# ACCOUNTING INFORMATION INTEGRATION IN THE TRIANGLE FINANCING - INVESTMENT - DIVIDEND. OPTIONS WITHIN ECONOMIC ENTITIES IN CENTRAL REGION

**Alina-Teodora CIUHUREANU** [1]

*"Nicolae Bălcescu" Land Forces Sibiu, Romania*

**Abstract**
*The article captures the three fundamental managerial decisions involving the capitalization of accounting information: financing, investment and dividend, the aim being to highlight the usefulness of accounting information by translating tit into calculation and analysis models even though this transposition does not offer a definite guarantee of a decision that eliminates future risks. It also presents the results and conclusions of a quantitative research based on a questionnaire, conducted on a sample of economic entities in Centre Development Region 7, whose main objective is to know the options for use of accounting information in taking financing, investment and dividend decisions.*

**Key words:** accounting information, financing, investment, dividend

**JEL classification:** M100, M410

## 1. Introduction

Accounting information is, or should become indispensable for running a business properly. The central idea from which we started is to develop a picture of the opportunities and usefulness of information whose language is understandable and realistic as any subject treated is useful only if it has the power to influence readers, at least through awareness of the informational content. We thus propose to highlight the multitude

[1] *assistant professor/Ph.D., Faculty of Military Management /Management and Administrative Sciences Department, email: alinaciuhureanu@yahoo.com*

of opportunities generated for managers using accounting information, for financing investment and dividend decisions, in view of shaping pragmatic solutions that can be adopted in the economic entities. Decision making is one of the management requirements. To have the decision-making ability is one of the characteristics of successful management.

## 2. Integration of accounting information in the financing decision, investment and dividend - literature review.

Regarding financing, a first alternative to the economic entities is represented by *self-financing*. Referring to this option, Virginia Cucu (2008) noted that „through self-financing a certain control from creditors and even shareholders is avoided." Self-financing capacity, however, is directly related to the performance of the economic entity using as sources the principal, the result of the financial year, retained earnings and amortization, information which can be found without doubt in accounting and statements generated by financial accounting.

Most often, domestic financing is not enough. Thus, one can opt for external sources, having at their disposal, in a first phase, *initial capital* that, while during the activity it may be increased (Baltes and Ciuhureanu, 2016). But the increase in capital is not free. The cost, determined from the use of accounting information is given by the capitalization rate claimed by existing investors which meets the minimum rate of return that determines, on the one hand, the potential investor to purchase shares and, on the other, the existing investors to abandon the sale (Nistor and Ciumaş, 2012). Moreover, in order for the capital increase to be successful, we believe that at least some of the information provided by financial accounting should be transparent so that the necessary framework for the decision is provided to potential investors. In conclusion, the accounting information becomes a „good" usable by all parties involved.

*Bonds* are another external financing alternative, but this financing option is currently non-existent in Romania, even though, according to Law 31/1990 and Law 297/2004, the possibility exists. Before deciding to use bond financing, we believe that exploitation of accounting information and not only contributes to the identification and evaluation of costs (Dobrotă and Chircuescu, 2009), of risks that may be determined by the nature of bonds, changes in interest (Zipf, 2000), inflation, reporting and registration on a regulated market, the holders' quality of creditors (Mitran, 2002).

In contrast, one of the most used external sources of funding is the *long-term loans* obtained from credit institutions. But since nothing is simple, there are a number of questions on the interest rate, variability, necessary guarantees, maturities, refinancing etc. which requires knowledge and use of accounting information for evaluating alternatives.

In the category of external financing sources various *types of short-term financing* are included, identified in banking options and which are in constant change. Although short-term financing are considered to be more flexible, they can however be riskier as a result of interest rate and the higher risk of insolvency because of the potential of economic issues that lead to lack of immediate positive cash flows. Thus, it is necessary to use accounting information for determining at least some minimal indicators targeting liquidity, receipts, payments, variability of turnover etc.

External funding obtained by *accessing structural funds* is currently both one of the most desirable sources and one of the most risky. The usefulness of accounting information is indisputable during access stage, in which information is needed for eligibility, demonstrating the cash flow, in the implementation phase, being developed financial reports periodically, reimbursement claims filed and records being kept by distinct analytical accounts, allowing information transparency and in the sustainability phase in which, through a distinct evidence, the achievement of indicators proposed after implementation can be demonstrated.

To substantiate the financing decision, managers have at their disposal a number of indicators, determined mainly based on information taken from financial accounting, aimed at self-financing, structure of debts and equity, financing and debt, thus being generated the opportunities for improvement of accounting information by self-financing capacity, financial stability rate, the rate of current resources, the rate of current resources in stable resources, global and matured financial autonomy rate, global debt to equity rate (cyclic, global, of property, banking, investments' self-financing), indebtedness, financial independence rate, repayment capacity rate, interest coverage, the cost of borrowing (Petrescu, 2004/2005 Ciuhureanu, 2009; Bătrâncea, 2004; Vintilă, 2002).

Another important decision for the economic entity, with important implications for the management is the investment. The importance of making decisions for investment and thus exploiting the available accounting information derives from the results that investments propagate on economic growth.

From the perspective of exploiting accounting information, a number of indicators can be determined used by the management of economic entities for the evaluation of investment decision's efficiency: the average rate of return on the investment project / average accounting rate of return (Average accounting rate) (Stancu, 2007) static and dynamic economic performance, the static and dynamic return on the capital invested, NPV (Net Present Value) - considered by specialists (Stancu, 2007; Sandu, 2010, Berceanu, 2002) as the criterion which best meets the basic objective of management in making the decision to invest and viability of the investment, internal rate of return, investment rate. However, the calculation of each of them cannot be achieved without taking some information from the financial accounting, such as the impact of depreciation, opportunity cost generated by the replacement value of the assets made available for the new investment, estimating the residual value (Stancu, 2007).

By current activity, the economic entity either generates a surplus resulted in profit (Sandu, 2010) or a financial need materialized in loss. In the situation of obtaining profit, one of the responsibilities of managers, in consultation with financial professionals and a careful analysis of the options, is represented by the dividend decision. This decision must be approached with great seriousness, in order to avoid complaints of shareholders and future development of the economic entity (Ciuhureanu, 2005). Awarding dividends reduces the financing amount retained by the entity and affects the size of capital that can be obtained from internal sources. Accordingly, the dividend decision is directly related to the financing decision, and thus with the investing decision, having major implications on the entity.

The decision related to dividends is directly related to the return and liquidity, fiscal and legal constraints. There are currently many "managers" or shareholders / associates who do not understand why dividends cannot be given "because profit has been yielded". Only in a well-managed economic entity, the profit turns into cash (Scale and Knight, 2011). Knowledge of these issues is solvable by capitalizing accounting information or in more misfortunate case by understanding it. Accounting information (in terms of specific indicators calculated on the basis thereof) can contribute to making the decision of dividend but there are aspects related to what is desired in terms of image.

## 3. Methodology of selective research

To know the opinions and choices of managers / administrators on the use of accounting information in the triangle financing-investment-dividend, we undertook a "sample-type quantitative selective research" on a sample of 301 economic entities in the Centre Region, the objectives and assumptions being detailed in table 1. It should be noted that this study is more complex, being developed following the distribution of a questionnaire which was based on 78 variables (Ciuhureanu, 2015). To obtain reliable information and reduce potential errors, the survey was undissimulated, the "snowball" method being applied given that only active economic entities were considered which have obtained turnover. The methodology of research - steps are followed as presented by the renowned specialist Iacob Cătoiu (2009).

**Table 1: Objectives and hypotheses of the study**

| Main objective | Main hypotheses | Secondary objective | Secondary hypothesis |
|---|---|---|---|
| ***$Q_1$*** Knowledge of options on using accounting information regarding funding, investments and dividend decisions | ***$IP_1$*** – Accounting information is somewhat used in decision making: investment-financing-dividend triangle. ***$IP_2$*** – Accounting information is largely useful in the decision-making triangle investment-financing -dividend, determining the cost of investment and financing opportunities being paramount while the dividend distribution decision is taken randomly. | ***$Q_{1.1}$*** Analysis of the economic entities' category. | ***$IS_1$*** **–** There is a direct connection between the integration of accounting information in the investment-financing-dividend triangle and the category of economic entities. |

Source: own processing

In order to achieve the objective, five variables were formulated, presented in table 2.

**Table 2: Variables of the research**

| Name of the variable | Definition of the variable | Type |
|---|---|---|
| Decision | V73. To what extent does your company analyze and use accounting information in adopting the investment, financing and dividend decision? | Multiple choice / 5 steps Likert scale |
| | V74. To what extent do you believe that accounting information meets future opportunities, being useful to the management in taking the investment decision? | Multiple choice / 5 steps Likert scale |
| | v75. To what extent do you believe that accounting information meets future opportunities, being useful to the management in adopting the financing policy? | Multiple choice / 5 steps Likert scale |
| | V76a. To what extent do you consider that accounting information is useful to the management in adopting the dividend policy? | Multiple choice / 5 steps Likert scale |
| | V76b. In your opinion, do economic entities establish their dividend policy and adopt the corresponding decision … | Multiple choice / Closed with a single answer |
| Respondents' profile | V2. Number of employees of the economic entity that you represent. | Multiple choice / Closed with a single answer |

Source: own processing

To determine the minimum sample we set a confidence level of 0.05 corresponding to a 95% guarantee probability of the research results and a margin of error of ± 5%, which would have involved a sample of 381 economic entities. The number of valid questionnaires was 301. Despite this organizational restriction, we believe that the results are relevant to the knowledge and can be a starting step in future research / projects.

## 4. Results and conclusions drawn from the selective research

First we sought to know the reality of economic entities surveyed. Thus, we have formulated operational variable v73 to identify the degree to which economic entities are using accounting information in decision-making (investment, financing, dividend). A detailed analysis is provided by the entity's category within the secondary objective ***$Q_{1.1}$*** *– Analysis of the entities' category in the perspective of integrating the accounting information in decision making,* by associating *v73* with *v2,* the information obtained being shown in table 3.

**Table 3: Integrating the accounting information in the decision-making process and association, depending on the category of the economic entity**

| Opinion | Valid percentage | Category | | | | *Total %* |
|---|---|---|---|---|---|---|
| | | micro | small entity | medium -sized entity | large entityt | |
| to a very small extent | 19,27 | 42,57 | 15,48 | 0,00 | 0,00 | 25,25 |
| to a small extent | 32,23 | 28,38 | 33,33 | 0,00 | 0,00 | 23,26 |
| neither to a small, or to a large extent | 22,26 | 16,22 | 5,95 | 5,77 | 5,88 | 10,96 |
| to a large extent | 14,29 | 9,46 | 30,95 | 34,62 | 23,53 | 20,60 |
| to a great extent | 21,59 | 3,38 | 14,29 | 59,62 | 70,59 | 19,93 |
| **Score** | 3,16 | 2,03 | 2,95 | 4,54 | 4,65 | 2,87 |
| **Total %** | 301 | 148 | 84 | 52 | 17 | *301* |
| | 100,00 | 100,00 | 100,00 | 100,00 | 100,00 | *100,00* |

Source: own statistical processing based on the data collected

The analysis of information obtained reflects the distribution of views on the full-scale used, without having a majority opinion framed in any range scale. We note, however, the largest share obtained of 51.5% for respondents who do not integrate accounting information for substantiating investment, financing and dividend distribution decision making. We believe that this sad reality is one of the factors contributing to the financial blockage of many of the active economic entities and leading to insolvency and bankruptcy. The share of those who rely on the analysis and implementation of accounting information into specific systems of indicators to support decisions with financial implications is only 35.88%. Analysis by entity's category demonstrates that in the majority of large (94.12%) and medium-sized (94.24%) entities decisions with financial implications are taken using accounting information which demonstrates their management utility. One could say catastrophic situation is observed in the case of micro-entities, those responsible for their management not giving the necessary importance to accounting information in the decision making process (70.95% do not use it) and 16.22% expressed a neutral opinion. Small entities do not have a better situation either, 48.81% not using accounting information in making decisions but noting the share of 30.95% and 14.29% of those who nevertheless have managers aware that the accounting information supports them in decision-making involving financial resources. The correlated analysis of secondary variables leads to the validation of hypothesis $IS_1$.

The conclusions from processing the data obtained through v73 validate the hypothesis $IP_1$. The reasons may be diverse, but most importantly we consider to be the lack of knowledge and interest in the context in which unsubstantiated decisions have the effect of recording financial losses that may affect entities up to insolvency and bankruptcy.

To know the opinion of respondents on the *usefulness of accounting information for investment decision*, operational variable v74 was formulated in the questionnaire, the obtained responses being presented in table 4.

**Table 4. Usefulness of accounting information in adopting the investment decision through the following opportunities:**

| **Opportunities** | to a very small extent | to a small extent | neither to a small, or to a large extent | to a large extent | to a great extent | ***Total %*** |
|---|---|---|---|---|---|---|
| A. Determining the investment's financing sources *Score = 2,77* | | | | | | |
| *Percentage %* | *12,29* | *17,28* | *55,81* | *10,30* | *4,32* | *100,00* |
| B. Calculating the investment's cost *Score = 4,05* | | | | | | |
| *Percentage %* | *0,00* | *11,63* | *19,27* | *21,59* | *47,51* | *100,00* |
| C. Estimating the investment decision risk *Score = 3,66* | | | | | | |
| *Percentage %* | *2,33* | *14,95* | *15,61* | *48,50* | *18,60* | *100,00* |
| D. Determining the return on investment *Score = 3,88* | | | | | | |
| *Percentage %* | *0,00* | *8,97* | *22,59* | *40,20* | *28,24* | *100,00* |
| E. Determining the recovery period *Score = 4,07* | | | | | | |
| *Percentage %* | *0,00* | *7,64* | *16,28* | *37,87* | *38,21* | *100,00* |
| F. Calculation of specific indicators to investment decision *Score = 4,10* | | | | | | |
| *Percentage %* | *0,00* | *7,31* | *15,61* | *36,88* | *40,20* | *100,00* |

Source: own statistical processing based on the data collected

Based on the information obtained from the survey, it appears that managers' options about opportunities generated by using accounting information for investment decision are diversified. The main opportunities lie in the calculation of specific indicators, a score of 4.10 being obtained, the determination of the recovery period (score 4.07) and calculating the cost of the investment (score 4.05). Also, although relatively low scores were obtained, opportunities generated by estimating investment decision risk (score 3.66) and determining the return on investment (score 3.88) are perceived by respondents as important opportunities provided by using the accounting information.

In the first part, we showed some financing alternatives through their advantages and disadvantages, costs and risks involved, factors to be considered in choosing an alternative. To know the opinion of respondents on *the usefulness of accounting* *information in adopting the financing decision*, operational variable v75 was formulated in the questionnaire, the responses being presented in table 5.

**Table 5: Opportunities of using the accounting information in adopting the financing decision**

| **Opportunities** | to a very small extent | to a small extent | neither to a small, or to a large extent | to a large extent | to a great extent | ***Total %*** |
|---|---|---|---|---|---|---|
| A. Choosing the financing sources *Score* = 2,96 | | | | | | |
| *Percentage %* | *12,29* | *20,93* | *35,22* | *21,26* | *10,30* | *100,00* |
| B. Financing cost calculation *Score* = 4,47 | | | | | | |
| *Percentage %* | *0,00* | *0,00* | *6,98* | *38,87* | *54,15* | *100,00* |
| C. Estimating the investment decision risk *Score* = 3,40 | | | | | | |
| *Percentage %* | *5,98* | *12,29* | *34,55* | *30,56* | *16,61* | *100,00* |
| D. Analyzing the financing opportunity *Score* = 3,78 | | | | | | |
| *Percentage %* | *0,00* | *10,63* | *28,90* | *32,23* | *28,24* | *100,00* |
| E. Analyzing the necessary guarantees for financing *Score* = 4,68 | | | | | | |
| *Percentage %* | *0,00* | *0,00* | *3,99* | *23,59* | *72,43* | *100,00* |
| F. Calculation of specific indicators to investment decision *Score* = 4,03 | | | | | | |
| *Percentage %* | *0,00* | *0,00* | *22,26* | *52,49* | *25,25* | *100,00* |

Source: own statistical processing based on the data collected

Based on the results obtained, we capture the belief in terms of the opportunities that the accounting information propagate towards the possibility of analyzing the necessary guarantees for financing (score 4.68). In this context, we may refer to information on assets, stock situation, situation on trade receivables and payables, etc. The usefulness of accounting information is also beneficial from the perspective that it determines the cost of financing (to a large and very large extent in the opinion of 93.02% of respondents, score 4.47), calculating specific indicators for financing decision (score 4.03). We note, however, giving a more reduced importance to the opportunity of choosing the funding sources (score 2.96), a negative result as all integration opportunities of accounting information mentioned in the variable (opportunity, costs, guarantees, risks) ultimately determines the financing source. In other opportunities, respondents said: *financer's flexibility, the rapidity of obtaining money, contractual terms, entity's relations with the financer* - reasons which in our opinion are analyzed for adopting the financing decision but are not based on capitalizing the accounting information.

The issue regarding remuneration of shareholders or associates should be permanently to the attention of managers. Pressure or taxes should not be the determining factors in the allocation of dividends but in order to establish the dividend policy it is required that management performs rigorous financial and accounting analyses to substantiate the availability of the economic entity "to dispense with potential resources allocated for dividends". In order to know *the opinion of the usefulness of accounting information for the adoption of the dividend policy and the way in which economic entities establish this policy* operational variable v76 was formulated in the questionnaire, the responses collected being presented in table 6.

**Table 6: Accounting information integration in taking the dividend decision / policy**

| **Accounting information usefulness in taking the dividend decision / policy** | Valid percentage | **Ways in which entities establish their dividend policy and adopt decision** | Valid percentage |
|---|---|---|---|
| to a very small extent | 28,90 | Based on a rigorous financial-accounting analysis | 15,61 |
| to a small extent | 24,25 | Under the pressure of external factors (shareholders, investors, financial constraints etc.) | 26,25 |
| neither in a small, or in a large extent | 23,92 | Randomly | 44,52 |

| | | | |
|---|---|---|---|
| to a large extent | 14,62 | I do not know | 13,62 |
| to a great extent | 8,31 | | |
| Total | 100,00 | | |
| Score | 2,49 | | |

Source: own statistical processing based on the data collected

By the operational variable v76 we aimed both at the analysis of perception and reality knowledge on the integration of accounting information in adopting the dividend policy / decision. The score of 2.49 points out the negative opinion on the usefulness of accounting information at the level of dividend decision. To some extent, we agree with that opinion of respondents as the decision on the allocation of earnings belongs to the General Meeting of Shareholders / Associates but not without emphasizing that the entity's management is required to inform, by the annual report or other report, on the opportunity to grant dividends. There are numerous situations in which an economic entity can obtain profit but cash not to enable their effective issue. In such cases, most often through the decision on profit distribution in "dividends" a tax liability is generated, by the corresponding tax, a liability that, according to Law 227/2015, may be postponed until no later than the 25th of January of the following year.

Another reason which emphasizes the need to use accounting information in adopting the dividend decision is linked to the economic entity's strategy, its future development. Granting dividends reduces cash which may have the effect of attracting other sources of funding, sources that entail added costs. Of course there also appears the dissatisfaction of owners if they are deprived of their due salaries but we finally consider that their interest lies in achieving bigger gains and carrying on the business in parallel with its development could generate them.

Moreover, the reality of entities surveyed (v76b) often reflects the net profit distribution decision on dividends is taken randomly (in case of 44.52% of the entities surveyed) and it is even sadder that a share of 13.62% of respondents declare they do not know how this decision is adopted.

Based on the results obtained, we partially validate the hypothesis *$IP_2$*. Therefore, concerning the investment decision, respondents considered as the main opportunity the calculation of specific indicators, option that we consider more beneficial (we can also include the cost of investment). Regarding the financing decision the main opportunity is considered to be the analysis of necessary guarantees and in terms of dividend distribution decision, it is considered that the accounting information cannot be integrated.

## 5. Final conclusions

For each of the managerial decisions, accounting information proves its usefulness in terms of integrating it into a minimum financial framework, based on specific analysis indicators. Unfortunately, the study shows that the accounting information is very little integrated in the triangle investment-financing-dividend, the category of economic entities being a factor with direct influence on the research's results. We therefore ask what arguments managers could bring when their decisions are subject to failure if at least minimal calculations are not presented to reflect the current situation, to develop forecasts that capture, for example, the need for investment, its recovery, the choice of funding sources etc. We believe that there are no substantiated arguments and the lack of time, availability or knowledge are not relevant justification.

Given the lessons learned, we hope that in some future research to identify a much higher proportion of economic entities, especially small ones, integrating accounting information in decision making process.

## 6. References


- *Balteş, N.; Ciuhureanu A. T. (2016) Contabilitate. Fundamente teoretice şi practice. Ediţia a II-a revizuită şi adăugită, Ed. Universităţii "Lucian Blaga" din Sibiu, Sibiu, pp. 77-79.*
- *Bătrâncea, I. (coord.) (2001) Analiză financiară pe bază de bilanţ, Presa Universitară Clujană, Cluj-Napoca, pp. 56-57.*

- *Berceanu, D. (2002), Valoarea actualizată netă-criteriu fundamental în politica de investiţii a firmei, Finanţe publice, contabilitate, no. 5, p. 39.*
- *Berman, K.; Knight, J. (2011) Inteligența financiară. Ghidul managerului pentru înțelegerea adevăratei semnificații a cifrelor, traducere, Ed. Curtea Veche, Bucureşti, p. 47.*
- *Bogdan, I. (coord.) (2004) Managementul eficienţei investiţiilor, Ed. Universitară, Bucureşti, 2004, pp. 2-3, 102-157.*
- *Bogdan, I. (coord.), (2002) Management financiar-bancar, Ed. Economică, Bucureşti, pp. 202-203.*
- *Cătoiu I. (coord.) (2009) Cercetări de marketing – tratat, Ed. Uranus, București.*
- *Ciuhureanu, A. T. (2009) Management financiar, Ed. Universităţii "Lucian Blaga" din Sibiu, Sibiu, 2009, pp. 88-92, 128-132, 228-231, 246-247.*
- *Ciuhureanu, A.T. (2015), Oportunități și limite ale valorificării și utilității informației contabile în managementul firmei, PhD Thesis Summary, Available online at http://www.uab.ro/upload/5965_Rezumat_teza_Ciuhureanu_romana_final.pdf*
- *Cucu, V. (2008) Modele de fundamentare a decizie de investiție, Ed. Artifex, București, p. 172.*
- *Dobrotă G., Chircuescu M. F. (2009) Decizia de finanțare pe termen lung la nivelul firmelor, Annals of the „Constantin Brâncuşi" University of Târgu Jiu, Economy Series, Issue 1, p. 38.*
- *Legea nr. 227/2015 privind Codul fiscal, art. 7, pct. 7-8, M. Of. nr. 688/10.09.2015, cu modificările şi completările ulterioare.*
- *Legea nr. 297/2004 privind piaţa de capital, M.Of. nr. 571/29.06.2004, cu modificările şi completările ulterioare.*
- *Legea nr. 31/1990 privind societăţile, republicată, M.Of. 1066/17.11.2004, cu modificările şi completările ulterioare.*
- *Mitran M. (2002) Finanţarea societăţilor comerciale prin emisiunea publică de obligaţiuni, Finanţe publice, contabilitate, no. 9, p. 16.*
- *Nistor, E. I., Ciumaș, C. (2012) Manual pentru admitere la masteratul Finanțe corporative. Asigurări, Cluj-Napoca, 2012, pp. 20-21.*
- *Ordonanţa Guvernului nr. 51/28.08.1997, privind operaţiunile de leasing şi societăţile de leasing, republicată, M.Of. nr. 9/12.01.2000, cu modificările şi completările ulterioare.*
- *Petrescu, S. (2004/2005) Performanţă şi risc în analiza financiară, Analele Universităţii „Alexandru I. Cuza" Iaşi, p. 123.*
- *Sandu, G. (2010) Finanțe & Piețe financiare, Ed. Economică, București, p. 24, 39.*
- *Stancu, I. Finanțe, ediția a patra, Ed. Economică, București, 2007, p. 534-535, 537-538, 544, 553.*
- *Vintilă, G. (2002) Gestiunea financiară a întreprinderii, Ed. Didactică şi Pedagogică, Bucureşti, p. 214.*
- *Zipf R., (2000) Piaţa obligaţiunilor, ediția a doua, traducere, Ed. Hrema, Bucureşti, p. 11.*