

# FINANCIAL RETURN IN THE FIELD OF CONSTRUCTIONS: WHAT ACCOUNTING ISSUES SHOULD AN INVESTOR KNOW?

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**Abstract:** *The present paper focuses on the accounting, taxation and analysis of the financial statements of companies within the construction field. The first part of the paper contains some guidelines regarding construction contracts and their accounting methods with respect to the international standards and issues on construction taxation introduced starting with 2014. The second part of the paper focuses on an analysis of the financial return of five large and medium-sized construction companies operating in the city of Brasov.*

**Key words:** *construction contracts, IAS 11, accountancy, taxation, financial return.*

## 1. Introduction

The accountancy of the construction contracts is governed nationally by the Public Finance Ministry's Order no. 3055/2009 and internationally by the International Accounting Standard 11 (IAS 11). IAS 11 advocates the accounting treatment regarding revenues and costs related to construction contracts, their recognition and projected losses.

## 2. Background for construction contracts

A construction contract is defined, according to IAS 11, as any contract specifically negotiated for the construction of an asset or group of assets closely related to one another or interdependent in terms of their design, used technology, operation and final use.

IAS 11 classifies construction contracts into fixed price contracts and cost plus contracts. The former end on a fixed contract price, or a fixed rate per unit of output (in some cases the contract may contain provisions to increase the price). The latter are contracts specifying that the contractor should recover the allowed costs, plus a percentage of these costs or a fixed fee. A construction contract is concluded between the contractor and his customer and may cover the construction of a single asset or of a combination of assets.

The revenues and expenses related to construction contracts are allocated during the construction activity. Incomes are established at the time of negotiation and include: their initial value agreed on in the contract, changes in contractual works, compensations and performance incentives. The revenue is assessed at the

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fair value of the work provided or which may be received after deducting trade discounts and rebates allowed by the contractor. According to Order no. 3055/2009, income is recognized when the receiving document regarding completion is signed by the beneficiary.

According to IAS 11, the costs regarding construction contracts are the following: direct costs of a contract, costs attributed to the contract activity in general and which can be allocated to the contract and the cost that the beneficiary is responsible of according to the provisions of the contract. Contract costs are recognized as expenses when incurred. Costs incurred on account of the contract, but not yet accepted by the beneficiary shall be recognized as work in progress.

### **3. Accounting methods of construction contracts**

In the case of long-term construction contracts, IAS 11 outlines two methods of accounting: work termination method and work advancement method (the percentage of work completed).

The work termination method involves determining the result at the end of the contract. Consequently, there is a delay concerning the recognition of the results until the completion of the contract.

Construction works are executed in accordance with the terms stipulated in the contract, during one or more work stages. If the period of construction work does not exceed an accounting period, the incomes and expenses will be noted at the end of the contract. If construction works take more than one accounting period, the revenues and expenses are recorded on different stages of the contract on the basis of the proportion executed, more precisely for every accounting period when activities are executed.

IAS 11 states that when the outcome of a

contract can be estimated in a reliable way, the method used for the recognition of the revenues and expenses is the work advancement rate method (for the stages in contract completion).

The stage of work execution/completion is determined as the ratio between the cost of the works executed at the date of the balance sheet and the total estimated cost of contract completion.

Entities recognize revenues in accordance with the degree of the work advancement method by recording as follows: 418 "Customers - invoices to be issued" = 704 "Revenues from provided services". The registration into accountancy of the expenses incurred in carrying out the works takes place by debiting expenses account and by crediting the account of stocks, third parties, fixed assets or treasury. An expected loss occurred in the construction contract will be immediately assimilated to an expense.

### **4. Construction taxation**

In Romania, starting with January 1, 2014 a tax on the value of special constructions, was introduced other than the buildings for which companies owe building tax to the local budget. The expense with the construction tax is a deductible expense in determining the taxable profit. The calculation of construction taxes is determined by applying a rate of 1.5% on the value of the buildings already existing in the heritage of the contributors on December 31 of the previous year, a value highlighted in the debit balance corresponding to the constructions, minus: a) the value of the buildings, including the value of the reconstruction, change, modernization, consolidation or extension works for buildings which were leased, rented, under management or use for which the taxpayer or owner, as applicable, owes the building

tax under Title IX of the Taxation Code; b) the value of reconstruction, modernization, consolidation, modification or extension works for buildings which are or shall be the property of the state or of the local administrative units; c) the value of the constructions in the 1.2.9 subgroup "Terraces on arable land, orchards or vineyards" in the Catalogue regarding the classification and normal life cycles of fixed assets.

### 5. Financial return in the field of constructions

The financial and economic crisis has affected the economic entities from the constructions field quite significantly. The number of companies from the construction field which have declared a state of insolvency has increased from one year to another because of the crisis. The top ten fields affected by insolvency in Romania, in 2013, were those presented in Table 1.

*Fields of activity* Table 1

Fields of activity most affected by insolvency	Number of entities
Wholesale and retail trade, repair of motor vehicles, motorcycles, of personal and household goods	10,436
Constructions	3,889
Hotels and restaurants	3,418
Manufacturing	3,153
Transport, storage and communication	2,049
Real estate, rentals	1,253
Professional, scientific and technical activities	1,176
Agriculture, hunting, forestry	811
Activities of administrative services and activities of support services	688
Other activities of collective, social and personal services	485

Source: Data processed by the author

It can be seen that the fields most affected by insolvency in 2013 are those in the field of wholesale and retail trade, repair of motor vehicles, motorcycles, of personal and household goods with 10,436 economic entities; followed by the construction field with 3,889 economic entities.

This study includes an analysis of the financial indicators of five construction companies in the city of Braşov. The field of activity of the analysed economic entities is: construction of residential and non-residential buildings.

The selected companies are large and medium-sized companies, the selection being made on the basis of the value of their turnover and the number of employees. The number of employees for each economic entity is shown in Table 2.

*Number of employees* Table 2

Years	Construction companies (C1, 2...)				
	C1	C2	C3	C4	C5
2008	325	199	210	221	147
2009	275	122	167	132	135
2010	223	55	205	122	114
2011	172	61	165	197	164
2012	100	86	165	169	156
2013	75	101	159	125	147

Source: RMF, Data processed by the author

A downward trend can be noticed in the average number of employees because of the downsizing that took place, especially in the years 2009-2010.

The analysis of the financial statements was conducted over a period of six years (2008-2013). Data were taken and processed from the financial statements of the economic entities that were published on the website of the Romanian Ministry of Finance (RMF).

A total of four relevant financial indicators were analysed in terms of profitability of economic entities from the constructions field, namely: financial rate

of return, return on assets, turnover and net result.

Rates of return express the efficiency of the economic activity by reporting the financial effects to the efforts involved. They should highlight the efficiency with which the investments made in the entity are being used. The financial rate of return (Return on equity - ROE) expresses the ability of an economic entity to generate profit, being a significant indicator for assessing the economic and financial performance of the company. Return on equity expresses the ability of one's own equity to generate profit and the efficiency in using one's own equity.

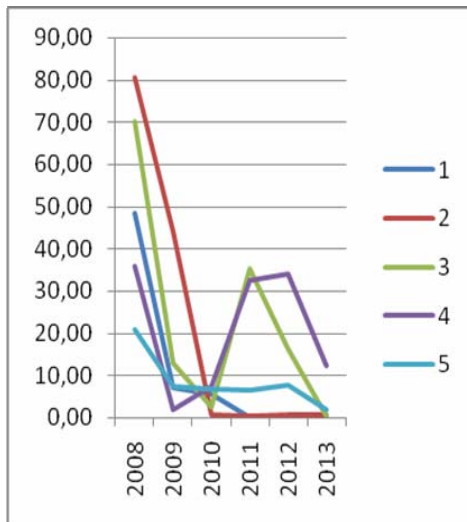


Fig. 1. *Evolution of ROE*

Source: indicator calculated by the author, data from RMF

Depending on this rate, shareholders appreciate if their investment is justified and if they are to continue investing. It is calculated as the ratio between net profit generated and the value of one's own equity. The evolution of the financial return of the five construction companies is presented in Figure 1, which shows the rate of the financial return registered fluctuations and a downward tendency in

2009-2010. In order to stabilize the economic situation with regard to those companies with low rates, it is required that the net profit should grow at a higher rate than one's own equity.

One of the main indicators of the profitability of an economic entity is the indicator return on assets (ROA). The values recorded in the period under review are shown in Table 3.

*Return on assets (%)* Table 3

Years	Construction companies (C1, 2,...)				
	C1	C2	C3	C4	C5
2008	6.4	39.3	40.5	19.1	8.9
2009	1.1	38.8	5.7	1.7	3.8
2010	0.6	0.3	1.1	5.4	2.5
2011	0.0	0.2	13.7	23.1	2.9
2012	0.0	0.4	5.2	28.8	2.9
2013	0.0	0.2	0.1	10.1	0.9

Source: RMF, Data processed by the author

Generally, a downward trend can be noticed with smaller values recorded in the period 2011-2012. The evolution of ROA is shown in Fig. 2.

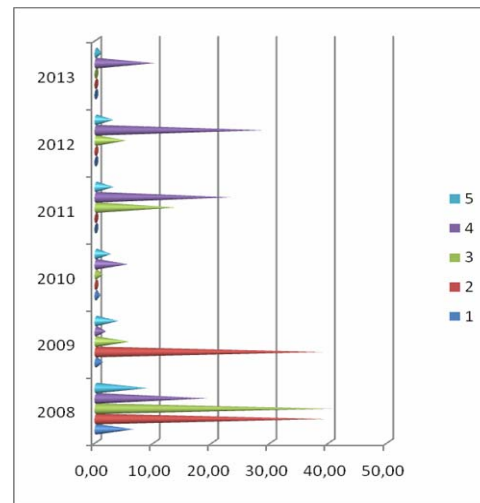


Fig. 2. *Evolution of ROA*

Source: indicator calculated by the author, data from RMF

The indicator shown in Figure 2 offers the investors an insight into the performance of the management of the economic entity as well as of the efficiency of assets usage in terms of the profit earned for every 100 monetary units (invested in assets). It was calculated as the ratio between net profit and total assets.

Practice suggests that an optimal reference range for a society is between 3-9%. The analysed economic entities are in the safe range in 2008, after which the percentages decrease considerably.

Another indicator of high importance in this study is the turnover, which measures the performance of the companies.

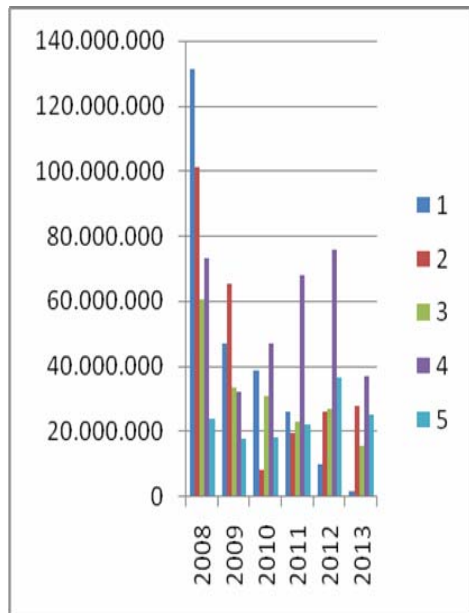


Fig. 3. *Turnover tendency*

Source: indicator calculated by the author, data from RMF

The turnover (Fig. 3) for the analysed companies ranges between 131 million lei and 9 million lei. There was a downward tendency, with lower values in 2013.

Alongside with the two previous indicators, the net income was also analysed and it expresses the efficiency of

all the activities developed by the economic entities. The values recorded in the period under review are shown in Table 4.

*The net profit (million lei)* Table 4

Years	Construction companies (C1, 2...)				
	C1	C2	C3	C4	C5
2008	5.5	20.8	11.2	14.4	1.3
2009	0.67	15.7	1.9	0.70	0.52
2010	0.45	0.13	0.27	2.70	0.53
2011	0	0.06	3.9	15.2	0.61
2012	0	0.17	1.2	19.8	0.79
2013	0	0.08	0.02	6.6	0.21

Source: Data processed by the author

The period 2011-2013 was marked by the strongest decreases of the net profit which was due to an increase of the total costs. The decreases in 2013 as compared to 2012 were between 50.23%-98.24%.

## 6. Conclusions

Regarding construction contracts and given the fact that construction work requires a longer period of time to be completed, the work advancement method is the best, as it allows a connection between the revenues and the expenses of the contract.

The profitability indicators analysed highlight the ability of an economic entity to remunerate its capital, a consistent remuneration, aspect sought by any investor, will cause the attraction of additional resources from the market.

The analysed period 2008-2013 is characterized by the decrease of the four reviewed indicators, especially of the net profit as compared to the moderate decrease of the equity, leading to a lower financial return.

Through the analysis of the data taken from the financial statements, it can be seen that construction companies from Braşov registered financial difficulties, recording a downward tendency of the

indicators during the period analysed herein.

The financial difficulties and the decreases of the analysed indicators are the result of underfunded works, high indebtedness to banks, non-collection of claims, increase in the prices of utilities, raw materials and other services provided by third parties.

### References

1. Anton, C.E.: *Analysis of the Interdependences between the Variables Characterizing the Financial–Accounting Services Executed by the Specialized Companies of Romania, in the Conditions of Accounting Standardization and Normalization*. In: International Conference Economics and Management, Lithuania, 2009.
2. Bărbuță–Mişu, N., Codreanu, E.S.: *Analysis and prediction of the bankruptcy risk in Romanian building sector companies*. In: *Ekonomika* Vol. 93(2), 2014.
3. Cernuşca, L.: *Contabilizarea contractelor de construcții (Accounting of construction contracts)*. In: *Revista Gestiunea și Contabilitatea Firmei* (2013) No. 2, p. 9-12.
4. Căruntu, C., Lăpăduși, M.L.: *Financial return on assets. The impact on the financial return on assets over the company's development*. In: *Annals of the „Constantin Brâncuși” University of Târgu Jiu, Economy Series, Issue 2/2009*.
5. Drumea, C.: *An Analysis of the Human Capital Management Effectiveness, as Key-factor of the Organization's Performance*. In: *Ovidius University Annals, Economic Sciences Series, Volume XII, Issue 2/2012, p.25*.
6. Nicolau, C., Albu, R.: *Location Strategies for the Operational Facilities of European Middle-Sized and Large Companies*. In: *The Proceeding of the 3<sup>rd</sup> International Conference Managerial Challenges of the Contemporary Society, Cluj-Napoca, 2010*.
7. Popa, A.F., et al.: *Studii practice privind aplicarea Standardelor Internaționale de Raportare Financiară în România (Practical Studies on the Application of International Financial Reporting Standards in Romania)*. Ploiești. Contaplus Publishing House, 2007.
8. CECCAR, Institutul Național de Dezvoltare Profesională Continuă. *Ghid de ținere a contabilității și de elaborare a situațiilor financiare individuale în conformitate cu IFRS-urile la societățile comerciale ale căror valori mobiliare sunt admise la tranzacționare pe o piață reglementată (Accounting framework for elaborating individual financial statements according to IFRS for trading companies with securities admitted for transaction on a regulated market)*. Colecția ghiduri profesionale, volumul I, Editura CECCAR, București, 2013.
9. Law no. 571/2003 regarding the Fiscal Code.
10. The order of the Ministry of the Public Finance no. 3.055/2009, for the approval of accounting regulations compliant with European Directives, published in Official Gazette no. 766 bis/ 2009.
11. <http://www.ifrs.org/IFRSs/IFRS-technical-summaries/Documents/English%20Web%20Summaries%202013/IAS%2011.pdf>. Accessed: 25-09-2014.
12. <http://www.mfinante>. Accessed: 25-09-2014.