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SOME NEW TENDENCIES IN DEVELOPMENT OF LONG-TERM FINANCIAL MANAGEMENT

Long-term financial management is without doubt a dominant integral part of the financial firm management.

For further development of long-term financial management in CR it is necessary to take into account tendencies which prevail in this area in well developed industrial states. Knowledge of these tendencies and their creative application in Czech economy assumed a great significance in the connection with an entry of CR into EU and with the growing economic co-operation of Czech and foreign firms. In this contribution we shall concentrate our attention on the world development tendencies in the following three areas which create basic elements of contemporary long-term financial management:

- evaluation of investment projects by financial criterion of their effectiveness,
- financial structure of firms' investment,
- financial support of firms' investment by the state and the participation of private firms in financing state's investment.

1. Developmental Tendencies in Theory and Practice in Decision-Making About Effectiveness of Investment Projects

The bases of modern theory of investment project's effectiveness evaluation is a concept of net present value which was the first time formulated in I. Fischer's work in the thirties of the last century [Fischer 1930]. The principle of net present value connects projects' evaluations with principal goal of business – by maximisation of firm's market value. Under unchangeable conditions every project with positive net present value means in its consequence the growth of firm's market value.

A criterion of net present value is in contemporary theory of investment decision strongly preferred prior to other indicators [Brealey, Myers 2003, p. 108-111; Levy, Sarnat 1999, p. 138-139; Valach 2006, p. 137] (internal rate of return, playback pe-

riod, return on investment). It is considered on optimum solution for evaluation and selection firms' investment projects under the presumption that it is possible to specify with relative accuracy expected future cash flows from the project and corresponding required rate of return.

In spite of the fact that it is recommended to use net present value in the literature on the subject, different solutions are used in practice.

The series of surveys about using methods for evaluation of investment projects in industrial well developed states demonstrate that firms very frequently use in practise other methods of project's evaluation effectiveness, namely the payback period and internal rate of return. For example the investigation of 100 great firms in Great Britain resulted in a fact that net present value is always utilised only within 33%, but the payback period within 62% and the internal rate of return within 54% (firms often use more methods side by side) [Pike, Neale 1996]. A conclusion from other surveys in this area states that "though still more grater firms have a tendency to discounting indicators of the investment value, the majority of firms are using probable methods which include for example the payback period and accounting rate of return" [Levy, Sarnat 1999, p. 219]. There are not similar surveys in CR but with a certain degree of tolerance we can anticipate that their results would probably show an identical conclusion.

What is the cause of differential practice in investment decision comparing with the recommendation of investment theoreticians? It is evidently a complex of reasons, namely:

- historical reasons,
- slightly increased mathematical demands,
- unsubstantial differences between projects' evaluation with the help of theoretically recommended approaches and according to deep-rooted practice,
- preference of cash flow from the project before accounting traditional categories of costs, incomes and profits from the project,
- existence of investment decisions which do not objectively enforce evaluation and comparison with the help of cash flow from the project, but only with the help of saving operational and investment costs.

Even though the modern theory of evaluation of the projects' effectiveness based on cash flow of the project, respecting the factor of time and risk is not yet – namely in Czech economic practice – sufficiently applied, in the last years we can observe further new access to the evaluation of the project which is not used in current practice at all or only exceptionally.

One of them, which is widely discussed especially in academic sphere, is option access to the evaluation of the project.

In this connection real options are often discussed (in distinction to financial options, which are standardised and are traded on capital markets).

The basis of optional approach towards the evaluation of investment projects lies in the fact that it attempts to respect investment projects' flexibility during their realisation and functioning. Classic concept of the net present value of the project is based on the firm strategy of realisation and functioning of its investment. The change of strategy in the course of realisation of functioning of investment is not considered (for example expanding the project at its high success or on the contrary terminating the project when its success is endangered because the conditions changed against originally presumed cash flow).

Options access to the evaluation of the project is, on the contrary, based on the fact that during the realisation and functioning of an investment numerous changes can appear in a product, technological innovations, expected demands for products and in expected risk. Changes of this type are contemporarily especially very frequent in some branches of business – for example pharmaceutical industry and electronics. It is necessary to take them into account while decision – making the projects. According to a character of the project managers can interfere in it during its realisation or useful life depending on new information about factors influencing the project. They can for example speed up or postpone the realisation of the project, increase or decrease originally projected capacity, terminate the project or sell it and so on. The possibility of this active interference in a project depends on its character and its own flexibility.

Some projects are less flexible (for example strongly purpose built technologies not usable for another purposes) and in these cases classical evaluation of projects with the help of net present value is sufficient. In case of projects which are, owing to their character, flexible enough (they enable for example to apply various technologies), classical evaluation of projects in most cases underestimates entirely their effectiveness, because it does not take possibility into account to change the project by active intervention in dependence on the changed conditions.

Optional access is intuitively applied by managers first of all in cases in which the classical net present value of the project without taking its flexibility into account is near zero or is slightly negative. Experienced managers, however, feel that these projects in case of their flexibility and uncertainty of environment could possibly increase the firm's value.

The theory of real options does not reject and does not replace classical instruments of investment decision in the form of net present values or internal rate of return. On the contrary: it is based on them and only their information ability extends and improves by stressing an importance of project's flexibility at realisation or functioning of the project. Total strategic net present value of the project is then given by a standard net present value, increased by the value of real option.

The value of real option is strongly and directly dependent on a degree of investment project's flexibility and on the degree of risk of future project's incomes. For its quantification analogous processes are recommended, as it is within the fi-

financial options (for example Black Sholes' model of option's valuation, event. discreet binomial model). However, it is necessary to take into account that between financial options and real options there are significant differences: lower rate of marketability, greater complexity of real options, impact of competition (concerning the branch – without admission barriers). Therefore, the valuation of real options with the help of methods for valuation of financial options is necessary to be taken into consideration only as approximate procedure, which, however, at the strongly flexible projects can substantially improve evaluation of the project and quality of the whole process of investment decision.

2. Developmental Trends in Financing Firm's Investments

Financing of firm's investments is a further significant area of long-term financial management. It is engaged in specifics of the specificity alternative financial resources, applicable to financing the firm's development, in costs of capital for their supply, choice of optimal capital structure and in problems connected with its precise identification.

As far as the structure of alternative resources of financing firm's investments is concerned, it is possible, with a certain degree of caution, to form the following long-term tendencies.

1. As decisive resources of financing investments of non-financial corporations internal resources appear in the majority of highly developed industrial countries.

Their contribution in long-term perspective highly exceeds 50% of investments value. In some countries it exceeds the limit of 75% (for example internally generated resources participated in 2000 in general investments of non-financial firms in USA by more than 76% [Brealey, Myers 2003, p. 378]). Similar analyses carried out in Great Britain state that internal resources in 1990 formed about 63% of all resources of long-term financing industrial and commercial firms [Pike, Neale 1996, p. 465].

Also in CR there is the proportion of internal resources for financing of non-financial corporations which are decisive, even when they are rather smaller. The proportion of own resources (in CR there are more or less only internal resources because external resources in form of share issues are minimum) reached around 60% in 2000 [*Gross Investments...* 2002].

2. Decisive internal resources of financing are depreciations of long-term property.

So for example in USA in the course of last two decades the participation of depreciation fluctuates round 70% of all internal resources [Block, Hirt 1994, p. 414-415], in CR depreciation in last years' form more than 60% of internal resources.

Some authors, namely of accounting publications, do not consider depreciation as financial resources. They stress that depreciation represents only the allocation of

original price of assets until the period in which these assets are used – nothing more and nothing less.

However, the theory and practice of the financial management assume a different attitude to the depreciation of long-term assets. Moreover, depreciation is understood as a systematic method of transferring the price of long-term asset in operational costs and stresses their significant role as an internal resource of financing. Internal resources of financing are not understood only as profits (event. retained profits), but widely as a total collected receipts of firms. A part of these receipts must be used for the settlement of personal expenditure, part for financing short-term assets, part for financing long-term assets and remaining part for settlement taxes, financing the development of a firm and claims of owners who have invested capital and have accepted the risk of business.

Financial management of the firm cannot be oriented only on firm's profit event. its distribution for various purposes. It must be systematically engaged in total receipts of the firm, in their collection, in application to renew manpower and short-term and long-term assets. Only substantially the small part of internal financial resources is used for expanding firm's assets. The decisive part serves as the renewal of assets and manpower. Practical financial management and planning is also not concentrated only on planning of firm's profit and its distribution. In long-terms and short-terms total receipts, their collections, receipts for personal expenditure, renewal of stocks and receivables for renewal of long-term assets are planned. Neither theoretically nor practically do any serious reasons for not including depreciation among internal resources of financing the firm's needs exist. The fact they cost and express the transmission of original price of long-term assets do not exclude the fact that – because they are not simultaneously cash outflow – it is necessary to accept them as a part of receipts which in consequence represent an expressive resource of financing.

The difference against the profit is that depreciation introduces a resource which in a final consequence aims at renewal of long-term assets; profit is than a new financial resource, making the financing of firm's development possible. In this connection it is good to realise that so called replacement investments are in the majority of countries a decisive part of gross investments – 60-70%.

3. The third tendency in financing firm's investments is concerning the external resources of financing.

In this case it is a clear difference between USA and the majority of European countries. While in USA firm's bonds and stocks of various types appear as a dominant external resource of financing, in Europe and Japan dominate long-term bank credits [Valach 2006, p. 263-264]. In CR external resource of financing tangible and intangible investments at non-financial firms, is entirely dominant too (In 2000 the bank credit took part in financing more than 22% of investments, while issue only 2% of securities (they are mostly firm's bonds).

Last tendency which can be proved on the bases of various analyses is a great development of leasing – in financing investments, especially means of transportation. In USA, Europe and CR leasing has occupied in more than 30% on the market. The development of leasing in CR will evidently continue especially in the area of operative leasing where the utilisation in CR is, for the present, lower than in highly developed European countries and also in the leasing of real estate.

In the future it is possible – in connection with the globalisation of economy and with CR opening in EU as well as with the growth and improvement of capital market in CR – to expect the increase of risk capital in financing some highly innovation investments and the increase of the share of external financing through the issue of shares and bonds. For that it is necessary to create adequate conditions on the capital market and in the sphere of taxation. Through the increased role of issues and bonds in financing investments, internal resources of investment's financing remain a decisive resources of financing firm's development in the majority of firms.

3. Tendencies in the State's Support of Firm's Investments and Participation of Private Firms in Financing State's Investments

In all countries with market economy the centre of gravity for financing firm's investments lies in internal resources, combined with various forms of financing external resources in a form of bank credits, bonds, shares or leasing.

Financing investment activity of a firm with an expressive engagement of the state dominated in central controlled economy from the fifties to the eighties of the last century. Historical development proved explicitly its unsuitability. Such a form of financing was one of main reasons of inefficiency in state firms and the whole economy.

Participation of the state is very differentiated, according to the extent of state support of economy (USA x France, Germany).

State's investment support is justified by the necessity to support economic growth by insufficient development of some regions or sectors of business by existence externalities on market by necessity to support small and middle business. In their realisation the state is limited not only by the extent of state budget but even by the necessity of respecting market conformity of these supports. It is necessary to ensure that the market business environment is not essentially interfered. It ensures approximately the same conditions in business and the same in international criteria.

Financial support of firm's investments is realised through various forms:

- direct investment supports (investment grants from the budget, central funds),
- indirect investment supports (tax rates, relief, holidays).

Investment support in the form of grants is connected with some negative phenomena (wasting financial means, their misusing for other purposes, low pressure on

the effectiveness of investments, wide space for corruption). The state defends itself with usefulness of grants, with administrative controls and so on.

In European countries they are extended in agriculture, in railway and municipal collective transport and in power production from recoverable sources. More intensively they are utilised by small and middle firms. From 2004 Czech firms can ask for grants from structural funds of EU through various operational programmes. In an area of investments they concentrate on help to firms starting business, on the support of increasing the technological level of small and middle firms as well as on the support of innovation projects. At nineties of the last century it began to play a significant role in stimulation firms investments (especially in direct foreign investments) indirect investment support in a form of various reliefs. They are included in so called investment incentives.

Pioneers of investment incentives were Singapore in Asia and Ireland in Europe. At this time they occur not only in developing countries, but also in well developed countries (for example in 2000 Honda firm obtained 105 thousand USD for one new working place) [Srholec 2004, p. 130]. Also in CR the law on investment incentives has been in existence for six years as one of public support forms.

It must not interfere with economic competition and incentives and it must not exceed certain part of investment value. Economists' opinions on application of investment incentives are not unified. Some stress only their benefits (obtaining new technologies, capital, know-how, creation of working places), the others strongly doubt them. We assume that as far as other countries apply the system of investment incentives CR cannot abandon this support of investments.

However, it is necessary to struggle for its improvement (to extend incentives for smaller investments, interest them in investments in modernisation and investments supporting export and limiting importing demand of new investments). We cannot suppose that in a medium-term horizon investment incentives will stop to be utilized in European economic area.

A significant phenomena in an area of financing investment has become in the course of last 10-15 years financing projects of Public Private Partnership. In this case it is an opposite process: private sector takes part in financing projects realised by the government or local authorities. Order party is a state agency, the maker (sometimes an operator) is a private sector. There is a closer connection between the order party and the maker. The maker (private firm) ensures not only a realisation of a project but it also takes part in its financing, event. in its further operation or maintenance.

Great expansion of PPP projects in the last two decades throughout the world is caused by the growing deficits of state budgets and public debts, by pressure of population on providing and improving public utility services and also by the fact that long-term experience proves lower effectiveness of building and operating pro-

jects secured and financed only by public sector. Private sector mostly creates a stronger pressure on effectiveness at building and at following operation of projects.

Private sector in the participation in financing state projects has been especially extended in the last years in Great Britain, Ireland, Spain and France. In Great Britain it covers according to an estimate 15% of state investments.

Potential preferences of PPP project's financing consist in the temporary reduction of claims for budget in the creation of greater pressure on the reduction of capital and operational expenditures and in the acceleration of the time of construction and in the optimum distribution of project's risk upon order party and makers.

Basic conditions for the utilisation of above mentioned potential preferences are transparent criteria for the selection of PPP projects, solid determined standards of public services, licensee's contracts of good quality and the detailed economic analyses of the project, proving its economic contribution, comparing with projects managed and financed only by state.

Projects financed according to the rules of PPP has naturally its risks and disadvantages. Here it occurs that indebtedness of the state or local public authorities are to a certain extent hidden and underestimated.

It is necessary to draw a long-term concept of public finance because PPP projects are considerably long-term (15 to 30 years). The preparation of the concept for such a long time is extra difficult owing to the development of prices and required standard. A lower quality of provided public services is a danger here because the private company can sacrifice the quality for a high profit. PPP projects lay considerable demands on the quality of contracts between order party and maker.

Practical experience from the application of PPP projects, namely in Great Britain, proves that they suppress an additional grow of costs and delay of projects. In CR after the first unsuccessful attempt (building of the highway from Hranice to Ostrava) the greater projects of this type are in the phase of preparation.

It is obvious that financing projects by the means of method of Public-Private Partnership has some positive aspects as far as adequate conditions are created for its realisation. However, it would be illusory to regard it as a decisive instrument for making the investments of state sectors more effective.

Literature

- Block D., Hirt A., *Foundations of Financial Management*, IRWIN, Massachusetts 1994.
 Brealey R.A., Myers S.C., *Principle of Corporate Finance*, McGraw-Hill, Boston 2003.
 Fischer J., *The Theory of Interest*, Macmilan, NY 1930.
Gross Investments in CR at Year 2000, Czech Statistic Office, Prague 2002.
 Levy H., Sarnat M., *Capital Investment and Financial Decision*, Grada Publishing, Prague 1999.
 Pike R., Neale B., *Corporate Finance and Investment*, Prentice Hall, London 1996.
 Srholec M., *Direct Foreign Investment in CR*, Prague, Linde 2004.

Valach J., *Investment Decision and Long-Term Financing*, Ekopress, Prague 2006.

KILKA UWAG O ZMIANACH W DŁUGOTERMINOWYM ZARZĄDZANIU PRZEDSIĘBIORSTWEM

Streszczenie

W prezentowanym artykule autor zauważył, że w Republice Czeskiej w ocenie projektów inwestycyjnych chętnie wykorzystuje się metodę NPV. Ostatnio stosowane są także metody oparte na rachunku opcyjnym. Dodatkowo można stwierdzić, że dobór źródła finansowania inwestycji zmienia swój charakter – coraz chętniej jest wykorzystywany kapitał obcy.