

# Financial Analysis, Budgeting, Decision and Control

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A R T I C L E I N F O	A B S T R A C T
Article history:	The economic processes taking place in the economic environment are stochastic processes
September 2013	that involve and imply risks, arising from product diversification, competition, financial
Available online 21 December 2013	derivatives transactions: swaps, futures, options and from the large number of actors
JEL Classification	involved in the stock market with a higher or a smaller uncertainty degree. Competition and
G 10, G17	competitiveness, led to major and rapid change in the business environment, they
	determined actors participating in the economy to find solutions and methods of collecting
Keywords:	and processing data, in such a way that, after being transformed into information they
Analysis, Planning, Forecasting,	quickly help based on their analysis in decision making, planning and financial forecasting,
Financial decision, Diagnostic	having an effect on increasing their economic efficiency. In these circumstances the
-	financial analysis, decision, forecasting and control, should be based on quality information
	that should be a value creation source. The active nature of the financial function implies
	the existence of a substantially large share of financial analysis, financial decision,
	forecasting and control.
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### 1. Financial analysis

The financial analysis [1] is a vital part of the financial practice, because its main objective is to set a diagnosis for the financial situation which is indispensable for the investment and financing decision. This analysis requires the financial management to segment the activity its runs in two distinct areas, namely:

- the management activity includes activities aimed at patrimony exploitation, financial operations used on the capital and the monetary markets, as well as exceptional operations and it results in management cash flow;
- the capital activity includes those activities aimed at producing changes in the volume and structure of assets and liabilities, as a result of investment and financing decisions and resulting in capital cash flow.

Although any positions of assets and liabilities in the balance sheet as well as the income statement items are expressed in monetary units, only the liquidity position (cash) represents real liquid amounts.

The cash flow management is determined according to the relationship:

$$CF(G) = CF(E) + CF(F) + CF(Ex)$$

where:

CF (G) - management cash flow CF (E) - operating cash flow CF (F) - financial cash flow CF (Ex) – exceptional cash flow.

The main component of the management cash flow is the operating cash flow, which is determined by the relationship:

$$CF(E) = P(E) - 1 + A \le CF(E) = P(E) - \{[P(E) - D] \bullet Q\} + A \bullet CF(E) = P_n + A$$

where: CF (E) - operating cash flow P (E) - operating profit D - interest paid on debt Q - profit tax rate  $P_n$  - net profit A - depreciation I – profit tax.

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If the companies carry out financial operations in the monetary and capital markets, the management cash flow is determined by the relationship:

$$CF(G) = CF(E) + Di$$

where:

Di – interest cashed from investments.

If the companies have an income from exceptional activities (Vex), then CF (G) is determined by the relationship:

$$CF(G) = CF(E) + Di + Vex$$

Worth mentioning that the interest cashed from investments (D-j) and the exceptional income (Vex) are corrected by the efforts incurred for this purpose. If we also take into account the activity determining changes in the volume of assets and liabilities, then we are dealing with the available cash flow. This flow is the foundation for the effective compensation of capital investments and is determined by the relationship:

$$CF(D) = CF(G) - CE \bullet CF(D) - CF(G) - (AI + ANFR)$$

where:

CF(D) – available cash-flow CE – economic growth AI – asset variation (L - I<sub>0</sub>) ANFR – variation of the wor

ANFR - variation of the working capital needs (variation in inventories and receivables).

The cash flow analysis can be done using the financing statement (cash flow statement). This statement captures the interaction between the management and the capital activity. Basically, the financing statement highlights the variations in the working capital needs (ANFRA) and the variation in net treasury (ATN). The financing statement explains the composition of the working capital and its relation to the cash balance. It is determined based on two successive balance sheets and it explains the connection between the top and bottom of the balance sheet through the variation of the working capital (AFR). The fundamental relationship explained by the financing statement, as a financial analysis tool is the following:

The last ratio shows that changes in the need for working capital (ANFRA) result in improvement or deterioration of the working capital and are reflected in the variation of the net treasury.

#### 2. Financial decision

The financial decision [1] can be defined as being the rational process of choosing a line of action, based on the analysis of multiple solutions, in order to continuously ensure funding for the production and their efficient consumption, enabling both the payment of obligations to third parties as well as growing profitability.

The stages for substantiating, issuing and executing the financial decision are:

- ♦ establishing financial targets for the enterprise's far-reaching economic development plan;
- analysing the available information;
- adopting the financial decision;
- executing the financial decision.
  - The current economic and financial practice uses several types of financial decisions, namely:
- current financial decisions (operating), related to the current activity and having the largest share in the activity of the financial department (paying the amount that reached maturity to the budget, repaying loans, keeping an amount for your own funds, etc.);
- strategic financial decisions (perspective), related to the future development of the company's economic and financial business and aiming at higher proportionate actions related to the creation and increase of the social capital, investments, etc. These decisions are subject to the following objectives: covering the costs from your own revenues, sustainable growth in profitability and efficiency.

## **3. Financial forecasting**

The financial forecasting [1] refers primarily to the estimation of the funding needs, over several years in advance, whenever a proper planning of the financing funds is desired. Specifically, the financial forecasting considers the estimation of the company's turnover for a determined future period of time, based on the present sales trends and the manufacture's renewal degree. Financial forecasting is not a simple operation, because there are a number of aspects related to the market's phenomena, the changing rates between the balance sheet items and the turnover etc. Depending on the above elements, in financial practice, we identify several financial forecasting methods, namely:

the "percentage of sales" method, if the specified rates are constant over time;

- the regression method, if we admit the assumption that there is a relationship between a specific type of asset and the turnover;
- the specific elements forecasting assumes that when the current level of some asset types is not optimal, the "percentage of sales" method should be modified.

#### 4. Planning and control

Financial planning [1] involves forecasting turnover, revenue and necessary assets, according to the different adopted production and/or marketing strategies, and then adopting decisions on how to cover the necessary financing funds. The financial planning tools are multiple, the most popular being: the "break-even" method, the "operating leverage" effect (leverage factor), treasury budget, etc.

From the above we conclude that a company's financial policy cannot be established outside of a financial planning activity. For this purpose, a special role belongs to the budgetary system (income and expenses budget), which is crafted annually and broken down by quarter.

**a)** the general activity budget shows net result for the year as difference between the total revenue and the related expenditure. The basic relationship of this type of budget is:

$$RN = VT - CT$$

where:

RN - net result for the year

VT - total revenue

CT - total expenses

The indicators included in this budget refer to revenues, expenses and net financial results expected to be achieved in the present financial year, compared to those realized or forecasted in the previous year.

The revenues included in this budget come from all activities (selling of goods, products, services, shares, investment securities etc.), being structured on three levels - operating income, financial income, exceptional income.

The expenses comprise all the company's activities, being structured as follows: operating expenses, financial and exceptional ones, legal reserves, covering losses from previous years, profit tax.

**b)** The budget of the production activity, which provides the necessary elements for the forecasting of the production activity's financial results (profit or loss).

The calculation formula for the production budget is:

$$RE = VE - VE = VP + PS + PI$$

where:

- RE operating result
- EV operating income
- EC operating expenses

PV – sold production

PS - stored production

PI - capitalized production.

The indicators included in this budget refer to the production of manufactured goods, the costs of this production (raw materials, materials, energy, salaries, depreciation etc.) and the financial results. The enjoinings of the production budget are used for sizing the production investment budget and the treasury budget. The development of the production budget involves several steps:

developing the production plan by trying to harmonize the trade provisions with the company's productive capacity, while meeting market requirements and fully using the production capacities. The fundamental ratio of production forecasting is the following:

$$Q_f = Q_v - S_i + S_f$$

where:

Q<sub>f</sub> - production projected for the following year

- Q<sub>v</sub> the amount established to be sold
- S<sub>i</sub> initial stocks, provided by the balance sheet at the end of the financial year
- S<sub>f</sub> stocks of finished goods.
- The ante calculation of production costs is a forecasting process that allows the sizing of the financial effort in order to achieve the products established in the production programme, under normal production factors consumption conditions and other expenses that they generate. Ante calculation is done on calculation items, established according to the separation of expenses in direct and indirect costs, in relation to the production.

the treasury budget activity represents the treasury's forecasting tool. It does a synthesis its own resources grouped by provenance and destination on the main activities that generate charges and payments, ensuring a necessary balance for the normal course of the business.

The treasury budget is developed based on three evidence and forecast documents: balance sheet for the financial year (opening balance for the forecast period), income statement and forecast balance sheet. The relationship linking the three documents is:

where:

- BT Treasury budget (= earnings of the period payments of the period)
- BD opening balance (=initial claims initial debt)
- CR forecast income statement (=planned income for the period planned spending for the period)
- BP the forecast balance (=final claims final debt).

The indicators that fall into the treasury budget include:

- the owner's financial resources, materialized in the availability of resources at the beginning of the period (equity, reserves, other funds) and the owner's reserves for the current period (operating, financial and exceptional income);
- the total resources needed to finance the operating expenses (including depreciation), the financial expenses, the exceptional expenses, repayment of loans, the financing of tangible and intangible assets, raises in reserves, profits tax, budget payments, etc;
- the resource surplus or deficit resulted by comparing the existing resources with the required ones;
- covering the deficit, if there is any, through credit (loans), product grants, investment allowances.

The treasury's forecast begins in the closing phase of the commercial contracts, by establishing how and when payment is made.

Also, in forecasting treasury one must establish both the periodical collections upon well-defined terms as well as the date of payments both for those established by law (VAT payments, tax payments, profit tax payment, etc.) as well as the company's well established payments (paying salaries, paying suppliers, etc).

**c)** The investment activity's budget presents the investment indicators for the year. This budget determines the owner's investment financing resources (availabilities in the account, amounts from sold fixed assets, property depreciation, carried forward profits), on the one hand, and the destination of the resources (loan repayments, financing current investments, financing investments in progress, new ones and the purchase of new goods) on the other hand. The basic ratio of the investment activity budget is as follows :

where:

ED - surplus (deficit)

RP – owner's resources used in financing investments

CI - investment expenses.

The indicators that are registered into the budget of the investment activity include:

- the owner's financing resources materialized in: available balance at the beginning of the period, amounts resulted from valorizing the materials obtained from dismantled tangible assets, the sale of fixed assets, amounts from the carried forward net profit etc;
- the destination of resources used for loan repayments, financing current investments etc.;
- covering the deficit, if necessary , by: loans, grants, budget allocations or the investments special fund.

Through this budget we can ultimately determine the surplus or the deficit in the owner's resources that can be used for financing investments by comparing the costs to the total volume of investment financing. If a deficit is expected one should also anticipate the coverage resources which include: credits and other loans, budget allocations or special investment funds and other resources.

**d)** Other budgets cover the following:

state-guaranteed loans require a strict record of each loan category, both in the contract currency as well as in the national currency. At the end of the financial year the debt is determined by the relationship:

$$D_f = D_i + I_c - R_c$$

where:

D<sub>f</sub> - the actual debt at end of period

D<sub>i</sub> - debt in the beginning of the period

 $I_c$  - input credits

R<sub>c</sub> - capital repayments

the different reserves are filled in a separate form, according to the legally established funds. The legal reserves, the statutory ones and other reserves are distinctly highlighted. For each fund, the balance at the end of the period is established by the ratio:

 $\text{Sf}=\text{RT}\sim\text{UT}$ 

where:

S<sub>f</sub>- ending balance

RT - total resources

UT - total used resources

- the profit distribution comprises distribution of the net profit according to legal destinations.
  - **e)** The economic and financial indicators presented in the income and expenditure budget and in synthesis documents are in general, rates of return, liquidity rates, indebtedness rates, current assets rotation, ratios on productivity labor and cost structure. Therefore, in the financial and accounting practice the economic and financial indicators (deducted from synthetic documents and the budgetary system) are:
- the value of equity (registered capital, ownership equity, permanent capital, total capital), net assets, working capital;
- the working capital financing rate, shows the current assets' degree of coverage with net working capital and it is determined by relating the net working capital to the current assets;
- the breakeven reflects the turnover level that results in a zero profit;
- the company's broadly reflects the possibility for the current patrimonial components to turn in a short period of time into cash in order to pay off current liabilities;
- the company's solvency reflects the degree to which economic entities can meet their short term and their long term engagements.
- the company's financial structure, which broadly means, the ratio between the short-term and the long term financing.
- the efficiency of the used resources, which is appreciated by using the return indicators, namely: commercial rate of return measures the obtained results in relation to the work they implied; economic rate of return measures the results in relation to the economic performance and the financial rate of return measures the outcomes in relation to the financial results.
- other indicators such as: fixed assets efficiency ratio, current assets rotational speed, total expenditure efficiency ratio.

By means of the financial policy we can establish ways and methods of concentrating and directing the financial resources towards achieving the economic goals as well as towards increasing initiative, accountability as well as the decision and action accountability of economic agents.

# 5. Conclusions

For the scientific substantiating of the decisions, in the financial analysis, planning, forecasting and control, the collected data, the processed data and the submitted data have a particular importance, which are then analyzed and converted into information using computers.

For companies, an important role is played by the information system, which is the engine for the transmission of information, in their transformation from leader subsystem to the follower and vice versa. This way we shall ensure the detailed and continuous knowledge of the company's aims and objectives, the necessary human and material resources and the factors that influence the conduct of the company's business.

The decision is scientifically substantiated by the understanding of this information, which is based on collected, processed, transmitted, analyzed data and transformed into information using computers helping in the planning and forecasting processes.

The automatic data and information processing is done through the information system materialized in equipment and software used in data processing. The information flow is the result of information transmitted between two elements of the information system.

Information technology has become a new way of life for the business environment, which adds up digital economy [2], through intermediates like Intranet and Internet, has created new business models such as e-business, e-banking, e-Government, e- Learning etc.

The fundamentals of the digital economy [3] include:

- the digitization and the intense use of information and communication technologies;
- coding knowledge;
- transforming information into products;
- new ways of organizing work and production.

Budgeting is a component of business management, a corporate activity planning and control instrument. Forecast management is materialized in budgets focused on the enterprise's main activity areas

and control consists in complying with budgets. Annual budgets are developed based on short -term plans, being then split per semester, quarter, month, decade, semi decade, which in turn, which based on information and cost-effectiveness forecast the necessary resources, in order to achieve the company's goals and objectives.

Practice has confirmed that the use of budgets is not widespread, which is why, we recommend the use of budgets in companies, because it has the following advantages:

- achieving budgets determines the participation and cooperation of both the employees and the management;
- the budget indicates the quality and performance of achieved goals and objectives ;
- the budget requires the use of planning in business management ;
- the budget forecasts the expected benefits ;
- the budget forecasts the production level ;
- the budget forecasts the sales level;
- the budget forecasts the costs that will cover the production;
- the decision- makers will consider the budget;
- ensures profit center leadership;

The further developments in these directions depend on the "realism of the financial forecast and the managerial activity focused towards achieving it."

Thus, "budgets are planning and coordination tools, and the budget management aims to ensure correlation between the partial budgets, activity based activities or functional ones and the business objectives, the company's resources as well as the consistency between these budgets" [5].

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