FINANCIAL BALANCE - BASIC TOOL IN APPROACHING FINANCIAL DIAGNOSIS FOR FIRM VALUATION

Assoc. Prof. Dorel BERCEANU, PhD
Prof. Nicolae SICHIGEA, PhD
Prof. Marcel DRĂCEA, PhD
University of Craiova

1. Introduction

In light of its importance, financial diagnosis refers to the component with the highest "weight" of partial diagnoses.

Thus**, the approach to financial diagnosis for valuation** is one of the most interesting and complex approaches related to the valuation activity, this diagnostic component having a key role in conducting a quality assessment by the light of the decisive role, namely:

- the role of synthesizing the findings from other diagnostic components;
- the role of ensuring consistency in the relationship between diagnosis and valuation methods (especially those methods which are based on income).

Ensuring sufficient financial resources and their judicious management have a decisive role in the smooth functioning of all components. It is understandable why a great importance is given to both ensuring the firm with financial resources and utilizing them.

So, by financial diagnosis the firm's financial health is determined, pursuing if:

- the firm uses appropriate management systems and methods for the size and nature of its business;
- it has or it is able to attract sufficient financial resources to ensure the development and support of current activities;
- the financial components are correctly integrated in the overall strategy.

Setting up the program with minimum cost and allocation of financial resources is the means of strengthening the commercial, technical and social performances which the company aims. Hence the important role that the financial function plays in all company functions and the financial diagnosis plays in the global diagnostics company.

Financial diagnosis primarily aims to locate those signs and symptoms that show current and future financial difficulties (treasury difficulties, self-financing capacity loss) and then make a financial situation assessment by **calculating and interpreting the balance, cost and risk indicators** to identify the internal and environmental causes, so that the decision-makers can take corrective action for the failures detected, if the analysis' purpose is to improve the managerial performance, or to form an opinion on the company's value if the analysis' purpose is to evaluate the company for carrying out commercial transactions, merger or division.

Specifically, financial diagnosis aims to determine if the company is creating value, respectively if financial stability is assured, and to understand the value creation process in order to identify the inefficacy causes. The company is creating value if the operating flows meet the investors', shareholders' or creditors' demands, given their risks: operational risk, financial risk and risk of bankruptcy.

Financial diagnosis for valuation has **three major objectives**:

- to ensure **understanding of the achieved performance** of the evaluated company during the last 3-5 years and **to highlight the company's business risks**. In this sense, the thinking of future performance prospects is supported by the trends analysis that occurred over the diagnosed period.

This can be summarized in the following graphic:

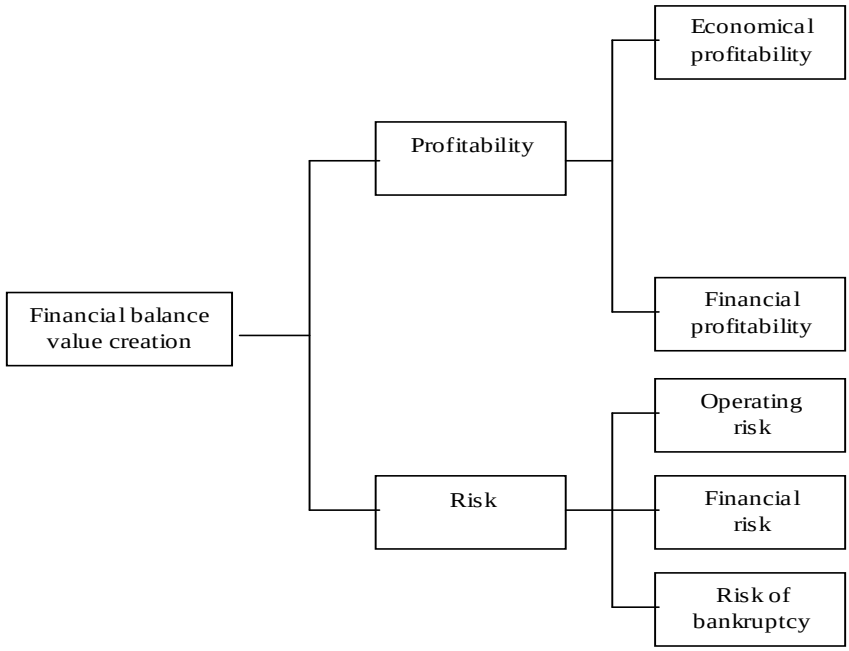

Fig.no.1. Firm's profitability and risk

- **to allow the historical financial statements' adjustment** in order to develop the asset-based approach, and also corrections on assets and liabilities and prepare the implementation of income-based approach by estimating the firm's ability to generate cash income for investors.
- **to provide the comparison with similar firms** to set risk, profitability and value parameters, fundamental aspects in the comparison approach and the capital cost estimation.

Financial diagnosis is the result of firm's financial analysis. From its broad spectrum, we consider to be useful for the company's valuation the following: firm's asset structure analysis, analysis of the patrimony's management (rotation), financial stability analysis, profitability analysis, risk analysis.

Therefore, the financial diagnosis must be supplemented by the **ensurance company's financial stability analysis**, as its integral part.

The information source underlying microeconomic financial stability analysis is the balance sheet as a summary, representative and suggestive document of the overall company activity.

Therefore, the balance sheet is the instrument which reflects the company's financial balance at the year end, and materially reflects (by assets) the use of equity and borrowed capital. The balance sheet offers, therefore, financial stability assessing criteria at a specific point in time and the calculating basis for company budgets.

Although it provides various information on company's available resources and how to utilize them**, the balance sheet** does not directly allow a financial diagnosis, but requires some restatements and regrouping of some items or accounts in relation to the objectives of the analysis and the analyst's views on the concept of financial balance.

In financial theory and practice, **two approaches** to the concept of financial balance have been shaped over time:

- **a liquidation approach** arising from the static analysis of business activity and which favors the concept of *working capital*;
- **a functional approach** resulting in dynamic analysis of business activity and which brings to the fore, the concept of *working capital requirement*.

The difference between these two approaches is given by analysis purposes, namely, capturing financial balance in terms of patrimonial solvency at a time, or by the operating cycles' development.

Starting from the balance sheet, **depending on how to deal with the financial balance**, we can generate:

- financial balance (liquidity or patrimonial);
- functional balance.

2. The logic of the balance sheet's construction in terms of financial stability analysis

Financial balance sheet is created in net values, reflecting a still image of the patrimony. This image is more real than the balance sheet. The purpose of the financial balance sheet is the patrimony's and firm's commitments' inventory and their ordering by the liquidity and chargeability criterion.

Liquidity is the ability of the assets to be converted into cash. The more liquid an asset is, the easier convertible to cash. The most liquid asset balance sheet item is cash, and the less liquid are fixed assets.

Chargeability is the liabilities' ability to be repaid by capital providers. In this sense, the most outstanding liabilities are cash loans, while the least outstanding is the equity, which, in principle, should never be repaid (it could be considered repayable when the company enters bankruptcy proceedings).

The financial balance sheet's usefulness can be viewed from several perspectives:

- *from the perspective of those whom they are addressed to*:
  - shareholders - who want to know their patrimony's value, the evolution of its size, its liquidation period in the event of a capital recovery;
  - creditors - who want to know the value of the firm assets, which represent the warranty of their rights' realization.
- *from the perspective of how it meets the financial analysis' requirements and objectives,* in the financial balance sheet, patrimonial elements grouping better responds to: patrimonial-financial structure analysis, financial stability analysis, the company's creditworthiness analysis, risk analysis, determining the net asset value of the firm.

Therefore, the financial balance is, largely, built according to creditors' optics (banks or other businesses) that the firm's assets can ensure the repayment of the contracted debts.

In this perspective, assets are classified by their speed currency processing and liabilities by increasing resources. It should be noted that the balance sheet is built, largely, according to this view.

To construct the financial balance sheet, accounting balance sheet is used (after the profit distribution) on which, based on explanatory notes on asset liquidity term (less than one year, over one year) and liabilities maturities

(less than one year, from 1 and 5 years, 5 years) some corrections apply.

BSI restatements which have to be made are:

- intangible fixed assets should be excluded from *non-values* such as the cost of formation of setting up the company and the costs of research-development not embodied in the licenses, patents or new products and technologies with solvent demand, which are, in fact, fictitious assets; counterpart, assimilated capital and equity will be reduced to the same extent.
- tangible fixed assets are recorded at their fair value, achievable on the market, which implies their reassessment. The differences found in relation to the book value will also affect the equity by increasing or diminishing it.
- from the financial fixed assets, maturity loans to less than one year are grouped in circulating assets;
- from the circulating assets, longer than one year collection period receivables must be transferred in fixed assets;
- slow moving stocks will group to the fixed assets;
- non moving stocks and doubtful receivables are included in the non-values' category and are removed from the active; as appropriate, the equity is also diminished;
- deferred charges must be removed from the active, the equity being also properly reduced;
- provisions for risks and expenses are differently treated, namely:

- if they are justified, they will be transferred into the short-term or long-term debts' category, as risk or expense will be achieved in less or more than a year;

- if they have no real object and will be transferred to revenue, they will be included in equity after they have been reduced for income tax, which is reflected in the short-term debts' category;

- deferred income can be assimilated to the year result, and therefore included in the equity;
- that share of profits for distribution as dividends or incentives is excluded from equity and included in current liabilities; that's because, from a liquidation point of view, these are payments to be made.

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Given the above, we can outline the financial balance sheet's structure:

	Uses (Ways to use)	**Resources** (Establishing ways)	
Permanent needs	Net fixed assets (less than one year)	Corrected equity Medium and long-term debts	Permanent resources
Temporary needs	Circulating assets (less than one year)	Short term debts	Temporary resources

Fig.no.2. The financial balance sheet

Thus, the firm's capital is divided into three categories:

- equity, resources that have the most distant maturity;
- medium and long term debts, which have a maturity greater than one year;

- short-term debts with maturity under one year. Here we can divide into: operating and non-operating short-term debts, like debts to suppliers, employees, budgets, and various creditors and current financial liabilities, which mean short-term loans.

The balance sheet assets' is, in turn, divided into:

- sustainable assets, fixed assets with the period of existence in the company for over a year;
- operating assets, circulating assets, with a less than one year lasting.

Based on the financial balance sheet, so constructed, we can determine **the working capital (WC)** by two methods of calculation:

Working capital = Permanent capital – Net fixed assets
Working capital = Circulating assets – Short-term debts
where,
Permanent capital = Equity + Medium and long-term debts
Net fixed assets = Gross fixed assets – Amortization

The working capital can be defined as the difference of permanent capital remaining after the covering of the fixed assets, which are used to finance circulating assets of permanent nature.

The existence of *a positive working capital* certifies a state of long-term financial balance. Therefore, we have a surplus of permanent resources. This must be understood as the existence of a reserve fund from which, in some instances, some deficits that may arise between temporary needs (larger) and temporary resources (smaller) may be financed.

In contrast, *a negative working capital* emphasizes the impossibility of the firm to provide a surplus of long-term financial resources that can cover the short-term financing needs.

As order of magnitude, firms which are characterized by long production cycles are expected to have high levels of the indicator and those with relatively short cycles may accept lower levels of the indicator.

Also, given the funding source, we can highlight ***other forms of working capital*** too:

The Own Working Capital

Own working capital = Permanent capital – Net fixed assets
or
Own working capital = Working capital – Medium and long term debts

The Foreign Working Capital

Foreign working capital = Working capital – Own working capital

The relation between WC, OWC and FWC is:

Working capital = Own working capital + Foreign working capital

Even if, as we have mentioned, the liquidation approach favors the working capital indicator, based on the financial balance sheet, we can calculate **the working capital requirement (WCR).**

Working capital requirement = Stocks + Receivables + Current debts

To reflect the state of general balance, based on the financial balance sheet, at the firm level, **the treasury** can be determined according to the following relation:

Treasury = Working capital – Working capital requirement

It is very clear that we can speak of **a positive treasury when WC > WCR** and **a negative one when WC < WCR**.

A positive value of the treasury reflects the short-term financial achievement, since the company has sufficient liquidity to enable it to cover current liabilities, while *a negative value* shows a state of financial imbalance because working capital requirement can not be fully covered by permanent resources and the company is forced to resort to bank loans.

Moreover, as a control key, the positive treasury must be found in the money held in cash and bank and the negative treasury should be equal to cash loans.

Summarizing, we can realize the following financial balance's block diagram, based on the financial balance sheet:

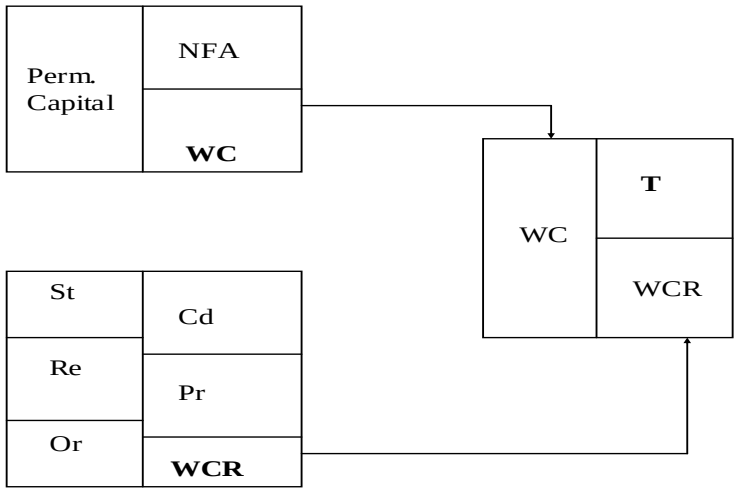

Fig.no.3. Financial balance based on the financial balance sheet

Based on the liquidity balance sheet, following patrimonial liquidity and solvency rates are determined:

The patrimonial liquidity is the ability of companies to honor the outstanding short-term obligations with available cash.

For its characterization the following rates are used:

a) **general liquidity** (sometimes referred to as **the current liquidity** or **circulant capital indicator**) **(GL)** provides warranty coverage of current assets and liabilities and is determined according to the next relation:

$$GL = \frac{\text{Current Assets}}{\text{Current Liabilitie s}}$$

Though, most often, equal sign is put between current assets and circulating assets, usually, for a correct result, the current assets are determined by subtracting the non recoverable stocks and doubtful debts from assets.

The current debts include the short-term debts. According to the 3055/2009 OFPM, the recommended amount acceptable is around 2. Views according to which the optimal range is [1.8, 2.0] or [2,0, 2,5 are also found in the literature.

b**) immediate liquidity** (sometimes called **the acid test**) **(IL)** expresses the firm's ability to meet short-term debts from obligations and receivables and it is determined by the relation:

$$IL = \frac{\text{Circulating Assets} - \text{Stocks}}{\text{Current Debts}}$$

Optimal value of this indicator is in the range [0.8, 1.0].

Even if it is not required in the order mentioned above, sometimes, in order to have a conclusive picture of the risks of default, **the spot liquidity (SL)** is calculated according to the relation:

$$SL = \frac{\text{Cash}}{\text{Current Debts}}$$

Optimal value of this indicator is 0.2.

The solvency reflects the company's ability to meet payment obligations by their sources.

For its characterization, the following rates are used:

a**) general solvency (GS)** measures the company's security to creditors and it is determined according to the relation:

$$GS = \frac{\text{Total Assets}}{\text{Total Debts}}$$

Optimal value of this indicator is assessed as 2.

b) **patrimonial solvency** (called the rate of global financial autonomy) **(PS)** is determined according to the relation:

$$PS = \frac{\text{Equity}}{\text{TotalLiabilities}}$$

It is considered that an amount in the range 33-50% is satisfactory for ensuring financial stability, the normal limit being 50%.

3. Conclusions

The presented analysis involves two *observations*: although it starts from the premise of stopping the exploitation and the company's liquidation, plus or sub-values that would result from the liquidation process are not considered, which would be possible if the necessary information were available; in the liquidity balance sheet, the treasury does not appear separately.

The liquidity-analysis' purpose is, therefore, the review of the company's solvency, analysis aiming, first of all, at the company's creditors' risks. The solvency is highlighted by the existence of a positive working capital.

Liquidity–analysis has certain limits, as follows: it does not reveal the optimum level of working capital, it is placed in an liquidation optics, which is not typical for all firms.

In conclusion, we can estimate that the **working capital**'s strategic position of connecting the top and bottom of the balance sheet gives it a great informative value, leading to a financial analysts' almost unanimous assessment that working capital is the most important indicator of the company's financial stability. Finally, it is the result of arbitrage between long-term financing and short-term financing.

However, there are analysts who believe that, conversely, **the working capital requirement** is the most relevant indicator of financial balance sheet, as it highlights those temporary needs (in stocks and receivables) permanently renewable in the successive operating cycles of the firm. This assessment is based on qualitative analysis of the operating cycle regarding its ability to balance the (temporary) cyclical needs from cyclical capital sources.

REFERENCES

V. Robu, I. Anghel, E.C. Şerban, D. Ţuţui	Evaluarea întreprinderii, Editura ASE, Bucureşti, 2003;
I. Stancu	Finanțe – Ediția a treia, Bucureşti, Editura Economică, 2002;

N. Sichigea, D. Berceanu ş.a	Gestiunea financiară a întreprinderii – manual universitar, Editura Universitaria, Craiova, 2002;
V. Dragotă, A. Ciobanu, L. Obreja, M. Dragotă	Management financiar, Vol.I – Analiză financiară şi gestiune financiară operațională, Editura Economică, Bucureşti, 2003;
L. Buşe	Analiză economico – financiară, Editura Economică, Bucureşti, 2005;
M. Pirtea, H. Cristea, C. Nicolescu, C. Boțoc	Managementul financiar al companiei, Editura Mirton, Timişoara, 2010;
N. Sichigea, D. Berceanu ş.a	Gestiunea financiară a întreprinderii, Editura Universitaria, Craiova, 2006;
D. Berceanu	Politici financiare de întreprindere – Aplicații practice, Editura Universitaria, Craiova, 2005;
*****	OMFP nr.3055/29.10.2009 pentru aprobarea Reglementărilor contabile conforme cu directivele europene.