

ЕФЕКТИВНОСТ НА СТОИТЕЛНИЯТ СЕКТОР В ГЪРЦИЯ
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EFFICIENCY OF THE CONSTRUCTION SECTOR IN GREECE
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Received: 30.01.2017, Accepted: 13.03.2017

Abstract

The crisis in the construction sector is deep and may become permanent. It is highlighted by the reduction in building permits, the shrinkage of the Public Investments Program, the over 40% discounts (on average) granted in public works, in order to sustain contractor enterprises, the significant drop of structural materials industries and smaller businesses turnover and of course the reduction of their exports.

In a period of negative developments and bleak future predictions for the entire economy and hence the sector, the analysis of the financial course of companies active in it and the reaching of conclusions for the general course of the Construction sector, should be sought in order to reveal co-dependence relations between sectors and prospects or opportunities. The object of the current thesis is the evaluation of the construction sector's financial status in Greece. The analysis provided will allow us to evaluate the development and efficiency of the Construction sector in general.

Keywords: construction sector, efficiency, analysis

JEL Codes: M10, L74

1. Introduction

Construction is one of the main sectors of Greek economy. The sector includes a multitude of products and services, which are differentiated according to their position in the production procedure and utilization of construction projects. At the sector's core, we find building construction and infrastructure project activities by technical and building enterprises (e.g. roads and community projects) as well as other specialized construction activities

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(demolitions, electrical and hydraulic installations etc.). The wider supply chain of Construction also includes other activities from the sectors of mining, processing, trade and services (Hellenic Federation of Enterprises (a), 2016, p.25).

The sector of technical projects in particular, is one of the most significant sectors in the Greek economy, integrally attached to the country's financial development during previous years. The absorption of financial funds from Community Support Frameworks and the completion of the Olympic Games' projects, the increase of consumers' available income and the reduction of interest rates, placed this sector at the center of Greek economy. However, today's status significantly differs from the respective in previous years and is characterized by exceptionally unfavourable conditions (Greek Foundation for Economic & Industrial Research, 2015, pp.3-5), (Hellenic Federation of Enterprises (b), 2016, p.10).

2. The construction sector in Greece

The closed core of Construction represents a rather important share of the total added value and employment in Greek economy. The close interconnection between construction activity, the industry of construction products and other materials used in construction and the architectural/surveyor activities and trade, as well as the essential support provided in the implementation of investment projects in sectors such as tourism, industry, trade and the residential/urban planning development, constitute Construction as a particularly important sector for the development of Greek economy (Association of Greek Contracting Companies, 2016, p.3).

Due to the recess of the last few years, in 2015 employment losses were intense, with absolute reduction of 1.06 million job positions and increase of the unemployment rates, approximating 27%. During the same period, available income was reduced by-27.7% and uncertainty was enlarged, dramatically influencing investment activity. These rapid developments led to the decline of almost all economy sectors. A telling example is that the added value of the closed core of Construction had reached 16 billion Euros in 2006 or 7.8% of the GDP, and along with the other activities included in the sector, the total direct contribution of Construction was 22.5 billion Euros or 11% of

the GDP. However, the participation of Construction in the Greek economy figures was shaken due to the economic depression and in 2015, the added value of the wider sector was 8.1 billion Euros, approximately 4% of the GDP, in comparison to 8.7% in 2008 and 9.2% on average during 2000-2008 (Hellenic Statistical Authority, 2015).

2.1 Employment

The crisis also had significant effects on employment, which for the wider sector of construction amounted to 287 thousand individuals in 2015 (8.7% of total employment) as opposed to 589 thousand in 008 (13% of total employment). It is worth noting that 46 occupation categories are active in the sector, based on the 3-digit STEP (Statistical Ranking of Occupations) ranking, while in the wider sector there are 86 occupation categories, including hundreds of separate occupations. It is also a fact that Construction were asymmetrically influenced in comparison with the entire economy and its other sectors, both in terms of added value as well as employment. The accumulative reduction of added value in Construction reached 76% during the period 2008-2015 and 59% for employment, surpassing by a large degree the reduction registered in the entire economy and other sectors (Association of Greek Contracting Companies, 2016, pp. 35-42).

2.2 Construction sector performance today

In 2015, approximately 162 thousand individuals and 87,000 enterprises were active in strictly construction activities (2014 data), generating over €3.1 billions of added value for the Greek economy. An equally significant contribution was also attained for other parts of the construction sector. In processing, which includes the main suppliers of construction (production of structural, metal and other products) 62 thousand individuals were employed by 14.2 thousand enterprises, which in 2015 generated approximately €2.6 billions of added value for the Greek economy. In mining, financial figures were influenced on a smaller scale, and a particularly important part of the construction sector regards trade and architectural and surveyor services (Bank of Greece (a), 2016, pp.40-45), (Bank of Greece (c), 2015, pp.37-40).

2.3 The sector's prospects in Greece

During the last few years, the construction sector was largely influenced by the economic depression suffered by the country, the postponement of large-scale public works, the cuts in the public investment program and the reduction of private initiative. Thus, the sector presented significant losses. Any forecast made for the period 2017-2019 regarding the sector's development is risky, given the uncertainty existing in the Greek economy. However, according to the current conditions (predicted financial depression, cuts in public investments for 2017-2019, preference for Public Projects with lower budget) it is estimated that this sector shall present further recession in Greece, with percentages estimated to approximately 15% in relation to 2015. In this framework, technical companies should utilize their proven know-how and experience, as well as the skills of their advanced human resources, in order to maintain their position in the market. Enterprises should focus on project financial management, in order to achieve more profitable results (Greek Foundation for Economic & Industrial Research, 2016, p.60), (Alpha Bank, 2016, p.17).

On the other hand, construction activity has been reduced in Europe since the beginning of the financial and economic crisis and up to 2013, presenting slight improvement in 2014 and early 2015. The investments in this sector were reduced by 3% in 2012 and 2013, and increased by approximately 1% in 2014. For the first time since the beginning of the crisis, the European construction sector and Eurozone presented generation of working positions (Greek Foundation for Economic & Industrial Research, 2016, p.67).

4. International conditions

The construction sector in EU-27 has been severely affected by the financial crisis that started in 2008 and the consecutive financial recession in building activity. Return to development has been delayed, with the Eurozone debt crisis occurring and the application of austerity measures in several member-states. However, in 2011 the construction sector achieved a 1,208 billion Euros turnover, an amount representing 9.6% of the EU-27 GDP and 51.5% of gross asset formation (Bank of Greece (b), 2014).

However, as stated in the twelfth research publication titled "European Construction Forces" issued by Deloitte, following a five-year period of constant shrinkage, in 2014 the European construction sector recovered from recession and showed small development. According to the European Committee predictions, this tendency shall be continued in the following years. Despite that, the sector is somehow reluctant towards this new period, due to previous difficulties faced (Deloitte, 2015).

In 2014, the stock exchange value of the 20 largest companies showed 6% increase and the Euro Stoxx 50 Index was increased by 1%. As in previous years, among the first ranks of the 20 largest construction forces, we find French and Spanish groups (French groups Vinci SA and Bouygues SA (1st and 3rd position respectively) with Spanish group ACS found in the 2nd position) (Deloitte, 2015).

The United Kingdom has achieved the largest development in absolute terms, and Spain achieved the largest increase percentage, mainly due to the increase of capital, amounting to 1,000 million Euros. Despite the fact that European construction companies have increased their stock exchange value since 2012, their total stock exchange value remained low, in comparison with the levels achieved before the crisis (2007) (Deloitte, 2015). According to data from December 2014, the total stock exchange value for the 20 largest European construction companies, was by 19% lower than in relation to 2007 (Deloitte, 2015).

In various member-states, the construction sector has been affected by the same kind of financial factors, which are essentially the following (European Construction Monitor, 2014):

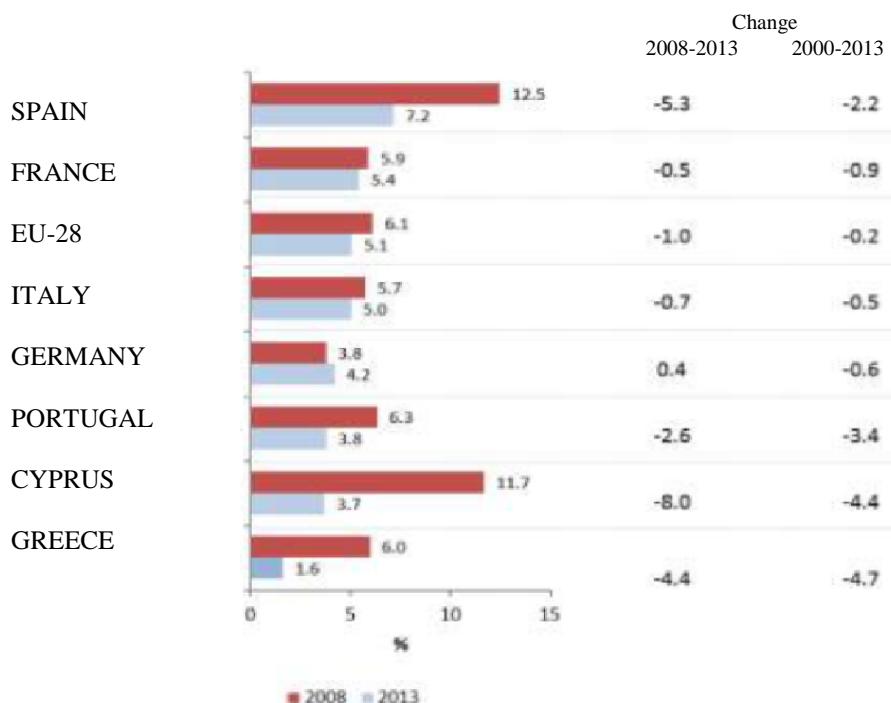
- the extended effects of reduced credit, limiting loaning;
- the removal of other measures for recovery;
- the beginning of the debt crisis in the summer of 2010;
- the consecutive application of austerity measures throughout Europe.

5. Comparison with other countries

Before the crisis (2008) the share of the closed core of construction over the GDP of Greece was approximating the EU-28 average, a little higher than in France, Italy and Germany but lower than in Portugal and even more so than in Cyprus and Spain (Figure 1). However, within a period of five years,

construction in Greece receded to a degree that (2013) participation in the GDP is 3.5 percentile units lower than the EU-28 average and of course among the lowest in comparison to other countries considered. An even greater recession with regard to participation in the GDP is shown for the period 2008-2013 only in Cyprus and Spain, but these countries had shown a previous intensive development of construction activity since the early 2000s. The recession in Portugal and other countries, with the exception of Germany, was smaller, but in any case it reflected the rapid reduction of Construction's added value in relation to the GDP for each country (Hellenic Statistical Authority, 2015).

Figure 1. Construction sector's participation in the GPD (%)

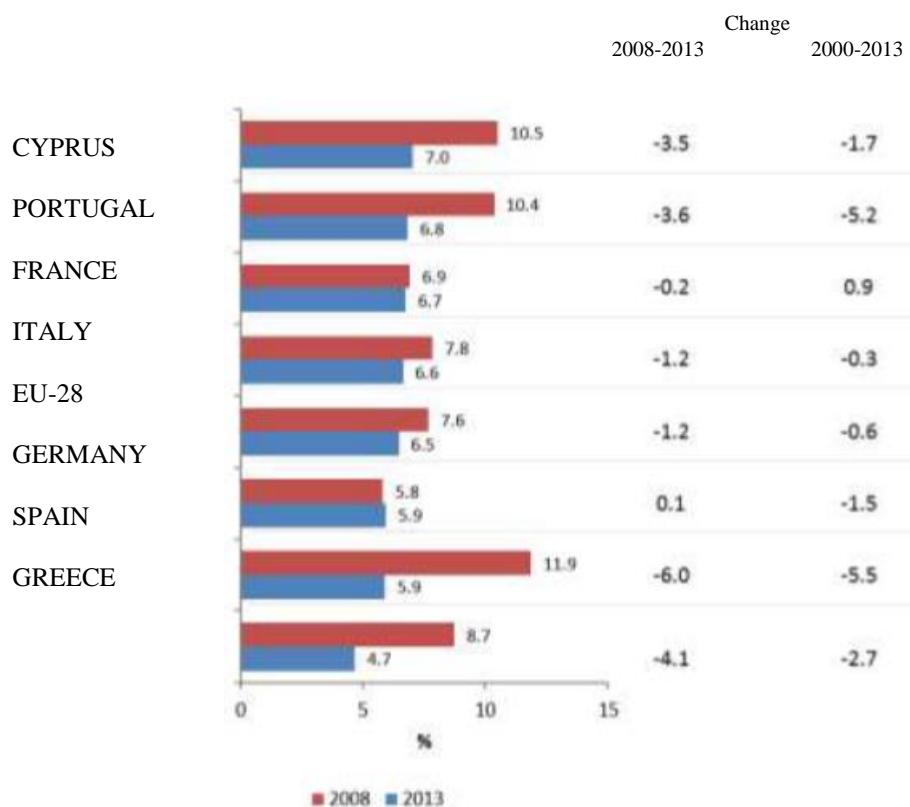


Source: Hellenic Statistical Authority

The reduction of construction activity had similar effects on employment as well. Thus, while in 2008 the sector's participation in total employment in Greece exceeded significantly the EU-27 average (partly also due to differences in employment productivity), in 2013 it was lower by almost 3 percentile units,

signifying the particularly negative effects the crisis had on the sector (Figure 2). Although in all countries considered, the participation of construction in employment in the period 2008-2013 was reduced (with the exception of Germany) the drop in participation in Greece is only lower than that noticed in Spain (Hellenic Statistical Authority, 2015).

Figure 2. Participation of the Construction sector in total employment (%)



Source: Hellenic Statistical Authority

6. Perception of opportunities and issues

An analysis of existing international literature provides an outlook of the status regarding the construction sector's financial conditions in Greece and in

Europe as well. However, it cannot depict the strengths, weaknesses, opportunities and threats inherent at this time in the construction sector.

These data should be investigated via research, through personal contacts with individuals and companies involved in technical projects, allowing the identification of issues, threats and opportunities faced by the construction sector.

The sample consists of 15 personal contacts, directly involved in the production of technical projects.

During interviews performed with technical project participants, the conditions in the construction sector and its future were discussed. The discussion focused on projects' financial status and their production, taking into consideration the sector's basic characteristics. SWOT analysis was used to define the elements affecting the construction sector.

SWOT analysis is a strategic planning tool, used when we need to make decisions. Strengths and weaknesses are derived by a company's internal available resources, e.g. financial status, skills, know-how, other characteristics and traits of the environment etc. Opportunities and threats are external variables, which companies need to detect, to adjust to them or even to regulate them where this is possible, e.g. entry of new competitors, legal regulations, creation and/or emergence of new markets etc. (Livieratos, 2015, pp.15-18).

The following questions were responded to during the analysis:

Strengths:

- What are the advantages?
- What is the most competitive product/service?
- What are the unique available resources or those with the comparatively lowest cost?
- What do local financial players consider to be the area's inherent strength?

Weaknesses:

- What can be improved?
- What could have been avoided?
- What do local financial players consider to be an inherent weakness?

Opportunities:

- Which good opportunities are there?
- What are the interesting tendencies in the area?

The following can be considered to be useful opportunities:

- Changes in technology and markets, on smaller or larger scale
- Changes in state policies in the field of interest
- Changes in social patterns, population profiles, lifestyle changes
- Local events

Threats:

- What are the common obstacles?
- What do the competitors do?
- Are there changes in specifications for products or services already provided?
- Do technological changes threaten or invalidate the area's existing economy?
- Are there funding or financial issues?
- Is any of the Weaknesses an actual threat for the area's economy?

Taking into consideration its basic characteristics and the general framework within which it is developed, we proceed to the SWOT Analysis (strengths, weaknesses, opportunities, threats) for the Construction sector and the determination of factors affecting its development, as shown in figure 3.

The construction sector was restructured in 2002, a fact which led to several mergers and reduction in the number of technical companies. As a consequence of these developments, large construction companies and groups were created, which are powerful business players, with important abilities to be active in the local and international market.

Another strength of the construction sector in Greece is the large experience and high degree of know-how owned by technical companies, acquired through the performance of complex technical projects with high demands.

Finally, the construction sector is one of the most significant sectors in the Greek economy, integrally attached to the country's financial development during previous years.

Figure 3. Sector SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Extrovert business groups, with opportunities of activity in the local and international market. • High know-how and experience from projects with high demands in Greece and abroad. • High level of knowledge and experience owned by Greek engineers. • Major important and close relation of the construction sector in the generation of GDP. 	<ul style="list-style-type: none"> • Important delays in payments and significant debts from customers to technical companies. • Problematic legislative framework regarding the performance for projects and bureaucracy. • Significant discounts in the sector, due to intense competition. • Major sector dependence on the public sector.
Opportunities	Threats
<ul style="list-style-type: none"> • Release of funds from the NSRF. • Assumption of works in countries abroad. • Cooperation with foreign companies for the construction of co-funded projects. • Expansion of association institution between the private and local sectors. • Reduction of delays in payments from the public sector side (as part of the EU relative directive). • Implementation of environmentally friendly projects. 	<ul style="list-style-type: none"> • Further recession of the Greek economy and reduction of public investments. • Postponement of public projects and reduction in the bidding of new ones. • Lack of project funding. • Reduction of private investments. • Increase of raw materials' prices.

A double amount than that usually paid in advance shall be introduced in the Greek economy via the NSRF, aiming for these funds to be utilized to cover the part of national participation of NSRF plans for the period 2014-2020.

An opportunity to successfully enter new markets is also posed by the fact of major shortages in basic infrastructures in some of the new E.U. member-states and other countries in Central and Eastern Europe. Indeed, the funding of major projects in new E.U. member-states and in general the conditions in these countries, make them particularly attractive for Greek technical companies, which are equipped with the advantage of geographical proximity and accrued know-how.

The expansion of associations between the private and public sector in several of the new projects, is expected to provide a new boost for the construction sector. In addition, the introduction of Directive 2011/7/EU for the treatment of payment delays in commercial transactions, is a significant success in local economy, as by stopping payment delays in commercial transactions, the market's operation is strengthened and company competitiveness is increased, particularly for smaller and average companies.

Finally, the performance of environmental works (utilization of waste etc.), the performance of works for Renewable Energy Sources, works for the improvement of building energy efficiency, tourism investments (ports, marinas, tourism complexes etc.) are opportunities of development for the construction sector.

The most serious threat existing for the sector's companies is the financial recession affecting several countries during the last few years and obviously affecting demand for the services offered by the sector. The uncertain financial context, the drop in development rates and the unfavourable funding conditions internationally, negatively affect developments in the construction sector.

As has already been stated, the perspectives of the sector considered are not favourable, given the financial crisis occurring internationally and affecting the Greek market significantly as well. According to market players, the construction sector is expected to experience reconfigurations (mergers, absorptions between larger and smaller technical companies) and the market's total value is expected to be negatively affected in the short-term future.

7. Sector companies development strategies

Construction companies, due to the range of their activities, implement their strategies on a business and corporate level. Higher tier companies (7th or 6th) are active in corporate level strategies, while average and lower tier companies are particularly interested in business level strategies, without excluding strategic planning on the other levels as well.

The development strategies of construction-technical companies are mainly focused on the following sections:

- Expansion of activities, both locally and abroad.
- Participation in public works further to bidding processes.
- Participation in calls for tenders to assume projects funded via Project Finance.
- Development of private projects, with standard corporate bank funding, with Project Finance funding as well as with funding by participation of the company's own funds (Real Estate - Venture Capital).
- Acquisition of know-how, administrative and technological restructuring.
- Further expansion of their activity in other financial sectors and the need to create more powerful groups (synergies, competition of international construction companies, projects with major budget, need of know-how, institutional framework) lead several companies to merging with larger groups.
- Qualitative and aesthetical acknowledgement of projects constructed, punctuality with deadlines and deliveries and the reduction of construction cost.

Various issues may emerge in the efforts of a company to respond to the new sector's conditions. The basic issue faced is the lack of liquidity and thus the inability of assuming credit risks.

8. Sector company needs and demands

The introduction and development of new and already existing companies in this dynamic and intensely competitive business backdrop, both locally and in foreign markets (markets of the European Union, Middle East, Northern

Africa, wider Balkan region) form a polymorphic grid of needs and demands (Hellenic Federation of Enterprises (a), 2016, p.20), (Technical Chamber of Greece, 2005):

- Working capital funding
- Fixed assets funding
- Project funding (Project Finance)
- Joint Venture funding
- Debenture loans
- Issuing of letters of guarantee
- Real estate utilization
- Leasing funding
- Insurance
- Reserves management (Repos, term deposits etc.)
- Imports - Exports

9. Conclusions

The construction sector has always been one of the most important sectors leading development in the Greek economy. As construction projects include infrastructure investments by the private and public sector and private building activity, the wider construction sector includes industry and commerce sectors as well as professional services, with significant contribution in the Greek economy.

The construction sector has been showing rapid development from the early 1990s to 2007, significantly increasing its importance in Greek economy and positively contributing to its strengthening. However, macroeconomic conditions and the effort of fiscal adjustment of the last few years, have had a significant effect on the sector's course. The limitation of public and private investments, the lack of liquidity and bank funding, the shrinkage of available income, the uncertainty for the future and the significant increase of real estate taxation, have brought the construction sector to an unfavourable position. The sector's capacity in human resources, capital equipment and know-how, is slow deteriorating due to the existing conditions.

Several companies (technical companies, structural products and materials production and trade companies, surveyor offices etc.) have either had to

terminate their operations or limit them significantly. Building loans have been drastically reduced and real estate property prices are subsiding. At the same time, a large stock of construction has been created, which is left unsold, and the inability to repay loans is a problem with significant financial and social consequences. In this difficult framework, the construction sector is seeking new directions and prospects for the future.

Thus, as stated in a previous chapter, one of the most common and useful financial analysis methods to evaluate the sector's and companies' efficiency, is the use of index numbers. Index numbers provide an analytical and descriptive tool to interpret financial data of the construction sector. They allow the determination of the sector's funding needs and the negotiating options available for talks with investors.

According to the European Committee predictions:

- Investments in the construction sector are expected to be increased by 2.1% and 3.5% in 2015 and 2016, respectively. The total investments in the construction sector in the European Union for 2014 amounted to 1.37 trillion Euros.
- Intercontinental agreements are expected to continue increasing in 2017 as well, since companies are looking for projects with greater profit margins and increased income.
- The large number of construction companies dealing with financial problems during the last few years, has made attracting human resources and finding subcontractors to support the construction of major projects, particularly difficult. It is expected that the European construction market shall reach its lowest point and shall gradually recover, at parallel with the course of economy in the respective countries.
- The number of agreements with the participation of private investment funds has been increased in the last few years, and it is expected that interest will be shown for even larger-scale agreements by private investment funds, mostly in the sector of infrastructure.
- The number of take-over and merger agreements is expected to increase in 2017.

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