

# Mladá veda

## Young Science

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# USE OF FINANCIAL ANALYSIS IN COMPILING A RISK ANALYSIS

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## Abstract

Financial analysis based on the known past makes it possible to operate with future predictions. It combines and compares information gained mainly from accounting, investment and financial market or economical statistics. Financial analysis provides feedback on the made decisions and the reality and represents one of the starting points for risk analysis designs. Risk analysis, among other things, uses information gained from financial analysis and with this help it identifies risk-bearing areas, which could represent possible future danger for the company. The aim of this paper was the application and utilization of the results gained via financial analysis during identification and analysis of relevant risks for specific company. The basic data used in this thesis were acquired from accounting documents of the company in years 2003 - 2009, internal documents, personal interviews with the employees and the owner of the company. Other sources of data were acquired from comparison of the real-life conditions with the planned conditions and observance of generally applicable legal regulations. In this paper we have evaluated financial health of a specific business subject by using accounting information and certain chosen methods of financial analysis ex ante. In the second stage we identified and analysed risks. Evaluation of the risks resulted in information about risk areas, where specific steps need to be done. At the same time, the priority of the steps was assigned. In the last one we identified addition and application of results of performed analysis. We assume high utilization rate of risk analysis using financial analysis in practice.

**Key words:** Financial analysis, Ex ante, Risk, Risk analysis.

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## Introduction

According to Puttick and Van Esch and Kana (2007) audit is considered to be a control or an investigation whether the required documents are in compliance with the applicable auditing standards. Starting point for its implementation is closing of financial accounting. Due to its credibility and integrity it gives a great emphasis on compliance with all legal requirements. Financial or other information prepared in accordance with the relevant criteria also play a big part. The aim of this information is to obtain another view of the financial and economic situation of a company. Kafka and Štědranský and Fehér (2008) describe an audit as a process where constituent transactions, activities, processes and systems are being reviewed to evaluate and improve the effectiveness of risk management, controlling processes, management processes and board of management. Kumar and Sharma (2006) bring an easier point of view, as they understand audit as an examination of accounting records carried out to demonstrate its accuracy and completeness.

In practice it is necessary to distinguish between external and internal audit, which is the subject of this conference paper. Miller (1999) describes the internal audit as an independent objective assuring and consulting activity aimed at adding a value and processes improvement in company. It helps an organization to accomplish its objectives and therefore it brings a systematic and disciplined approach for evaluation and improvement of the effectiveness of risk management, control and management of processes. Simmons (1997) set the main aim of the internal audit to give an opportunity to provide the managers with reasonable assurance that:

- Financial and operating information is accurate and reliable,
- Policies, procedures, plans, laws and regulations are adhered,
- Assets are protected against loss or theft,
- Resources are used economically and efficiently,
- Operational tasks and targets will be fulfilled.

In order to identify threats and risks to firm, it is necessary to know what the risk is and where its danger for the organization lies. Risk is associated with the performance of internal audit as the internal audit should provide assurance that risks the organization is exposed to, are under control and at the same time they are the basis for creating audits' plans. Tichý (2006) defines risk as the possibility of negative as well as positive deviations from an assumption or a goal. Burger and Buchhart (2002) consider a risk as a factor with the greatest impact on economy. The reason is a weak information base for decision-makers. Vaughan (1992) understands a risk as a situation in which a likelihood of negative deviation from desired and expected result of operation exists.

MoF SR (2004) divides risks into two basic categories - general and financial risks. Majtánová (2009) prefers the classification of risks into 10 groups while Dvořáček (2005) divides risk that is necessary to recognize during internal audit into seven groups:

- Net risk (risk with a negative impact or loss only),
- Objective risk (risk that is independent of activities of participating entities),
- Subjective risk (the opposite of objective risk, dependent on activities of participating entities),

- Systematic risk (risk resulting from overall economic development, affecting all entities),
- Unsystematic risk (risk affecting only certain entities),
- Financial risk (comprises possible unfavorable effects of financial variables development on activities of company),
- Operational risk (represents possible adverse effects of non-financial factors on the operation and services of public organization).

### **Risk analysis and financial analysis**

According to INTOSAI standards (2011), risk analysis together with the identification process, is an integral part of risk assessments. Peltier (2004) presents a view of risk analysis as a factor that enables the company to gain control of their destiny. Risk analysis can be used to review the task, project, idea or entire company. The determination whether it is reasonable to continue or not is considered as the greatest benefit of risk analysis. This allows reviewing the current state, to determine a level of vulnerability and subsequently to choose the appropriate level of control or to accept this risk. All these results are usually classified as confidential and are provided to the provider only.

MoF SR (2004) considers the objective of risk analysis:

- Identify hazards within company / audited entity,
- Verify whether internal control or procedures and processes of audited entity are able to minimize or prevent hazards,
- Evaluate the structure of internal control.

Shattell (2004), on the contrary, assigns risk analysis the role to establish clear rules and direction for further progress. He emphasizes the role of workers who determine risk areas based on their experience and personal abilities and thus they have a direct impact on risk identification.

To the methods that can be used to identify risks we can also include financial analysis, which processes the past (ex post) and offers a prediction for the future (ex ante). The predictive model of ex ante financial analysis includes, among others, Quick test, Beaver's test, Altman's model or Credibility index. veda Young Science

### **Methodology and data**

Analyzed entity was established on August, 2nd in 2001 (company registration) as a limited liability company (Ltd.). On the day of its origin, the company had three executives. At the time of preparing the financial analysis (Vavrek, 2011) it had one executive. This person is authorized to act and sign independently on behalf of the company - the trade name of the company is accompanied by his handwritten signature. The object is mainly to lease their own premises, which are intended for business purposes.

Fundamental basis for the elaboration of this contribution was the accounting (closing of financial accounting) from 2003 to 2009. Among other resources that provided important information were also study materials, analysis and synthesis, comparison and controlled interviews with company owner and employees.

For risk identification and risk analysis a variety of methods and techniques was used. The basis for determining the risks information obtained from financial analysis "ex ante" was used.

## Results and discussion

Selected predictive models of financial analysis were used to identify the following risks.

Quick test pointed out the accumulation of funds in tangible investment assets, spending financial resources in tangible investment assets in the form of repairs (although it was technical evaluation). Among additional conclusions can be classified artificial decreasing of the profit in order to reduce income tax, increase foreign capital (loans mainly), growth obligations, reducing the level of self-financing, extending the payment period liabilities or low profitability. As the main problem distorted profit and directly expensed (not through depreciation) were identified.

Beaver's model like Quick Test pointed out growth of liabilities. Among additional conclusions can also be included the inability to pay short-term liabilities, defaulting on payment deadlines, unequal balance of payments, a decrease in net working capital, problems in floating assets, no monitoring of operational inventory and receivables, low financial accounts and non-transparency of financial flows.

Based on interviews and Altman's model growth in total assets was identified (real estate), a decrease in net working capital, the growth of foreign capital, insufficient in net working capital, a low operating stocks, nonpayment periods (current liabilities). The market value of the property was not established. Market value appears to be lower (at most equal) than the acquisition cost tangible fixed assets. The whole technical evaluation was not included in the price of tangible investment assets.

Reliability index confirmed the findings of other methods and confirmed the growth of foreign sources, asset coverage for the most part by foreign sources, a low operating stocks, low returns and influencing income.

Ex ante financial analysis clearly demonstrates that the analyzed entity:

- Accumulated financial resources into tangible investment assets,
- Artificially lowered profit in order to reduce the tax base, for example, by accounting the technical evaluation as a repair,
- Burdened with the loans, thereby reduced the level of self-financing and his ability to pay off short-term liabilities was gradually reduced,
- Did not meet the deadlines for payments of its liabilities, did not follow the deadlines of receivables. Receivables were not enforced or they were enforced with significant delay. It resulted in the growth of its costs and reducing revenues, but also in unequal balance of payments,
- Growth of foreign capital, no interest in ascertaining the market value of assets, insufficient in net working capital.

Based on the used prediction models recommendations for the elimination of risks were proposed (9).

- The stabilization of cash flow:

Large fluctuations in cash flow in interannual review (especially 2004 and 2005) were caused by funds accumulating for major repairs (construction work) of premises which the company leases. To ensure a stable flow of financial resources the balanced business is necessary.

- The balance of receivables and liabilities:

Throughout the whole monitored period of time, significant fluctuation of insolvency was typical. For the stable operation of the company it is important to monitor the status of receivables and liabilities continuously to ensure their balance.

- Follow the structure of property:

Accumulation of property (real estate) resulted in a reduction of the volume of current assets. Lack of current assets in a company might mean the inability flexibly and adequately respond to the changing conditions of the regional market, but also to the loss of competitive advantage.

- Reduce long-term foreign capital:

To maximize efforts to pay off the loans because the interests represent other inefficient costs. We do not recommend to pay off the loan with another loan.

- Reduce time of encashment of the trade relationship, optimize due date, monitor due date:

A large amount of outstanding receivables means currently decrease of available resources which in the future might lead to secondary insolvency of the entity. Based on the current status it can be assumed that the entity gives too long due date or it is not paid too much attention to recovery of claims.

- Adhere due date of liabilities:

Period for paying off the liabilities serves as a means for the currently accumulated resources in case of need. We recommend using this option in combination with the reduction of time for encashment of liabilities.

Compliance with the due date liabilities affects the image of the subject as a credible person. Therefore, it is important to agree on the due dates in advance and to keep these dates. It appears for the entity as more advantageous when due date is longer than the due date of encashment of liabilities.

- Carefully consider further investment

High indebtedness is connected with planned repairs and reconstruction of premises intended for lease. Whereas the current situation did not allow enough money to provide the reconstruction, the loan option was used. Getting a loan resulted in an increase of total debt. In the future, no further investments in these premises are expected therefore there is a presumption of decrease of this indicator.

- Not reduce profit artificially

Entities tend to reduce profit. The reason is to reduce the encumbrance next year. They forget, however, the negative impact on the rentability of takings, income, assets, expenses, and others. During the reporting period low profit occurs, which does not display the current status in the company.

- Analyze the added value

The added value represents a contribution of analyzed entity in the reproductive process. It includes not only the costs but also the profits of company. Its structure is important, because

the view of the added value could be different. First glance represents the high costs of operation. On the contrary, a second glance represents an effort to maximize profits. The added value achieved significantly high values during the years 2004-2008 that may cause negative impact on reducing revenue, sales.

With the distance of two years application of recommendations and the current financial stability of the company were analyzed.

Recommendation	Implementation for recommendation
<b>The stabilization of cash flow</b>	Introduction of real income, Stable costs
<b>The balance of receivables and liabilities</b>	Debt Recovery, Take out payment schedules for liabilities
<b>Follow the structure of property</b>	Reassessment of other reconstructions and repairs.
<b>Reduce long-term foreign capital</b>	Refinance the loan, Reassessment of funding other reconstructions with loan
<b>Reduce time of encashment of the trade relationship, optimize due date, monitor due date:</b>	Cash audit of liabilities, Negotiating payment schedules, Enforcement through the courts
<b>Adhere due date of liabilities:</b>	Cash audit of liabilities, Partial payments, Negotiating payment schedules
<b>Carefully consider further investment</b>	Reassessment of further investments, Suspension of planned investments (reconstruction of internal wiring, interior, etc.)
<b>Not reduce profit artificially</b>	Introduce accounting and financial status to the real numbers
<b>To analyze the added value</b>	Reassessment of investments and repairs according to possibility of leasing office space.

Table 1: Implementation of recommendations after 2011

Source: Own work

Company in the next period did not stabilize their current incomes and expenses. Due to financial difficulties of tenants incomes decreased rapidly. While the fixed costs associated with ensuring the operability of the object remained unchanged. To these costs mainly include the cost of media (water, electricity, gas and other charges - fee for trash collecting, real estate tax, internet, etc.).

In the period after the year 2010, the company achieved an increase in receivables. Non-paying tenants were let go. Payment schedules were agreed on (unpaid rent and payments for services related to renting). In some cases, the recovery was applied through the courts. On the other hand, liabilities related to ensuring the operability of the object increased.



In the next period, the company reassessed its priorities and the accumulation of assets in real estate reduced significantly. The company focused only on the operation of the building and makes every possible effort in order to ensure tenants in its building.

Company did the reassessment of its priorities at the time of investing in real estate. The executive objectively acknowledged that the repairs in the building were not necessary. In times of crisis, the maintenance would be more than sufficient. Furthermore, the executive admitted that many reconstruction works were financed as capital outlays due to the reduction of the tax base.

Reconstruction works were financed by the loan. In order to reduce the loan burden it refinanced the original loan with new loans (lower interest rate). Despite that the company got itself into financial difficulties due to lack of financial resources acquired from leasing in less than two years.

Based on the recommendations the company carried out a thorough and into depth cash audit of receivables and liabilities. With suppliers they agreed on payment schedules. Company evaded contractual penalties and other sanctions that were related to non-payment liabilities. Liabilities were divided into three groups - liabilities in due date, overdue liabilities within two months and liabilities overdue for more than two months. Debtors were asked to pay the debt. Liabilities overdue for more than two months after sending a second summons company started to enforce by the courts. The company managed to reduce debt. Lease contracts with non-paying tenants were canceled. Not all vacant spaces were to leased (revenue decline).

Company on the basis of recommendations made thorough cash audit of their liabilities. In order to avoid contractual penalties and other sanctions agreed on partial payments of their liabilities and in justified cases it closed payment schedules.

Following the submission of financial analysis and after its thorough explanation, the executor reassessed his investment priorities. He acknowledged that in previous years he focused on costly reconstructions - replacement of all windows in the facility, reconstruction of the roof, facade insulation. Other activities related to reconstruction of internal wiring and interiors were stopped.

The company corrected its accounting and financial situation in the next accounting period. The results were surprising for the company. Company found out that it does not have enough cash, loan is too high for it, moreover, profit was reduced by the high amortization.

The executive officer after two years found out that in order to make the premises more attractive he disproportionately burdened on rented premises. Due to financial difficulties of small business owners he was not able to lease all the premises. Actually achieved revenues did not correspond with the expected ones. Fixed costs decreased only slightly. The company encountered secondary insolvency. As of 06/30/2013 closed its business activities - sale.

The executive officer appreciated the importance of financial analysis in personal interview and stated that regrets greatly he had not used financial analysis, risk identification and recommendations for their elimination earlier.

## Conclusions

Financial analysis plays an important role for every business that wants to succeed in a market economy. Based on the processing of past it provides possible solutions for the future; provides information about the current position of the company. Financial analysis reflects the entity as a whole in relation to the environment in which it is located. Identification (and risk analysis) based on financial analysis eliminates subjectivity of risk assessment process and allows to deal with risk correctly.

As the risk identification process is continuous and it is associated with an effort to achieve their objectives. It is necessary and useful to consider quantifiable risks (e.g. reputation). In conjunction with previous research (ex ante financial analysis), it is possible to identify changes in the risk profile of entity. Profile changes are due to changes in the economic and legal environment (financial crisis, recruitment of new and revision of generally binding legal regulations) as well as internal and external operating conditions (e.g. loss of a supplier, a new technology).

The analyzed entity is an example of a company doing business on the Slovak market, which is primarily focused on the regional market. Due to external and internal factors (mainly in order to reduce positive profit) in the proceeding body found deficiencies. These deficiencies represent not only potential but real risk in all areas of subject processes.

After performing an ex ante financial analysis, risk identification and risk analysis, we offered to analyzed entity particular suggestions and solutions - recommendations. These recommendations were applied by the company. On the basis of recommendations the entity concluded that its financial situation is on the verge of bankruptcy. The company acceded to sell it as a whole. By selling the company he did not earn, but losses were minimized.

We discussed a whole situation with the executive officer after 3 months of sale. The executive officer in a personal interview admitted that if he had results of analysis and recommendations at the time when he had been thinking about reconstruction, he would have acted quite differently.

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