THE DINAMIC OF THE DYNAMICS OF CONSTRUCTION COMPANIES IN THE BEFORE AND AFTER COVID PERIOD

Cristina Elena BADIU¹, ORCID: 0000-0001-7285-1064

Abstract: The paper presents an analysis of the fiscal measures adopted before and after Covid (2019 and 2020) carried out in order to identify and examine the main financial indicators of construction companies, which were influenced by the fiscal facilities entered into force during that period. The analysis was performed in comparison with 2018, a neutral year from the perspective of the fiscal facilities subsequently adopted. The study was conducted on a sample of 29 companies in the construction sector in Romania, which had about 200 employees during the period under review, according to information taken from the listafirme.ro website and verified with the financial data of the companies on the site mfinante.ro. This study shows that the adoption of fiscal facilities in 2019 had a positive effect on the analyzed indicators, but the fiscal measures taken in 2020 did not increase the performance of construction companies, the purpose of these measures being to provide support to the business environment in order to overcome the period of the crisis triggered by Covid and not necessarily the economic growth of companies. However, the analyzed companies registered increases of the indicators in 2020, but the evolutions were due to the investments made by the state in infrastructure projects, the return of the manpower from Western Europe and less due to the adopted legislation.

Keywords: Covid, fiscal facilities, indicators

JEL Codes: E62, G30

Introduction

The construction sector plays an important role in the Romanian economy, but also in the European Union.

If we look at the Union level, the construction sector accounts for almost 9% of European GDP and generates almost 18 million jobs (European Commission 2020), mainly among small and mediumsized enterprises (up to 95%). The construction sector is a consumer of intermediate production (raw materials, chemicals, electrical and electronic equipment), but also of related services (Bărbuță-Mişu, 2012). Due to its importance, the construction sector significantly influences the development of the economy as a whole (EUR-Lex - European Commission 2012).

The prospects of the construction sector are favorable in the medium and long term, and the funds provided by the European Union for the development of infrastructure projects, for the acquisition or construction of houses, will have a positive influence on the development of this sector.

The construction market is divided into 3 distinct sub-branches: building construction, civil engineering works and special construction works. Regarding the real estate market, residential

¹PhD Student, Transilvania University of Brasov, Faculty of Economic Sciences and Business Administration, cristina.badiu@unitbv.ro

buildings have a significant share with an increase of 66.1% in the period 2010-2018 (European Commission).

In order to stimulate the construction sector and to facilitate the population's access to real estate loans, the government adopted the "First Home" Program, so that, at the end of 2019, 260.000 people contracted state-guaranteed loans amounting to 24.9 billion lei (5.2 billion Euros).

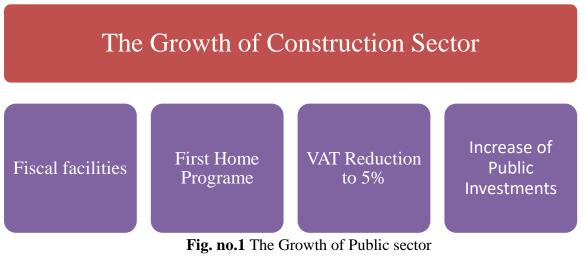
Regarding - civil engineering constructions, such as highways, streets, bridges, tunnels, railways, aerodromes, harbors and other hydro technical projects, irrigation systems, sewerage systems, industrial facilities, pipelines and power lines, outdoors sports units etc. - The European Union has supported investments in Romania through the European Fund for Strategic Investments (EFSI). Funding through this program amounts to 722 million Euros until November 2019, of which 519 million were allocated to infrastructure projects and innovative projects approved and financed by the European Investment Bank (EIB) (European Commission 2019).

In July 2020, Romania received, through European grants, 118 million Euros for key transport infrastructure projects. These funds represent part of the 2.2 billion Euros that is part of the economic development plan for all Member States and which relates to 140 infrastructure projects (European Commission 2019 - Internal Market, Industry, Entrepreneurship and SMEs).

The paper is structured on the following sections: the evolution of the main macroeconomic indicators of the construction sector in 2018-2020, the influence of legislation adopted before and after COVID on the business environment and the analysis of the influence of legislative measures on the performance of companies in the construction sector.

Evolution of the main macroeconomic indicators of the construction sector

In Romania, the construction sector is in full development, as shown in (Fig. no.1):



Source:own editing

due to fiscal and government facilities adopted and maintained - low salary taxes and the First Home Program (economedia.ro), VAT reduction to 5% on the purchase of real estate worth up to 100,000 euros, the increase of the residential buildings sector, of the activity in engineering constructions on the background of the similar advance in public investments, of the potential for infrastructure development and implementation of programs with the European Union (delloite.ro).

In 2020, Romania invested 22 billion lei in infrastructure projects in the first eight months of the year, which is an absolute record for the last 10 years, European money (agerpres 23.09.2020). The faster

pace of development of the construction sector in Romania compared to the EU can be explained by the lower degree of development that Romania has compared to most countries in the Union. Figure no. 2 presents the evolution of the production index in the construction sector in Romania and the EU. It can be seen that only in 2018, the EU 27 registered a higher growth than the previous year than Romania, in 2019 the growth was almost identical, and in 2020 Romania was ahead of the growth in the EU 27 by 22.74%. In fact, 2020 was the best year in the last decade in terms of production and number of employees, but also the average gross salary.

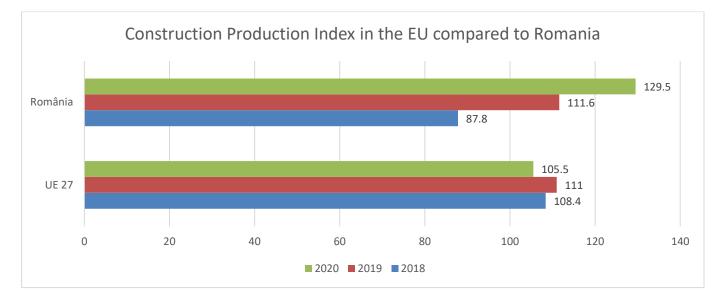


Fig. no.2 Construction Production Index in the EU compared to Romania Source:<u>https://ec.europa.eu/eurostat/databrowser/view/sts_copr_a/default/table?lang=en</u> accessedon 21.10.2021, Calendar adjusted data, not seasonally adjusted data

The share of the construction sector in GDP

The estimated Gross Domestic Product for 2018 was 940477.5 million lei current prices, increasing - in real terms - by 4.1% compared to 2017. Constructions had a negative contribution to GDP growth (-0.3%) as a result of the reduction of their activity volume by 5.6%, according to Figure no. 2 (insse.ro -2020).

The estimated Gross Domestic Product for 2019 was 1053884.8 million lei current prices, increasing - in real terms - by 4.1% compared to 2018. Constructions had a positive contribution to GDP change (+ 0.9%), with a share of 6.4% in GDP formation and whose volume of activity increased by 16.8% (insse.ro -2019).

The estimated Gross Domestic Product for 2020 was 1053881.4 million lei current prices, decreasing - in real terms - by 3.9% compared to 2019. Constructions had a positive contribution to the change in GDP (+ 0.6%) and a share of 6.6% in GDP due to the increase of its activity volume by 9.7% (insse.ro -2018).

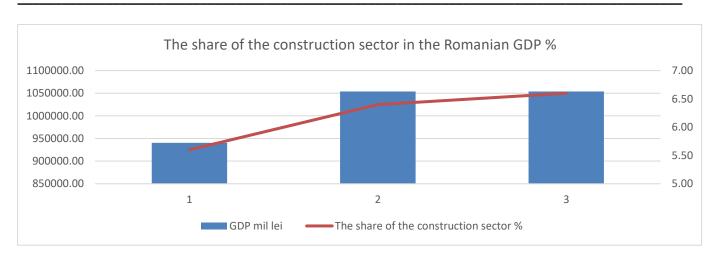


Fig. no. 3 The share of the construction sector in the Romanian GDP % *Source:*the processing by the author of the information taken from the insse.ro website

It is noted that the years 2019 and 2020 recorded approximately equal values of the share of construction in GDP compared to 2018 by one percentage point, an increase recorded as a consequence of the granting of fiscal facilities in the construction sector aimed at attracting the manpower from abroad, Romania being an important supplier of manpower in the construction sector in Europe (Bărbuță-Mişu 2009).

The evolution of the construction sector in the period 2018-2020

The number of companies in the construction sector (including the 3 types of sub-domains according to the NACE classifications - class F - building construction, civil engineering works and special construction works) - decreased from 2018 to 2020 (European Commission), as it can be observed in Figure no. 4. We can observe the registration of a considerable decrease in 2020 by 33% compared to 2019 and by 32% compared to 2018.

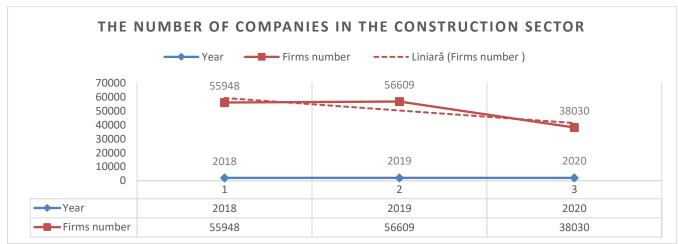


Fig. no. 4 Dynamics of the number of companies in the construction sector Source: <u>https://ec.europa.eu/growth/sectors/construction/observatory/data-mapper_ro_accesat la_31.10.2021</u> If we look at the indicators presented in Figure no. 4 (production, average number of employees and average monthly salary), we find that there were increases in each, and the year 2020 was the maximum value.

		2018			2019		2020
Production billion Euros	achieved	9,52			10,59		14,01
Average number of employees Thousands of employees		356,1			383		416
Average monthly salary (lei)		3345			3989		4182
Average number of employees 440 420 400 380 360 340 340 320	of employees in construct	and average salary ion sector 5000 3989 \$18 ² 4000 3000 383 2000 1000 0	age monthly salary	16 — 14 — 12 — 10 — 8 — 6 — 4 — 2 — 0 —		10.59	14.01

Fig. no. 5 Evolution of construction production, number of employees and average salary in construction sector in the analyzed interval *Source:* 12thEdition of Top 100 Construction Contractors 2021, p 94

At the beginning of 2020, more precisely in March, when the state of emergency was declared, a series of legislative amendments were adopted aimed at technical unemployment to counteract possible redundancies. But, during the pandemic, few companies reduced the workload, the construction works being far from having stopped, it went on an upward trend. The closure of the construction sector in Western Europe as a result of the pandemic wave has led to the return of manpower from abroad, which is one of the factors driving the positive evolution of the construction sector at that time. At the same time, the law that was adopted at the beginning of 2019, which increased the level of the minimum wage and decreased the contributions paid by the employees in the construction sector, brought benefits for the employees in the construction sector, benefits that are visible in the long run.

However, the construction workforce is an ongoing challenge for both employers and the government, and this is due to both migration to developed countries in Western Europe and the

absence of construction-specific schools to form the new generation of construction workers. This aspect limits the development of this sector. (European Construction Sector Observatory 2021).

The influence of the legislation adopted before and after COVID on the business environment (the moment of COVID being the moment of declaring the state of emergency - 16.03.2020)

Year 2019

Considering the objective assumed by the Government Program for achieving a smart, sustainable economic growth, based on a qualified and remunerated workforce according to the competence, at the end of 2018, GO114 was adopted, as we presented in Figure below.

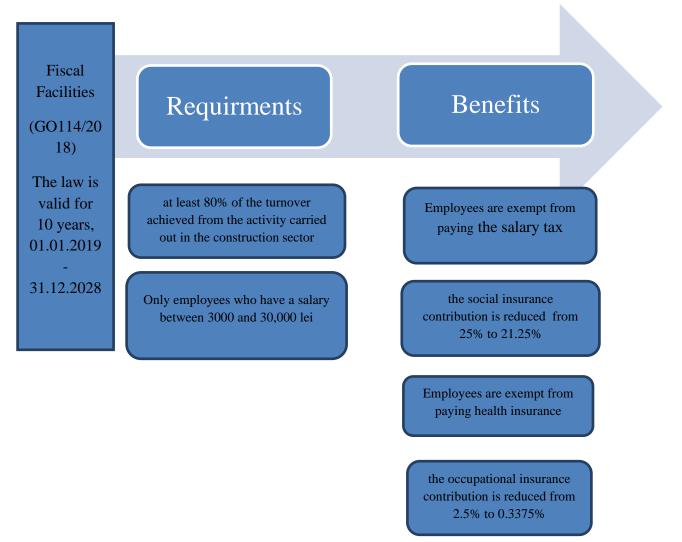


Fig. no. 6 The fiscal facilities for the construction sector Source: own editing of GO 114/2018

Year2020

Once the state of emergency was declared, legislative measures were adopted to establish social protection measures in the context of the epidemiological situation caused by the spread of the SARS -CoV - 2 coronavirus and to establish additional social protection measures as it shows in (Figure no.7). Also, most companies face the risk of insolvency and declining liquidity, with the prolongation of the crisis, which is why state support must be maintained and adapted to the needs of the business environment

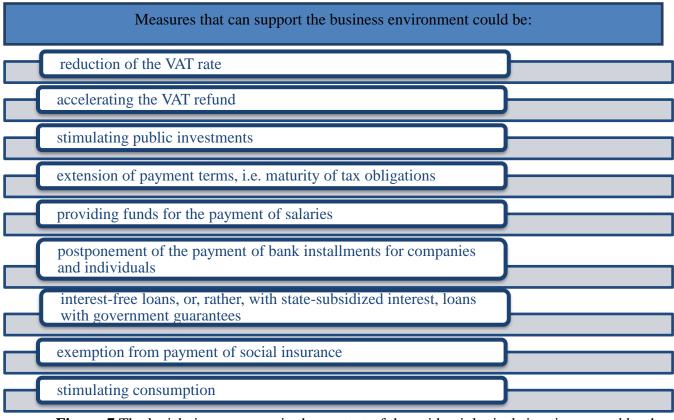


Fig. no.7 The legislative measures in the context of the epidemiological situation caused by the spread of the SARS - CoV - 2

Source: own editing by Badiu C(2020)

Fiscal facilities adopted in Romania

In our country, the measures in the sector of social protection referred to: the payment of technical unemployment for employees with individual employment contracts suspended in case of temporary interruption or reduction of activity, due to the effects of the SARS-CoV-2 coronavirus epidemic. The level of gross allowance is 75% of the basic salary corresponding to the job held, but not more than 75% of the average gross salary. This allowance is borne by the budget of the unemployment fund.

Here, however, one more aspect must be specified, namely that the companies in the construction sector that also benefited from the fiscal facilities specific to the branch of activity (GO 114 / 2018), had to choose between the 2 types of facilities, since, according to the Fiscal Code, 2 types of tax facilities cannot be granted at the same time. Thus, for the employees who had the salary of 3000 lei gross who did not pay the taxes and contributions mentioned above, acc. to GO 114/2018 received a net salary of

3000-3000x (21.25% + 0.3375%) = 2352 lei,

Technical unemployment meant that at $75\% \times 3000 = 2250$ lei to apply the tax and other contributions, reaching an income of approximately 1370 lei, a measure that was to the disadvantage of many employees and was only adopted when the sites were closed, i.e. at the end of March and in April. This dynamic in presented in Figure no.8.

The fiscal facilities adopted during the pandemic did not directly target the construction sector, they were of a general nature and referred to: postponement of local tax payment deadlines, suspension of enforcement measures during the pandemic, downsizing of outstanding tax obligations at 31.12.2021, SME loans with state guarantees and interest subsidy, issuance of Emergency Situation Certificates during the state of emergency, lowering the level of the reference interest rate of the National Bank of Romania to 2% per year, decreasing compared to 2.5 % per year.

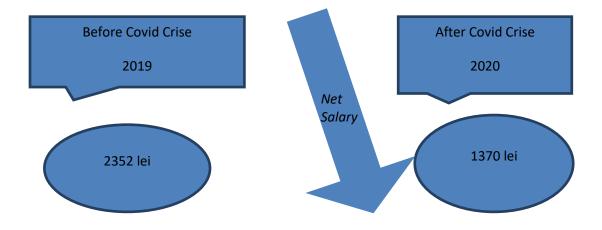


Fig. no.8 Net Salary in the constructin field before and after Covid Crise Source:own projection

Analysis of the influence of legislative measures on the performance of companies in the construction sector

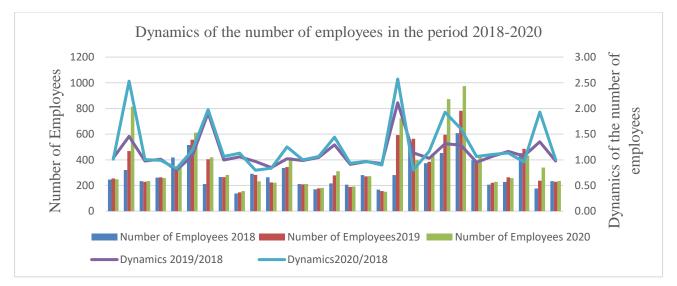
The institutional framework is one of the main factors that influence the performance of the enterprise (Bărbuță-Mişu 2009). For developed countries, the importance given to the institutional framework has been responsible for economic development in general (North 1990). The financial diagnosis "follows the appreciation of the enterprise's capacity to maintain an appropriate level of remuneration, to obtain profit, the capacity of self-financing" (Bărbuță-Mişu 2009). Thus, the study was based on the analysis of turnover - which is an indicator of the volume of activity, profit - the result of the activity and the main motivation of a business (Dragotă et al.2012), the funds brought by owners - equity - which represent " the residual interest in the assets of the enterprise after deducting all debts" (Brezeanu 2008), but also the dynamics of fixed assets to observe whether the profit obtained was reinvested in assets.

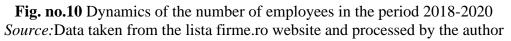
The companies in the chosen sample are from the construction sector and have over 200 employees for the entire analyzed period (27 of them), and 2 have over 100 employees. The companies in the sample are distributed throughout the country (Fig. no. 9).



Fig. no. 9 Dispersion in the territory of the selected sample of companies *Source*:Data taken from the firma.ro website and processed by the author

Regarding the number of employees (Figure no. 10), we note that at the end of 2019, the year of adoption of fiscal facilities in the constructionsector, which aimed to increase the number of employees, only 4 of the companies analyzed decreased the number of employees, 12 companies did not change their number of employees, and 13 companies registered increases as follows: 5 companies registered an increase in the number of employees by 10%, 1 company by 20%, 3 companies by 30% and one company at a time registered the increase of the number of employees by 40% and 50% respectively. Only 2 companies in the chosen sample of companies doubled their number of employees. That is, for 13 companies (44%) the measures adopted had a positive effect, for 41% (12 companies), it had no effect, and for 13% (4 companies) the change in legislation did not lead to any increase.





At the end of 2020, out of the 29 companies analyzed, 6 of it (20%) registered a decrease in the number of employees during the pandemic compared to 2018. 7 companies (24%) had the same

number of employees, and for 16 companies (55%) the dynamics was as follows: 6 companies registered an increase of 10%, 2 of it increased their number by 20%, 3 companies increased by 30%, 40%, 60% each. 3 doubled the number of staff employed, and 2 increased 2.5 times. In total, out of the 29 companies, 16 companies registered an increase in the number of staff, so it can be concluded that the fiscal measures adopted, together with the other determinants (investments made by the state in infrastructure projects, return of manpower from Western Europe) had a beneficial effect.

From the dynamics represented in the graph it can be seen that the year 2020 had better results in terms of the dynamics of the number of employees compared to 2019.In 2019, 10 companies out of the 29 analyzed, 10 (34%) had a lower turnover than in 2018, the other entities registering increases of this indicator, 4 (13%) of it doubled their turnover, 3 (10%) tripled their revenues, and only one company had 10 times higher turnover (Figure no. 11). The other companies had increases of 20% (3 companies), 30% (3 companies), 40% (3 companies), 60% (1 company) and 70% (1 company). 66%, i.e. 19 of the companies registered an increase in turnover.

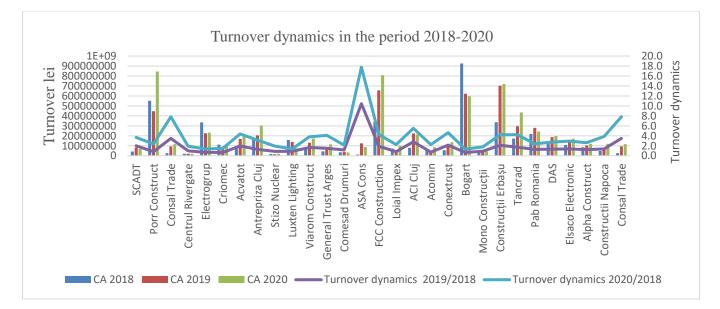


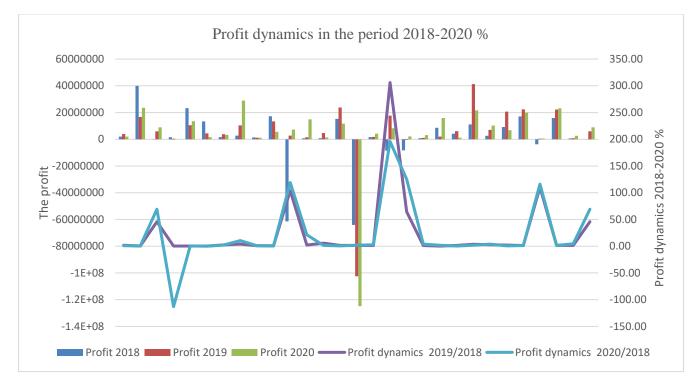
Fig. no. 11 Turnover dynamics in the period 2018-2020 *Source:* Data taken from the lista firme.ro website and processed by the author

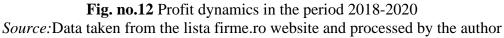
The year 2020 was slightly better for the companies in the sample presented, as only 7 companies (24%) had a lower turnover than in 2018. The company which in 2019 had a 10 times increase in turnover, in 2020 the increase was only 7 times compared to 2018. 10 companies doubled their revenues, 2 registered increases of 4 times of the indicator, and the rest, i.e. 9 companies had increases of 70% (1 company), 40 % (1 company), 50% (2 companies), 40% (3 companies), 10% (2 companies). The year 2020 led to increases in turnover for 76% of the subjects analyzed.

The comparison of the 2 dynamics shows that 2020 was better in terms of revenues recorded by construction companies than 2019, following almost the same pattern, i.e. companies that grew in 2019, continued the upward trend in 2020.

Regarding the profit, there are some companies that had spectacular evolutions in 2019, in the sense that the registered profit increased by 306%, reaching from large losses, to a considerable profit in the following year (Figure no. 12). Other 2 companies registered the profit increase over 100 times, 45 times (1 company) and 64 times (1 company), 3 times (3 companies), 2 times (2 companies). 6

companies recorded losses, one company remained at the same level of profit, increased by 70% (1 company), 60% (1 company), 40% (3 companies), 30% (3 companies), 20% (2 companies). 22 companies, i.e. 75%, registered an increase in profit.





The dynamics of profit in 2020 followed the same trend as in 2018, the one exception being a company that, although it registered a decrease in profit in 2019, ended up registering considerable losses in 2020. A percentage of 28% (8 companies) had a lower profit in 2020 than in 2018, the remaining 69% (20 companies) had higher profit in 2020 than in 2018. Although the value of profit was higher in 2020 than in 2019 versus 2018, however, as a number, the year 2020 had a lower growth rate, 1 company recording accounting loss, and for 2 companies the profit was lower.

It can be seen on the graph that the dynamics of the 2 years follow the same trend, the companies that registered increases in 2019, followed the same trajectory in 2020, with one exception.

In 2019, for 10 companies (34%), equity decreased. The other 19 companies (66%) as follows: 9 recorded an increase in equity of up to 10%, in 2 of them the increase was 30%, one company increased by 40%, and one of them doubled its equity (Figure 13). The company that has doubled its own capital is the company that has had spectacular increases in profit. The companies that registered the increase of the profit in 2019/2018, also resulted in the increase of their own capitals. Those that recorded losses also had the effect of decreasing equity, or maintaining it at the level of 2018. Only one company resulted in an increase in equity, although the profit decreased in the 2 years subject to analysis.

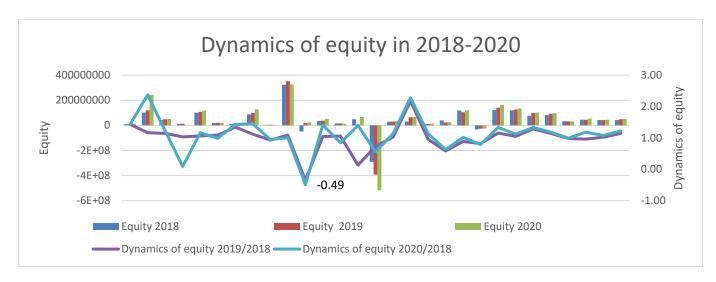


Fig. no. 13 Dynamics of equity in 2018-2020 *Source:*Data taken from the lista firme.ro website and processed by the author

In 2020, 9 companies faced a decrease in equity (31%). The increases of the indicator for the remaining 20 companies (69%) had a similar trajectory as in 2019, 3 companies registering the increase of equity by 10%, 6 of them by 20%, 2 evolved by 30%, 3 by 40% and 4 of them with up to 50%. 2 companies doubled their capital compared to 2018 - one of them being the one that doubled its capital in 2019 - maintained this trend, and the other is the one that although the profit decreased in the 2 years, in 2020 doubled the equity compared to 2018, which means that the profit obtained was invested in equity.

In 2019, 13 companies (44%) recorded decreases in fixed assets. For the other 16 companies, 7 of them increased by up to 10%, 2 companies increased by 20%, 4 of them by 40%, and 2 tripled the value of their assets compared to 2019 (Figure no. 14). When analyzing this indicator, we noticed that the companies that had the highest value increases of assets are not the companies with the highest profits.

In 2020, 11 companies (37%) decreased their current assets, 18 companies (63%) registering the increase of this indicator, having the following evolution: 3 companies increased by 10%, for 4 of them the increase was by 20%, 4 companies increased their assets by 30%, 2 companies by 40%, and 3 of them increased their fixed assets by 300%.

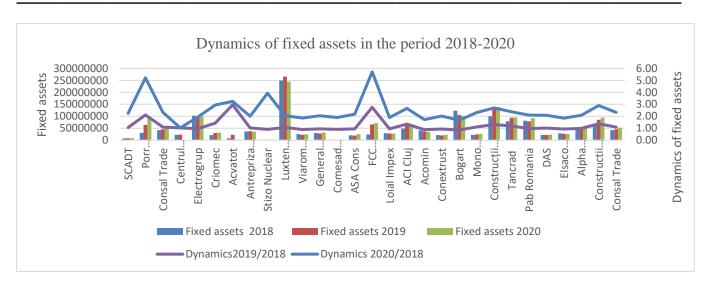


Fig. no.14 Dynamics of fixed assets in the period 2018-2020 *Source:* Data taken from the lista firme.ro website and processed by the author

The connection between equity and fixed assets is represented by the working capital, which is in fact the difference between permanent resources (equity plus medium and long-term debt) and fixed assets and financial values (Brezeanu 2008). Thus, this indicator shows whether companies can finance their assets only from their own capital (when it is positive), or not (when it is negative).

In each of the 2 years, 12 companies (41%) registered negative working capital, and for the other 17 companies, the dynamics of 2020/2018 in terms of working capital was slightly better than 2019/2018, where we can concludes that the profit reinvested in equity was redirected to fixed investments in a proportion of 59% (Figure no. 15).

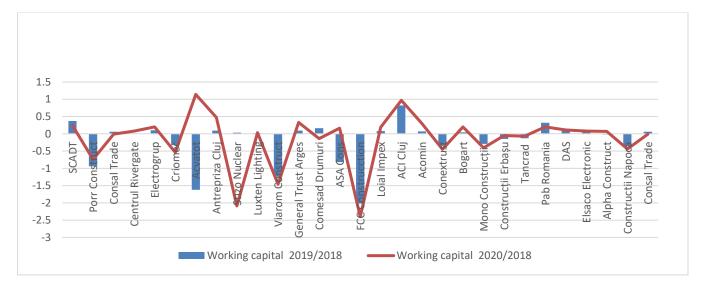


Fig. no.15 Dynamics of working capital in the period 2018-2020 *Source:* Data taken from the lista firme.ro website and processed by the author

Conclusions

If year 2019 began with the entry into force of the legislation granting benefits to employees and companies in the construction sector, year 2020, marked by the context of the epidemiological situation caused by the spread of SARS - CoV 2 coronavirus, began with other legislative measures which did not expressly supported the construction sector.

The increases recorded by companies in the sector were not due to the support of the business environment by the government, but to another set of factors, the most important of which is the European funds that were disbursed in the sector of constructions, especially in the infrastructure sector. Also, the lower degree of economic development in Romania compared to most EU countries determined that the demand and need for construction works to be high, which is reflected in the positive developments of the analyzed companies.

In 2019, in order to counteract the shortage of manpower in construction, which is a continuing challenge for both employers and the government, the change in legislation has contributed to the increasing number of employees, in 2020 the increase was not an effect of the adopted law. And even if, at the beginning of the declaration of the state of emergency, the technical unemployment represented a solution for many of the Romanian companies, later, the fiscal facilities granted to the business environment, did not contribute to the development of the construction sector.

The fact that the analyzed indicators have higher values both in 2019 and in 2020 compared to the reference year 2018, demonstrates that the construction sector is in full development. Profit increased for 75% of the companies in 2019 and for 68% in 2020 compared to 2018. The number of employees increased for 86% of the companies (half being companies where the number remained constant) in 2019, and in 2020, 80% of the companies hired people (29 of them had the same number of employees). Turnover also increased for 66% of companies in 2019 and for 76% of companies in 2020.

Equity also increased for 20 companies in both years, and fixed assets recorded higher values than in 2018 for 16 companies (2019) and 18 companies (2020). Working capital was also positive for 58% of the companies analyzed.

Although the financial results of the companies increased during the analyzed period, it is not clear that this is a result of the state support provided by legislative measures. On the contrary, the fiscal facilities granted in 2020 canceled the facilities granted in 2019 for the construction sector, so that the state's involvement in providing support to contractors was not perceived as sufficient.

The development of the construction sector will continue, and the state can from now on be involved in adopting effective measures that not only support this sector of activity, but these measures can improve the standard of living and quality of life for each of us, through the result of the work of those involved in the sector of construction - an area of strategic importance.

References

- 1. Badiu C. 2020.*Tax and Budgetary Measures during COVID-19 Crisis in Europe, Economics and Applied Informatic*, "Dunarea de Jos" University of Galati, Faculty of Economics and Business Administration, no2/2020, pages 148-161
- 2. Bărbuță-Mișu N.,2012. Financial Risk Study of the Construction Sector SMEs, Economics and Applied Informatics, "Dunarea de Jos" University of Galati, Faculty of Economics and Business Administration, Issue 3, pages 31-38.
- 3. Bărbuță-Mișu N. 2009, Modelling the Finnancial Performance of the Building Sector Enterprises -the case of Romania - Romanian Journal of Economic Forecasting
- 4. BrezeanuPetre. 2009. Finanțe Corporative, Vol II, București, EdituraC.H.Beck.
- 5. BrezeanuPetre. 2009. Finanțe Corporative, Vol I, București, EdituraC.H.Beck, p.122, p. 51.

- 6. Dragotă V., Obreja Brașoveanu L, Dragotă I.2012. *Management financiar strategic*, vol II, București, Editura Economică.
- 7. Bărbuță-MişuN.2009. *Finațareașiperformanțaîntreprinderii*, București, Editura Didactică și Pedagogică, p.208, p. 218.
- 8. Cohen E. 1990. AnalyseFinaciere, 2^e edition, Paris, Economica.
- 9. North, D.C.1990, *Institutions, instituțional change and economic performance*, Cambridge University Press, p. 110-111.
- 10. European Construction Sector Observatory Country Profile Romania January 2021, https://ec.europa.eu/growth/sectors/construction/observatory/country-fact-sheets/romania_en 12th Edition of Top 100 Construction Contractors 2021.
- 11. https://ec.europa.eu/growth/sectors/construction_en-
- 12. https://ec.europa.eu/growth/industry/sustainability/buildings-and-construction_en
- 13. https://ec.europa.eu/growth/sectors/construction/observatory/country-fact-sheets_en
- 14. https://ec.europa.eu/growth/sectors/construction/observatory/data-mapper_ro
- 15. https://eur-lex.europa.eu/legalcontent/RO/TXT/HTML/?uri=CELEX:52012DC0433&from=ET
- 16. https://ec.europa.eu/eurostat/databrowser/view/sts_copr_a/default/table?lang=en
- 17. We invested 22 billion lei in infrastructure in the first eight months of the year, an absolute record, September 23, 2020, available at https://www.agerpres.ro/economic-intern/2020/09/23/burduja-ministerul-finantelor-am-investit-in-infrastructura-22-miliarde-de-lei-in-primele-opt-luni-ale-anului-record-absolut--577585 accessed on 20.10.2021
- 18. The construction sector in Romania will reach a record level of over 126 billion lei in 2021 / Top construction companies, June 16, 2021, available at https://economedia.ro/analiza-sectorul-constructiilor-din-romania-va-atinge-un-nivel-record-de-peste-126-miliarde-lei-in-2021-topul-firmelor-din-constructii.html#.YYLPWhz8tEY accessed on 20.10.2021
- 19. http://www.ann.ugal.ro/eco/Doc2012.3/Barbuta-Misu.pdf
- 20. https://caen.ro/diviziune/42-lucrari-de-geniu-civil
- 21. https://insse.ro/cms/sites/default/files/com_presa/com_pdf/pib_tr4r2020_1.pdf
- 22. https://insse.ro/cms/sites/default/files/com_presa/com_pdf/pib_tr4r2019_1.pdf
- 23. https://insse.ro/cms/sites/default/files/com_presa/com_pdf/pib_tr4r2018_1.pdf
- 24. https://www.listafirme.ro
- 25. Construction defied the pandemic. Exceptional evolution in 2020, March 12, 2021, available at https://www2.deloitte.com/ro/ro/pages/real-estate/articles/constructiile-au-sfidat-pandemia-evolutie-de-exceptie-in-2020.html, accessed on 16.10.2021