

THE RELATIONSHIP BETWEEN THE GDP GROWTH AND THE DEVELOPMENT OF DESIGN AND CONSTRUCTION PROJECTS IN ROMANIA

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ABSTRACT

The article's main purpose is to present the relationship between the Gross Domestic Product growth and the development of design and construction projects in Romania.

Romania is a developing country which has a serious need for economic growth. One of the most relevant indicators that reflects a country's economic growth is the Gross Domestic Product.

The article aims to demonstrate that an efficient way to generate Gross Domestic Product growth is to develop design and construction investment projects as development of this kind of projects leads to development of many other important markets associated to this domain.

The research was based on the available statistical data and on the literature review of the specialized publications.

The main conclusion of the paper is that the Gross Domestic Product growth depends on the value of the design and construction projects implemented.

KEYWORDS: *construction, design, development, Gross Domestic Product, projects*

1. INTRODUCTION

The article highlights the current situation in Romania related to Gross Domestic Product (GDP)'s growth and the main sectors' contribution to it.

Then, the paper presents the main advantages of encouraging the sector represented by design and construction for a country's economic development.

After that, it highlights the frequent obstacles encountered in this type of investments and potential measures to overcome them and to stimulate the construction sector.

2. LITERATURE REVIEW

National public investments represent an efficient engine of economic growth, in competition with other types of incentives. Economic growth is a prerequisite for a sustainable development of a country.

In fact, economic growth generates movement. The lack of movement leads to imbalances, and the uncontrolled contraction and implosion can and does generate social traumas and sometimes social disturbances.

GDP is the macroeconomic indicator that measures economic growth.

In the recent years, the budgetary revenues represented approximately 30-35% from the GDP as presented in the following figure:

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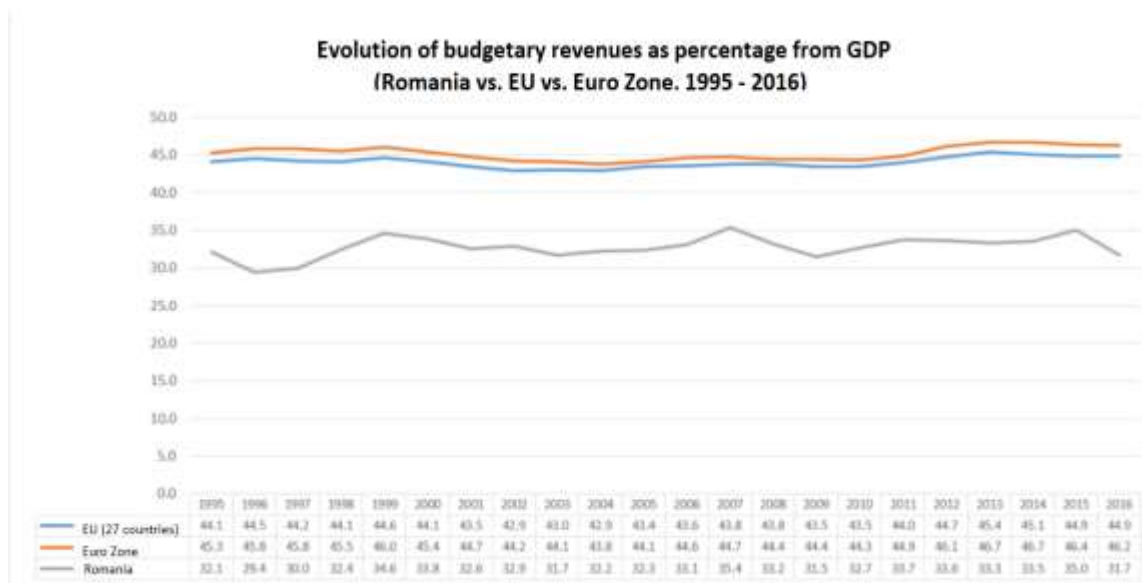


Figure 1. Budgetary revenues – percentage from GDP
 Source: The Secretariat-General of the Government (2019)

The budgetary revenues' growth is supported by duties and taxes, which are related to final consumption and existing investments that are taxed. Generally, consumption generates collection of taxes.

Consumption made in order to develop design and construction investments generates collection of taxes and duties from different sources presented in the next figure:

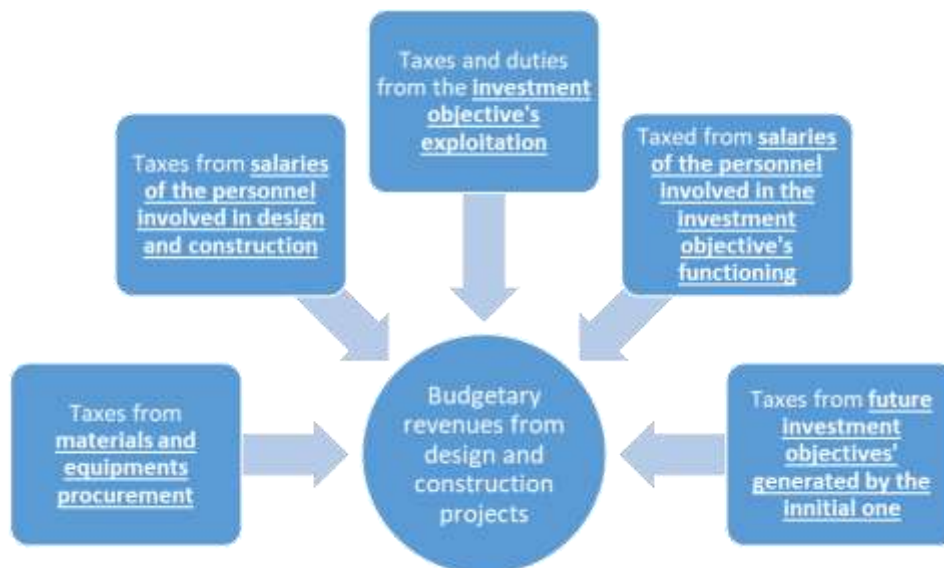


Figure 2. Budgetary revenues from design and construction projects

Therefore, an effective way to increase the national budget and implicitly the GDP is to stimulate national public and private investments in design and construction projects. Development of national public investments in infrastructure will generate private investments' development which will increase the national budget and the GDP through the snowball effect.

In Romania, GDP increased by 4,4% in Q2 2019 compared with the same period in 2018, due to the construction and IT&C sector while the sectors represented by industry, agriculture and banking and insurance decreased as illustrated in Figure 3. (Melenciuc, 2019)

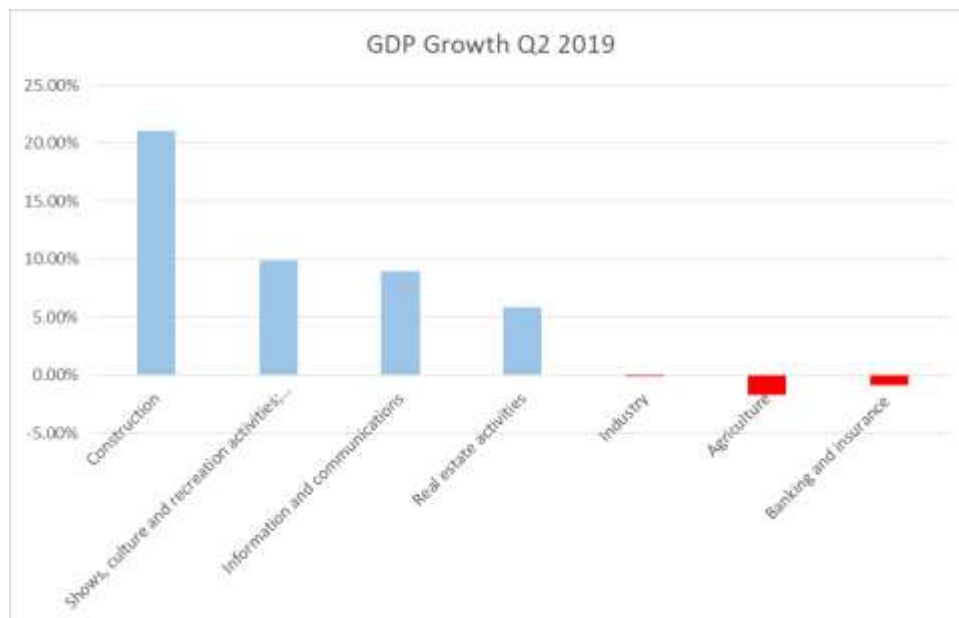


Figure 3. GDP Growth Q2 2019
 Source for percentages: Melenciuc (2019)

Due to its significant contribution to Gross Domestic Product and Gross National Product, construction represents a valuable sector of activity for any country.

"Construction is an important part of the development and modernisation process." (Dlamini, 2012) However the sector of construction tends to be neglected and heavily taxed by the public authorities from developing countries. The banks do not offer financial facilities or favorable policies for design and construction projects as they consider them the most risky category of business. (Sabarish et al., 2016)

Considering its crucial role for Japan, Germany and Europe economies' recovery after World War II, the construction industry can be viewed as the backbone to national development as behind urbanisation, irrigation structures, equitable income distribution, millions of jobs and sustainable economic development stays the construction industry. (Sherani, 2012)

Moreover, investments in construction generate a snowball effect in associated industries such as: "cement, iron, steel, timber and wood, marbles, tiles and stones, electrical and sanitary works, glass, paints and varnishes, electrical lightning, horticulture, interior decoration, transport, light-heavy" and others. (Sherani, 2012)

In the Study for the European Commission (DG EMPL) entitled "Monitoring of sectoral employment" (VC/2010/0064 - 2012) the multiplier effect in the construction industry is explained as one person working in the construction industry creates two further persons working in other sectors.

Based on the data provided by the European Construction Industry Federation, the following table presents the total construction output, the number of jobs in construction and the total number of enterprises in European Union countries:

Table 1. Key figures for construction in Europe, 2018

| <i>Countries</i> | <i>Total Construction Output 2018 (Bln €)</i> | <i>Jobs In Construction 2018 (X1000)</i> | <i>Total number of enterprises 2018 (X1000)</i> |
|------------------|---|--|---|
| Germany | 351 | 2,529 | 366 |
| United Kingdom | 194 | 2,333 | 314 |
| France | 182 | 1,765 | 440 |
| Italy | 128 | 1,395 | 509 |
| Spain | 124 | 1,222 | 413 |
| Netherlands | 73 | 461 | 174 |
| Sweden | 57 | 350 | 106 |
| Poland | 50 | 1,188 | 160 |
| Belgium | 47 | 281 | 111 |
| Austria | 42 | 286 | 36 |
| Denmark | 32 | 190 | 33 |
| Finland | 30 | 207 | 41 |
| Ireland | 24 | 143 | 52 |
| Czech Republic | 20 | 370 | 173 |
| Portugal | 12 | 313 | 43 |
| Slovakia | 10 | 170 | 12 |
| Romania | 9 | 455 | 87 |
| Greece | 8 | 152 | 61 |
| Hungary | 8 | 381 | 101 |
| Bulgaria | 6 | 184 | 20 |
| Luxembourg | 6 | 45 | 4 |
| Estonia | 3 | 50 | 12 |
| Lithuania | 3 | 100 | 8 |
| Slovenia | 2 | 58 | 18 |
| Latvia | 2 | 68 | 12 |
| Cyprus | 2 | 34 | 7 |
| Croatia | 2 | 77 | 15 |
| Malta | 1 | 12 | 6 |
| TOTAL | 1,427 | 14,818 | 3,332 |

Source: adapted from European Construction Industry Federation (2019)

The numbers reflect a significant output generated by the construction sector in Romania, respectively 9 Billion Euros. However, it represents only 2% of the output generated by the same sector in Germany. Therefore, Romania has to better exploit the construction sector in order to increase its contribution to the national budget.

In conclusion, the construction sector plays an important role for economic development in any country and should be stimulated through convenient measures by the public authorities and banks.

3. A SOLUTION FOR GDP GROWTH IN ROMANIA

Considering the significant importance of the construction sector in generating GDP growth, the authors propose a series of means for addressing the present barriers and for stimulating favourable investment conditions.

First of all, **innovative technologies** and **digitalisation** should be integrated in the construction sector in order to increase effectiveness and profitability. This will enable the construction sector to

adapt to the challenges presented by the globalisation. Then, the **access to financial resources** should be improved so that the investments in this sector will be supported. Furthermore, the policies related to **access to housing** should be improved in order to stimulate the construction activity. Moreover, the public authorities should **enhance the use of financial instruments** offered by the European Union to strengthen the national potential for economic growth. (European Construction Sector Observatory, 2018)

In addition, the public authorities should offer the construction business sector the possibility to collaborate through **private-public partnerships**.

Also, in order to address the lack of skilled labour in the construction sector, the **apprenticeships** should be stimulated by using tax incentives to support companies to train their personnel. In addition, **training programmes** should be offered through **digital** means.

Another measure to overcome the obstacle represented by the lack of skilled labour is to promote **cross-industry cooperation** trainings "where trainers and participants from different trades share their experiences, enabling a positive exchange of knowledge and resulting in a synergy effect". (European Construction Sector Observatory, 2017)

4. RESEARCH METHODS

The research method applied in the present research was the documentary analysis on the specialty literature. Consequently, the authors studied the available scientific articles from Web of Science database, Scopus, Elsevier, Emerald Management Journals 200 and also the available official reports and statistics related to the construction sector, GDP growth, obstacles encountered in developing construction investments and measures to overcome the obstacles.

CONCLUSIONS

In conclusion, in order to support sustainable economic development in Romania as in many other countries, it is necessary to support the construction sector growth through appropriate measures so that policy-makers can make better use of this sector.

Investments in the construction sector will empower the GDP's growth, allied industries' development, job creation and the achievement of important objectives related to climate, environment and energy. (European Commission, 2012) In this way, Romania will achieve sustainable economic development.

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