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# SPLITTING REAL ESTATE PROPERTY FROM CONSTRUCTION COMPANY AND ITS INFLUENCE ON FINANCIAL CONDITION OF ORIGINAL COMPANY

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## Abstract

Intention of the paper is to consider the influence of real estate assets transfer to financial condition of the original company. Contribution involves two methods of undertaking a comprehensive evaluation, respectively bankruptcy models. The first of these is Altman´s index that was constructed in the second half of the 60 years on the basis of statistical examination of the quantities and ratios of financial analysis and their relation to the possibility of bankruptcy. The second (IN05) is originated in their modifications since the nineties of the twentieth in the Czech Republic. Both indicators are similar. Many times, analyses are used side by side and sometimes offer entirely different results. The practical part also briefly deals with potential influence of company splitting (transfer of real estate assets) on financial condition of the original company with usage of Altman and IN05 indexes.

### Keywords

Summary index; bankruptcy models; crisis prevention

## Introduction details

Intention of this paper is to verify hypothesis, that splitting real estate property from Construction Company will not cause the crises of the original company and will not negatively influence financial condition of the company.

## Methodology details

*Evaluation of Financial Condition of the Company via Financial Analysis*

Financial Analysis (next FA) results are used for the evaluation of company´s financial condition. FA provide wide spectrum of information (stock management, price and investment policy, property management etc.).

Indexes are calculated thanks to data extracted from Financial Statements (Balance Sheet, Profit and Loss Account, and Statement of CF). It is possible to choose from wide scale of indexes that mainly speak about profitability, liquidity and capital structure.

Due to fact that the object of this paper is verification that splitting the real estate property from Construction Company will not cause the crises and will not negatively influence the financial condition of the original company, it is suitable to use summary indexes.

*Summary Indexes suitable for Company Evaluation*

There was need to create the model that characterize the financial condition of the company by the only one number. This one number is called *summary index*.

*Bankruptcy indexes* are used in this paper due to fact that the core of this article is to verify that the splitting the real estate property from the company will not cause the crises and will not negatively influence the financial condition of the company.

Altman´s index and IN05 were selected for the above mentioned verification due to fact that splitting will affect significant part of the Balance Sheet (outflow of significant part of fixed assets and retained earnings from previous periods).

*Altman´s analysis*

Altman´s analysis is one of the possibilities how to test the financial condition of the company with help of summary index. Z-score is the name of the summary index and it is consisted from 5 indexes from the field of profitability, liquidity and capital structure (debt inclusive). Each sub-index received weight based on empiric research [4].

Usage of Altman´s analysis brought her improvement (one of the improvements is in differentiation between companies traded on capital market and not traded). Variant applicable for company staying outside the capital market is used in this paper.

Version of this model from 1983 is applicable for Czech environment.

Z-score formula is below [2]:

$$Z = 0{,}717 * \mathrm{X1} + 0{,}847 * \mathrm{X2} + 3{,}107 * \mathrm{X3} + 0{,}420 * \mathrm{X4} + 0{,}998 * \mathrm{X5} \qquad (1)$$

Where: X1 = Net working capital / total assets (NWC/TA)

X2 = Retained Earnings from Previous Years/ total assets (RE/TA)

X3 = EBIT / total assets (EBIT/TA)

X4 = Booking value of shares / liabilities (S/L)

X5 = Sales / total assets (S/TA)

The value of Z-score oscillates from -4 till +8

| | |
|---|---|
| Criteria for evaluation are: | $Z > 2{,}9$ financially strong company |
| | $1{,}23 < Z < 2{,}89$ some financial difficulties, unclear next trend |
| | $Z < 1{,}2$ bankrupt candidate |

*Altman ´s model was widely used in the Czech economy but the model was criticized for not adjustment for Czech conditions. It was the reason why Mr. and Mrs.* Neumaier have started to develop model suitable for The Czech Republic. They used database of Ministry of Trade for model testing and they gradually developed models: IN95, IN99 a IN01 (numbers correspond to year when model was presented) [5].

*Index IN05*

Index IN05 is used for hypothesis testing due to fact that this index was developed for environment of The Czech Republic and is suitable for industrial companies that are not traded on open market. This index also involves the viewpoint of owner.

Advantageous of IN05 (user viewpoint):

- Easy for calculation
- Transparent algorithms of calculation
- Usage of financial data publicly available (Trade register)
- Suitable for both tradable and no tradable on open market companies
- Gives clear results

In the same time must be taken in account, that index IN05:

- Was created and tested on middle sized and big industrial companies, co for them is the most suitable
- Is working with annual performance data of company, what mean that it describes company performance in annual horizon
- Gives the picture of total company performance but it does not solve how this performance was reached.

*Index IN05 – formula for calculation*

$$\mathrm{IN05} = 0{,}13 \times \mathrm{A/CK} + 0{,}04 \times \mathrm{EBIT/IC} + 3{,}97 \times \mathrm{EBIT/A} + 0{,}21 \times \mathrm{TR/A} + 0{,}09 \times \mathrm{OA/KRZ} \quad (2)$$

Where:

| | |
|---|---|
| A | – Assets |
| CK | – Liabilities |
| EBIT | – Earnings before interest and taxes |
| IC | – interest costs of liabilities |
| TR | – Sales |
| OA | – Current assets |
| KRZ | – Short-termed liabilities |

*IN05 results interpretation* [5]*:*

| | |
|---|---|
| IN05 < 0,9 | company does not create the value and moved towards the bankrupt (with probability of 86%) |
| IN05 > 1,6 | company creates the value (with probability of 67%) |
| 0,9 < IN05 < 1,6 | twilight zone |

If the company has low level of debts (or any debts), it is recommended to replace the ratio EBIT/IC by number 9 to get proper result.

*Summary Indexes interpretation*

Each company is specific and in the same time macroeconomic situation is variable (indexes interpretation will not be the same during the recession and during the significant economic growth). It is the reason why evaluation is necessary to provide in wider context.

## Results details

*Introduction of case study – what is important to take in account to prevent occurring of crisis situation*

Hypothesis is tested on middle sized construction company during the process of consideration splitting the real estate property from the company. Object of the splitting is real estate property, all assets related to this property and all contracts related to assets (employee contracts inclusive).

There were several reasons why general meeting finally approved the process of splitting. Risk elimination was the main reason of the process of splitting.

*Kinds of risks eliminated by the process*

- *Existential risk of reconstruction project will put the construction company in danger and vice versa*

Consideration of large reconstruction project (large real estate complex) was the first impulse for looking for solution that will eliminate the risk. Keeping reconstruction project separately was also requirement from a financier (all CF related to reconstruction must be kept in separate legal entity). Based on this it is clear that the related real estate transfer is good solution for all involved parties. In case of failure the second entity will not be influenced.

- *Tax and cost risk – transfer of real estate without purposeless cost increasing*

2 variants of real estate transfer were considering in the beginning:

*Var 1: new company establishing and real estate as equity inserted in new company*

*Var 2: splitting the real estate from the original company*

Based on legal and tax review was found out:

*Var 1* – effectively from 1st of Jan 2014 input of real estate (as equity) in to company is not transfer tax free, so due to this fact this variant will cause increase in costs by 4% from real estate value (value specified based on expert´s opinion). This variant is also not suitable because of preferable ownership structure is to have 2 sisters company instead of mother and sister structure that this variant offers.

*Var 2* – this variant was chosen as optimal one and it was specified that firstly new company will be registered than it will be prepared the project of splitting by merger (institute defined in law: from original company were split all real estate assets and this property was merged with newly established company). Big advantageous of this variant is that all real estate assets are transferred in book-keeping value (no costs for expert´s opinion and no higher depreciation due to fact that there is high probability that market value of property is higher that booking value).

- *Organization optimization – way to more transparent management*

The Splitting the real estate assets from the company started the process of organization optimization of construction company due to fact that together with the real estate assets were transferred all property related processes and contracts.

*Transferred part of the original company – definition and related risks*

Definition of transferred part is the object of Project Splitting by merger (in line with the Act no 125/2008 statue book about company transformation, as subsequently amended).

Transfer from the assets*:*

- Plants, Buildings, Equipment – net value

Transfer from the equity and liabilities:

- Retained earnings from the previous years
- Other long termed liabilities
- Deferred tax liabilities (related to transferred fixed assets)
- Deposits received (related to lease contracts)

*Splitting Consequences*

One company will be replaced by two legal entities. The original company will continue construction business; the new one will be concentrated on property and facility management. Both companies will operate independently to each other.

*Consideration - influence of real estate assets transfer to financial condition of the original company*

Data from Financial Statements (2011, 2012, 2013 and as at 1.1.2014) were used for financial condition consideration.

To define the Decisive Day for Splitting purposes is very important. 1.1.2014 is the decisive day in this case. It means that the comparison could be realized among two dates, 31.12.13 and 1.1.14 due to fact that specified assets, equity and liabilities were moved between this two dates.

It is clear from *Altman´s index calculation* (see Tab no 1 next) that the process of splitting does not negatively influence the financial condition of the original company, on contrary the Z-score slightly increased. This slight increase does not move the original company from the grey zone. Slight improvement is thanks to fact that Construction Company does not use transferred assets for own core business (sales and profit generation), so keeping of assets had negative effect to Z-score. This transaction also helped in assets optimization (keeping only assets that are useful for core business). One sub-part of the Z-score is slightly worse after splitting (due to fact that part of Retained Earnings from previous years had to be moved to balance the moved assets).

From Table no 1 is clear that the company´s Z-score has slightly decreasing trend within the last 3 years. This slightly negative trend has anything to do with the process of splitting, but it is a consequence of several years lasting decrease in all construction industry. It is possible to suppose that Z-score of comparable construction companies will have similar deteriorate tendency.

*IN05 index calculation (see Tab no 2 next)* gives similar results as Altman´s Z-score; i.e.it keeps the company before and after the process of splitting in grey zone (see Figure no 1).

It will be interesting to calculate both indexes one or two years later (from splitting) to prove the conclusion of this study.

*It is clear that the process of splitting the real estate assets (and all related assets, equity and liabilities specified above) from the construction company will not negatively influence the financial condition of the original construction company and will not cause the crises of this company.*

**Table 1: Z-score calculation**

| | *Altman´s index* | | *Altman´s index* | *1. 1. 14* | *31. 12. 13* | *31. 12. 12* | *31. 12. 11* |
|---|---|---|---|---|---|---|---|
| X1 | NWC/TA | | *0,717* | 0,3827 | 0,3321 | 0,2074 | 0,2504 |
| X2 | RE/TA | | *0,847* | 0,0000 | 0,0716 | 0,0699 | 0,0755 |
| X3 | EBIT/TA | | *3,107* | 0,0493 | 0,0435 | 0,0613 | 0,0754 |
| X4 | Equity/Liabilities | | *0,42* | 0,2837 | 0,3700 | 0,3541 | 0,4061 |
| X5 | S/TA | | *0,998* | 1,3092 | 1,1565 | 1,2381 | 1,3268 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Z* | *Altman´s index for companies not traded on open market* | | | *1,85* | *1,74* | *1,78* | *1,97* |

| | |
|---|---|
| Z > 2,9 | *Financially health company*, not in danger of bankruptcy in short period |
| *1,23 < Z < 2,89* | *grey zone* – not clear decision related to financial health |
| Z < 1,23 | *Company is not financially healthy*, in danger of bankruptcy |

**Table 2: IN05 calculation**

| *IN index* | | *Index IN05* | *1. 1. 14* | *31. 12. 13* | *31. 12. 12* | *31. 12. 11* |
|---|---|---|---|---|---|---|
| A/CK | | *0,13* | 1,39 | 1,47 | 1,40 | 1,45 |
| EBIT/IC | | *0,04* | 3,86 | 3,86 | 5,71 | 7,16 |
| EBIT/A | | *3,97* | 0,05 | 0,04 | 0,06 | 0,08 |
| TR/A | | *0,21* | 1,3092 | 1,1565 | 1,3948 | 1,4804 |
| CA/KRZ | | *0,09* | 1,84 | 1,81 | 1,57 | 1,68 |
| | | | | | | |
| *Index IN05* | | | *0,971* | *0,924* | *1,088* | *1,236* |

| | |
|---|---|
| IN05 > 1,6 | Company creates the value (with probability of 67%) |
| 0,9 < IN05 < 1,6 | *Grey zone* |
| IN05 < 0,9 | Company is drawing to bankruptcy (with probability of 86%) |

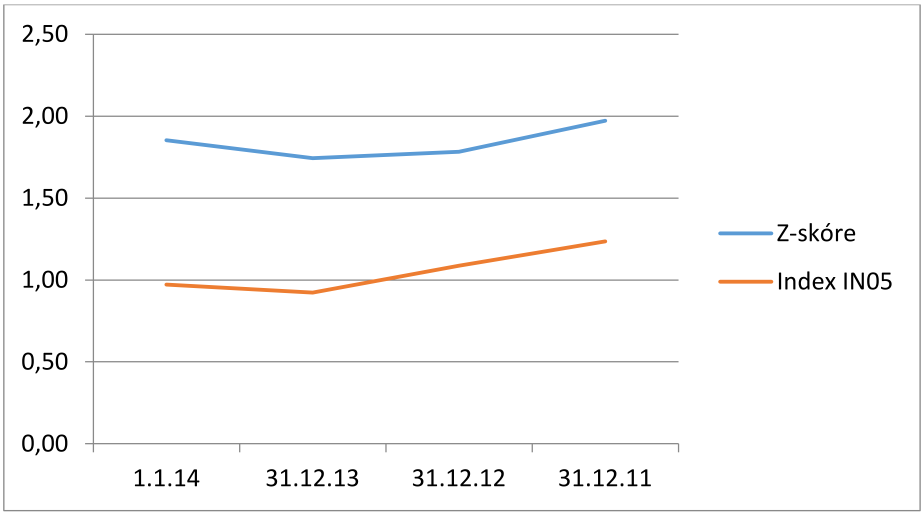


**Figure 1 – summary indexes (Z-score, IN05)**

*Symptoms of oncoming financial crisis*

Symptoms of oncoming financial crisis are involved in this paper due to fact that the object of this text was to consider not only the influence on financial health but also risk of causing the crisis.

*List o symptoms and potential causing by the project of splitting* [3]*:*

- Decreasing or stagnating sales, product stock increase, cash binding – *any relation to the project of splitting*
- Account Payables and Liabilities are covered with delay – *not expected deterioration*
- Price Increase of inputs, wages, and interest what will cause decrease in profitability and could lead to loss - *the project of splitting does not cause this, in contrary it gives opportunity for more transparent management of costs units that will trade with new entity (transparent prices and conditions comparable to market). The project of splitting gave the impulse to original company processes revision.*

- Production decrease below the BEP will cause decrease of equity (to cover loss) - the *project of splitting can prevent in future this kind of situation because part of assets and equity are moved to independent entity.*
- Using up all disposable financial recourses force the company to next debts – new situation will cause positive pressure on more effective net working capital management (in both companies)
- Strongly indebted company has no access to loans, creditors ask for bankruptcy – *in case that one of the company will be in future in such situation the second company will not be influenced by that, so the project of splitting positively diversifies the future risk*

## Conclusion

*Based on theoretical basis and case study, it is visible that the project of splitting is the optimal solution because it does not cause the negative change of financial health. From the text is visible that the project does not cause the crisis, in contrary it stimulates many preventive anti-crisis actions that reinforce the original construction company.*

Main benefits of the project are in:

- *Legal protection of each project, company* (in case of enterprise failure, 2 independent core businesses are separated in independent legal entities)
- *Risk diversification* (each project in independent company, no mutual guarantee)
- *Enlargement of activity portfolio* (beyond construction business) by Facility management
- *Higher cost flexibility* - outsourcing, intention to switch majority items to variable costs
- *Process revision and improvement*
- *Precise preparation phase* (looking for variants with acceptable level of risks)

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