on the effect of spiral. Illiquidity is shifted from buyers' companies to suppliers and then further, to their suppliers and so on. Fourthly, the biggest damage arising from this situation appears due to a fact that, in this way, illiquidity enters the healthy parts of the economy as well.

By aggressive (ab)use of suppliers in current-assets financing the illiquidity problem is not resolved. It is only postponed. The longer is postponement, the bigger are the problems, and resolving them becomes more painful. It is familiar that increasing liabilities to suppliers above the usual level is not a long-term sustainable cash flow [26, pp. 386-387]. Such increase in current liabilities is only a postponement of cash outflow. The problem in Serbian economy is even more complex if we have in mind that the illiquidity problem is the consequence of other serious disorders.

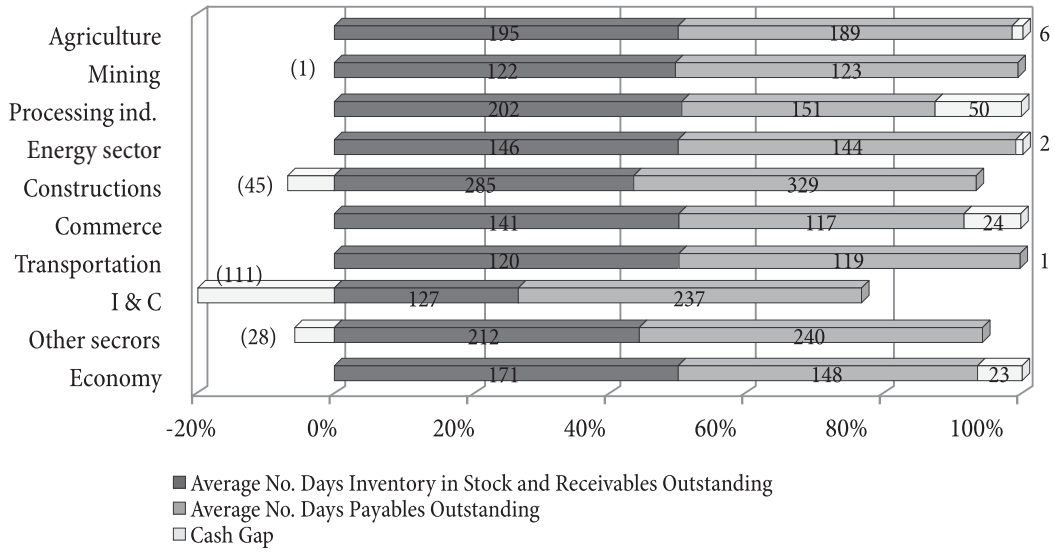
Analysis of long-term solvency risk

Short-term liquidity problems arising from the inability to synchronize inflows and outflows from operations could be resolved by the insertion of liquid funds in the economy, more efficient cash-flow management and similar measures. Problems are more complex when the economy is in a situation when, besides current liabilities, it cannot settle liabilities based on interest payment and repayment of financial debts. In that case, besides liquidity crisis, there is solvency crisis as well. The inevitable accompanying elements of solvency crisis are fall of profitability, financial-structure disorders, fall of investors' trust, and growth of cost of capital.

Previously mentioned relations are well-known in literature [24, pp. 296-299]. The lack of necessary funds forces one towards borrowing. It is a good strategy in situations when borrowed funds are invested in assets that bring return on assets (ROA) which is higher then financial expenses after tax. However, at the same time the increase of debt in capital structure increases the risk of inability to pay interests and repayment of financial debts, thus increasing the incremental borrowing costs. When ROA falls below financing costs after tax it means that the owners have losses from such borrowing. In other words, return on equity (ROE) decreases. Hence the importance of measuring long-term solvency risk.

Identifying long-term solvency risks requires wider range of indicators. Thereby, the most important ones are indebtedness ratio, coverage of fixed assets (and inventories)

Figure 2: Analysis of cash cycles



with high-quality financing sources, sufficiency of CFO in servicing debts (these indicators are displayed in Table 1), synchronization of cash flow from operations, cash flow from investing and cash flow from financing (see Figure 2), net working capital and profitability (being probably the most important solvency determinant).

Capital structure is closely related to solvency-based risks. This is because movements in indebtedness increase or decrease the above-mentioned risks. Our analysis shows that, at the economy level, debt is, in the analysed period, higher than equity by about 1.5 times on average. However, capital structure distributed by sectors varies significantly. So, for example, in energy sector debt to equity ratio is averagely only 0.4 (among others, due to extremely high revaluation reserves). On the other hand, the least favourable values are present in processing industry, 2.49 on average, commerce, 2.27 on average, construction, 2.0 on average and mining, 1.91 on average. Having in mind previous research of this problem [16], as well as the information in Table 1, we have to point out several worrying details: in all sectors indebtedness mostly rises during the whole analysed period, accumulated losses rise steadily, the share of short-term debts in total debts is considerable, while the burden of interest is hardly bearable. The fact is that financial risks increase with the growth of indebtedness. It results in greater investors' caution and the increase in cost of capital.

We will get bigger picture of financial structural disorders by the analysis regarding methods of financing certain parts of assets. In order to do so, two indicators are important: fixed assets coverage ratio and fixed assets and inventories coverage ratio. It is well-known that the most risky assets (fixed assets) should be financed from the best-quality sources, meaning from equity. However, fixed assets are not entirely financed from own sources in any of the sectors. Also, long-term financing sources (equity plus long-term debt) are not enough to finance fixed assets and inventories. In other words, it means that a part of fixed assets and inventories is financed from short-term sources. All this increases the exposure of economy to long-term financial risks. Capital structure and assets structure in 2011 are displayed in Figures 3 and 4.

In favour of the fact that such a situation was inevitable during the analysed period we offer the analysis of cash-flow movement (see Figure 1). Namely, often negative cash flow from operations (at the economy level, after three years of negative cash flow from operations, we have positive cash flow only in 2011) did not enable significant investment financing from internal generated sources. This was not feasible even with the above-mentioned abuse of suppliers. It led to additional borrowing, mostly under unfavourable conditions. Such a situation causes multiple problems. The first one is related to borrowing, which we have already discussed. The second one comes from the fact that there are not enough investments in conditions of scarce internally generated financing sources, difficult obtaining of capital by share and bond issuance and expensive credit sources. The third problem arises from the previous two. Insufficient investments also mean the insufficient range of activity (insufficient revenues), which implies very tight operating margins. It is not possible to cover high financial expenses from such margins and, consequently, losses are unavoidable.

The movement of net working capital, as the most

Figure 3: Analysis of capital structure

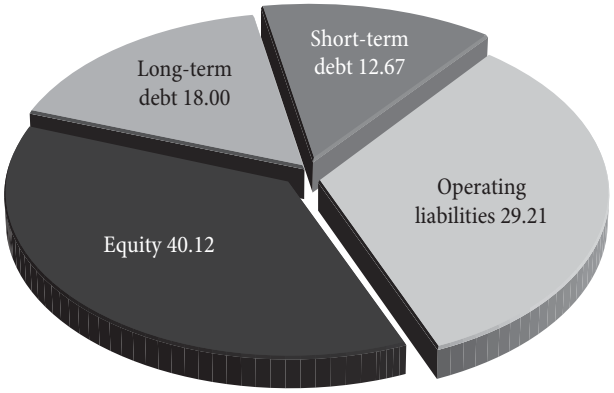
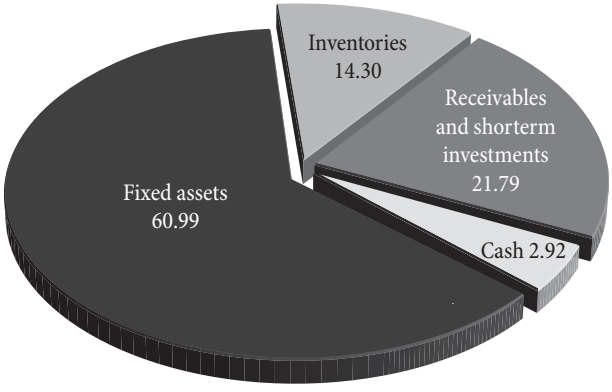


Figure 4: Analysis of asset structure

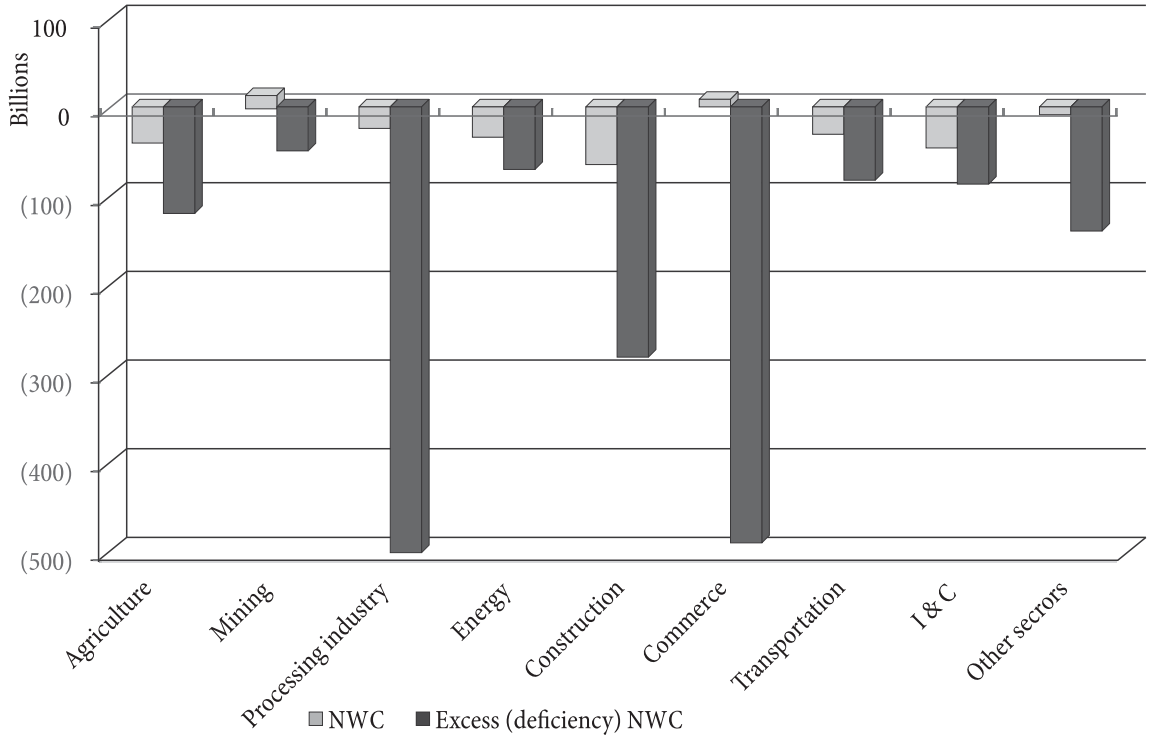


widely-used measure of companies' and economy's financial equilibrium, could be guessed quite easily from the previous story. Chronic lack of long-term financing sources causes that net working capital, as the difference between long-term equity and fixed assets, is often negative. So, for example, own net working capital (being the difference between equity and fixed assets) is negative in all sectors and each analysed year. In almost all years, net working capital is negative in agriculture, mining (except in 2011), construction, transportation and information and communications (except in 2007). During the whole period, net working capital is positive only in commerce and, in some years, in processing industry and energy. However, the missing net working capital (long-term capital necessary for fixed assets-and-inventory financing) is much bigger, which is displayed in Figure 5. It is only after this review that we could get a bigger picture of deformities in Serbian economy.

There is one very serious question imposed by previous assumptions. Is solvency crisis the biggest problem in Serbian economy and is it so big that it cannot be overcome? Thereby, we must not neglect a few important facts. Financial structural disorders are very serious and their presence causes serious problems. Capital is decreasing steadily. From debt share of about 53% in 2007, the economy came to debt share of about 60% in 2011. It is undoubtedly that financial risks are rising, especially if we have in mind the level of financial expenses. Despite all this, the answer to previously asked question is negative.

Empirical studies, both in developed and developing countries, clearly show that capital structure depends on numerous factors. Therefore, there are some important factors like macroeconomic conditions, availability of financing sources, type of activity, management capability etc. In developed countries, the share of total liabilities in total sources is for instance, at 66% in USA, 67% in Japan, 72% in Germany, 69% in France, 67% in Italy, 575 in UK and 61% in Canada [20]. The analysis based on capital structure research in 10 countries of Central and Eastern Europe (countries that went through transition) shows that, during that process, they increased their leverage and decreased the gap between real and target leverage. Gradual financial system development enabled companies to have higher debt level [12]. In Bulgaria total liabilities ratio is 59%, in Czech Republic 61%, Estonia 62%, Hungary 62%, Latvia 65%, Lithuania 53%, Poland 59%, Romania 76% and Slovak Republic 59% [13]. High indebtedness level is also typical for Turkey with total

Figure 5: Analysis of net working capital



debt ratio of about 59%, South Korea about 73% and India about 67%. On the other hand, the lowest indebtedness level is in countries like Brazil about 30%, Mexico about 35% and Malaysia about 42% [6]. From our neighbouring countries, total liabilities ratio is about 63% in Croatia (on a sample of 110 companies) [22], while it is about 60% in Slovenia (on a sample of more than 3.210 companies)[9].

Previously presented research results are given in order to realize that higher debt share does not have to be a limitation to successful functioning of companies as well as of the economy as a whole. Since there is solvency crisis in Serbian economy, it speaks in favour of the fact that liquidity crisis and solvency crisis are not the only problems and that they are more the consequence than the cause of crisis. Further analysis points us to profitability, and through that, to the competitiveness of Serbian economy.

Analysis of profitability

Nowadays, people speak much more of the illiquidity problem in Serbian economy, while the profitability problem is set aside. This is probably the reason why some economic policies are short-term and often unsuccessful. The problem is that liquidity is not the cause of unprofitability, but vice versa. Profitability is an important premise of liquidity (which does not always mean that profitable companies are immune to problems of maintaining liquidity) and the most important determinant of companies' long-term stability (solvency). With high returns it will be easier to provide cash flow synchronization (a key prerequisite for maintaining liquidity), attracting necessary capital and sustainable growth.

Profitability represents the driving force in market-oriented economies. It is only by covering the real costs that the maintenance of invested capital is provided, as a minimum prerequisite of survival and company functioning. Thereby, reported income represents the measure of achieved owners' returns. Only profitable companies able to provide the internal financing sources can count on long-term sustainable growth. The existing and perspective profitability provides companies' and branches' appeal to investors. After all, income, as one of profitability measures represents the basis and framework of increasing national economy's prosperity [15, pp. 19-27].

It is the fact that profitability depends on numerous factors. Empirical studies point especially to the relevance of factors like: country's investment appeal (determined by resource availability, development of financial and technological structure, quality of institutional and regulatory framework, openness to international trade and approach to markets), industry structure (according to Porter, it is determined by the intensity of competition, possibilities to include new producers, potential appearance of substitute products, services, buyer's and supplier's negotiating skills) and companies' features (quality of organization structure, product quality, relationship with suppliers, distributors and buyers, as well as the availability of knowledge to maintain the existing competitive advantage or acquire the new ones) [11, pp. 495-498]. Also, it is the fact that a few years of poor profitability combined with high borrowing could cause serious financial disorders.

In stressing the importance of profitability and factors that could affect it, it was counted on turning the attention towards two things. Firstly, profitability is closely related to the progress of economy, the ability of economy to invest and provide sustainable growth rates, as well as the ability to increase employment. Vice versa is also true. Unprofitability causes problems with illiquidity, solvency, companies' deterioration, decrease of employment and so on. Secondly, by pointing to profitability factors we also stress the possibility of taking action and jurisdiction in certain fields. Therefore, it is definitely clear that the state is in charge of development the business climate, while owners and management are responsible for successful functioning of companies.

In the evaluation of Serbian economy's profitability we will certainly stress the most common indicators used worldwide: return on assets and return on equity. The first one (ROA) represents the measure of owners' interest achievement. Thereby, both ROA and ROE will be displayed in their analytical versions. The mail goal is, in this way, to grasp deeper into the key causes of un(profitability) in Serbian economy. Key indicators of profitability in certain sectors and in the economy as a whole are displayed in Table 2.

Return on assets represents the measure of capability in companies and the economy to generate incomes

regardless of the method in financing the assets. It is exactly the reason why ROA is used as a test of core-business success and a measure of capability to repay debts. Further importance of ROA comes from the fact that its level is partly influenced by industry's features, while it is partly the consequence of strategy choice and implementation, the level and profitability of incomes and the efficiency in assets management.

Based on results displayed in Table 2 it is relatively easy to conclude that ROA at the national economy level is very low. Average ROA for analysed five-year period is just some more than 4%. Of course, profitability of individual sectors differs. Different characteristics of certain industries as well as different effectiveness and efficiency within the individual sectors make these variations expected. However, even the analysis of individual sectors does not change the general impression on very low capacity of economy and its sectors to generate incomes. Average ROAs for the whole analysed period are below 6% in all sectors, except in information and communications. The worst situation is in the energy sector where the average ROA is negative (3.06) and in agriculture where it is only 0.48%. Of course, this is quite worrying if we have in mind that it is the profitability of core business and that such a situation imposes a serious question of justice in functioning of companies that contribute such profitability. We must not forget that financial expenses have not been considered yet, as well as the achievements of the most profitable sector. We cannot be satisfied with information and communications. It is an infrastructural sector that has a very high profit potential worldwide, so that achieved average ROA of 8.36% does not confirm such possibilities [18].

Eventually, there is the question why profitability is so low in Serbian economy. The reasons are numerous. Firstly, profit margins are usually very tight. For example, in 2011, EBIT margin was respectable only in information

Table 2: Indicators of sector's profitability

	Indicators	Gross Profit Margin [1]					Salary Ratio [2]					Amortzation Ratio [3]					Other Operational Expenses ratio[4]					Operatin Profit Margin [5=1-2-3-4]				
		2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Profitability	Agriculture	27.19	26.30	25.07	23.02	24.04	12.93	12.14	12.09	9.81	8.87	4.09	3.96	4.32	3.70	3.38	10.05	9.53	9.58	8.13	7.98	0.12	0.68	(0.92)	1.38	3.81
	Mining	26.94	35.48	48.74	51.26	52.33	11.57	15.94	24.17	19.55	18.33	5.87	7.39	12.31	7.85	7.00	8.86	11.66	14.18	11.41	10.56	0.64	0.50	(1.92)	12.44	16.45
	Processing industry	33.91	33.34	35.21	32.50	31.26	14.93	14.41	15.19	13.02	12.85	4.09	3.92	4.72	3.95	3.69	11.82	11.66	12.43	11.67	11.35	3.07	3.34	2.87	3.87	3.37
	Energy	37.13	35.73	38.77	29.12	26.46	12.29	11.87	11.73	8.44	7.81	20.88	18.92	14.07	9.03	8.61	11.01	11.02	11.44	9.00	8.12	(7.05)	(6.08)	1.53	2.65	1.92
	Construction	67.41	65.79	68.42	65.78	65.21	15.04	14.82	16.46	14.69	13.82	3.79	4.00	5.02	5.00	6.95	42.26	39.20	40.82	38.78	39.71	6.33	7.77	6.12	7.31	4.73
	Commerce	17.34	17.06	17.65	17.36	16.59	5.19	5.27	5.62	5.35	5.13	1.12	1.10	1.22	1.13	1.08	7.36	7.29	7.92	7.81	7.30	3.67	3.39	2.90	3.07	3.09
	Transportation	52.39	46.25	51.22	45.94	44.44	20.55	19.76	20.50	16.99	17.60	8.71	6.39	6.51	5.14	4.94	23.26	21.88	22.59	21.84	21.56	(0.12)	(1.78)	1.63	1.97	0.34
	I & C	80.73	82.47	84.12	82.76	82.80	17.83	18.09	18.41	17.94	18.97	13.11	13.74	14.81	14.38	14.37	38.50	37.00	38.59	36.96	35.91	11.29	13.64	12.31	13.47	13.55
	Other sectors	64.78	67.73	69.32	63.50	63.52	24.50	23.29	24.23	23.49	23.78	5.42	5.57	5.89	5.75	6.06	30.33	35.42	34.43	28.93	29.42	4.53	3.44	4.76	5.33	4.26
	Economy	34.64	34.73	36.61	34.42	33.54	12.12	12.02	12.80	11.45	11.20	4.46	4.26	4.65	4.06	4.06	14.98	15.30	15.95	14.64	14.27	3.08	3.15	3.20	4.27	4.00
		Leverage (Total Assets/Equity) [1]					Turnover (Sales/Total Assets) [2]					Profitability (EBIT/Sales) [3]					Interest Burden (Net income/EBIT) [4]					ROE [5 = 1x2x3x4]				
Return on equity	Agriculture	1.77	1.93	2.05	2.19	2.34	0.54	0.54	0.48	0.55	0.66	4.45	1.62	(1.90)	(0.36)	0.36	0.29	(2.61)	-	-	(9.50)	1.24	(4.43)	(7.65)	(6.84)	(5.23)
	Mining	2.32	2.13	2.95	3.87	2.89	0.94	0.76	0.60	0.78	0.71	1.42	2.90	(15.25)	14.60	19.41	(1.17)	(2.27)	-	0.38	0.76	(3.64)	(10.67)	(44.04)	16.66	30.31
	Processing industry	2.90	3.05	3.28	3.61	3.97	0.85	0.86	0.71	0.76	0.79	6.49	8.34	4.84	6.35	4.64	0.23	0.01	(0.61)	(0.31)	(0.50)	3.74	0.16	(6.84)	(5.37)	(7.31)
	Energy	1.35	1.36	1.41	1.46	1.41	0.37	0.39	0.41	0.47	0.36	(42.98)	(6.74)	(1.58)	2.86	7.00	-	-	-	(0.80)	0.61	(20.20)	(5.81)	(2.44)	(1.56)	2.20
	Construction	2.58	2.86	3.03	3.41	2.92	0.67	0.67	0.52	0.49	0.43	9.74	10.96	9.76	9.92	7.31	0.52	0.34	0.18	(0.31)	(0.12)	8.83	7.05	2.72	(5.12)	(1.14)
	Commerce	2.33	2.60	2.88	3.46	4.09	1.21	1.23	1.09	1.20	1.38	5.65	5.35	4.77	4.37	4.19	0.56	0.16	0.09	(0.04)	0.18	8.97	2.72	1.34	(0.79)	4.31
	Transportation	1.62	1.69	1.81	2.07	2.16	0.53	0.59	0.56	0.66	0.63	5.06	4.64	7.06	5.14	8.87	0.15	(0.89)	(0.04)	(0.52)	0.36	0.64	(4.15)	(0.28)	(3.65)	4.39
	I & C	1.85	2.31	2.53	2.71	3.02	0.60	0.55	0.53	0.54	0.57	12.44	15.91	14.15	15.00	17.18	0.65	(0.12)	0.13	0.12	0.56	8.90	(2.43)	2.43	2.64	16.41
	Other sectors	1.78	2.07	2.37	2.45	2.37	0.44	0.41	0.35	0.36	0.38	12.05	12.52	11.38	8.90	14.89	0.43	(0.11)	(0.12)	(0.47)	0.21	4.15	(1.21)	(1.11)	(3.64)	2.84
	Economy	2.08	2.26	2.49	2.71	2.65	0.78	0.77	0.67	0.71	0.71	4.57	6.71	5.05	6.12	6.73	0.21	(0.11)	(0.35)	(0.22)	0.17	1.53	(1.23)	(2.89)	(2.60)	2.16
		Fixed Assets Turnover (inverse) [1]					Current Assets Turnover (inverse) [2]					Total Assets Turnover [3 = 1/(1+2)]					EBIT Margin [4]					ROA [5 = 3x4]				
Return on assets	Agriculture	1.25	1.15	1.29	1.11	0.91	0.61	0.69	0.80	0.71	0.61	0.54	0.54	0.48	0.55	0.66	4.45	1.62	(1.90)	(0.36)	0.36	2.39	0.88	(0.90)	(0.20)	0.23
	Mining	0.71	0.99	1.23	0.91	0.99	0.35	0.33	0.42	0.38	0.42	0.94	0.76	0.60	0.78	0.71	1.42	2.90	(15.25)	14.60	19.41	1.34	2.21	(9.22)	11.32	13.83
	Processing industry	0.62	0.60	0.72	0.66	0.63	0.55	0.57	0.69	0.66	0.64	0.85	0.86	0.71	0.76	0.79	6.49	8.34	4.84	6.35	4.64	5.53	7.17	3.43	4.82	3.66
	Energy	2.30	2.17	2.00	1.72	2.31	0.41	0.39	0.46	0.41	0.44	0.37	0.39	0.41	0.47	0.36	(42.98)	(6.74)	(1.58)	2.86	7.00	(15.91)	(2.63)	(0.64)	1.34	2.54
	Construction	0.88	0.84	1.07	1.17	1.41	0.62	0.65	0.85	0.88	0.92	0.67	0.67	0.52	0.49	0.43	9.74	10.96	9.76	9.92	7.31	6.52	7.33	5.09	4.83	3.13
	Commerce	0.44	0.41	0.44	0.36	0.27	0.38	0.40	0.48	0.48	0.45	1.21	1.23	1.09	1.20	1.38	5.65	5.35	4.77	4.37	4.19	6.83	6.59	5.21	5.24	5.79
	Transportation	1.54	1.36	1.39	1.11	1.14	0.33	0.33	0.38	0.40	0.44	0.53	0.59	0.56	0.66	0.63	5.06	4.64	7.06	5.14	8.87	2.71	2.75	3.97	3.41	5.62
	I & C	1.28	1.41	1.45	1.38	1.27	0.39	0.40	0.44	0.47	0.49	0.60	0.55	0.53	0.54	0.57	12.44	15.91	14.15	15.00	17.18	7.46	8.77	7.49	8.14	9.76
	Other sectors	1.55	1.65	1.92	1.82	1.68	0.70	0.80	0.95	0.97	0.92	0.44	0.41	0.35	0.36	0.38	12.05	12.52	11.38	8.90	14.89	5.35	5.11	3.95	3.19	5.73
	Economy	0.82	0.81	0.91	0.83	0.83	0.47	0.50	0.60	0.58	0.57	0.78	0.77	0.67	0.71	0.71	4.57	6.71	5.05	6.12	6.73	3.54	5.14	3.36	4.34	4.80

and communications sector where it is 17.78% and mining where it equals 19.41%. More deeper analysis of income profitability reveals that gross profit margin (calculated only after covering the direct variable costs, costs of direct material and purchase value of goods sold) is higher than 50% in 2011 only in mining, construction and information and communications (we do not discuss other sectors in the analysis). Profitability of certain sectors' incomes is determined by the amount of achieved incomes and cost structure. Although each sector is specific and requires careful analysis, we could generally say that sectors where fixed costs are dominant have, among other things, problems with insufficient range of activity. Due to unit fixed cost decrease and the effect of operating leverage, extending the activity range would soon bring companies and, through them, even sectors, into a zone of high operating profit margin, which would increase ROA. On the other hand, sectors where variable costs are dominant will not be able to increase ROA in short time even with extending the activity range (which is otherwise necessary), because, thanks to low contribution margins, that increase will not considerably influence operating profit margin. Regardless of how different the problems are in individual sectors (in the energy sector there is a strict state control of prices, sectors are variously capital-intensive, etc.), at this point we could generally conclude that there is a huge problem of the insufficient activity range and relatively low efficiency in managing the costs, revenues and incomes. It means that an obvious profitability crisis is mostly a consequence of crisis in competitiveness.

Secondly, turnover, as the other component of ROA, is extremely low in all sectors, except in commerce where it is higher than zero. Thereby, the fact is that some sectors are capital-intensive (e.g. energy, mining, information and communications) and require great investments. Low turnover ratios in such sectors are not surprising. Still, we should bear in mind that investment basis (total assets) is not high. Years of technical and technological backwardness as well as product and price uncompetitiveness demand investments all over Serbian economy. It will raise the value of assets, but higher yield power of such investments should also affect, through wider activity range, the increase of profit margins and assets turnover.

We get better picture of (un)profitability in Serbian economy only by bringing return on equity into the analysis. In Table 2, it is presented as the product of leverage, total assets turnover, EBIT margin and interest burden. Mind that this is the measure of generated incomes for owners. Research results show that average returns for analysed five-year period are negative for the economy as a whole and five more sectors (agriculture, mining, processing industry, energy and transportation). Construction has average ROA of 2.47%, commerce 3.31%, while the highest return, as expected, is in information and communications, 5.59. Instead of commenting on the insufficiency of reported returns even in these sectors, let us remind that owners take the biggest risk and hence expect higher returns compared to other investors.

It is relatively easy to notice that second and third component of ROE make ROA. We have already discussed this rate. At this point, the first (leverage) and fourth (interest burden) component of ROE are more important for us. These are the components of ROE that are directly related to borrowing. Theoretically, if there were no borrowing, leverage and interest burden would equal zero, which means that ROE would equal ROA. However, with borrowing, the first component of ROE (Total assets/Equity) increases, while the fourth component (Net income/EBIT) is below zero. If the product between the two components exceeds one it means that borrowing affects ROE positively. Thereby, ROA is higher than cost of capital and the remainder is shifted to owners. Vice versa, when the product is less than one, cost of capital is higher than ROA, so ROE decreases. In the first case, we speak of positive effect of financial leverage, while in second one we speak of negative effect of financial leverage [25].

Our results show a significant level of indebtedness in the economy. For example, the worst situation is in 2011 in commerce and processing industry where indebtedness (Total assets/Equity) is about 4. It practically means that the share of total liabilities in liabilities is 80%. Even more worrying is the fact that such borrowing does not contribute the increase but the decrease of ROE. In other words, the burden of financial expenses is huge. It can be seen from the movement of interest burden. Wherever this indicator is negative, it means that financial expenses

cannot be covered by the achieved operating incomes. Where the results are positive (except in agriculture in 2009 and 2010, mining in 2009 and energy in 2007, 2008 and 2009, where EBIT and net income are negative, so positive values do not make sense), they show how much out of 100 dinars (belonging to owners and creditors) belongs just to owners. So, for example, at the economy level in 2011, out of 100 EBIT dinars (belonging to owners and creditors) 17 dinars belong to owners and the rest goes to creditors. In such circumstances, we get quite a clear picture of the appeal of investment in Serbian economy.

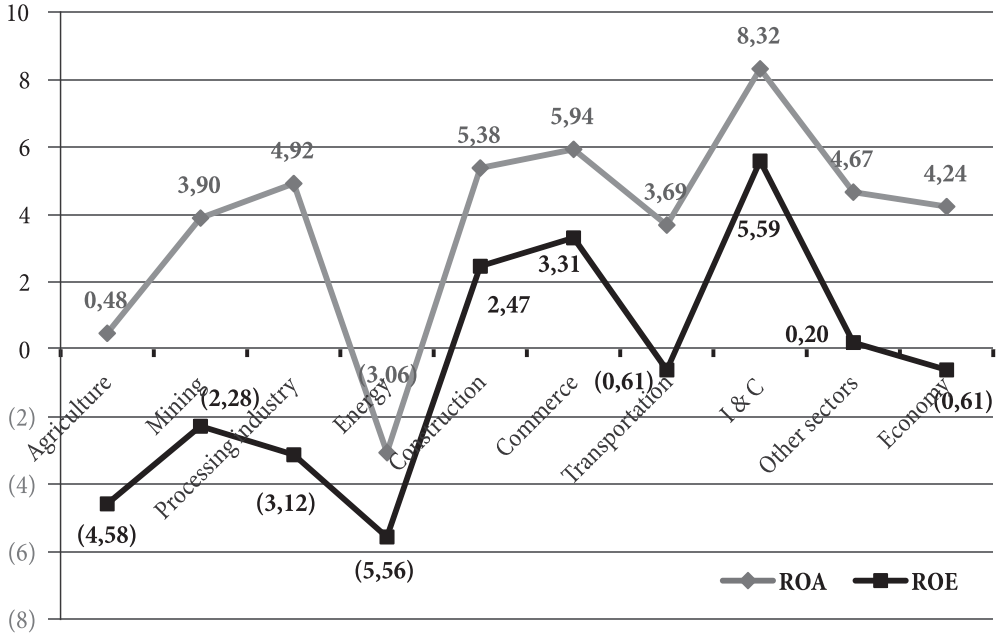
Let us make clear only one more thing – how serious is the problem regarding the burdening of Serbian economy with financial expenses and where does it mostly come from? The answer to the first part of the question could be sought through the analysis of ROA and ROE movement. That will help us to bring a final conclusion on profitability. The answer to the second part of the question points us to the analysis of financial expenses' level and structure. In Figure 6, we present the analysis of financial leverage by following ROE and ROA movement. Thereby, we use average ROE and ROA for analysed five-year period in all sectors and economy.

It is well-known that profitable companies are characterized by the situation when ROE is higher than ROA. As we have already stressed, it is the sign that ROA is higher than the cost of debt and that the excess shifts to ROE. In Figure 6, we see that the situation is quite the opposite in all sectors. That means that owners suffer losses where ROE is below zero, and owners earn less than creditors where ROE is higher than zero, which opposes to the logics of company functioning in market economy. So, in all sectors and all years, there is a negative effect of financial leverage.

What comes from this is that causes of unprofitability are partly found in core-business unprofitability, but that they are no less important in the segment of financial expenses. High financing expenses are the key determinant of financial risk. In order to understand and disclose the problem, key factors are the level and structure of financial expenses. We calculated the amount of cost of debt from the relation between financial expenses and average amount of long-term and short-term financial liabilities. In order to perceive the structure of financial expenses, we will follow the fluctuations of dinar exchange rate compared to euro and cost of debt movement at the economy level for the analysed five-year period. These fluctuations are shown in Figure 7.

The first important observation is that, at the economy level, financial expenses reach the level of 22% in 2008. Even much stronger economies would not handle such high expenses. Secondly, cost of debt is very fluctuating so it varies significantly between certain years. Besides the level of financial expenses, their variability is another important determinant of financial risk. Thirdly, we can

Figure 6: Analysis of financial leverage



notice the dependence of fluctuations in dinar exchange rate on cost of debt. In periods of stable exchange rate (in 2007 and 2011), financing expenses were the lowest. It is also evident that financing expenses considerably grow with the fall of dinar value. The reasons for this should be sought in the fact that in total cost of debt, there are the exchange differences and the effects of currency clause apart from interest cost. So, the greatest part of financial risk is shifted to the economy.

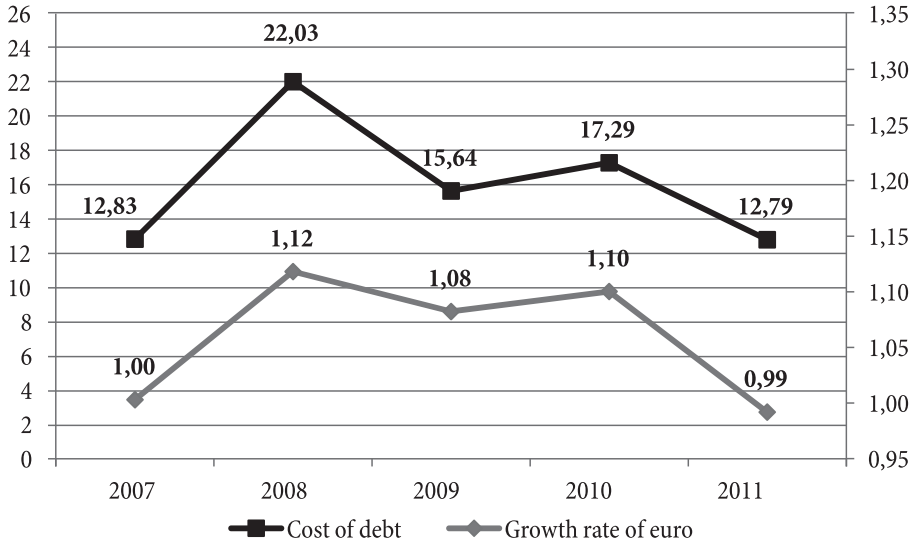
Analysis of bankruptcy risk

The presence of high cumulated losses, high illiquidity and insolvency risk, profitability crisis and competitiveness crisis imposes the question to what extent certain parts of economy are exposed to bankruptcy risks for companies belonging to some sectors. This happens particularly because the evasion of Bankruptcy Law has enabled for years the existence of companies with losses higher than equity, which are illiquid and endanger healthy parts of the economy, by participating in business transactions. It is exactly the reason why we dare to test financial health of the economy, by applying some models based on selected groups of financial indicators. Thereby, we are familiar with the fact that the evaluation of financial position and the analysis of bankruptcy risk are related to individual companies. Despite that, in this way, we would like to get a general impression on financial performances in the economy and point out the seriousness of the situation. After all, if the financial position of the economy is bad, it is sure that some companies have contributed such a situation and that bankruptcy risks are extremely high for such companies.

In previous elaborations, we have already mentioned some indicators used to classify the companies exposed to high bankruptcy risk from those that are financially healthy. First of all, we mean the use of two indicators that include cash flow from operations into the calculation: CFO to current liabilities and CFO to total liabilities. Empirical studies performed by *Casey* and *Bartczak* in 1984 and 1985 showed that, in five-year period preceding the bankruptcy, 83-92% of companies with values of the first indicator less than 0.4 and values of the second indicators less than 0.2 were properly classified as high-risk companies (that ended up in bankruptcy) [7], [8]. Other studies have also pointed clearly to the importance of information on cash flows for the purpose of estimating risk [3], [4]. At this point, we just remind that the values of these indicators are displayed in Table 1 and that they are below the required values in all sectors.

In this part of the paper, we stress some scoring models based on combined use of accounting indicators and statistical techniques with the aim to set the zones characterized by higher or lower risk. Thereby, they often combine indicators related to liquidity, assets turnover, the share of liabilities (total and short-term ones) in total financing sources, profitability, performance variability, quality, etc. We will test financial health of the economy applying three different models. For all of them, it is common that they are

Figure 7: Analysis of financing expenses



based on the information in financial statements. From our point of view, *Taffler's model* [1] is the most rigorous since it is based on the analysis of listed companies in UK. Thereby, it links four financial indicators, one of them being related to profitability and the other three to liquidity. *Zmijewski's model* [30] is based on different methodological approach, but again with the aim to get to the score which points to the exposure of companies to bankruptcy risk. It combines the information on profitability, leverage and liquidity. Finally, *Altman, Hartzell, and Peck's model,* adjusted to developing markets, the so-called EM Score [2], includes the indicators which reflect the height of net working capital, retained earnings, profitability and indebtedness. Results of the analysis are displayed in Table 3.

According to *Taffler's model*, all companies that have score less than zero are below the solvency threshold, i.e. in a risky zone. If we averaged the amounts obtained by the application of this model, all sectors would practically be below the solvency threshold. We are not inclined to take these very results as the real measure of financial health in Serbian economy, but we also consider it wise to see where we are compared to the standards in developed market economies.

Zmijewski's model aims to recognize bankruptcy risk. Thereby, values exceeding 0.5 mean the increased bankruptcy risk. Thus, reported values are favourable. However, we should be careful here since neither this model, nor the previous one, is adjusted to developing economies.

It is a general impression that *Altman, Hartzell, and Peck's model* has the greatest practical value. This is mostly due to the fact that it is adjusted to be used in countries with emerging markets. As much as it is difficult to develop a universal model, the fact is that it still considers the peculiarities of companies operating in such an environment. In the evaluation of financial health (solvency), the authors make the difference among three risk zones. The best one is a so-called safe zone where there are those whose score is higher than 5.8. The riskiest one is a so-called distress zone where there are those with score less than 4.15. In between, there is a so-called grey zone with the companies which, depending on the score, approximate or digress from safe zone.

EM/score results show that the economy with the score of 4.17 in 2011 is somewhere at the borderline between grey zone and distress zone. If we averaged the values, we would come to the conclusion that almost all sectors (except energy) are at the rock bottom of grey zone, i.e. at the borderline of distress zone. We do not take these results as the final answer regarding the probability of bankruptcy in some companies, but most of all as a serious warning on the situation in our economy. Besides, it seems like a certain conclusion that there is a huge number of companies in bankruptcy zone within all sectors. The artificial holding of such companies (except those whose existence is socially justified) significantly decreases general performances of the economy.

Prerequisites of creating favourable business climate

Having in mind a very serious financial structural heritage presented on previous pages, we feel obliged at least to point briefly to key prerequisites of creating favourable business climate and possible actions aimed at overcoming

Table 3: Indicators of financial strength

	Taffler's model					Zmijewski's model					Altman, Hartzell and Peck's EM score				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Agriculture	(2.21)	(3.09)	(4.44)	(5.35)	(5.12)	0.32	0.29	0.28	0.28	0.29	4.76	4.45	4.04	3.76	3.70
Mining	(1.85)	(5.96)	(10.19)	(2.84)	3.47	0.29	0.26	0.19	0.35	0.42	3.79	3.07	2.30	4.17	5.23
Processing industry	(2.05)	(2.67)	(4.03)	(3.99)	(4.23)	0.32	0.31	0.29	0.30	0.29	4.48	4.49	4.06	4.08	3.89
Energy	(11.76)	(1.86)	1.01	0.04	2.39	0.19	0.27	0.29	0.30	0.33	5.28	5.95	5.87	5.43	5.88
Construction	(3.22)	(4.28)	(4.93)	(8.09)	(6.87)	0.34	0.33	0.32	0.30	0.31	4.11	4.01	3.97	3.65	3.70
Commerce	(0.42)	(1.52)	(2.25)	(3.34)	(3.02)	0.35	0.32	0.31	0.31	0.32	4.66	4.57	4.26	4.13	4.09
Transportation	1.08	(0.97)	(0.90)	(1.16)	0.17	0.31	0.29	0.31	0.29	0.33	4.96	4.71	4.42	4.38	4.36
I & C	3.10	(1.94)	(1.07)	(1.27)	(1.98)	0.36	0.30	0.32	0.32	0.36	5.07	4.29	4.24	4.21	3.92
Other sectors	1.37	(2.63)	(3.37)	(2.76)	(1.08)	0.33	0.30	0.31	0.30	0.32	5.46	4.63	4.25	4.15	4.46
Economy	(0.83)	(1.97)	(2.73)	(2.92)	(2.05)	0.32	0.30	0.30	0.30	0.32	4.60	4.44	4.15	4.11	4.17

the existent problems. Since we will avoid a more detailed discussion due to a limited space and purpose of the paper, in these elaborations we intend to provide enough grounds for recognizing jurisdiction and responsibility in taking further steps. Creating an adequate business climate is a constant problem which is obviously not resolved properly. Therefore, we see the following prerequisites as necessary: reaching macroeconomic stability, developing the capital market, achieving legal stability and reasonable (very limited) state involvement in the economy.

Macroeconomic stability, by its definition, serves to stimulate economic activity. First of all, we mean price stability, interest rate stability, exchange rate stability and financial market stability. Although these goals do not always have to be mutually synchronized in a short run, looking in a long-term, economic growth and employment growth cannot be successfully achieved without the stability of these factors. It is certain that instability in any segment brings higher uncertainty for investors, complicates decision making and affects unfavourably the economic growth. The relations among inflation, interest rates and share prices are familiar. Although the interdependence does not always have to be direct and consistent, it certainly exists [21, pp. 419-422]. In order to maintain targeted real returns, credit institutions incorporate inflation into interest rate, which affects its growth. In situations when companies cannot shift the growth of production costs and financial expenses to their buyers, incomes and cash flow decrease while share prices fall. Due to increased uncertainty, investors hesitate to invest, which results in fall of economic activities.

The impression is that nowadays people sometimes discuss macroeconomic stability and economic growth without bearing in mind that the economy (with all its problems) should in fact bear the burden of economic growth. In order to get the picture of how much we managed to create a favourable business climate in the previous period, in Table 4 we present the review regarding the movement of key macroeconomic indicators and the indicators of economic performances. We also do this because of the need to encourage further empirical studies on the influence of certain key macroeconomic aggregates (e.g. inflation, exchange rate, etc.) on economic performances.

From the information displayed in Table 4, we would like to emphasize a few things. Firstly, inflation is at a very high level which is not in function of providing macroeconomic stability. The problem is that inflation goes beyond targeted values. Secondly, dinar exchange rate is unstable. Its fluctuations are related to inflation, but they are not consistent. Here, we do not consider that the exchange rate should be fixed, since stability is more about predictability. Thirdly, inflation movement and weakening of the dinar against the euro is, by means of the effects of currency clause and exchange rate, included in financing costs, thus significantly raising the cost of capital. Economies cannot bear such high financing costs, especially in the situation when core-business profitability is very low. Fourthly, this set of circumstances results in an unsustainable situation: creditors, who take less risk, earn more than the owners, who take the most risk. It is opposed to the logics of company functioning. Therefore, we should not be surprised by investors' indifference. Insisting on strengthening the role of dinar is completely legitimate, but hardly feasible in inflationary conditions.

Table 4: Macroeconomic indicators and indicators of economic performance

Macroeconomic indicators					
	2007	**2008**	**2009**	**2010**	**2011**
GDP growth (in %)	5.4	3.8	(3.5)	1.0	1.6
Consumer prices (in %)	11.0	8.6	6.6	10.3	7.0
Unemployment (in %)	18.1	13.6	16.1	19.2	23.0
RS public debt (in % GDP)	31.5	29.2	34.7	44.5	48.7
RSD/EUR exchange rate	79.24	88.6	95.89	105.50	104.64
Indicators of economic performances					
Debt/Equity	1.12	1.40	1.50	1.83	1.51
Cost of debt	12.83	22.03	15.64	17.29	12.79
ROA	3.54	5.14	3.36	4.34	4.80
ROE	1.53	(1.23)	(2.89)	(2.60)	2.16

A strong presence of financial risks (due to the level and variability of financial expenses) causes the weakening of balance in the economy. With the same assets, the share of liabilities in total liabilities and equity grows in conditions of growing exchange rate and currency clause. In such circumstances, banks reduce the offer of loans since the insolvency of companies grows. Exhausted companies, whose value decreases, often have no choice. They are ready to pay the creditors higher price for capital and to enter riskier projects. That increases the cost of capital, brings companies closer to bankruptcy since they cannot pay debts, but, at the same time, it causes the contamination of bank balance and the increase of loss risk. The fall of economic activity is inevitable. That is why economic stability is the first prerequisite of creating favourable business climate. Stability increases investors' protection, reduces the risk of adverse selection and narrows the space for speculative activities.

The development of capital market is another important prerequisite. The fact is that even in projections of growth by 2020, which plead to be serious, the problem of developing capital market is treated very superficially. It is true that the issue of shares, unlike media attention caused by capital markets, is not, individually speaking, the greatest external financing source for US companies and especially companies in continental Europe. We could say the same for debt securities. In developing countries, credit sources are dominant as well [19, pp. 371-375]. However, we should not draw a wrong conclusion from it that capital market is of small importance for the efficient functioning of the economy. It is enough only to look at the level of cost of debt and realize instantly that it is necessary to increase alternatives on the side of financing source offer in order to reduce the monopolistic position of banking sector.

We should not forget that financing from share issuance represents the best-quality financing source for corporations. This is mostly due to a fact that this is the source that never matures, except in case of liquidation. This is what embodies the advantage of financing from share issuance. Namely, unlike debt instruments and bank loans which have their maturity date and have to be obtained again after it, share issuance implies permanent acquiring of capital. Having in mind that, besides profitability, the height of equity is the most important determinant of companies' stability, it becomes even clearer why the primary share market is so important.

Debt instruments have a particularly important role in extending the range of financing sources. Corporate bonds of different maturity and features could change the debt structure of companies and make debts less dependent on banks. Furthermore, the development of debt-instrument market would be a good alternative for investors as well.

The fact is that only public traded companies have the approach to capital market. It is also true that only profitable and programme-attractive companies can be appealing to investors. In all developed economies, corporate, public traded companies play a very important role in their development. If we want a corporate way of doing business, we must develop capital market. Vice versa is also true. Public traded companies depend on primary capital market. On the other hand, if there are no primary issues, attractive shares and debt instruments, there is no active secondary market as well.

Regulatory stability is also a prerequisite of creating a favourable business climate. Regulations should provide the respect of property and contract, free flow of capital, transparent process functioning at the financial market, transparency of doing business in public traded companies, prevention of financial frauds and so on. Unfortunately, instability and incompleteness of regulations is an important feature of countries in transition. The problem in Serbia is all the greater because the transition process lasts longer than in other countries so that the harmful consequences of low-quality regulations are greater. Let us just mention that we have had three Laws on Enterprises in the transition period. A stable regulatory framework, based on widely accepted professional and ethic standards, is the best invitation to both national and foreign investors. Of course, we cannot say that nothing has been achieved in this field. On the contrary, the imperative of joining the European Union forces us to raise the regulations to a higher level and adjust them to European standards. The problem is that this is a long-lasting process.

The other problem related to regulations is the efficiency in their implementation. A good example would be the Law on Bankruptcy Proceedings. Evasion in the

implementation of this law directly undermines financial discipline and puts the companies which do business well in an unfavourable position towards those which are artificially maintained. Hence the practice in Serbia which is not typical for market economies. Companies with cumulated losses higher than equity do not suffer any legal sanctions. In such conditions, owners and creditors suffer the damage.

Insisting on stable regulations does not mean commitment to absolute protection which would completely free the investors of risk. It is the requirement that market participants should do business in a regulated, stable business environment where they will be treated equally. In such conditions, investors should evaluate risk on their own, decide how big risk they will take and suffer the consequences of potentially bad evaluations. High-quality regulations increase the credibility of a country and reduce the investment risk.

As much as we recognized the role of the state in previous areas (macroeconomic stability, capital market development, regulatory stability and legal certainty), *state interference in the private sector is still undesirable*. State has been proven a bad owner. For example, from 2006 to 2011, public companies reported net losses in each year, and they even reported operating losses in 4 out of 6 analysed years. Such an "efficiency" should not be transferred.

The state's concern regarding the economy functioning is comprehensible and justified. In that sense, system solutions for regulating the business climate are comprehensible and necessary. However, palliative approaches in resolving the economic problems are generally wrong. So, for example, the problem of state liquidity could be resolved neither by occasional pumping money into the economy nor by stimulating loans with lower interest rates. It is just a temporary extinction of fire, which will have no effect unless there is macroeconomic stability and raise of competitiveness. The intention that the state showed in order to take part in the property of small and medium enterprises is also very disputable. The state does not possess mechanisms of the efficient allocation of capital. Whatever the criteria, they will be submitted to subjective and flexible interpretation, which would always put some companies in an unfavourable position compared to some other companies. Apart from its role in previously mentioned fields, the state is obliged to be active in fields of reforming the public sector, restructuring the public traded companies, reducing grey economy, raising the efficiency of justice system, price liberalization etc.

Main guidelines for overcoming financial structural deformations

It is hard to expect that an economy with such financial structural imbalances could achieve any serious growth. The solutions are not simple. At this point, we have space to expose only main guidelines for the recovery of Serbian economy. A greater number of required activities have a strategic character, while some of them aim to alleviate current burning issues. In a few previous papers, we have already mentioned some of the challenges existing in these processes [17].

Raising the profitability of core business. One of the biggest problems in Serbian economy is insufficient competitiveness and insufficient profitability directly related to it. Thereby, we must be conscious of the fact that these financial structural problems did not appear only as a consequence of economic crisis, meaning that they will not disappear with overcoming the crisis. Years of technical and technological backwardness, market loss, maladjustment of capacities, numerous poor privatizations, inadequate economic structure and bad management are the inherited elements we brought into the crisis. Production, cost and price uncompetitiveness of a major part of Serbian economy shows that reaching the targeted activity range is a huge challenge. In that sense, it is necessary to focus the activities in several directions.

The improvement of quality in corporate management, as a set of relations among management, owners and other interest groups, should bring to the reduction of information asymmetry and adverse selection risk, the increase of investors' protection, the improvement of decision-making process, easier attracting of capital and lower financing costs. In this respect, it is necessary to strengthen the internal control mechanisms, including a competent board of directors, monitoring, internal audit, system of internal controls and internal market of managers.

In order to raise the quality of corporate management, it is equally important to provide the acting of external control mechanisms as corporate-control market, presence of institutional investors, active capital market, external market of managers and high-quality legislation.

The improvement of quality in business management. Creating values for owners and other interest groups requires the following things from management: maintaining and improving the competitive position, programmatic improvements, more intense investments and rational use of resources. That should result in the increase of profitability, employment and growth of GDP. Thereby, prerequisite is a continuous professional improvement and constant raising of the quality of knowledge. Human capital is the driver of future company performances and the most valuable intangible assets. How much this is a sore point of our economy can be seen from the fact that in 2011, when operating incomes at the economy level grew by 12%, operating margin fell by slightly more than 6%, instead of growing faster due to a unit fixed cost decrease. The application of contemporary concepts of performance management represents the inevitable way in creating cost competitiveness.

Strengthening the export orientation of the economy. Serbian market is relatively small and it is difficult to provide the necessary economy of scale on it, and accordingly, the strengthening of competitive position on these grounds. The increase of exports brings advantages to both individual enterprises and at the macro level. Serbia should use its good geographical position and good approach to markets (CEFTA, Russia, EU) and provide export-oriented investments. In this respect, it is important to remove the administrative barriers and develop transportation and telecommunications infrastructure. Higher awareness of domestic companies regarding the possibilities on foreign markets would result in easier approach to those markets.

The increase of direct foreign investments. Without diminishing the importance of other portfolio investments and in terms of the need to provide rapid growth of the level of economic activity and increase employment, the most important are the so-called greenfield investments. They are important due to a fact that they bring new technology, know-how, competitive products and that they could bring to the increase of economic activity in a short term. In a long term, such investments bring to the transfer of contemporary management skills, corporate culture, better approach to various financing sources, positive signals to other foreign investors and so on. Greenfield investments often initiate the start-up of new enterprises which serve to support final production. The state is responsible for the increase of efficiency in public administration, simplifying administrative procedures, improving the quality of infrastructure, raising the capacity of regulatory bodies, providing legal stability and reducing the investment risk.

Investing in profitable assets. It is obvious that the existing assets cannot provide incomes that would reject satisfactory profitability. The fact is that, from 2007 to 2011, operating assets rose by 1.5 times, but we should bear in mind that about 25% of the increase comes from assets revaluation. There are no real investments behind revaluation, but only correction of the value of existing assets. Bearing in mind years of technical and technological backwardness, it is obvious that raising the competitiveness of the economy requires considerable investments in revitalizing the existing capacities and building new ones.

It is true that not all the sectors have the same importance for economic growth and that, due to their distinctiveness, they require particular sector policies. In this respect, we often stress the importance of investing in sectors of agriculture, mining, processing industry and construction. However, we need to add them so-called infrastructural sectors, like energy, telecommunications and transportation. Their strategic character comes from the fact that, besides having a direct influence on growth, they have a multiplying effect on the growth of activities in other sectors. These sectors represent the pillars of national economy's development.

All previously mentioned sectors are capital-intensive. It means that they require high investments. Only financially healthy companies can bear such investments. Having in mind that many companies are in financial difficulties, it means that they will have to improve their financial position on the go as well as to take care of new investments and their funding.

Sources of financing sustainable growth. Unsatisfactory profitability of Serbian economy indicates that the internal

financing sources are not enough for required investments. So, the question is how to finance gap existing between high investment demands and internally generated sources. Further limitations are related to the fact that borrowing capacity is small and that obtaining external own sources often means losing control. Long-term sustainable growth implies combining various financing sources in a way that capital structure does not provoke excessive financial risk which could lead companies to bankruptcy. In that sense, we are making a few notes. Firstly, in companies where financial balance is not considerably damaged and where projects are not too demanding financially, combining internally generated sources with credit sources could provide maintaining of target capital structure. Secondly, in situations where projects are capital-intensive and there are still certain financial deformities the exit should be sought in recapitalization (additional issuance of stocks). Although such processes are not likely to succeed at present, we should not exclude the possibility that attractive projects find their way to investors by means of initial public offering (IPO), public share issuance or private placements. Having in mind great financial dubiousness, for many companies finding a strategic partner represents the only way to provide sustainable growth. Thirdly, in order to obtain the essential fresh capital, we should open space for public private partnerships. Infrastructural sectors are particularly attractive in this respect. Although, generally speaking, the state is not a good owner, we should not exclude it as the investor in some strategically important companies. Fourthly, partial financing of capital investments from debt is acceptable as well. Thereby, expensive bank loans need to have an alternative in various types of corporate bonds (long-term, short-term, convertible, inconvertible, bonds with put option, bonds with call option, floating rate bonds etc.). Prerequisites for the growth of bond market are strengthening the primary and secondary capital market, reduction of transaction costs and institutionalization in measuring the credit risk.

Financial expenses, leverage and profitability. We have already seen that financial expenses are intolerably high. Their level is determined by interest rate, exchange differences and incorporated currency clause. Owing to this structure, unstable financial climate makes the financial expenses variable, which increases additionally the financial risk. Extending the possibilities on the side of financing-sources offer should cause cost reduction. However, it is because of the structure of these expenses that the financial stability is necessary in order to reduce financing costs more seriously. That implies a reasonable inflation and clearly defined exchange regime.

In order to have a sustainable situation in the economy, it is necessary that financial expenses should be lower than owners' returns. Only then, financing activities would, by means of positive effect of financial leverage, contribute the increase of profitability of equity. Overcoming the existent difficulties in terms of financial expenses burden requires much greater responsibility of state (primarily in terms of providing macroeconomic stability), regulators (in terms of creating climate where banks should be interested in real sector's destiny), banks (which are inclined to shift all risks to companies, including those based on bad management) and company management (which should be more careful in borrowing and get in touch with creditors in the attempt to find a way for relaxation of liabilities). It is certain that companies will pay the price of unfavourable borrowing. However, even creditors will not be spared in that process. As much as the respective loans are secured, collateral will be worth much less if companies go bankrupt. The participants should bear in mind at least two things. Firstly, long-term growth and survival of financial sector without the real one are hardly feasible. The existent unnatural alienation must be overcome. Secondly, overcoming the crisis could not be provided by expensive loans. On the contrary, money should be cheap.

Strenghtening the solvency. Solvency crisis appears as a consequence of profitability fall, indebtedness growth, inability to pay interests and repay debts. Accordingly, raising stability implies the increase of the ability to generate incomes from so-called core business and strengthening the position of own capital from internal sources and owners' shares. In other words, resolving previously stated problems within operating, investment and financing activities is a normal way to resolve the problem of solvency.

At this point, we would like to emphasize certain systemic flaws that undermine solvency. It is familiar that

the appeal of corporation comes from limited liability of their owners. On the other hand, legal system of each country tries to protect creditors' interests as well. Settling these two opposite requirements is obtained by providing the sufficient amount of own capital which protects creditors' interests. By prescribing 100 dinars as the minimum amount of basic capital for starting up a private limited company, according to Law on Enterprises (Art. 145), the protection of creditors' interests was made pointless [27]. The protection of creditors against possible abuses by the owners, stipulated by Art. 183, is certainly good and represents an important step forward compared to the previous law. Still, it is not enough since we consider only one type of risk. Such a legal solution is opposed to the essence of corporation' functioning. The situation is similar with publicly traded companies as well, where, as stipulated by Art. 293, the prescribed minimum basic capital is higher (3 million dinars), which, considering their potential size, is far from being enough to protect creditors' interests.

Improving liquidity. From the point of view of consequences and intensity in manifestation, illiquidity is the burning issue of Serbian economy. That is why people often reach for short-term extorted measures whose range is very limited. A long-term solution of illiquidity problem requires establishing the competitiveness, increasing the profitability and removing financial structural imbalances. Wrong moves in this field are the consequence of misunderstanding the essence of illiquidity in the economy. If we reported the entire economy in one balance sheet, this problem would be manifested as the discrepancy between disposable cash and purchases done. More lasting negative cash flows from operations point to the inability of servicing liabilities from operating activities. The problem becomes even bigger and more obvious if we have in mind the need to finance a part of capital investments from internal sources, debt repayment and dividend payment. In that case, outstanding negative balance rises. The problem is not resolved by the insertion of fresh money into the economy. Debts still rise, risks grow, cost of capital grow, and the illiquidity problem remains and becomes even harder. Short-term, good measures are certainly the establishment of strict financial discipline and the increase of efficiency in cash-flow management.

The establishment of strict financial discipline is one of the key prerequisites for the improvement of liquidity position. It is necessary in a way that companies could acquire good business practice, but also to prevent the abuse of smaller suppliers by big and powerful companies (both public and private). In this respect, adoption of the Low on Terms of Settling the Financial Obligations in Commercial Transactions is a good move [28]. This is particularly due to the possibility that public sector could stop to be one of the generators regarding liquidity. Speaking of private sector, prescription of strict terms is disputable since the economy is so heterogeneous that it is hard to expect that any deadline would suit to everybody. Some relaxations of the anticipated 60-days deadline, e.g. extending the payment deadline, provided that unconditional payment instruments are obtained, indicate that the problem is understood. Turning the outstanding, non-interest-based liabilities into interest-based liabilities is also a good solution. The question remains if we are ready for the consequences of consistent enforcement of this law since there has been no such readiness so far.

Establishing strict financial discipline goes in favour of more efficient cash-flow management. Particular attention should be paid to managing the cash gap (inventory days on hands + receivables collection period – accounts payable period = cash gap). Through managing the cash gap we can understand how the efficiency in performing operating activities affects cash flows [5]. Closing the cash gap requires the obtaining of additional financing sources, mostly short-term loans. In that case, daily interest costs based on financing the cash gap could be easily calculated. Each day of cash gap decrease means reducing the need for cash and daily savings in interest costs. Increasing the efficiency of inventory management and shortening the period of receivables collection are crucial managing levers. The possibility of prolonging liabilities towards suppliers is not an option right now, since it has been widely abused in Serbian practice so far.

Scopes of the announced multilateral compensations are not great. In fact, the illiquidity problem cannot be completely resolved by multilateral compensations. After potentially done multilateral compensations, eventually a huge outstanding balance would remain as a result of the above mentioned imbalance between purchases and disposable cash. It is a time-limited measure which,

by definition, refers to old debts and does not bring fresh money, so it cannot resolve the problems of future liquidity. It can help in partial balance sheet adjustments of participants in compensations, which is not enough to remove the causes of illiquidity.

*Balance sheet adjustments***.** By this, we primarily mean excluding hidden losses from balance sheet. Hidden losses, being the result of overrating the assets and underestimating the liabilities, contaminate balance sheets which then stop to be a reliable information source. It is certainly not in favour of the need to attract foreign investors. Responsibilities of management, auditors and accountants are obvious in the process. However, what particularly worries is that the state takes part in the process of legalizing the creation of hidden losses. Allowing companies to postpone the effects of foreign exchange losses (and gains) and currency clause by means of delineation of the balance sheet for future periods is against the law. In this way, some companies are given the opportunity to report more favourable incomes and pay them off in the form of dividends. These outflows can be considerable, especially in case of companies whose founders are not the enterprises doing business in Serbia. Of course, dividend payoff is not disputable as a corporate decision, but the artificial framing of incomes in order to provide that is not allowed. Objectivization of excessive hidden reserves (which are essentially contrary to hidden losses) would contribute the reality of balance sheet. However, the fact is that reasonable hidden reserves are preferable and that potential damages based on excessive hidden reserves are incomparably smaller than damages caused by hidden losses. Raising the quality of reporting would contribute the increase of information capability of financial statements and the reduction of adverse-selection risk. In addition, ensuring a safe insight into the financial position of the economy, sectors and certain branches would reduce the risk of creating wrong sector policies.

Conclusion

Serbian economy is faced with very serious financial structural problems which are not only the consequence of economic crisis. Nowadays, we can freely say that Serbian economy is characterized by the crises of competitiveness, profitability, solvency and liquidity. Very difficult financial structural heritage raises a very serious question regarding how much such an economy can bear the burden of more significant economic growth. Ignoring the real problems in Serbian economy, as well as the distinctiveness of certain sectors and branches, results in strategically important documents whose realization is unsuccessful.

Years of delay in resolving financial structural disorders made the problems even bigger, and their resolving even more complex. Thereby, it is certain that the recovery of Serbian economy requires the creation of stimulating business climate for investors. Institutional premises in this respect are macroeconomic stability, capital-market development, regulatory stability and reasonable (quite limited) state interference in economic affairs. Main guidelines in overcoming financial structural deformations should be directed to the increase of competitiveness and profitability of core business. Thereby, in order to extend the activity range more seriously it is not enough just to increase the efficiency in using the existent assets. Years of technical and technological backwardness require big investments which should be directed to strategically important sectors in terms of growth. A small domestic market and the inability to reach economies of scale impose the stimulation of export-oriented economy. Such investments also imply searching for financing sources able to provide sustainable growth. In this respect, we will have a normal situation when creditors' returns are lower than the owners' returns. The opposite situation is not long-term sustainable. We could say that these are also the premises of long-term solution to the problems of solvency and liquidity.

In bringing final conclusions on economic performances, based on analyses of cumulative financial statements, we should always be careful up to a point. The fact is that there are parts of the economy, branches and individual companies burdened by serious losses, which in some cases exceed the amount of equity. In 2011, almost 42% of companies did not report incomes. Some of these companies could be restructured, while the unpromising ones should be market-sanctioned. However, there are some other, healthy parts of the economy, with above-average performances. Growth should be based on financially healthy and strategically important parts of the economy.

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