

BASIC PRINCIPLES OF THE VALUATION OF INSURANCE AGENCIES

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Introduction

The valuation of insurance agencies is a field that has not been dealt with in the Czech Republic comprehensively, either theoretically or practically. Even foreign professional literature dealing with the valuation of financial institutions, e.g. Miller (1995) or Rezaee (2001), does not mention this significant phenomenon. Publications mostly deal with general techniques that can be modified for the purposes of commercial banks. The results of the missing methodology can be felt very strongly if it is necessary to value an insurance agency either for the purpose of purchase or takeover of an insurance company or for the purposes of its taxation. Expertises of valuation companies may vary by up to tens of millions of Czech crowns. The reason is obvious. The individual valuers use their specific methods and keep them secret as they consider them their own know-how. It is questionable, however, whether the applied procedures are always in accordance with the general principles used for valuating financial institutions as described for example by Hrdý (2005), Miller (1995) or Rezaee (2001). There is no doubt that it is necessary to fill this gap in the field of the valuation theory and this is the aim of this contribution.

To arrive at rational and meaningful results and to prepare a generally applicable procedure that should be binding for the individual experts and valuating companies means to respect two basic attributes, namely to use the general principles of valuation applicable for all the business entities and also to respect the specific features of an insurance agency as a business entity as such. Valuating procedures for commercial banks and other financial institutions were prepared in a similar way, e.g. Hrdý (2002) and Hrdý (2005). Apart from these two basic attributes it is also necessary to respect the appropriate reason for valuation as this can influence the valuation of

the business entities significantly, as stated by, for example, Mařík (2003) or Rezaee (2001). The analysis of the procedures for valuating insurance agencies is therefore divided into eight chapters out of which the second chapter deals with the reasons for valuation, the third one deals with specific features of an insurance agency as a business entity as they are reflected in the general valuating procedures. Chapter four analyses the key method of valuating, namely the yield method which according to all the valuating theories brings the most conclusive and objective results for the business entities. Chapter five introduces a specific way of valuating financial institutions described for example in the publications by Hrdý (2002) and Hrdý (2005) called the method of the bond pricing model and it is applied for an insurance agency. Chapters six and seven deal with the valuation of assets or more precisely the method of the market comparison. The valuation of assets can be applied for some specific cases of valuation when it is necessary to know the value of the individual components of an insurance company's property and this method can be also used as a basis for a specific method of valuating by means of the method of the bond pricing model. The method of the market comparison is less demanding than the yield method but its application requires a developed market with sales and purchasing of insurance agencies or their shares, which is more typical for example for the USA than for the Czech Republic. Chapter eight then summarizes the topic and tries to give advice to the experts what way it is necessary to proceed and it also points out some possible problems that may arise from the application of the valuating operations.

Nowadays doesn't exist any standard process of implementing assessing of insurance agencies. Practically various methods of financial analyses for assessing of insurance companies purposes are used. So the main point of this

contribution is to analyse individual assessing methods including making provision for the specifics in the complexion of assessing of insurance work and to establish assessing process and method. Withal processing of financial analyse doesn't exactly reflect bordered methods and regulations and also the number of the financial analyses is high.

1. The Reasons for Valuating Insurance Agencies

Similarly as with businesses, even with insurance agencies valuation is a service that a client may order and which may be beneficial for him. That is why valuating an insurance agency results from various incentives and may serve various purposes. The reasons for valuation may be diverse. Valuating an insurance agency may be necessary when it is sold or purchased, when new partners enter the company, in cases of mergers and acquisitions, rescues, liquidations, bankruptcies or when it is necessary to compare the market value of the shares at stock exchange and when determining the internal value (potential) of a given insurance agency. An important role is also played by the fact whether we need to value an insurance agency as one unit or if only some components of its assets are to be valued for the purposes of taxation or accounting.

If we value an insurance agency for the purposes of acquisition, it is advisable to value the agency „in itself“, i.e. as if the insurance agency continued its operation as an autonomous unit based on the „going-concern“ principle. We may also value an insurance agency from the point of view of some particular intentions that are to be implemented as part of a merger with another insurance agency. By comparing both the values we get a synergetic effect when the sum of the value of the autonomous insurance agency and synergy can form the upper price limit.

The fact whether the reason for valuation is determining the investment (subjective) value or the objectified value is also important. The investment (subjective) value represents the value of an insurance agency for a particular subject. Therefore individual expectations as well as intentions of a given subject are reflected in the value of the insurance agency determined in this way. Each subject can have different intentions and ideas

concerning the use and operations of a particular financial institution. This is reflected in the decision about its purchase. On the other hand, the objectified value of an insurance agency should express the value of a financial institution which is based on generally acknowledged data as much as possible and relevant requirements and agreed principles will be complied with. Even this is one of the aims of this study, i.e. to determine and analyse certain objectified procedures and principles which should be complied with when applying the valuation of insurance agencies. This way the „internal value“ of an insurance agency can be detected, which is its own potential. This can then be adjusted to some particular intentions, requirements and aims of a given subject. It can also be compared with the market value of an insurance agency calculated by means of the method of the market capitalization with the aim to find out whether the value of the insurance agency on the market corresponds to its inner potential.

2. Specific Features of the Activities in the Insurance Business

As was characterized in the introductory chapter, the basic procedures for valuating insurance agencies will be drawn up on the basis of specific features of the insurance business activities as projected into the general principles of valuating business entities. For this reason it is necessary to briefly characterize the specific features of the insurance business activities and their objectives concentrating on what way an insurance agency creates profits, because similarly with valuating banks and some other financial institutions, the removable yield, or the dividend potential will be the basis for the yield valuation of an insurance agency, which the owner of that particular insurance agency receives. It is therefore necessary to analyse especially the basic fields from which the insurance agency makes profits and also the risks connected with this kind of activities.

From the theoretical point of view the insurance business is associated with the estimation of future developments. An insurance agency is not able to identify (as was stated above) an insurance occurrence in advance but when designing and operating the insurance products it makes use of the view of the whole set of the insured subjects

based on balancing risks between the individual subjects insured in the given set. The estimation of the future costs of the indemnifications is the biggest problem because the price of the insurance product is derived just from this parameter. The size of the costs of indemnifications is based on the estimated size of the individual insurance occurrences and also on the calculation of the probability of such an insurance occurrence.

The estimation of the size of indemnifications is more complicated with the so called unvalued policies when the sum of the indemnifications is given by the size of the damage. As far as the probability of the insurance occurrence is concerned, it is based on the past experience about the given reality. The insurance occurrences are, of course, influenced by a number of factors (general economic conditions, conditions in the burden of losses, the origin of new facts etc.), which results in the fact that the occurrence of the individual sorts of insurance events changes significantly in course of time. At the same time the insurance agency works with sets of insured subjects and the interest in the individual insurance subjects plays an important role. The demand for the insurance products of a given agency is connected with the general development trends (e.g. the situation on the financial markets influences the demand for life insurance, frequent occurrence of natural disasters influences the demand for products of property insurance), but there is also the influence of the competitions on the market with insurance products.

The creation of the so called technical reserves is a characteristic and specific feature of the insurance business. The operation of the insurance products is connected with technical reserves, which are necessary with respect to the accruals and deferrals in the receipt of premiums and payments of indemnifications. The reasons for creating technical reserves are as follows:

- the existence of the so called capital assurances;
- the need of accruals and deferrals;
- of the received premiums in such a way that the premium is assigned to the period in which it is necessary to cover the indemnifications;
- in relation to indemnifications - assigning the premium to the relevant period with regard to

the time shift in the payment of indemnifications;

- the need of covering the fluctuations in indemnifications.

The technical reserves also represent temporarily available funds of the insurance agency (it forms the decisive item of the liabilities of the agency balance sheet – with life insurance approx. 85% and with casualty insurance approx. 60%), which are invested on the financial market. The technical reserves of the insurance agencies from the investment point of view have different nature with regard to the purpose for which they are created by the insurance agency. A larger volume of the technical reserves is connected with the operation of life insurance, especially in case of capital assurance. These reserves are of a long-term nature. On the contrary the reserves in the hazard insurance are usually of a shorter-term nature.

The specific features of the insurance products are at the same time associated with another specific feature in providing insurance, namely using reinsurance. Reinsurance is necessary for an insurance company just because of the possible covering of high indemnifications, and thus it plays the role of a stabilizer in relation to indemnifications, especially to indemnifications of a large scale. At the same time there is a question of the quality of reinsurance. This means that reinsurance, in case the insurance agency would not be able to meet its commitments arising from the reinsurance contract, means hedging any credit risk. With regard to the character of the insurance agency activities it is necessary for the insurance agency to have sufficient sum of equity capital as a financial cushion for covering increased commitments from operating the insurance business.

The profit of the insurance agency is created by operating the insurance products. A certain profit margin is calculated in the price of the insurance products. A technical profit of the insurance agency from operating the individual insurance products is mentioned in connection with the difference between the sum of the received premiums and the costs connected with the operation of the relevant insurance product, of which the costs of indemnification are the most significant. At the same time the profit of

an insurance agency comes from its investment activities because the operation of the insurance products is inseparably connected with creating the so called technical reserves which serve to cover the future commitments of the insurance agency. Because the size and character of the technical reserves differ significantly between life insurance and casualty insurance products, the yields from investment play a different role in both the areas of the insurance business.

3. Valuation of an Insurance Agency by Means of the Yield Method

3.1 Basic Principles

The valuation of an insurance agency by means of the yield method represents a significant way of determining the value of an insurance agency as a business entity. Without that way of valuation it is not possible to consider determining the value of an insurance agency as reliable. Unfortunately this way of valuation is the most demanding because it requires a relatively thorough financial analysis of the insurance agency followed by a financial plan based on a financial analysis and the strategic plan of the insurance agency.

During the valuation itself it is necessary to define the notion of the yearly effect for the owner. In case of the valuation of the insurance agencies the result is closer to the removable net yield, similarly to the valuation of banks, when this effect is seen as the size of dividends that could be paid to the owners in the individual years, i.e. the dividend potential of the insurance agency. In the field of the valuation theory the expression „Free Cash Flow Equity or FCFE“ is sometimes used. The basis for this concept in the Czech conditions is the profit of an insurance agency from the profit and loss statement modified for the purposes of valuation where some items may be overvalued or left out completely, e.g. extraordinary profit, because the aim of valuation is to relate it to the future realistic potential and it is therefore necessary to disregard the fluctuations there may be in the course of the economic activities.

The specific features of the insurance agency economic activities are reflected in the specific features of the accounting of the insurance agencies, i.e. into the form of the profit and loss statement (which has to respect different aspects

of the life insurance and casualty insurance – see the appendix).

From the profit a disposable cash flow for owners or the dividend potential can be determined based on the following procedure:

Profit per accounting period

- **Estimated investment necessary to secure the desired profit growth**
- **Allocations to the legal reserve fund and to the statutory funds**
- **Possible restrictive financial conditions based on the Commercial Code (disposable financial sources)**

Disposable cash flow for shareholders (the removable yield-dividend potential)

First of all it is necessary to highlight the fact that in case of financial institutions the profit item can be identified with cash flow. The costs that are not expenditures are not modified because their retention as a result of, for example depreciation or creation of reserves, is fully justifiable.

The value of an insurance agency by means of the yield method = the current value of disposable cash flows for the owner for a period of approx five years + the current value of the continuing value of the insurance agency.

The continuing value of an insurance agency is calculated similarly as in the case of a company, i.e. the estimated net effect in the prospective years divided by an interest rate decreased by an estimated growth of dividends.

The final formula is as follows:

$$Value = \sum_{n=1}^N \frac{Div(n)}{(1+i)^n} + \left(\frac{Div_N \times (1+g)}{i-g} \right) / (1+i)^N \quad (1)$$

where:

- n* - the individual years for determining the financial plan (1 – 5 years),
- N* – the number of years for which the financial plan is determined,
- Div (n)* – the dividends paid in the individual years,
- i* – the interest rate for discounting,
- g* – the desired prospective yearly growth of dividends.

An important role is played by the identification of the interest rate for discounting, as it is, simi-

larly with a company, difficult to determine. With regard to the structure of the insurance agency it is possible to doubt the suitability of the method of the average (weighted) costs of capital. Even with regard to the fact that insurance agencies are joint stock companies, whose shares are mostly traded on stock exchange, it will be most suitable to apply the method based on the model of valuating the capital assets. The principle of this method is relatively well-known and therefore it will not be described here. It is based on this equation.

The calculated interest rate = desired rate of profit = risk-free interest rate + risk surcharge x „beta“ coefficient

The interest rate for discounting reflects the financial risk of the volatility of the prices of the shares on the market. The term risk will be dealt with in detail later, especially in connection with estimating the prospective profit and also with valuating some components of the assets of the insurance agency. Especially the plan of the prospective estimated net profit and the net effect for the owner that is derived from it will be the key problem here. From the point of view of the yield valuation of an insurance agency the plan of the prospective net profit that the agency may make will be the most interesting figure as it can be transformed to the form meant for the purposes of the yield valuation.

The prospective development of profits can be determined in the following two basic ways:

1. The regression analysis

It represents a classic statistical method of projection of the past development into the future.

This method is considered by experts, and rightly so, very imprecise and it should only serve a rough estimation of the value of a business entity. Nevertheless, as far as the insurance agencies in the developed and working economies with long-term stable insurance market are concerned, **the method of the regression analysis is probably a little more precise and has a little higher information capability** than with classic businesses.

2. The identification of the prospective profit of an insurance agency based on drawing up a financial plan of an insurance agency including a planning balance sheet and an income statement.

This procedure of estimating the prospective dividend potential, i.e. the procedure derived

from the financial plan of the insurance agency is the most precise but logically also the most demanding. The expert has to be able to identify the prospective development of the funds of the insurance agency, which is very complicated not only because of the fact that the profit of an insurance agency consists of a few key items where each of them is planned in a specific way but also because nearly every insurance agency owns a large number of relatively autonomous units, branches and when drawing up the financial plan it is necessary to consider the plan at the central level as well as the plan of the individual branches and to coordinate them mutually. Determining the planned income statement and balance sheet for a period of usually five years should be the aim. The net profit is then derived from these figures as well as compulsory allocations into funds, the allocation based on the capital adequacy and possibly also development investments and, naturally, also the size of the dividends to be paid to the owners. **The profit generators, the so called drivers** are the decisive factors for planning profits and on the basis of their development the individual profit items are then estimated. The key profit generators are represented by the volume of the prescribed premiums, the structure of the insurance contracts, the size and structure of the technical reserves, the investment portfolio and the future development of all of them. The structure and development of the rendered insurance services form a significant item of the „drivers“, because even the income from the fees and commissions form a relatively large proportion of the total profits, especially with the individual branches. The formula for determining the continuing, adequately discounted value is as follows:

$$PH = \sum_{t=1}^N \left(\frac{Div_N \times (1+g)}{i-g} \right) / (1+i)^t \quad (2)$$

where:

Div_N - the estimated possible paid dividend based on the financial plan,

i - the interest rate for discounting,

g - the estimated rate of growth of dividends per year.

The final value of an insurance agency is then given by the total of the value of the bank resulting from the first five years and of the discounted continuing value.

3.2 The Financial Analysis of an Insurance Agency

The financial analysis of an insurance agency for the purposes of valuating has its own specific features and similarly as with valuating classic companies it has **one basic task: to assess the financial health of the insurance agency, thus the ability of the insurance agency to meet its commitments on regular basis.**

An important role will be played by comparing the financial situation of the valuated insurance agency with other agencies in our country, or in other countries, which would be theoretically even more precise, but practically much worse viable. There is a considerable advantage when carrying out the financial analysis of an insurance agency as opposed to the classic businesses and it is the fact that the figures concerning the insurance business are published in the respective countries. Therefore we can determine relatively well if the valuated insurance agency is different from other insurance agencies in a substantial way and like this it is possible to identify a possible negative development into the future, or on the contrary, to reveal reserves in the economic activities of the agency and possibly unused potential which could make a good springboard for the future growth of the insurance agency and its market value. The only problem can be a somewhat different concept of accounting in insurance agencies. The same indicators can be used for the financial analysis of the insurance agencies as for the analysis of the financial health of another company, but the specific character of the insurance products and operations requires some modifications.

At the same time, from the point of view of the financial analysis, there is an important fact that apart from managing the insurance stock the insurance company must also master the management of the investment portfolio.

The following indicators are suitable for carrying out a financial analysis of an insurance company:

The indicator measuring the total risk of underwriting the analyzed insurance company in relation to its capital value: **the prescribed net premiums/adjusted equity capital of the insurance agency.** The higher the value of this indicator, the bigger the exposure to the risk of the insurance agency is in relation to its equity capital.

The indicator of **the prescribed gross premiums/adjusted equity capital** plays a role with respect to reinsurance, the comparison with the previous indicator is important in case of doubts about the reinsurance collections.

The indicator called the retention ratio follows the above indicators and it shows the extent of the dependency of the insurance agency on reinsurance: **the prescribed gross premiums/prescribed net premiums.**

The indicator of **the technical reserve/adjusted liquid assets** - the purpose of this indicator is to trace how quickly the insurance company is able to respond to a higher need of cash funds.

The indicator measuring the ability of the insurance agency to satisfy the financial requirements that may be applied towards it: **the liabilities/adjusted liquid assets.**

The relationship between the investments and the equity capital is illustrated by the indicator: **bonds + shares + dividends/the adjusted equity capital.**

The result of underwriting is assessed by the following indicators: **net damages/net earned premium, commission and underwriting costs/net earned premium.** The sum of these indicators generally points at the result of underwriting – if the value is lower than 100% it means insurance technical profit, higher value means insurance technical loss, but it is necessary to consider whether it is the life insurance or casualty insurance (with life insurance an important role is played by the fact how long the insurance is operated).

The indicator profit from underwriting/net profit from investments points at the results from underwriting.

The indicator: **technical reserves + adjusted equity capital/prescribed net premium.** The aim of this indicator is to detect a possible low level of reserves or of the company's own capital.

3.3 The Internal and External Valuation of an Insurance Agency

Apart from the figures found in a financial analysis of a bank it is necessary to carry out more complex characteristics of the internal situation of an insurance agency as a business entity. There are various opinions concerning the depth of the internal valuation of an insurance agency but the most significant criteria can be expressed as „ten P fac-

tors", W. D. Miller (1995) used for banks which can be easily adjusted also for insurance agencies.

They are as follows:

1. Profit,
2. People,
3. Personality,
4. Physical Distribution,
5. Portfolio,
6. Products,
7. Processes,
8. Property,
9. Planning,
10. Potential.

Apart from the internal factors it is also necessary to analyse the external environs of the insurance agency.

The external environs points at the possibilities of applying the appropriate insurance products. The analysis of the internal factors provides information about how the insurance agency is able to use the opportunities. To best assess the external environs of an insurance agency it is first necessary to have the appropriate data available. It is especially necessary to carry out:

- a) a demographic analysis,
- b) an economic analysis,
- c) a competition analysis.

The future development of an insurance agency is connected with the fact what risks are to be covered and how the claims record will develop. On the other hand, as the insurance agency is also an investor, the future development is also connected with the results of investments. In a number of insurance products of the insurance agency the insurance companies promise (guarantee) a certain extent of valuation for clients. Therefore the future development of an insurance agency will depend on the fact whether the investment yields of the insurance agency are at least within the extent that was estimated in the technical calculations of the insurance.

3.4 Financial Planning of an Insurance Agency

Similarly as with businesses, a strategic analysis is the cornerstone for the yield valuation of an insurance agency as it defines the total yield potential of the given insurance agency.

The potential is logically based on the completed financial analysis of the insurance agency and on the analysis of the internal and external factors. When we mentioned the word potential we must distinguish between the internal and external potential. The external potential can be expressed as chances and risks that the insurance market offers. The internal potential reflects to what extent the insurance agency is able to use the chances of the external environs and face its risks.

The procedure of drawing up a plan is as follows:

1. The individual agencies or branches will gather the estimated yields from the portfolio of the yield products from the new contracts and contracts concluded in the past, from the contracts based on the segmentation according to the region, the sort of insurance and the type of client and the items for reinsurance are identified according to the sort of the insurance products. At the same time the accruals and deferrals of the premiums are to be carried out.
2. Identification of yields from the financial markets.
3. A plan of commissions from the reinsurance of the insurance agency.
4. Drawing up plans of costs includes namely:
 - a) the indemnification to be paid,
 - b) the time shifts between the origin of an insurance event and the payment of indemnification.
5. The equalization reserves for bonuses and discounts for insurance and fluctuations in indemnifications.
6. The rendered bonuses and discounts and a bonus in accident insurance.

Other technical yields are also identified, for example because of lower mortality or a reserve for indemnification related to life insurance which must consider whether there will be any changes in the life expectancy, more injuries of higher mortality. Further on, yields from other sources, for example technical reserves are identified.

4. The Yield Valuation of an Insurance Agency by Means of a „Bond Pricing Model“

This method is used by some expert companies when valuating banks and according to them it is considered to be theoretically the most correct type of valuation. Nothing should prevent this

model from being used analogically in case of valuating insurance agencies. In fact it is a combination of yield and property valuation of a bank. It is based on the following equation:

$$\text{MARKET VALUE} / \text{ADJUSTED NAV} = \text{ROE} / \text{COE} \quad (3)$$

NAV = value of assets – liabilities, i.e. equity. In an ideal case NAV should record the market value of the assets and it should reflect hidden reserves;

ROE = Return on Equity = net profit after tax / average funds of the shareholders;

COE = Cost of Equity = risk-free interest rate + beta x market risk bonus.

When using this method the biggest problem is to set the market value of the individual assets of the insurance agency. The disadvantage of this method is the fact that it does not consider a possible future growth of an insurance agency, so there is a tendency to undervalue the value of the insurance agency. On the other hand, this method works with current figures and in case of identifying the setting „ROE“ and „COE“ with a number of figures from the past, and these figures are more easily qualifiable than the figures used for setting up a financial plan of an insurance agency for the valuation purposes. Another advantage is that some assets of the insurance agency are already kept in its market value, the so called „fair value“ and it is possible to convert other assets by means of some sophisticated methods to the market value without any serious problems. As far as setting the costs of the equity of the insurance agency is concerned it is based on the classic model of the valuation of the capital assets and the risk-free interest rate is understood in the conditions of the Czech Republic as the productivity of the long term and liquid state bonds and the „beta“ coefficient is determined on the basis of the well known calculations according to the change of productivity of the individual shares in relation to the change of profitability of the market portfolio. The „beta“ coefficient is then calculated in the following way:

$$\text{beta} = \frac{n \times \sum V(A) \times V(t) - \sum V(A) \times \sum V(t)}{n \times \sum V(t)^2 - (\sum V(t))^2} \quad (4)$$

where:

$V(A)$ - profitability of shares of a particular bank,

$V(t)$ - profitability of the market portfolio,

n - the number of years of monitoring the development.

The bond pricing model is a static view of an insurance agency. We can get a certain element of dynamics if we monitor the insurance agency in a few successive years, i.e. a few years back, or possibly 3 – 5 years ahead, according to the projection of the disposable income for the owner.

5. The Valuation of an Insurance Agency Based on the Method of the Market Comparison

The method of the market comparison is based on a similar principle as in the case of the valuation of companies, i.e. it is based on the price which would be paid for getting the same or a very similar insurance agency. Similarly as with valuating a classic joint stock company, the shares of insurance agencies are commonly traded and so we have the so called market capitalization available, i.e. the value that we get if we multiply the market value of a bank shares by the number of shares. Similarly as with a joint stock company whose shares are traded on the stock exchange it is not correct to identify the market capitalization with the market value of an insurance agency. The cause may consist in the fact that the market value fluctuates and it is not correct to consider only the instantaneous value. Another reason why it is not possible to identify the market capitalization with the market value of an insurance agency is the well known fact that in case of purchasing a higher proportion the price of shares is higher in comparison with the previous state, according to M. Mařík (2003), approx by 20 – 50% higher. The reason is usually seen in the fact that a new owner pays for the controlling interest in a given insurance agency. Another explanation consists in the costs of representation arising from the separation of executing the property rights and the management of the company and the new owner anticipates an effect caused for example by a change of management.

The market price of shares does not necessarily express the real state in a given insurance

agency and may be influenced by various speculations or by fluctuations of shares resulting from the anticipated restructuring or privatization. Nevertheless the aim of the valuation is to find out the potential of the insurance agency as a business entity providing an effect for its owners. For that reason valuating an insurance agency by means of the market comparison is understood more as auxiliary and tentative for a possible buyer to know for what price similar insurance agencies are sold. And this brought us to the basic principles of the valuation by means of the method of the market comparison. Basic procedures are as follows:

1. A comparison of similar insurance agencies which have already been the subject of valuation and whose price of shares is well known,
2. A comparison of the insurance agencies which have already been the subject of sale and the exercise price of the transaction is well known.

In both cases the key aspect is finding comparable insurance agencies and the values of the „well known“ insurance agency are recalculated in relation to a bank valuated, similarly as with a company, by means of various multipliers. Finding comparable insurance agencies should be far easier than with classic companies as all the commercial insurance agencies operate almost identical business activity. In case of the well known market value of a comparable insurance agency it is possible to calculate the resultant value by means of the following two basic ways:

1. on the basis of P/E indicator,
2. on the basis of M/B indicator.

1) In the first case the basis is the known indicator of the ratio of the share price to the profit per share and on the basis of the comparison we estimate the expected P/E of the valuated and known insurance agency and we multiply it by the last profit per share of the valuated insurance agency and we get its value on the basis of the market comparison.

2) In the second case the basis is the ratio of the market and accounting value of the equity and we multiply the accounting value of the equity of the valuated insurance agency by the above ratio calculated for the compared bank.

Not even this procedure removes all the problems resulting from the market capitalization if the market price of a comparable insurance agency is derived as a product of the market price of a share and the number of shares. We can compare the market capitalization of our valuated bank with the price that we get on the basis of the market comparison.

As far as the comparable transactions are concerned, the basis is the known value for which a comparable insurance agency was sold or purchased, i.e. in our conditions it is any classic commercial insurance agency and then the price of the valuated insurance agency is set on the basis of some multipliers which can be represented by:

- the accounting values of the equity, the above mentioned M/B ratio;
- the ratio of the annual profit after tax (without considering any extraordinary profit).

Further indicators that are used by classic companies, as for example the annual cash flow and the executed turnover, are not suitable in case of valuating insurance agencies for the reasons mentioned here earlier. The use of the method when valuating banks can be understood as a complementary method, which gives the expert an idea about the value of the bank. The use of that method as the primary method is limited by two basic factors:

1. In case of the market capitalization the market value of the shares of the insurance agency may not express the real situation in the insurance agency and it can be the result of possible speculations.
2. In case of comparison with another insurance agency a possibly different approach to risk may play an important role.

When using this method of valuation you cannot avoid some application problems concerning especially the market specialization of the compared insurance agencies, the structure of its clients, the objectives of the owners and in case of the international comparison even the different levels of the basic business legislation. Despite it this method is relatively popular in case of practical valuation of insurance agencies because setting the value of an insurance agency on the basis of comparability with another insurance agency which had been sold is easier than the

complicated yield principle which demands exact planning and setting the potential of a given insurance agency. On the other hand this method of the market comparison will be less exact than the yield one as it does not consider the potential of the given bank and its perspective into the future. In the EU, where the insurance market is the most developed in the world, insurance agencies or their parts are often sold, merged or acquired. Here the method of the market comparison is used most and it provides relatively good results.

6. The Property Valuation of Insurance Agencies

The property valuation is not a suitable method for the valuation of an insurance agency as a specific business entity in comparison with the yield valuation because its significance for valuating an insurance agency is not expressed by the individual components of its property but all the components as a whole. The valuation of the individual components of the property may be important for example for the purposes of taxation or in case of the cessation of the insurance agency and the like. Despite the above facts we will still pay attention to this method of valuation because the market valuation of an insurance agency and its liabilities is the precondition for the method mentioned earlier, „the bond pricing model“, and it is thus possible to use the figures from the market valuation with the yield valuation. The determination of the following phenomena belongs to the basic methods of the property valuation:

1. the accounting value of the equity;
2. the substance value.

This way of valuation is the simplest but also the least precise. It is based on the accounting values of the property of the insurance agency reduced by the value of the outside sources. The advantage of this method is the simplicity of detecting the relevant figures and the conclusiveness of the values. It can also serve as a start value when setting the property valuation of an insurance agency and when using the method „bond pricing model“. Nevertheless the valuation of an insurance agency by means of the accounting method is far more precise than valuating a company because the procedures of accounting for financial institutions force the insurance agencies

to reevaluate some items of assets to the real value or possibly to create rectifying items and so the accounting value of an insurance agency is more credible than with a classic company. Therefore it is suitable to use this method in practice in such a way that the accounting items valued to the real value or adjusted by a rectifying item are left in the value of the accounting of the insurance agency and other items are transferred to the real value by means of the procedures that even other companies are familiar with (it refers namely to the tangible property). In order to be able to use this procedure effectively, it is necessary to carry out a brief survey of the methods of valuating the property of insurance agencies in accounting.

Generally, basic accounting principles are to be applied when valuating the individual bank assets in accounting. When setting the market value of assets it is necessary to transfer some accounting items to the real value. The money that the insurance company keeps can be invested and 30% of it is kept in liquid funds. As for investments, 65% is in bonds, 10% in shares. If we look at the procedures of accounting for banks and other financial institutions, we may find out that they force insurance agencies to reevaluate a considerable part of their property to the market value, which is an advantage for the experts or the valuating company because they do not have to carry out the labour-consuming revaluation. The securities kept until they are due must be valued pursuant to the specific procedures published for example in Mařík (2003), Hrdý (2002) or Hrdý (2005). The real properties or other assets of an insurance agency are also valued pursuant to the specific principles for valuating real properties and movable assets.

If the method of the accounting value of the equity is used, it is only based on the accounting figures without any adjustments. If the method of the substance value is used, it will be necessary to reevaluate the assets that are not in the market values based on the method of substance, i.e. to reevaluate them to the price for which the assets would be purchased again in current prices. Even though the property valuation is only a complementary one, its significance consists mainly in the fact that it creates a basis for the valuation by means of the bond pricing model method.

The Act No. 39/2004 Act on insurance business, granting licences for the provision of life

and casualty insurance. The Czech National Bank monitors the solvency of the insurance agencies, The Decree of the Ministry of Finance 303 of the year 2004, the comparison of the company's own resources with the volume and structure of activities.

The Conclusions Arising from the Theoretical Findings and a Recommended Practical Procedure for Valuating the Insurance Agencies

The valuation of insurance agencies is a very demanding process whose aim is to determine the factual value of an insurance agency respecting and reflecting its market position and internal potential. In the process of valuation it is necessary to project the agency's specific features into the general valuating principles for companies and financial institutions. This implies that it is possible to consider three basic approaches to valuating business entities as these are identified according to Mařík (2003), Hrdý (2002) or Hrdý (2005), which means the yield valuation, the property valuation and the method of the market comparison. The yield valuation appears to be the most precise as it best describes the market potential of the valuated insurance agency and the going-concern principle. Apart from the yield valuation the bond pricing model method is also worth mentioning based on the principle of the same ratio of the market value of the adjusted assets towards the accounting value of the equity and return of equity in relation to the costs. The method of the market comparison is difficult to apply in the Czech and Slovak conditions as there are not enough comparable transactions or insurance agencies with a known market value. An expert or a valuating agency must therefore use the yield valuation and the valuation by means of the bond pricing model method which creates a kind of span and the expert, on the basis of his/her opinion in relation to the external factors and the internal potential of the given insurance agency, then decides which value better corresponds to the reality.

If the method of the bond pricing model is used, it is necessary to reevaluate some items of the assets and liabilities to the market value and then to identify the equity costs. Here the model

of valuating the capital assets can be used, as the beta coefficient, similarly as with banks, can be considered as equal to one.

When the yield valuation is used, it is necessary to set the value of the removable net yield for the individual years of the plan and then also the continuing value. The removable net yield is based especially on the planned values of profits for the relevant period. This is, similarly with other business entities, the key issue of all the process of valuating. An expert or a valuating agency will have a proposal of the plan of the insurance agency managers available, however it is also necessary to carry out its correction based on the results of the financial analysis of the insurance agency, for example according to the portfolio of the insurance products of the given agency, the capital adequacy of the insurance agency, its position on the insurance market and also based on the analysis of the internal factors of the insurance agency as well as external ones, namely the development of the financial market, inflation, demographic factors, the development of the burden of losses and the insurance market itself, both in the field of life insurance and casualty insurance.

For assessing of insurance agencies here exists high number of analytic methods. By method evaluation for assessing of insurance agencies is necessary to go out of the specific process of the assurance company. Leverage of the insurance company go out of particular characteristics evaluation: insurance-technical connections, investment strategy, ability, technical reserves and so on. The anamnesis of the financial management of the insurance agency goes out of the usual methods, not from directive advance. In spite of this we have taken the view that the base of assessing might be method of return which might be in combination with the method of bond-price model. It is very difficult to advocate explicitly just one attitude of the work with bolstering. By using of both these methods it is obtained some interval in which it is necessary to choose the value. The final value chosen from this interval then could depend on the results of financial and internal and external analysis. More better results lead to choose the higher value from this interval and vice versa.

The valuation of insurance agencies is undoubtedly a very complicated process in which a team

of experts or valuating agencies have to participate and even so their role will be a difficult one. Let's only hope that the above valuating procedures and methods will make their lives easier and that they will also be beneficial in the field of settling disputes in the area of valuating.

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ABSTRACT**BASIC PRINCIPLES OF THE VALUATION OF INSURANCE AGENCIES****Milan Hrdý, Eva Ducháčková**

A field connected with the valuation of insurance agencies has not been dealt with in the Czech Republic although insurance agencies occupy an important position among financial institutions. That's why the purpose of this paper is to mention different methods of valuating which are used for purchase or takeover of insurance agencies. There are many differences in valuation and the companies consider the individual valuers as their own know-how.

In order to ensure transparency it is necessary to respect the general principles and procedures of valuating applicable for the business entities and to consider the specific attributes of an insurance agency. First of all there should be known a reason for determining of investment value of such an entity because it can influence the whole procedure. The insurance agency is necessary to be evaluated when it should be sold or purchased, then in cases connected with the new partnership in the company or in cases of mergers, liquidations and comparison of the market value of shares.

We can find the different approaches of valuating business entities which have their advantages and disadvantages. There are three main methods – the yield valuation, the property valuation and the method of the market comparison.

The yield valuation is hold as the crucial method of valuating and is seen to be the method in the most objective and the most conclusive way. On the other hand this kind of valuation is the most demanding because a financial analysis and the internal and external analysis of a business environment are necessary to be done. The valuation according this principle describes the market potential of the valuated insurance company and the going-concern principle. We can follow the method of bond pricing model which is based on the determining of the market value of the individual assets and liabilities and identification of the equity costs. The valuating is like a combination of yield and property valuation of a bank and we get a static view of an insurance company.

The paper deals also with the method of the market comparison which is applied in the USA because of the requirement of a developed market with sales and purchases of these entities. Valuation is based on the price which would be paid for a similar insurance company and it works with market capitalization which we get if we multiply the market value of a bank shares by the number of shares. It is difficult to apply this method in the Czech Republic because there are not comparable transactions and the market value of insurance companies is not known.

In comparison with the yield valuation, the property valuation is based on valuating of all components of the property as a whole which can be seen as an advantage. We have to determine the accounting value of the equity and the substance value.

The valuation of insurance companies is a very demanding process and the authors recommend the following of the procedure of valuating and they mention some problems and difficulties which can appear in the operations of valuating.

Key Words: *insurance agency, valuation, yield valuation, bond pricing model, valuation of assets, market capitalization, property valuation.*

JEL Classification: G22.