THE CONSTRUCTION INDUSTRY IN FUNCTION OF THE RECOVERY OF THE REPUBLIC OF SERBIA ECONOMY

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The current economic crisis has affected the level of the economic activity in many sectors of the economy. Among theorists and practitioners, the construction industry, followed by all the other industries, is increasingly said to be facing a serious crisis and to encourage its recovery of the overall economy of the Republic of Serbia. For this, the construction industry is said to be able to bear half of the economic growth of Serbia. However, taking into account the above-mentioned positions, the question is what the effects of the economic crisis on this economic sector are and what the effects of the measures imposed by the previous government of the Republic of Serbia regarding this sector were. Searching for answers to this question can to a great extent profile the answer of the current government regarding the solving of the problems in the Serbian construction industry.

Keywords: economic crisis, institutional environment, state subsidies, construction sector

JEL Classification: G01, E29, E29, D22

INTRODUCTION

The construction industry in all countries is faced with different challenges and problems. However, in countries with delayed transition, these problems and challenges have special characteristics, reflected in the specific institutional environment and a chronic lack of adequate funding. If we add the impact of the current economic crisis, it is more than evident that the challenges the construction industry is being faced with are gaining intensity. We emphasize the fact that, unlike some other sectors of the economy, the construction industry of Serbia has failed to internationalize itself after 2000, even though favorable conditions for that have existed (Mladenović et al, 2012, 42). Acknowledging this fact, a survey on the situation in the construction sector in Serbia will be carried out, then the effects of the post-crisis measures of the Government of the Republic of Serbia in the sector will be presented and the measures for the recovery of the industry in Serbia will be defined. In this context, analyze the current business institutional framework for this sector of the economy, as well as consideration of institutional arrangements offered by the previous government of the Republic of Serbia to boost construction industry. Whether these measures have yielded the results, and what the situation in this economic sector is like, will be analyzed based on the
representative sample. The premise is that the post-crisis measures of the Government of the Republic of Serbia have not yielded results. The validation of the hypotheses will be tested based on the representative sample.

The sample will consist of the companies that, in 2012, had a 5% share in the total revenue realized in the total construction activity of the Republic of Serbia. The case analysis will be carried out on the official financial statements of the companies included in the sample for the period from 2008 to 2012. The analysis of the balance sheet position, liquidity, financing, debt collection and profitability gained will be a clear insight into the impact of the current crisis in the construction sector in the Republic of Serbia. The subject analysis will show whether the measures of the previous government of the Republic of Serbia have been effective or, as many people say, they have become the cause of the insolvency and economic collapse of this economic sector. The analysis will help give recommendations for the recovery of this important economic sector.

THE INSTITUTIONAL FRAMEWORK OF CONSTRUCTION ACTIVITIES IN SERBIA

The construction activity in Serbia is a very important industry for the functioning of the economy as a whole. Generally speaking, the industry is associated with almost all areas of human endeavor. With the development of science and technology, civil engineering has become an important economic area, and is associated with over 30 economic activities. The products of the building activity are final outputs and inputs for other industries. The construction industry is an important generator of economic growth in developed as well as less developed countries (Oladinrin et al, 2012, 56). According to the data from the Chamber of Commerce of Serbia, the Serbian construction industry accounts for about 11,530 companies with about 116,760 employees. Construction contributes to the total number of companies with 13.1%, while construction in the overall number of employees accounts for 11.8% (Serbian Chamber of Commerce).

Unfortunately, once one of the most expansive and propulsive export industries, the highly profitable Serbian construction industry, shares the fate of the overall economic situation in the country today. In 2013, the construction activity is carried out in a very specific institutional milieu. According to the World Bank, business environment is all but favorable for people engaged in the economic activity. Specifically, out of the 185 countries studied, Serbia is ranked as the 86th regarding the business environment for the realization of the economic activity (Doing Business 2013, 5). According to the same survey, the worst situation is in the area of securing permits for building. It is devastating to Serbia 179 place, where necessary; In Serbia, the devastating fact is that it is necessary to undergo 18 procedures and spend 269 days on average to obtain a permit to build (Doing Business 2013, 27). That is the biggest limiting factor in the construction sector in Serbia. Amongst the other weaknesses identified are: charging taxes (149th place), resolving insolvency (103rd), and the application of the treaty (103rd) (Doing Business 2013, 8). Such institutional milieu has resulted in the emergence of many problems in this business sector such as corruption, legal (in)security.

All this is a strong confirmation of the generally accepted thesis – the institutional theory that the market failures are the consequence of inefficient institutional arrangements. Therefore, it is necessary that the state should become active in the field of the adoption and implementation of the laws in the area of property rights, contract enforcement and guaranteeing the rights of foreign investors. It turns out, then, that the market is less well to the role of the state and its institutions of higher and vice versa (Leković, 2008, 161).

In addition, we are witnesses that rarely can the investor lawfully start construction regularly and in due time. This is a very fertile ground for corruption because makers of decisions on obtaining a permit to build want to take advantage of the complicated procedure for obtaining personal wealth. The fact that obtaining a permit to build lasts for a large number of days is the consequence of the fact that the Serbian administrative requirements of the parties are not decided on within the stipulated deadlines. According
to experts, it is not uncommon for the objections to
documents attached for the issuance of a permit to
build by the administration to assume the title of
illegality (Isailović, 2012, 13).

The legislation defining operations of the construction
sector in Serbia is defined by the Law on Planning
and Construction, Law on Cadaster, the Regulations
on Energy Efficiency of Buildings Ordinance on
the conditions, the content and method of issuing
energy performance of buildings certificates. Defined
by substantive law favors the illegal actions of
administrative bodies, as it leaves discretion to the
administrative objections may relate to any part of
the project. This situation leads to the investor's legal
uncertainty.

The inefficiency of the Real Estate Cadaster in
resolving claims of the parties is also one of the serious
problems affecting the number of investments in the
construction industry. Without radical changes in this
field, it is hard to remember what it is that can change
for the better.

Such an institutional environment, with the current
economic crisis, has created a new problem, namely a
lack of funding for projects. Banks and other financial
institutions are conspicuously ceased to hold the
financing of construction companies because of legal
loopholes favorable to debtors, which are extensively
used in time of crisis. Namely, the "loopholes" of
the disordered legal system have now emerged to
the forefront, thus the majority of banks and other
financial institutions have been affected.

Practice has proved that the bank typically used
notes and non-judicial foreclosures as collateral for
the execution of the debtor's liabilities. Everything
had been working right until the crisis became more
intense. However, when borrowers stopped paying
their liabilities, banks were faced with unusual
problems rendering their collateral meaningless. This
is a direct result of the bad legislation defined by
the Mortgage Law and the Law on Bankruptcy. This
opened a complex problem of financing investment
activity in this sector of the economy.

It is generally accepted that the main source of
investment funding at level of individual national
economies is in domestic savings. If you watched the
entire production of the country reach the current
consumption, it would mean complete stagnation
and a lack of growth. In short, saving is a voluntary
renunciation of consumption in the present in order
to increase consumption in the future (Lewis, 1963, 619).
It is understood that any delay in consumption
means reducing the usefulness of certain goods in the
future, analogous to time-shift their use (Mladenović
& Cvetanović, 2011, 144).

Domestic savings is certainly the most important
source of funding for investment in almost all
countries of the world. Its volume depends on the size
of the gross domestic product per capita and the rate
of national savings. Moreover, it can reliably be argued
that these two macro aggregates are directly correlative
conjunctions, or that a high level of the national income
per capita implies a high savings rate and, conversely,
a low level of the indicator corresponds to a low rate
of savings. Since highly developed economies have a
strong savings rate, then it is logical that the stronger
percentage applied to a large amount of the national
income per capita results in a sufficient amount of
funds for the smooth financing of investment activities.

Industrially advanced countries own development
as a rule-based investments financed by domestic
savings. In contrast, in most developing countries, the
insufficiency of domestic savings is by far the biggest
problem of financing economic progress. "Especially in
the poorest regions of the urgent current consumption
competes with investments in the use of scarce factors.
The result is too small an investment in productive
capital, which is so essential for rapid economic
progress" (Samuelson & Nordhaus, 1992, 698).

Therefore, in their investments, developing countries
partly financed additional savings from abroad as
well. The national savings rate is largely determined
by the size of the national income per capita, so it is
not surprising that in countries where the size of the
national per capita income is barely sufficient to meet
the basic needs of the population is low. Hence, the
development of these largely depends on an inflow of
foreign funds. This situation is almost completely true
for Serbia when it comes to the construction sector.
Alternatives to foreign sources of funding are the very
sources of their own construction companies.
The sources of financing corporate enterprises can be classified into external and internal ones. Simply put, the former ones include share capital and another reinvested profit and depreciation. Because the owners of the capital invested in a company, in addition to maximizing the amount of interest and dividends to grow and develop "their" companies as a source of a future income, they will seek to reinvest a portion of profits at the expense of reducing the current dividend. Although this reasoning has a logical background, the policy distribution of the net profit on the portion of the dividend and the share of funding the future growth and development of the company (a reinvestment) is extremely complex and, as such, understandably not the object of study in this paper. In the context of the problem of financing economic activities, it should be mentioned that the role of a profit in the formation of the savings of the corporate sector, and thus the total national savings, has led some economists to attribute a profit a major role in financing economic development, which can also be subject to a justifiable challenge (Lewis, 1966, 120-121).

Serbia does not have much choice to finance its business activities in any construction activity. If there is not enough funding for the baseline economic activity, unfortunately there are no funds to finance innovative activities particularly important for the competitiveness of the economy (Mladenović et al, 2011, 571). On the one hand, it is well-known that household savings are not enough, and on the other hand, the bank-loan market is extremely expensive. The output of this situation can be seen in the sources of funding provided by the state. It is known that the two main sources of public savings, namely 1) a budget surplus of income over expenditure, i.e. the budget surplus, and 2) public companies’ savings. When referring to the state revenue, we primarily mean the income tax base; while the government expenditure means all taxes, public goods and services as well as resources required to implement the program of income redistribution. The Serbian budget has been recording a surplus for many years. On the other hand, publicly-owned enterprises’ savings are modest. These businesses are generally less successful than private enterprise, which is certainly one of the reasons for encouraging their privatization. Serbia Gas and Galenika are striking examples.

Considering all these circumstances, in order to save the construction industry, foreign sources of funding, as the only remaining source, are used. However, the construction sector of this country is special in that it is a source of directly used funding. From its budget, and indebting itself, the state has mobilized foreign savings. This has made the Government of the Republic of Serbia 2010th year. The following analysis will show whether the proposed actions have been correct or not as well as what their effects have been.

INSTITUTIONAL SOLUTION TO SUPPORT THE CONSTRUCTION SECTOR IN SERBIA IN THE CRISIS

Taking into account the circumstances and a difficult situation in the construction industry, the Serbian government mandated from 2008 to 2012 launched a measure to encourage this sector of the economy. These were the Law on Encouraging the Construction Industry of the Republic of Serbia in the Economic Crisis ("The Official Gazette of RS", no. 45/2010) and the Decree on Measures of Support to the Construction Industry Through Long-term Housing Loans in 2012. The first measure embodied the Law aimed to overcome the negative effects of the economic crisis in the Republic of Serbia in the field of construction, provide assistance to the local construction industry to overcome the crisis and, then, encourage its development and employ local construction companies and provide liquidity in this sector. The focus was on encouraging the development and employment of local companies engaged in the production of building materials and the retention of the existing employment levels and creating preconditions for the creation of new jobs. All of this should lead to the promotion of economic development in the Republic of Serbia.

In accordance with this legal decision, and upon proposal made by the competent ministry or the competent authorities of local self-governments, the Government determined the projects fully or partially financed from the budget of the local government, autonomous regions, or the Republic of Serbia. The intention of the legislature was to make the realization of these projects necessarily use domestic construction
materials in proportion of at least 70% of the required building materials and installed equipment, if equipment is of the same quality products in the Republic of Serbia. Building construction and civil engineering projects, whose implementation was funded and implemented in accordance with the law analyzed, were related to schools, kindergartens, hospitals, housing, highways and other state roads, sporting objective, facilities for the purposes of carrying out activities in the field of culture and the like. It is interesting that the selection of the companies that implemented these projects led the negotiated procedure without prior notice in accordance with the law governing public procurement. In this way, the state could choose with whom to work and has the discretion of the company will benefit from this law. Also, the implementations of the Act were limited in time, and stipulated its duration until 31st December 2011, where it was concluded to a short-term measure.

Another measure taken by the Government is the Decree on Measures of Support to the Construction Industry Through Long-term Housing Loans in 2012. Its purpose was to support the construction industry through long-term housing loans and purchase, or the construction of housing units for the category of citizens who saw a solution to their housing problem in raising the credit rating and lower interest rates. For the purpose of this measure, the state opted for 1.7 billion. The beneficiaries of these subsidies were the citizens who had already resolved the issue, in which the amount of the monthly household income did not exceed 150,000 dinars. The state subsidized the participation of eligible citizens in a housing loan in the amount of 20% of the property (an interest free loan to be returned upon payment of a mortgage loan), 5% of the property being financed by the user, and 75% of the price of the housing units being financed by a business bank. These measures were very attractive, but in time of crisis, fewer people chose to use them. These measures were also short-term because the statute referred only to 2012.

The question raised is what the effects of these measures were and whether there are companies using the proposed benefits improved its financial position. Reply to this questions looking for in the analysis of the major companies operating in the field construction before and after the introduction of these measures.

AN ANALYSIS OF THE BALANCE SHEET ITEMS OF THE CONSTRUCTION SECTOR IN SERBIA IN THE 2008-2012 PERIOD

For the purposes of this study, the sample consists of 10 companies, whose core activity is the construction of residential and non-residential buildings, which were the backbone of the economic activity in this sector of the economy. In 2012, these companies accounted for 5% of the overall income realized in the construction sector in Serbia as a whole. In 2012, the presented sample accounted for 30% of the total revenue in the construction of residential and non-residential buildings in 2012, which is a representative sample more than evident. The sample consists of the following companies: “Užice Roads” LTD, Užice; “The Building Directorate of Serbia” LLC, Belgrade; “Enerqoprojekt – Construction” LTD, Belgrade; “Deneza M Engineering”, Belgrade; “Inter-Kop” LLC, Šabac; “Energo Group” LLC, Belgrade; “Tehnogradnja” LLC, Kruševac, “PMC – Engineering” LLC, Belgrade; “Garden”, Belgrade; “Strabag AG”, Belgrade. The objective of the analysis of the Balance Sheet items was to gain an insight into what the effects of the crisis and the government’s measures were on the individual items in the financial statements of the analyzed companies. The focus is primarily on the position of the total income (Graph 1).

Based on the Graph 1 data, it can be concluded that there was an evident stagnation in income from 2008 to 2010 that are implemented construction companies in Serbia. If this is added the fact that revenues are expressed in the current prices, it can be concluded that there was a decline in real incomes in this sector in the period from 2008 to 2010. That is why the previous government passed the “Law on Encouraging the Construction Industry of the Republic of Serbia During the Economic Crisis” in 2010; it is also evident that the measures gave the results. This is supported by revenue growth in 2011and 2012. The conclusion is that the analysis (of large companies) was included in the measures of the government and that they had
fulfilled all the necessary conditions prescribed by the law and posted the increased revenues. In this way, it was expected to alleviate the negative effects of the crisis on the budget of the Republic of Serbia.

A similar conclusion can be drawn if the dynamics and level of working capital in the companies analyzed (Graph 2) were analyzed. Specifically, in order to enlarge the scope of the activities implemented by the companies, a greater volume of working capital had to be engaged.

However, if the Balance Sheet position of the movement of the fixed assets is analyzed, we reach a conclusion that the measures of 2010 were short-term. Graph 3 reveals the fact that, after an increase in the volume of the fixed assets by 2011, there was a decrease in the position of the sample by 2012.

Interestingly, a reduction in the level of the fixed assets was recorded in 7 out of the 10 analyzed companies. This leads to the conclusion that something serious had happened in their business. An analysis of financing expenses in the period answers this question (Graph 4).

The Graph 4 makes us conclude that the construction sector borrowed extensively in order to comply with the obligations of the contracted work. However, what is missing is a timely payment of the obligations of the state. In an interview with the managers of the companies, the state did not comply with the terms of payment, and the contractors had to comply with their financial obligations for an increased volume of work, which they the state assigned them. All this led to
construction, and construction companies were slow in their debt repayment. It should be recalled that, in Serbia in 2008, there was the so-called "price bubble" on finished apartments in Belgrade, which was a result of the high demand on unrealistic grounds. Buying an apartment in Belgrade was a good alternative to holding cash. With the intensification of the economic crisis and its spillover in Serbia, however, those days are a distant past. This resulted in an enormous increase in the share of the liabilities in financing, namely in the higher borrowing by the construction sector. The above-mentioned developments had their repercussions on the liquidity ratios and crafts.

**AN ANALYSIS OF THE LIQUIDITY INDICATORS OF THE CONSTRUCTION SECTOR BETWEEN 2008 AND 2012**

Whether the effects of the crisis and the measures of the Government had their repercussions on the liquidity of this sector or can be seen based on the analysis of the current liquidity ratio. For each company in the sample, the time frame of the analysis, the calculated indicator of the current liquidity ratio and the proportion to the economic strength of the company (business income) are calculated for the sample as a whole. The results of the analysis are shown in the Graph 6.

The 2008 analysis showed that one RSD of short-term liabilities in the construction sector in Serbia was covered with 0.93 dinars of the current assets. The end of 2012 shows that 0.87 dinars of the current assets cover 1 RSD of the current liabilities. Considering that the minimum desirable level of this indicator is 1, it is seen that, at the beginning of 2013, the liquidity of the construction sector in Serbia was seriously affected. For example, according to the data of the SBRA (Serbian Business Registers Agency), in the Serbian economy and the entire construction sector in Serbia, this indicator amounted to 1.01 and 0.9 in 2012. This confirms the representativeness of the sample and the applied methodology, as well as the fact that the construction sector is less liquid in the analyzed period, compared to the average liquidity of companies in Serbia.
with respect to the mentioned Law on Incentives, but after the first analysis had been carried out, the effects were short-lived. On the pattern of Serbia (companies that file financial statements – SBRA), the average number of days for claims in the period to 2012 was 78 days, while in was 109 days for all companies in the entire construction industry in Serbia in this period. This data confirms that the analyzed sample is fully representative and describes the true picture of the sector in Serbia. The question posed is what the effects on the key indicators of the business performance of companies in the field of construction in Serbia are in the period analyzed.

AN ANALYSIS OF THE INDICATORS OF SUCCESS IN THE CONSTRUCTION SECTOR IN SERBIA FROM 2008 TO 2012

The analysis of the business performance of the construction sector in Serbia is seen through the main three economic indicators. These include: EBITDA, the total revenue in the total expenses ratio, and return on assets. For each company in the sample, it was calculated during the period, by the values of these parameters, and the indicator was calculated for the sample as a whole on the basis of the economic strength of each company. Criteria for the economic strength of any share in the revenue.

EBITDA, i.e. Earnings before interest, taxes, depreciation and amortization, represents earnings of a company, excluding – however – taxes, an interest, depreciation and amortization in the calculation of a profit. Many people referred to EBITDA as earnings before all the bad stuff and the term is used to analyze and compare profitability between different economic sectors of an economy or society. Another reason lies in the fact that the calculation of this indicator excludes the effects of financing and accounting decisions, which are individual to each enterprise. This indicator emphasizes the ability of a company to realize a profit from its core activities.

The analysis of EBITDA confirms what has been discussed so far. From 2008 to 2010, a decline in EBITDA was recorded. The 2010 Government measures yielded...
short-term improvements, when an increase in the value of this ratio was recorded in 2011 only to have its value reduced in as soon as 2012. In an interview with the managers of the companies analyzed, the cause for the rise was the cost of doing business, especially financial expenses, and desisting from the activities ordered by the state, because it was not good “payer” (Graph 8).

Effectiveness as a total revenue and total expenses ratio is an important indicator of the economic success of a business. Although the preferred minimum value of this ratio is one, the survey has shown the value of this ratio below one (Graph 9). This shows that the residential-and-non-residential-building construction sector is insufficiently successful in doing business. For example, at the level of the country as a whole (the companies filing their financial statements with the BRA), the value of this indicator was 1.01 in 2012, whereas it was 0.9 for the Serbian overall construction activity. This is only a confirmation of the fact that the sample in this study is representative and that it provides us with the current situation in the construction sector in Serbia. The analysis of the sample shows a permanent reduction in the value of this indicator from 2010 to date. The situation is particularly alarming for 2012, when the value of all revenues only covered 76% of the total expenditure in the analyzed sample.

ROA (return on assets) shows the earning ability of a company. For the analyzed sample, the value of this ratio is intensively falling, particularly during 2012, when one of the largest companies in the sample had an entirely negative net profit. This indicates that the companies engaged property in the field of building a modest earning ability. The yield was 6% in 2008, and has been decreasing ever since then (Graph 10).

In order to verify the representativeness of the sample and analyze the data obtained from the SBRA, it was discovered that for the overall Serbian construction industry in 2012, the value of this indicator was -2.34%. This has again confirmed the fact that the construction activity in Serbia is in a serious crisis and that on average one RSD of the assets involved in this sector realizes an average loss of 0.023 RSD. In comparison to Serbia as a whole (all companies filing their financial statements), the value of this ratio is 0.19%. In other words, the average Serbian company generates a net profit of 0.0019 RSD on one RSD of assets. This is an extremely low value of this indicator. As we have seen, the construction sector, as part of the economy, has the above-mentioned results.

This analysis has shown that when the construction sector in Serbia is concerned, the measures imposed by the state intervention gave short-term results. It is also
evident that the measures had elements of a classic state failure. Not a small number of papers in Serbia are indicative of this fact. The "analysis of the failure of the state, first at the theoretical and methodological levels and then from the perspective of the functioning of the national economy, should serve as a relevant source of information for an economic policy and the creation of a market economy" (Petrović, 2013, 16). If policymakers in Serbia were aware of these shortcomings, the conditions for the adoption of appropriate measures by which to perceive the effectiveness and efficiency of subsidized company-specific government activities. Perhaps some solutions related to public-private partnerships in this area stand for a good basis for thinking the future (Suhaiza, 2013, 98).

CONCLUSION

The business analysis of the construction sector in Serbia conducted over the past five years has shown this sector of the economy to be having serious problems. It unequivocally demonstrated that the problems are due to several factors. The first factor is the poor institutional environment for dealing with this sector of the economy, which is reflected in the option open to legal arrangements in place for the safety of the epilogue was legal uncertainty. This institutionalized framework is a good ground for corruption as the biggest systemic problem of the Serbian society. The second one, the inadequate sources of funding for this very specific branch of the economy and an inadequate response to the third state in stimulating this sector of the economy in terms of the current economic crisis. A survey confirmed that these factors have contributed to deterioration in the liquidity construction activities even to 10% below the already poor liquidity levels of Serbian companies. That is inadequately designed to help this sector of the economy affected by the "darlings" of the previous government are inadequate indicators of business success, especially in the area of return on assets, which had a negative value for 2012. Overall, the study confirms the initial hypothesis that the effects of the government intervention were of a short duration and that in one segment of the cause for the poor condition of this sector of the Serbian economy. In this way, the survey shows that the construction industry should be designed by structural measures to help the sector begin to recover. A systematic approach means that, in addition to direct financial incentives, many far-reaching effects can be measured in the changes of the institutional environment, which the sector operates in. The research has just opened this issue, and sometimes it is a good and important question for the sake of seeking an adequate response.

REFERENCES


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