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THE PROBLEMS OF FAIR VALUE IN SMALL EMERGING MARKET ECONOMIES

(THE CASE OF SLOVENIA)

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Abstract

Decision of the European Commission to make the International Financial Reporting Standards (IFRS) mandatory for the preparation of consolidated accounts of all listed entities within the European Union would create no problem if the IFRS were structured to cover accounting solutions for all levels of capital market development. Since this is not the case, the solutions in the IFRS, raise numerous_questions in countries with less developed markets. The article presents the main problems of fair value accounting in the case of the small Slovenian market economy. At the same time, it suggests amendments to the financial reporting framework which would relieve the fair value measurement in emerging market economies.

<u>KEYWORD</u> : Fair Value, International Financial Reporting Standards, Emerging Market Economies, Slovenia

JEL classification: M41, O16, O19, P27

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Introduction

Slovenia is a very small country in the shape of a hen, between Italy, Austria, Hungary, Croatia and the Adriatic Sea, it is $20,000 \text{ km}^2$ with 2 million inhabitants.

Slovenia became an independent country² in 1991 and is one of the few former socialist country currently a member of the European Union (it held the rotating EU presidency from January 1st until June 30th, 2008), the Euro zone, the Schengen zone, the Organization for Security and Co-operation in Europe and NATO.

Following its independence₂ Slovenia began its transformation from a planning to a market economy. For this reason, some important legislation was enacted in the 1991-1994 period³.

The main objective of this new legislation was the transformation of the selfmanagement⁴ socio-economic system, which had proven to be economically inefficient, into a contemporary competitive market system.

The Law on the Ownership Transformation of Enterprises (hereinafter: the Law) from 1992 defined the way to transform so-called social capital into the ownership capital of all Slovenian companies that used to have social capital. Social capital formally belonged to all citizens and was managed on behalf of the community by company employees. The management of companies was autonomous, although in practice it was often politically appointed. Based on the Law, social capital was replaced with the ownership rights of the state, state and financial institutions and other legal and natural persons.

Social capital, which established the basis of the ownership transformation of Slovenian companies, was determined by the opening balance sheet dated January 1, 1993 pursuant to the Methodology for the Preparation of an Opening Balance Sheet (hereinafter: the Methodology) prepared by the Agency of the Republic of Slovenia for Restructuring and Privatization (hereinafter: the Agency) and determined by the Government of the Republic of Slovenia. The Methodology was supposed to provide the basis for determining the true value

² It used to be part of the Socialist Federal Republic of Yugoslavia.

³ The Denationalization Act (1991), the Law on the Ownership Transformation of Enterprises (1992), the Companies Act (1993), the Public Trading Services Act (1993), the Investment Funds and Management Companies Act (1994) and the Law on Forced Settlements, Bankruptcy, and Liquidation (1994)

⁴ Workers' self-management is a form of workplace decision-making in which the workers themselves agree on choices (for issues like customer care, general production methods, scheduling, the division of labour etc.) instead of the traditional authoritative supervisor who tells workers what to do, how to do it and where to do it (for more information, see reference).

of intangibles, real estate, equipment and inventories along with all other assets and liabilities. In addition, under the Methodology various fictitious items had to be removed from the balance sheet. Social capital was determined as the difference between the total assets and liabilities of a company. A permitted alternative to determining the social capital was a valuation of capital performed by licensed appraisers as of January 1, 1993. This alternative gave rise to the development of the valuation profession with the help of American experts and was extremely important for all subsequent events in the Slovenian valuation field.

The process of ownership transformation was largely completed in 1998. The legal forms of newly established companies allowed by the legislation were joint-stock and limited liability companies.

During the privatization process around 1,500 Slovenian companies with social capital were privatized. Of these, around 140 were selling shares to the public. All these shares were subsequently listed on the Ljubljana Stock Exchange, already established at the end of 1989.

Due to the strong tradition of self-management in the past and soft financial conditions for the management and employee buyouts, the consequence of the privatization process was a high percentage of insider-ownership. This did not necessarily imply that each privatized company had a group of active private owners, able and willing to make changes in the company. Accordingly, a process of concentrating shares in the hands of active owners was inevitable. Up until the end of 2007 the number of listed shares decreased to around 100.⁵

Financial Reporting Framework

Before the first Slovenian Law on Enterprises (1989) was enforced, the Slovenian accounting legislation was based on the Law on Associated Labour (1976). The Bookkeeping Act (1976), accepted on its basis, was quite progressive and dealt with all legal entities on an equal basis. Enforcement of the Law on Enterprises in 1989 led to new accounting legislation. But the new Accounting Act (1989), also taking into account the provisions of the European Union's Council Directive 78/660/EEC, substituted the Bookkeeping Act only as far as it involved business entities regardless of whether they were in social, co-operative, mixed or private ownership. Entities performing non-business

⁵ For more information about small limited liability companies in Slovenia see Garrod, Kosi and Valentinčič, 2008.

activities were not covered by this Act and had their own accounting legislation. With the start of the privatization process in 1993, the basic accounting rules for business entities (including government business entities) were transferred to the Slovenian Accounting Standards (hereinafter: the SAS), also including the International Accounting Standards (hereinafter: the IAS).

The SAS were first issued in 1993 on the basis of the Companies Act (1993). The fundamental framework for preparing the SAS was provided by domestic professional effort. Yet, although in form the SAS substantially differed from the IAS, they were actually very close in substance. Even more, the SAS included the possibility to use the IAS directly if there was no relevant provision in the SAS.

The second issue of the SAS in 2001 included all major accounting developments in Europe since 1993. The SAS was organized in the same way as in the first issue. But there was one important difference. On the basis of legal requirements the provisions of the IAS could no longer be used directly. Those provisions of the IAS that had not been incorporated into the SAS were treated solely as information about professional achievements.

The third issue of the SAS in 2006 was based on the renewed Companies Act (2006). Under this Act, the European Union's regulations on the application of the IAS (Nos. 1606/2002 and 1725/2003) were implemented in Slovenia. The Companies Act included the following requirements:

 the SAS had to summarize the European Union's Fourth and Seventh Accounting Directives (Nos. 78/660/EEC and 83/349/EEC) and should not be in contradiction with the IFRS (including IAS);

- listed companies, banks and insurance companies should prepare their consolidated accounts in conformity with the IFRS;

 non listed companies should prepare their accounts in conformity with the IFRS at least for five subsequent years and only when decided by the stockholders' meeting.

On the basis of the mentioned requirements, those Slovenian companies compelled by the SAS should only directly apply the provisions of the IFRS to which the SAS directly refers to. Concerning accounting issues not covered by the SAS, direct references are made to the IAS 17, IAS 19, IAS 26, IAS 31, IAS 36, IAS 39 and IAS 40. Other provisions of the IFRS are treated as information about professional achievements.

In substance, all definitions and basic solutions in the SAS are the same as in the IFRS. Also, gradual changes in the measurement of assets and liabilities

from historical value to fair value in the IFRS were also reflected in the SAS. For this reason, one does not need to know the SAS in detail to understand the "fair value" problems in Slovenia.⁶

Fair value concept has been criticized a lot in the last few years, especially after the securities' prices have begun to fall. Taking into account the relevant interpretations, the International Accounting Standards Board's (hereinafter IASB) concept of fair value is that of specific hypothetical market price under idealized conditions. Thus, market prices represent the best estimate of fair value, if market conditions satisfy the fair value definition (Hitz 2007). Provided the one-to one condition is satisfied, fair values are value to shareholder if market prices are "efficient" (Penman, 2007). Since the conditions required are difficult to be fulfilled even in the well-developed market economies the situation in emerging market economies is even more problematic. In the article I will try to present the most urgent problems connected with fair valuation requirements in such an economy.

Requirements for Fair Valuation

Similar to the IFRS the term *fair value* in the SAS (hereinafter: accounting standards) can be found in a wide variety of cases. As we move through the accounting standards we meet the fair value of land, buildings and equipment, intangibles, financial instruments, inventories, investment property and equity. Among the items quoted it is financial instruments the most complex. Let us examine the problems connected with their fair value requirements in the case of financial instruments.

According to the accounting standards⁷ a financial instrument is any contract that gives rise to a *financial asset* of one entity and a *financial liability* or *equity instrument* of another entity.

The fair value of a financial instrument as described in the accounting standards is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. After their initial recognition, financial instruments with the exception of loans and receivables and held-to-maturity investments should be measured at fair value. It is true that accounting standards allow the measurement at cost where

⁶ From this point of view the situation in Slovenia is different as in some larger European countries, for example in Germany. (See Hung and Subramanyam (2007) for details.)

⁷ International Accounting Standard 32, Financial Instruments: Presentation.

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investments in equity instruments do not have a quoted market price in an active market, or their fair value cannot be reliably measured. But taking into account the whole substance of the standards this should be more an exception than a rule. On the other hand, neither the standards together with the application guidance nor the International Financial Reporting Interpretations give explanations as to what are the crucial criteria of:

- an active market
- reliable measurement.

It is obvious that contemporary financial reporting frameworks (U.S. Generally Accepted Accounting Principles (hereinafter U.S. GAAP) and IFRS) arise from an environment with <u>a</u> relatively high market efficiency offered by the New York Stock Exchange and London Stock Exchange (Brayshaw, Craner and Samuels 1995). The question is what possibilities do small emerging market economies have to measure in a reliable way the fair value of equity instruments as defined above.

The Problem of an Active Market

According to the accounting standards the best evidence of fair value is a quoted price in an active market.

A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The objective of determining the fair value of a financial instrument traded in an active market is to reach the price at which a transaction would occur at the balance sheet date in that instrument (without modifying or repackaging the instrument) in the most advantageous active market to which the entity has immediate access.

Deriving from this broad description of an active market the question arises of whether an active market in fact implies an efficient market.

Theory recognizes three levels of market efficiency (Brealey & Myers, 1991). The first is a weak form of efficiency in which prices reflect all information contained in the record of past prices. The second level is a semi-strong form of efficiency in which prices reflect all publicly available information. Under the third, strong form of market efficiency, prices reflect not just public information but all the information acquired by painstaking fundamental analysis of the company and the economy. In this case, prices on the stock

market would always be fair and no investor would be able to make consistently superior forecasts of stock prices.

Thus the majority of investigations connected with market efficiency are based on a certain type of valuation model, granting an intrinsic or true value as a long-term tendency of an efficient market (Damodaran, 2002).

Let us take the Slovenian stock exchange market as an example of a very small capital market. It is illustrative to mention that since the privatization period of 1993-1998 approximately 140 shares altogether have been quoted on the Slovenian stock exchange market. In the USA 1,787 shares were first listed on the stock exchange in half that period, namely 1993-1995 (Hayn, 1997).

In 2007 there were 107 shares quoted on the Slovenian stock exchange market⁸ as follows:

- 9 shares on the prime market;
- 21 shares on the standard market;
- 77 shares on the entry market.

The situation in 2007 is presented in more detail in Table 1.

Table 1- Financial transactions on the Slovenian stock exchange market in 2007 (shares)

transactions (in '000 EUR)	transactions (in '000 USD)	of the total value	Quantity	transactions	of Equity 31.12.2006 (in '000 EUR)	of transactions in equity
(2)	(3)	(4)	(5)	(6)	(7)	(8=2/7)
1,382,249	1,898,461	70,7	9,616,049	122,108	3,778,302	36.6
451,751	624,178	23,3	5,382,233	58,875	9,159,938	4.9
117,977	161,903	6,0	9,846,672	48,713	N/A ⁹	N/A
1,951,977	2,684,542	100,0	24.844.954	229,696	N/A	N/A
	transactions (in '000 EUR) (2) 1,382,249 451,751 117,977 1,951,977	transactions (in '000 EUR) transactions (in '000 USD) (2) (3) 1,382,249 1,898,461 451,751 624,178 11,7977 161,903 1,951,977 2,684,542	transactions (in '000 EUR) transactions (in '000 USD) of the total value (2) (3) (4) 1,382,249 1,898,461 70,7 451,751 624,178 23,3 11,7977 161,903 6,0 1,951,977 2,684,542 100,0	transactions (in '000 EUR) transactions (in '000 USD) of the total value (2) (3) (4) (5) 1,382,249 1,898,461 70,7 9,616,049 451,751 624,178 23,3 5,382,233 11,797 161,903 6,0 9,846,672 1,951,977 2,684,542 100,0 24,844,954	transactions (in '000 EUR) transactions (in '000 USD) of the total value transactions total value transactions (2) (3) (4) (5) (6) 1,382,249 1,898,461 70,7 9,616,049 122,108 451,751 624,178 23,3 5,382,233 58,875 11,7977 161,903 6,0 9,846,672 48,713 1,951,977 2,684,542 100,0 24,844,954 229,696	transactions (in '000 EUR) transactions (in '000 USD) of fe total value transactions (in '000 EUR) of Equity 31.12.2006 (in '000 EUR) (2) (3) (4) (5) (6) (7) 1,382,249 1,898,461 70,7 9,616,049 122,108 3,778,302 451,751 624,178 23,3 5,382,233 58,875 9,159,938 117,977 161,903 6,0 9,846,672 48,713 N/Å ⁹ 1,951,977 2,684,542 100,0 24,844,954 229,696 N/Å

Source: author's calculations based on Ljubljana Stock Exchange data and Agency of the Republic of Slovenia for Public Legal Records and Related Services data.

According to the completed research (Mramor & Valentinčič, 2001) the Slovenian capital market is inefficient even in the weak form. But if we examine it carefully we could spot that some parts of the Slovenian stock exchange market are less inefficient than others. If we accept the statement of Brealey and Myers (1991) whereby random-walk research shows that the

⁸ Significant decline is evident until the end of 2008 with 7 shares on the prime market, 18 shares on the standard market, and 59 shares on the entry market. The numbers remained the same until the end of March 2009.

⁹ Not available.

market is at least efficient in the weak sense¹⁰, we could argue that the Slovenian prime and standard market demonstrate the weak form of market efficiency. Regarding the entry market the situation is more problematic. On the basis of Ljubljana stock exchange data the number of transactions for 35 shares out of 77 in 2007 was less than 100. Of these, for 18 shares the number of transactions was less than 10 and for 6 of them there were no transactions at all. Besides, there is no guarantee that the parties involved in the transactions were independent of each other as well as equal. In addition, the prices of the shares might be affected by political and tax factors, data concerning the money market, individual economic events like a capital increase in a large company via the capital market, dividend payout ratios, the issue of stock options and even by speculation. These effects prevent the market prices of securities to be based exclusively on expected returns. Nevertheless even the share prices on the entry market are treated in practice as "fair values". Still more, if prices on the entry market are not available, the prices from the gray market are treated in reality as "fair values".

The facts mentioned above lead to the following conclusions:

- Even if quoted on an active market the quoted price as a fair value might be questionable if it does not represent actual and regular market transactions occurring on an arm's length basis.

- Quotations on gray markets do not meet the requirements of an active market in accounting standards. This is especially true with regard to the publication and regular availability of prices.

For these reasons comprehensive financial reporting frameworks should give users in emerging market economies additional information about the characteristics of an active market.

The Problem of Reliable Measurement

Regarding accounting standards, an entity establishes fair value by using a valuation technique if the market for an equity financial instrument is not active. The goal of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations. Valuation techniques as defined by the IFRS include:

¹⁰ The case in which prices reflect all information contained in the record of past prices.

- recent arm's length market transactions between knowledgeable, willing parties, if available;

- reference to the current fair value of another instrument that is substantially the same;

- discounted cash flow analysis
- option pricing models.

Recent arm's length market transactions are (without additional explanations in the IFRS) supposed to be transactions on the active market before the measurement date. Since such a market could also imply not only an efficient, but any kind of market, a further explanation of the active market in the IFRS would be much appreciated.

Reference to the current fair value of another instrument is a method rarely used on small equity markets where it is very difficult to find substantially the same financial instrument.

For the reasons mentioned above, the most widely used valuation technique is based on a discounted cash flow analysis. Thus, it is to be considered how companies would be valued by the Slovenian stock market.

Apparently, the estimated value of equity for an environment without an efficient capital market is the best starting point for decision-making. But when we go into details it is accompanied by a number of problems connected with the assumptions included in the valuation model. If the valuation model includes discounted cash flows, the main assumptions are related to the size of the cash flows, their timing and the discount rate.¹¹ Problems arising can be divided into two groups:

problems related to the projected cash flows,

- problems related to the discount rate used to calculate the present value of the projected cash flows.

¹¹ Rather than market information, model based fair value inevitably incorporates management's private information and assumptions, that is, elements of fair value in use (Hitz, 2007, p. 343).

Projected cash flows

A cash flow projection is not a simple task. The more unrealistic the assumptions about a company's future operations seem, the less accurate projections are.

The, well-known in financial literature, *discounting cash flow models* usually derive the net cash flow from various definitions of accounting income. In theory, income is generally defined as cash flow from operating activities after depreciation and amortization. The fact is that only in an extremely simplified world could such a definition be correct. The assumptions for each period concerned would be:

- The approximate equality of cash flows and accounting flows (i.e. revenues and expenses as presented in the income statement). This assumption is justified if the level of working capital is relatively stable. In this case, the net cash flow and working capital from operating activities are very close to each other.

- The approximate equality of depreciation and amortization costs and the amount of money needed for the replacement of existing capacities.

No changes in accounting policies and significant accounting estimates.

In reality, all of these presumptions are very rarely met.

As soon as we step out of the simplified world, the use of accounting income becomes problematic. Namely, it is the cash flow and not the income that has to be discounted. The money cannot be used for other purposes until it is received or can be used for other purposes after it is received. Regarding this fact, the net cash flow from operating activities resulting from the net income is not the best basis for planning. The question arises of whether the comprehensive financial reporting frameworks give a good enough starting-point for planning future cash flows.

Given that the financial report of a company is the most important source of information for the external user we can check the explanatory power of the financial statements included.

Already in the planning phase of an investment it is important to bear in mind the main goal of the investors – to maximize their wealth. They are prepared to invest their money if the chosen method of investment valuation meets their expectations. Among the methods available, the present value method

(calculating the present value of future cash flows caused by the investment) is the most popular one.¹²

In consequence, the firm not only plans the cash flows but on the basis of those cash flows the accounting flows as well (i.e. revenues and expenses) for new investments. The main purpose of planned accounting flows is to reallocate the burden of the initial investment on a systematic basis over its useful life, which enables a more realistic measurement of the business capacity of the firm. This way the accounting flows are more stable and better demonstrate the average expected return of the investment in the form of profitability. On the other hand, the accounting flows are more or less (depending on the tax legislation in the country) connected with the taxable income and enable us to establish the cash disbursements for tax purposes.

When the investment is put into operation the casual-consecutive connections between the cash and accounting flows are not as clear as in the planning stage. The reasons for this are:

- At the time of operation cash does not always follow the recognized (as a revenue or expense) business event.

- The previously mentioned adjustment is improved if we take into account changes in the balance sheet items, but it has to be admitted that the accuracy of the adjustments depends a lot on the accounting instruments used by the company. For example, with the adjustment method the net cash flow from operating activities is equal to the operating revenue, reduced by the amount of an increase in accounts receivable (or increased by the amount of a reduction in accounts receivable). If receivable accounts are presented in the balance sheet in their net value and allowances for bad receivables are not disclosed as a separate amount among expenses, the adjusted net cash flow from operating activities will be too high due to the reduced (by allowances) accounts receivable at the end of the accounting period.

 Accrual accounting is affected by management estimates, which are usually subject to changes. That is why actual accounting flows reflect the effects of actual changes in business events and changes in management's estimates.

¹² Also in Slovenia the present value method is the most widely used method in the decisionmaking process about long-term investments in bigger companies (Questionnaire about the organization and implementation of the financial function in Slovenia (Slovenian Institute of Auditors, July 2002)).

- As investors prefer firms with stable profits, the management tends to level out strong oscillations in profit between accounting periods. Besides the interim changes in accounting flows and cash flows have permanent and temporarily components out of which temporary components affect cash flows more intensively than accounting flows. Problems arise if the management uses the accounting instruments to cover problems in the business. The more instruments are used the more possibilities for adjustments can be chosen by the management.

- The longer the product cycle the greater the possibilities for adjustments and changes in accounting principles and/or practices and the danger that the actual cash flows from operating activities will not follow the comparable accounting flows.

It seems clear that there is an incompatibility between the basis for making investment decisions and the basis used for evaluating investment decisions. In the decision-making process the cash flow is the most important factor. In the process of evaluating decisions, the net income or profit is a kind of surrogate for a presentation of the firm's earning power with the main goal of maximizing the shareholders' wealth. Therefore there is a need for a control mechanism over the assumptions used in accrual accounting. Such a mechanism would be a direct cash flow statement. It enables the analyst to find differences between actual events and assumptions used to present these events and evaluates the rationality of the assumptions.

Under the current solutions in the GAAP and IFRS the cash flows from operating activities can be determined by direct or indirect methods. Even the direct method is in itself indirect as it gathers information about cash flows from already prepared balance sheet and income statement.

The cash flows from investing activities are determined on the basis of changes in long-term assets and short-term investments and not classified as cash equivalents on two successive balance sheet dates but (under the IFRS) on the basis of the income statement items with an investment character. Although the accounting principles or standards suggest the presentation of investment cash flows in gross amounts, the possibility of such a presentation depends (especially for the external user) on the quality of the disclosures in the balance sheet and income statement.

Similarly to the cash flows from investing activities, the cash flows from financing activities are determined on the basis of changes in financial liabilities on two successive balance sheet dates and (under the IFRS) income statement items with a financing character. The quality of the presentation in

gross amounts is questionable for the same reason as in the case of cash flows from investing activities.

Taking into account all the facts mentioned above the conclusions are (Duhovnik, 2008):

1. The statement of cash flows derived from the income statement and prepared under the indirect method as far as cash flows from operating activities are concerned does not give much additional insight into the cash flows of a company. The direct method of determining cash flows from operating activities improves the quality of accounting information but it is unfortunately concentrated on the establishment and not on the tracing of cash flows.

2. Special problems are caused by balance sheet and income statement items' changes with a mixed substance, partly and partly not representing cash flows.

3. An additional problem is caused by simplifications connected with assumptions that certain expenses (revenues) are automatically cash outflows (inflows); for example, a balance sheet item can include (allowed or not) hidden reserves.

4. Financial analysis is interested in the future financial position of a firm. The cash flows, derived from already prepared balance sheet and income statement usually involve older data and are more concerned with the past than with the present and future.

5. Anomalies can be caused by a change in the group of companies included in a consolidated financial statement. As the inclusion of new subsidiaries affects the items of balance sheet and not the income statement, the establishment of cash flows of the new group is created from an incomparable balance sheet and income statement.

6. External users cannot eliminate all effects of revaluation because they do not have adequate data.

7. For the previous reasons the accounting principles or standards have not exploited all possible opportunities to improve accounting information.

An important advantage of a direct statement of cash flows for current analysis would be tracing (instead of establishing) cash flows. As companies should in one way or another follow cash flows for internal purposes the direct statement of cash flows should not cause much additional efforts and costs. But management should (according to the accounting principles or standards)

assure the reasonable classification of cash flows as cash flows from operating, investing and financing activities.

When considering such a statement, it has to be taken into account that the costs of gathering information are much lower than 20 years ago. On the other hand, the tougher competitive conditions of today have made wrong decisions much more expensive than they used to be.

At the end of the accounting period daily, monthly or quarterly statements of cash flows can easily be summarized in the cash flow statement of the accounting period connecting the cash position of a firm at the beginning of the period with the cash position of the firm at the end of the period and presenting the gross amount of cash flows from operating, investing and financing activities. A lasting and often even inadequate reconciliation to net income would become unnecessary. The direct statement of cash flows would at the same time offer an adequate basis for a comparison with the projected cash flows used to make investment decisions and would not be sensitive to differences in financial reporting, accounting policies and estimates.

The direct statement of cash flows would also probably improve the efficiency of capital markets as it would be included in publicly available information.

Finally, it would serve in the valuation process as a basis for cash flow projections of the company's life cycle remaining or for at least five years. The basis for such projections would be the historical direct cash flow statements from previous periods compared with the historical income statements of the same periods.

Discount Rate

For an environment without an efficient capital market the definition of the discount rate is even more problematic than the projection of cash flows.

To define the value of equity the discount rate is the expected rate of return on equity which attracts investors. It depends on the general level of interest rates and risk premium related to a company's activities and operations. In practice, the problem is usually solved by adding the risk premium to the risk-free interest rate. The risk premium depends upon the risk of a company perceived by the investors. In relation to this practical approach, there are many theoretical doubts based on the subjective estimate of risk. For this reason theoretical models have been developed. Such models establish the connections between the risk premium and the objective measures of risk. The best known and most practically used is the Capital Asset Pricing Model (Sharpe, 1964;

hereinafter: the CAPM) which presumes that the appropriate discount rate is the expected rate of return on equity (k_j) , depending on the risk-free interest rate (r) and risk premium. The risk premium depends upon:

– excess of the total expected return on the market over the risk-free interest rate $(k_M - r)$;

– a beta factor (hereinafter: beta) of the certain company's share (β_j) .

$$k_i = r + (k_M - r) \beta_i$$

Beta is the measure of systematic risk which cannot be avoided with the diversification of portfolio. It is the measure of risk in relation to the risk of the share with the average market return (hereinafter: average share) on the capital market. The beta of the average share equals 1, the beta of the share which is more risky than the average exceeds 1 while the beta of the share with a risk lower than the average is less than 1. There are many simplified assumptions underlying the CAPM (Pratt, 1989, p. 50; 2003, pp. 112-113).

For this reason the CAPM is only partly supported by the empirical evidence (Lewis and Pendrill 1992); the less developed the market environment the weaker the support.

The use of the described method requires an exact determination of the branch a company is active in to reach the appropriate beta coefficient. The procedure gets complicated if a company is engaged in more than one industry with different betas. In this case, the average beta of a company depends a lot upon personal judgment.

Due to the assumptions mentioned, the CAPM has been criticized a lot. For example:

Already in 1992 professors Fama and French (Journal of Finance, pp. 427-65) criticized the almost 30-year-old CAPM. According to their conclusion, the model did not ascertain the average returns on shares in the last 50 years; in another words, the beta was not the right measure of risk. If this was true, the risk might not be related with returns in the way theoretically described for 20 years.

 Nichols (1993, pp. 52-53) stated in his article that the CAPM directly contributed to the problems of competitiveness in the USA as it led to safety investments with clear short-term returns instead of those following long-term competitive investment opportunities.

- Edwards and Keen (1984, pp. 211-214) proved with a special model that dividend taxation influenced the cost of capital and thus also the discount rate with a change of the marginal source of financing.

- Schneider (1992, pp. 518-519) drew attention to the fact that under the assumptions of the CAPM the cost of capital in the circumstances of uncertainty should be composed of a risk-free interest rate and two risk premiums:

• market risk premium covering the average risk in the capital market;

• risk premium for an individual investment depending on the more or less systematic risk of this investment in relation to the average market investment.

In the case of planning for more than one accounting period three more risk premiums should be taken into account, as follows:

• premium covering the risk of a possible change in the riskfree market interest rate between the first and second period;

• premium covering the risk of a possible change to the market risk premium between the first and second period;

• premium covering the risk of a possible change of a beta of an individual investment between the first and second period.

With the growing number of accounting periods included in the chosen time horizon the sum of risk premiums should be increasing.

Later the CAPM was supplemented by the arbitrage pricing model (Ross, 1976; hereinafter: the APM).

Comparing both models, Damodaran concludes (2002, p. 78), that the survival of the CAPM as the default model for risk in real-world applications is a testament to both its intuitive appeal and the failure of more complex models to deliver a significant improvement in terms of estimating expected returns. Thus it seems that the CAPM is still the most effective way of dealing with risk.

Slovenia has tried to solve the problem during the privatization process with a calculation of certain accounting betas¹³. But due to the frequent changes to the

¹³ A method of estimating a project's beta by running a regression of the company's basic earning power against the average basic earning power for a large sample of firms (Brigham 1995).

Bookkeeping Act (1976) and Accounting Act (1989) and the high rate of inflation in the past the results were unreasonable and not used in practice.

For practical purposes Slovenian business appraisers use banks' interest rates and internationally available data bases such as <u>http://www.reuters.com/</u>, <u>http://pages.stern.nyu.edu/~adamodar/</u> and <u>http://finance.yahoo.com/lookup</u>. The data originating from such bases serve as a starting point to determine the discount rate for fair value calculation. This means that conditions in foreign equity markets like size, diversification and variability of expected return are taken into account when establishing the fair value of an asset in Slovenian circumstances. It also means that the fair values calculated are at least partly biased.

If we take into account all the problems connected with the estimated value of equity then the use of this value is much less attractive than expected. Regarding the cost-benefit view it may even be unreasonable. For this reason, accounting in small emerging market economies needs extremely careful consideration as to whether the conditions for fair value recognition in the financial statements have been properly met.

Conclusion and Recommendations

As contemporary financial reporting frameworks arise from an environment with relatively high market efficiency, small economies are faced with a certain paradox. Since their capital markets are less efficient than the developed capital markets with a long historical tradition, the need to establish fair value by using a valuation technique is more frequent. But the domestic market does not offer adequate market inputs for valuation models. The use of data from developed capital markets requires better skills of appraisers valuing the business, although the level of general knowledge in a small economy is different from a country with a long-term market tradition.

For the reasons mentioned earlier, the IFRS, especially those adopted in the European Union, should include a more detailed definition of the active market and of the frontier, beyond which fair value recognition would be impossible due to the existing uncertainty. After all, since we are facing "financial crisis" even IASB has published a paper stressing, that a measured value using an approach without taking into account all factors market participants would consider in pricing the financial instrument, does not represent an estimate of a current transaction price on the measurement day (IASB 2008). Practically this means that such an instrument should be measured at cost, which should be

taken into consideration by companies and auditors in the environment without an active market.

On the other hand, small emerging economies should unite their forces and play more active role in the standard setting procedures which will not be that "straight" regarding the strength and history of large market economies.

Since it seems that all pluses of fair values have already been explored, IASB should deal with the elimination of minuses. Besides the solutions mentioned in connection with fair values of financial instruments another recommendation of the article is to bring more emphasis on the direct cash flow statement in the process of creating a transparent financial reporting framework.

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