

## BASIC INTERPRETATION OF INFLUENCE OF THE COMPANY PROCESSES' MANAGEMENT ON THE COMPANY'S FINANCIAL INDICES

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### 1 INTRODUCTION

The basic and the simplest parameter of every company's success is profit. But there can be many reasons, why a company is prospering or not. Probably the main way how to review the (financial) health of the company is financial analysis. A lot was written and processed about the financial analysis. The goal of this article is not to bring detailed overview of all the possible methods of financial analysis and present trends or arguing about single approaches and indicators, but the purpose is to bring the basic view on the whole problem aimed for e.g. technically educated managers and lead workers.

The usual problem is that technical oriented managers don't use to be familiar with economical information (result of unilaterally profiled scientific education of technical schools' graduates) and results of economical and financial analysis are almost not used in their work. **The aim of this article is to explain selected indicators of financial analysis to these managers, so that the influence of internal processes on values of the single indicators is evident.**

Financial analysis allows economically evaluating the company, to diagnose the financial health and appraise the productivity of its assets. The financial health of the company is in fact analogous to human health - there isn't only one indicator "degree of health", according to which a doctor could have explicit result, but it is a collection of symptoms and conditions of some quantities (temperature, chemical structure...) [1]. In case of a company the financial health is as well meant as a complex quantity, being composed of many particular characteristics - quantifiable and qualitative. Financial health of the company expressed by the financial analysis is an objective evidence of sufficiency of the whole system concerned, including the **functionality of the quality management systems**. Because the quality is understood as level of fulfilled requirements (needs or expectations, which are determined, generally expected or biding), it can be in general claimed, that profit equals to the success with customers (and owners) and that profit is the rate of quality. The analysis of the economical indicators on the highest level means analysis of efficiency of quality management system as well, because it reports summarizing information if the company creates values and allows the validation accepted steps efficiency.

## 2 METHODOLOGY

In the very beginning it is necessary to underline that only filling in the correct numbers to single formulas is not enough - without complex view on the company and knowledge of relevant facts the final conclusion will be most probably wrong and can lead to wrong decisions (e.g. it cannot be said, that high value of liquidity indicator is good or bad, because it can mean high liquidity or too high cash balance, what is wrong - that means deficiently productive asset).

**Sources of financial analysis are [2]:**

- 1) **Balance** - it gives us information about the condition of property at specific date (*assets - debts (debts)* = shareholder's capital). Property is noted on the side of assets and sources, from which it is financed, are on the side of debts. So debts tell us, how are the assets financed and what does finance them. Certain restriction of using the balance for financial analysis is the fact that during evaluation of assets and debts original purchase price edited of depreciation is used. So in some cases it is preferable to use qualified presumption. If the balance is not constructed like this, then it should be edited before analysis, so that the items of assets are sorted according to their liquidity (length of period when it's possible to change it into cash) and debts are sorted according to their expiration. We value each item as realistically as possible and we should "clean" the disputed amounts.
- 2) **Report on income and loss** (Income report) - it gives us view of the structure of costs, profits and results of company management for fiscal period (income/loss) subdivided to financial, functional and unusual results, so that *income-loss=profit*. But we cannot forget that net profits doesn't equal to net cash balance produced by company in certain period (e.g. encashment payments from retail on credit from previous period is not included, costs doesn't have to be paid in time of its creation etc.). Before the analysis it is necessary to exclude the unusual items, because it's not a periodic and adequate source of financing.
- 3) **Supplement to financial statement** - here we can find basic information about the company, its proprietary and organizational structure, information about statutory authorities of the company, information about used accounting methods, write-offs and pricing processes, how are general accounting principles applied, specified information to balance and income statement and further analysis of cash-flow (compulsory for companies, that must have financial statement verified by auditor).
- 4) **Annual report** - for our purposes it is a more supplemental source, particularly of qualitative information (for financial analysis we need firstly quantitative data from above-mentioned statements). Annual report includes the 3 previous items and further deals with business development and financial situation of the company; development plans are important as well as subsequent changes in organization. Of course it's important to note also what the annual report avoids.

## 5) Other sources of information - stock exchange, press, Internet etc.

The ways of analysis are obviously different according to its purpose and target group:

- **shareholders and investors** – decide future investments, control how managers manage company resources; analyze the relation between future profits and cash-flow towards fixed debt;
- **company managers** – long-term and operational business management; feed-back between decision and effect;
- **creditors** – short-term (banks, supplies etc.); mainly interested in liquidity, analysis deals with quality and movement of short-term assets and debts, and time flow of financial paths; long-term (debenture holders etc.) - analysis focuses also on analysis of expect future of the company.

### Methods of financial analysis:

- **method of implicit** (single items of accounting reports) and distance indicators (different of items);
- **method of proportion indicators** (percentage relation of items to specific base in time series). Proportion indicators are often compared in terms of one segment - so-called space alignment (the principle should be that companies should have similar parameters in activities character, quantity, etc.). Access to database with ordinary indicators in certain section is possible - fee for internet access.
- Another possibility of indicators evaluation is time comparing, when we watch progress of indicators for single period within the company. It's also possible to watch functional relation of two items using regressive analysis e.g. progress of sales depending on GDP progress or number of disputes in production.
- **combination synthetic evaluation** – e.g. Altman's formula to characterize risk of failure of the company or Du Pont's resolution of profitability indicator represents relation between profits and assets return, including reciprocal influence of single indicators.
- Except this basic methods exists also more advanced methods, that are using mathematical statistics and supporting SW tools, usually used by financial and analytical companies.

### 2.1 Proceeding of working capital

Production cycle can be described as movement of capital through the company - capital is changing from one form to another - financial sources applies to buying

material, from material is produced product (product or service), that is, at the end, convert into financial source again (with profit). During this process comes up risk, that company won't get its invested coffers back. It is necessary to manage working capital according to aims of the company. **Usual solution is control and optimalization of holdings size, fast encashment of debts and cover of debts in terms of payment.**

**Working capital cycle** = *how long does it company takes to product financial sources* [4]

Tendency of the company is to make it at the shortest period, that's why is important to evaluate this indicator regularly, analyze reasons on the basis of alignment with subject standard and apply corrections. This indicator is for operative management useful as possibility of transmission with parallel period of process (period from induction of product to the process, until the end of the process). Long parallel period often leads to delayed delivery and displeased customers. It's often caused by high degree of completion (products and sources are hold inside production process). In in-process amounts is very often hidden wasting (store costs, more difficult planning systems etc.).

**Net Working Capital** = *gross short-term assets - gross short-terms debts* [4]

This indicator determinates level of smooth financing flow possibility of economical activities. Structure of short-term assets and its money change ability is important, it means that it is needed to subtract unenforceable debts, unmarketable holdings etc. and after that induct values to the formula. The later phase of the production process has not radical influence on indicators value in this case, because with assets growth are debts also growing, or only short-term assets structure is changing. From the financial flow perspective it is better if most of short-term assets are money, because it is asset with the highest liquidity. On this place is needed to mention, that so-called principle of time corresponding in financing should be significant, by another name short-term assets should be financed by short-term sources and long-term property by long-term sources.

## 2.2 The Liquidity Analysis

Liquidity is defined as ability of the company to obtain resources to cover debts and solvency as ability cover usual business debts at the moment of maturity. Indicators are always proportion of that how is debt provided and of that what is needed to provide (whereas possible money from fixed assets sale are not included). Before using indicator is needed to consider, which assets will be inducted to formula - some only improve balance e.g. unmarketable holdings. (unmarketable holding should be identified during the financial statement formation correctly and evaluated in market price value reduced by sale charges and in the case that it is really unmarketable should be assessment up to zero - this has to be validate before analysis.)

**Immediate Liquidity** (1st level liquidity) = *financial sources / short-term debts [3]*.

It's very exact data about, how many a mature debt as per certain date is company able to cover by money resources in cash and accounts.

**Available Liquidity** (2nd level liquidity) = *(short-term assets – holdings – long-term debts) / short-term debts*

Available liquidity eliminates influence of holdings to predication ability about solvency of the company. Make indicator to be really able to describe rate of providing company costs, debts should be numerator (included in short-term property) in addition reduced by unenforceable or heavily enforceable debts.

**Current Liquidity** (3rd level liquidity) = *short-term assets / short-term debts [3]*

This indicator isn't too exact liquidity indicator, because if it comes out e.g. „2“, the company may be insolvent, if most of short-term property is blocked in irredeemable debts, unused holdings and unmarketable products.

From the view of quality liquidity can be influenced by abridgement of continuous processing time, because in general it cuts money blocked in short-term assets. Relations with suppliers can also influence indicator. One of criterion should be date of maturity (the longer it is, the longer time are money disposable for company) and next running ability of supplier - ability to provide just in time, what means save the storage costs.

## 2.3 The Economic Effect Analysis

These indicators are in general give us information about how much crowns from profit falls on each invested crown. For calculation are used profit (from income statement) and capital (from balance). Used data can be as per 31.12. or as first and last day average in watched period.

**Total Invested Sources Profitability (ROA)** = *net profit + net interests / total assets [4]*.

ROA predicate about how was property capitalized, no matter how it was finances. The higher is the indicator, the more prosperous it is. Using the net profit increased by interests, are profit and costs for foreign sources consolidated into one value and we can conduct alignment of single companies. We can often come across ROA in different variations - sometimes are gross interests in numerator, sometimes interest are missing (which is not very exact, because it excludes taking into account financing of the company as well by a loan).

**The Actual Capital Profitability (ROE)** = *net profit / own capital [4]*.

It is indicator, from which we can infer, how effective company manages invested property. ROE decline can be caused by:

- decrease of profit making;

- increase of foreign capital interests;
- increase of own capital shares on foreign (if it is caused by accumulation of undistributed profit, it signalize wrong investment policy);
- combination of previous reasons.

**Incomes Profitability (ROS)** =  $\text{net profit} / \text{incomes}$  [4].

Calculation is changing regarding to profit formulation (gross or net profit – it's important when we compare one branch companies). Low level indicator documents wrong managing of the company, middle level shows good work of management and high level signalize problems with competition, which will try decrease price of similar product in the future (does not operate monopoly companies).

These indicators give us 3 different views to one thing – how is total property profitable, how invested money are profitable and ROS is more dynamical indicator, because it shows if productivity increase brings aliquot profit increase (e.g. if this happened at the price of disproportionate costs increase).

These indicators give us much information about how successful we are in managing our processes from the level of cost view. It's possible to connect indicator and process cycle effect, what means effect of the process based on added value amount regard to time that product spends in process. Any process with low cycle effect presents big opportunity to costs decrease – most of processing, business, evolution processes effect is lower then 10%. As a result are excess holdings, hidden expenses in production, reprocessing, waste, invested capital and unsatisfied customers as well.

## 2.4 Turnover Analysis

Top executives should reach their aims with optimal property values setting (i.e. stable and short-term assets). If the company owns too much assets, its charge of interests is too high (it depends on the proportion of foreign sources and own capital) and it compresses profit, conversely if the company owns few assets, it has to renounce a lot of opportunities. Turnover indicates how many times is bearer of costs value superior to certain asset items (depreciation property turnover is center of stable assets, in the case of short-term assets it is holdings and financial property turnover).

**Stock Turnover Period** =  $\text{holdings} / (\text{incomes}/365)$  [1].

It indicate existence period of capital in inventory form. The higher is indicator, the longer is average stock period and the more sources are hold in the stock. It's necessary to mind if holdings are suitable valued and there are not obsolete holdings – its real value is lower. Holdings always represent considerably high size of financial sources. That's why it's necessary to watch range and manage effectively (in this branch exist number of conceptions e.g. just in time). Market

influences turnover, but there is possibility of active influence, what is again connected to work-in-process production.

**Debts maturity average period** =  $\text{debts} / (\text{incomes}/365)$  [1]

Result is the number of days during which is every day sale encashment hold in debts. It is useful to compare this value with common terms of payment when the company invoices products. It's important to determinate exact procedures of debts managing (conditions, terms, close contact with sales department to avoid insensitive procedures and disruption of relationships between company and customer).

In the case that the costs turnover period is lower than in liabilities, company markedly credits up its customers, what brings press to working capital. From the quality view, this indicator is more important from the customer relation managing view, what usually is business department matter.

**Fixed assets turnover** =  $\text{incomes} / \text{fixed assets}$  [1].

Fixed assets turnover shows how effectively company uses buildings and equipment. Very problematic is that asset price was given in the past (for calculation is used original purchase price and the inflation is not included – there are some methods how to include it, but usually not used). Supervisory management is interested in fixed assets real efficiency – it is quite easy to compare to company with same products. Assets real valuation is big problem and as well very important factors aren't included, e.g. know-how, mark, etc. That's why goodwill (good name, market position, people knowledge) includes to assets sometimes, but this is not coming out in the balance. Goodwill value can be specified in the supplement to financial statement, but the real value is checked only on sale.

**Total assets turnover** =  $\text{incomes} / \text{total assets}$  [1].

If is the indicators value comparing to others in the branch low, incomes should be increased or some assets should be sold, processes efficiency – decrease short-term assets.

## 2.5 Indebtedness analysis

These indicators inform about relation between foreign and own sources – the higher is value, the more indebted is company and can be problematic to pay loans and other debts, but as well interests from these debts. Then the company is in the closed cycle – to get money for installment, company tries to get foreign sources, banks are not gladly providing other sources, inspect the client situation, and if they afford sources it's of course more expensive. In this situation it's necessary to dissect the company situation and formulate disposals that can avert the end and after that negotiate with bank. On favorable condition can loan added to own property increase profitability (but it's necessary to save cost and increase incomes – so-called financial crow).

**Creditor risk indicator** = *total debts / total assets* [1]

This indicator determinates the high of company indebtedness. The higher is it, the more company depends on foreign financial sources and its financial stability is lower. It is necessary to point, that between the indebtedness scale and financial solvency of the company doesn't exist any continual proportion (less indebted company can make bad decision and get into trouble). But it is necessary to investigate within standards or actual situation in given branch and in time evolution. If unindebted company makes bad decision, it will survive better than indebted company.

### 3 CONCLUSION

Rarely happen, that one bad decision set up the company into troubles. Usually it's set of bad decisions and those can be, thanks to financial analysis, recognized before troubles attack and it's possible to avoid them. By financial indicators analysis can be defined future evolution of the company – easier cost estimation, with profit it's more complicated, because it's not possible to forecast unexpected affairs as well as future owners behaving. Based on analysis results it's necessary to recommend how to continue and if the company has really serious problem, insert analysis, production bases, manpower, market into it and determine healing steps.

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