Sources of Investment Finance in Firms in Slovakia[1]

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Abstract
Based on results of the EBRD-World Bank "Business Environment and Enterprise Performance Survey" (BEEPS), the paper provides an explanation of why firms in Slovakia finance the most of their new investments with retained earnings, followed by bank debt, trade credit and external equity, as well as why small firms tend to use more retained earnings and less bank debt than medium and large firms. The financing patterns of firms in Slovakia are compared to the average financing patterns of firms in selected OECD-countries. Furthermore, measures to stimulate corporate investments and their financing are proposed.

Key words: investment, sources of finance, pecking order theory, information asymmetry, retained earnings

1 INTRODUCTION
An important condition for economic development and improvement of living standards in a country is a continual increase in the productive capacity at the micro-economic level. Analogically, in a period of financial and economic crisis it is important to maintain the level of productive capacities as far as possible in order to be equipped for the growth phase after the crisis is over.

The growth in productive capacities of firms requires new investments, therefore firms should have access to reliable and cost-effective financial sources and they should expect the intended investments to be profitable. The cost of finance is a very important factor that influences the profitability of an investment. Therefore it is crucial for firms to pay a lot of attention to finding appropriate sources of investment finance and thereby also take into account, that the preferred financial source need not be currently available in the capital market.

The sources of investment finance can be divided into internal and external. Internal sources (retained earnings) are both in theory and practice considered as the most appropriate source of investment finance, but their amount is limited by the profitability of the firm. External debt (loans and bonds) is limited by the capacity of the firm to guarantee its obligations, i.e. by the amount of fixed assets that could serve as collateral. Financial system is also a key element: in Slovakia (and other countries) with the bank-based financial system, commercial banks are important loan providers, whereby their relation to the firm can turn into a mutually beneficial long-term relationship (the bank gains a good insight into the business of the firm, the firm can acquire loans under more favorable conditions). The amount of new external equity (new funds from the owners) is largely dependent on the legal form of the firm and its ownership structure, on the degree of involvement of the owners into the management of the firm and their willingness to take on new partners, and in the case of public limited companies also on

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the effectiveness of the stock market. Additionally, there are other alternative external sources of funds that are going to be discussed in the paper.

The first part of the paper explains the problem of information asymmetry and its impact on financial decision-making. The second part is aimed at the analysis of the structure of investment finance in firms in Slovakia and its comparison to the average of firms in selected OECD-countries, whereby the results of the EBRD-World Bank "Business Environment and Enterprise Performance Survey" (BEEPS) are used. In the third part measures to stimulate new corporate investments and to improve the conditions of their funding are proposed.

2 THE IMPACT OF INFORMATION ASYMMETRY ON INVESTMENT FINANCE

From the point of view of a firm, different financial sources are not perfect substitutes[2]. This can also be concluded from the pecking order theory by Myers and Majluf (1984) and Myers (1984), according to which firms follow a certain pecking order when they need to raise new capital for their investments: they prefer internal financial sources and out of external sources they prefer debt over equity. The reason is information asymmetry between managers and potential investors[3], who would require an inappropriately high rate of return. It follows, that profitable firms can fund the most of their investments with retained earnings, and less profitable or loss-making companies must rely more on external funds. Therefore more profitable firms are expected to have a lower leverage than less profitable or loss-making firms.

Because of information asymmetry, internal financial sources have several advantages over external sources from the point of view of the firm:

- managers need not disclose confidential information about the value of the existing assets or about the value of new investments;[4]
- the firm can avoid external funds, which may be too expensive, because it would be too costly or even impossible for the firm to credibly inform potential investors, who could consider such an information to be not credible, purposive or distorted;
- the firm can avoid the so called agency costs, which result from interest conflicts between managers and providers of external funds.

The preference of debt over equity can also be explained with the help of the pecking order theory and information asymmetry. Equity is more severely affected by the problem of information asymmetry than debt for the following reasons:

- investments that are intended to be financed with a bank loan are carefully analyzed by the bank in advance and continually monitored after their implementation. Moreover, banks require a certain collateral for the case the firm would not meet its obligations, the interest is paid out regularly on a contractual basis regardless of the profits achieved, and in the case

2 According to Modigliani and Miller (1958), different sources of finance are perfect substitutes only in a perfect capital market, whereby the market value of a firm is given by its assets. In order to maximize its market value, the firm should implement all of its investment opportunities with a positive net present value.

3 The information asymmetry can be caused e.g. by the following: managers may be reluctant to disclose some information which provides the firm with a competitive advantage, managers have more experience with the firm than potential investors, or investors may not trust the disclosed information.

4 For example disclosure of information about an innovative investment would cause imitation by competitors, causing the profitability of the investment to decrease to a level that would make the investment unprofitable for the firm.

of the firm's liquidation creditors have a preferential right to the profit achieved by selling its assets;

- equity issue can be considered as an inability of the firm to obtain money from other sources: potential investors could conclude, that the intended investment is too risky, or that the firm has already reached its affordable level of indebtedness.

It can be supposed, that the problem of information asymmetry will be the most significant in small (and medium) firms, newly established firms, growing firms, as well as in firms with innovative business that potential investors may consider as too risky, or that may be confidential, so that no imitators appear who would destroy the opportunity of the firm to achieve an acceptable profit from the innovative investment.

In general, such firms will also face problems to fund their potential investments with internal funds, either because the volume of their investments is relatively large, or because their profits have not reached their adequate level yet. Moreover, the access of these firms to external financial sources is limited: because of the problem of information asymmetry and a lack of tangible assets that could serve as collateral, it is difficult for them to obtain a bank credit under acceptable conditions. Issuance of securities can be taken into account only by large companies.

For the reasons mentioned above, such firms are often forced to resort to "informal" sources of funds (e.g. trade credit, financial support from family and friends), especially in the initial phase of their business, when the amount of financial sources needed is relatively small[5], or they can try to acquire venture capital. Venture capital investors are usually involved in the business of the firm, thereby reducing the problem of information asymmetry and increasing the probability of the firm being successful. After the expiration of the period of time for which the venture capital has been provided, the firm has to rely on internal financial sources and debt finance (bank credits). Thus the "pecking order" of financing seems to be modified in young, small, growing and innovative firms.

3 SOURCES OF INVESTMENT FINANCE IN FIRMS IN SLOVAKIA, COMPARED TO THE AVERAGE OF SELECTED OECD-COUNTRIES

The structure of sources of investment finance is depicted in Fig. 1, based on the results of the BEEPS implemented in the years 2009 and 2005 in selected countries including Slovakia. The results of firms in Slovakia are comparable to the average results of firms in OECD-countries: new investments are mainly financed internally with retained earnings, followed by bank credits; the rest consists of trade credits, external equity and other sources of funds (e.g. leasing, bonds, commercial papers, funds from family, friends and non-financial institutions). The relatively small share of external equity can be explained by the dominant position of banks in the financial system of the analyzed countries and by the low importance of stock markets, burdened with a relatively high degree of information asymmetry. Underdeveloped stock markets

5 However, financing of long-term investments with such funds could be problematic, because the amount of money raised in this way is relatively small, the repayment period relatively short and the cost relatively high. Therefore such funds are suitable only for acquisition of simple equipment.

cause the owner structure of firms to be relatively concentrated and this can also be one of the reasons for the relatively low share of external equity: the existing owners prefer debt, because taking on new partners would cause a dilution of their shares.

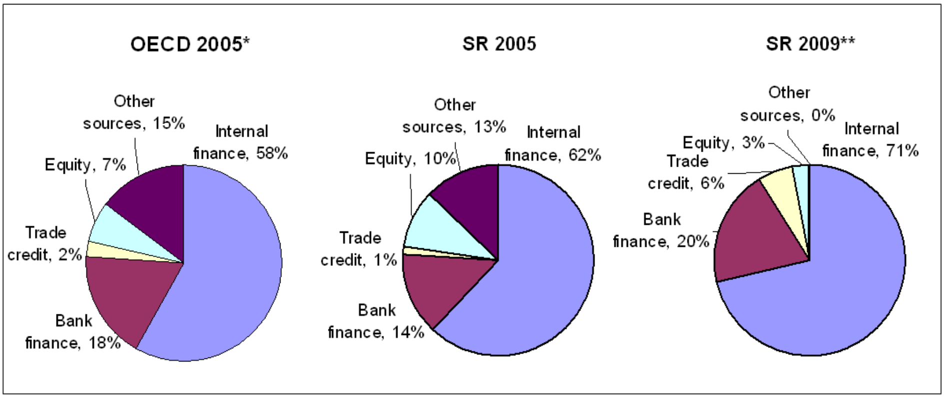

Fig. 1 – Sources of investment finance in OECD and in Slovakia (SR). Source: author's calculations based on the BEEPS.

Notes:
* Average of the following countries: Czech Republic, Greece, Ireland, South Korea, Hungary, Germany, Portugal, Slovak Republic, Spain.
** The 2009-data are not fully comparable to the 2005-data, because the 2009-survey did not contain the category "Other sources". Comparable OECD 2009-data are not available, because for the most of the countries the most recent data available is from the year 2005.

Comparing the data SR 2005 and SR 2009, a relative increase in trade credits (credits from suppliers and advances from customers) is obvious. This could be caused by problems of many firms in Slovakia to obtain funds for their investment, therefore financing a part of their investments with trade credits. However, financing long-term investments with short-term funds could lead to financial problems of the firm.

Although the available data do not contain such information, it can be supposed, that also a part of bank credits are short-term. But the fact that banks prefer to grant short-term credits (because long-term credits are more exposed to the problem of information asymmetry), can be an explanation of the relatively low share of bank credits in the sources of investment finance. Moreover, the problem of information asymmetry can cause long-term credits to be relatively expensive, making intended investments unprofitable for the credit-seeking firms.

The decrease in the share of external equity in firms in Slovakia can be a consequence of the slowing-down privatization process that can be considered to be almost accomplished.

The structure of sources of investment finance also depends on the firm size. From the Fig. 2, based on the results of the BEEPS, it is obvious that in Slovakia medium and large firms raise relatively more bank credits than small firms, whereas small firms tend to use more retained earnings. The more difficult access of small firms to the bank credits is related to the problem of information asymmetry.

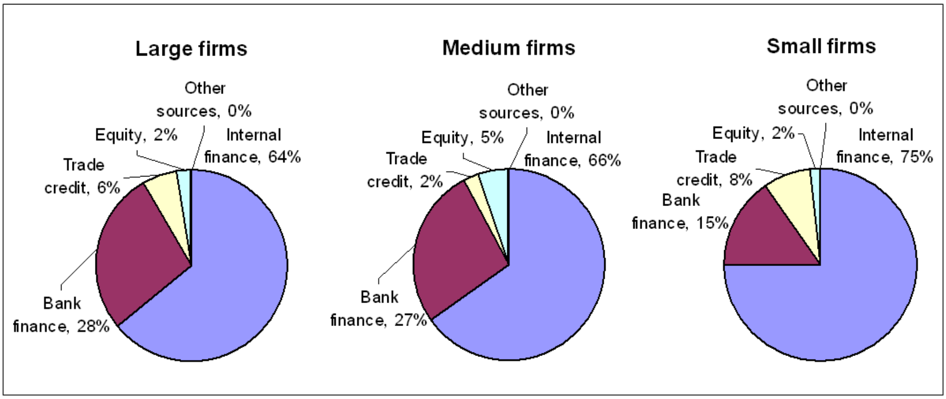

Fig. 2 – Sources of investment finance in firms in Slovakia in 2009 according to the firm size. Source: author's calculations based on the BEEPS.

Note: Small firms = 1 - 19 employees, medium firms = 20 - 99 employees, large firms = 100 and more employees.

4 STIMULATION OF CORPORATE INVESTMENTS

Retained earnings as the most important source of investment finance should be stimulated at the macro-level by appropriate measures, aimed at establishing and maintaining a direct relationship between firms' profits and investments (e.g. by a lower income tax rate, preferential tax treatment of retained earnings, higher depreciation rates).

Corporate investments and their financing can also be stimulated by the favorable legal and institutional framework, ensuring the enforcement of legal rights, creditors' protection, effective bankruptcy proceedings etc. An appropriate level of interest rates should be established by the monetary and fiscal policy: too high interest rates would reduce corporate profits, whereas too low interest rates would reduce the savings in commercial banks and would not be attractive for foreign investors. The banking system should also function properly, so that interest spreads are reduced and banks are more willing to provide long-term investment credits.

The access to the EU-funds and to the various forms of state assistance[6] can help to reduce the problem of information asymmetry and enhance innovative projects and activities in strategically important fields. The costs of such measures are expected to be weighted out by benefits for the society as a whole, given by the overall increase in investments, as well as by the income effect, including higher tax revenues.

As it is obvious from the results presented above, small and medium enterprises (SME) use relatively less bank credits and are more relying on retained earnings as compared to large companies. This is not because they prefer retained earnings, but because they often do not have other alternative for the reason of information asymmetry. With regard to these facts and also with regard to the fact that SME comprise a considerable share in the overall employment, state support should be primarily oriented at this group of companies. According to Šúbertová

6 For example loans by state-owned financial institutions, interest subsidies, investment subsidies, grants for newly created working places, credit guarantees by state, refinancing of commercial loans, syndicated loans by commercial and state banks, support of venture capital funds.

(2009), "Slovak SME are expected to reinitiate the growing trend of expansion of business activities, when they have sufficient funds, adequate information and less administration"[7]. Additionally to suitable framework conditions to conduct business, it is also essential for SME to establish and maintain good relations with commercial banks, thereby reducing the problem of information asymmetry.

5 CONCLUSION

The differences in the relative importance of various financial sources result from the information asymmetry between managers and potential providers of external funds. The information asymmetry is related both to the value of the existing assets of the firm, as well as to the viability of investment opportunities. It is a form of capital market ineffectiveness that causes the inability of capital market to allocate funds into the most productive investment opportunities. Especially small, young, growing and innovative firms suffer from this problem.

From the pecking order theory based on information asymmetry, as well as from the BEEPS findings it follows that firms generally prefer internal financial sources. Bank credits are generally the most preferred external source of investment finance in firms in Slovakia, as well as in firms in OECD-countries in general, whereas the importance of external equity is relatively low. The BEEPS findings have also confirmed that large and medium firms in Slovakia obtain relatively more bank credits, whereas small firms tend to rely more on retained earnings.

Corporate investments and their financing can be stimulated by a suitable macroeconomic, legislative and institutional framework, by an effective system of state support, as well as by enhancement of alternative sources of finance like for example the EU-funds and venture capital. Increased attention is to be paid to the SME.

References

1. EBRD-*World Bank Business Environment and Enterprise Performance Survey* (BEEPS) 2010 [online]. Washington DC : International Finance Corporation, 2010 [cit. 2010-05-01]. Dostupné na internete: <http://www.enterprisesurveys.org>.
2. HALL, B.H. The Financing of Research and Development [online]. In *Working Paper* No. E01-311. Berkeley : University of California at Berkeley, 2002. [cit. 2010-05-01]. Dostupné na internete: <http://129.3.20.41/eps/fin/papers/0303/0303003.pdf>.
3. KRIŠTOFÍK, P., KANDEROVÁ, M. The Impact of Financial Reform on Slovak Firms' Corporate Capital Structure. In *Ekonomický časopis=Journal of economics*. ISSN 0013-3035, 2009, no. 9, p. 891-902.
4. MODIGLIANI, F., MILLER, M.H. The Cost of Capital, Corporation Finance, and the Theory of Investment. In *American Economic Review*, 1958, no. 48, p. 261-297.
5. MYERS, S. C., MAJLUF, N.S. Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have. In *Journal of Financial Economics*, 1984, no. 13, p. 187-221.
6. MYERS, S. C. The Capital Structure Puzzle. In *Journal of Finance*, 1984, no. 39, p. 575-592.

7 Author's translation.

7. SIVÁK, R., MIKÓCZIOVÁ, J. *Teória a politika kapitálovej štruktúry podnikateľských subjektov*. 2. vyd. Bratislava: Sprint dva, 2009. 297 s. ISBN 978-80-89393-06-0.
8. ŠÚBERTOVÁ, E. Využívanie externých zdrojov financovania z fondov EU v MSP. In *Moderné prístupy k manažmentu podniku: zborník príspevkov z 18. medzinárodnej vedeckej konferencie* [CD-ROM]. Bratislava: Slovenská technická univerzita, 2009,s. 1-5. ISBN 978-80-227-3169-0.

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