

## The Impact of Financial Reform on Slovak Firms' Corporate Capital Structure<sup>1</sup>

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### Abstract

*This paper focuses on the capital structure of Slovak firms and the influence of financial market imperfections on their leverage. We hypothesise that the distorted, low supply of bank debt in the late 1990's was a major imperfection affecting capital structure. The importance of this imperfection was enhanced by the major role of bank debt in transition economies' financing. Consequently the 1999 banking reform aimed at increasing the supply of funds. This paper uses annual observations from 1996 to 2004 on a sample of over 1.000 non-financial firms to explore variations in financial structure over time. A survey of the capital structure literature leads to an empirical model of the major determinants of leverage. The data is split into two sub-periods; 1996 – 2000 and 2001 – 2004, to test the hypothesis that the bank reforms changed key firm characteristics. The theoretical predictions are confirmed, and size, inter-enterprise debt and asset tangibility emerge as important factors.*

**Keywords:** capital structure, financial market imperfection, bank debt

**JEL Classification:** G14, G32

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### 1. Introduction

This paper examines the role of financial markets in corporate decision making during the transition process, focusing on the role of financial market imperfections in capital structure decisions. Specifically it involves an empirical investigation

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of the behaviour in Slovak firms before and after the 1999 banking sector reform. For the Slovak financial market 1999 is considered to be the threshold separating the pre-reform period from the post-reform period.

In the pre-reform period the Slovak business environment was characterised by the relatively small amount of funds available for financing business. In Slovakia as well as in many other Central European countries bank debt is the predominant financing vehicle for funding corporate development. But in this period the financial sector provided insufficient financing for firms, as funds were absorbed by government for investment and consumption, followed by a strong crowding-out effect. This process also produced high interest rates. Given the lower returns on assets, this limited any leverage effect. Mainly for political reasons many commercial banks granted credits in exchange for inadequate or indeed no guarantees. This led to a huge build up of bad debts in bank portfolios.

Consequently the commercial banks faced both liquidity and solvency problems. To maintain the integrity of the financial system required a fundamental reform. During the reform the government removed the bad debts and foreign investors bought most of the banking system. With foreign capital the banks started to provide loans on a standard basis and increased the volume of funds available for corporations. Moreover they designed rules and regulations for financial intermediation, starting with adequate bankruptcy procedures. Most importantly banks brought in new monitoring systems, and developed their skills in collecting customer information, assessing risks and implementing all those actions that reduce informational failures in the borrower-lender relationship.

Here we concentrate on the potential and actual changes in firms' capital structure caused by the 1999 reform, because if the commercial banks' problems in the pre-reform period were the key financial market imperfections, the determinants of leverage should have changed their influence on capital structure.

The rest of the paper is organised as follows. Section 2 reviews the recent theoretical and empirical literature on capital structure choice and outlines some of its general themes. Section 3 presents the methodology and the empirical model of leverage based upon the determinants that emerge from the literature review. Section 4 contains the description of the data set. Section 5 reports estimation results and last section summarises and concludes.

## **2. Capital Structure and Financial Market Imperfections: Theory and Evidence**

This section reviews the recent developments in the literature on financial market imperfections and the role that they play in explaining firms' capital structure choice (Musa, 2004).

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It is evident that corporate capital structure is one of the most controversial issues in the finance literature. The pioneering work in the field of corporate capital structure is the paper of Modigliani and Miller (1958) about the irrelevance of the financing choice between debt and equity. Following this paper a vast and still rapidly growing literature deals with the potential determinants of leverage and capital structure. Three main groups of determinants dominate the literature:

1. Tax determinants
2. Information asymmetry
3. Agency cost determinants (including the costs of financial distress).

The first group of determinants comes from the well known trade-off between the tax advantages of higher debt and the costs of excessive indebtedness. But because this paper focuses on financial market imperfections we will concentrate on the other two groups of determinants.

### **2.1. Information Asymmetry**

Some theories of corporate financial structure suggest that internally generated cash flow is the cheapest form of financing, followed by debt, with external equity being the most expensive source. As internal funding sources are limited, firms are often forced to look beyond their internal resources to credit and equity markets and to pay the higher costs attached to these external sources of finance.

Capital cost hierarchies are consistent with a range of extensions to the basic Miller and Modigliani framework, including those related to asymmetric information. In addition transaction costs, flexibility, liquidity constraints and ownership dilution considerations can all lead to a predominant preference for internally generated funds.

All asymmetric information theories are based on the assumption that firms' managers are better informed than investors. Investors, knowing this, infer that managers are more likely to raise equity capital when they believe that share prices are over-valued. Hence investors price equity issues at a discount, which can force firms to forego profitable projects. However the prohibitive costs of external equity can be sidestepped by using retained earnings. Also firms can partly overcome the problem if they develop a credible reputation for providing accurate information.

Asymmetric information can also generate a premium on debt finance via the same mechanism. Again, such a premium can force firms that have exhausted internal funds to forego some profitable projects. However the premium on debt finance will be less than that on external equity because debt contracts involve less risky streams of income and hence debt is less prone to sharp revaluations when the true values of investments are revealed. As a result firms may tend to use internal funds first, followed by debt and finally externally raised equity.

There are two main streams in the theory of informational asymmetry in finance. The first is represented by the theoretical models of Myers (1984) and Myers and Majluf (1984). Although closely related, the Myers and Majluf's model is the more sophisticated, whereas Myers' model is more intuitive. Myers and Majluf's model demonstrates that:

- More profitable firms should borrow less, since they can rely on greater internal finance.
- Upon announcement of an equity issue, share prices should fall.
- New projects will tend to be financed mainly from internal resources or through the issue of low-risk debt.
- Since firms choose debt before equity only if it is of low risk, firms with assets that can serve as collateral, and so reduce debt risk, can be expected to issue more debt than firms with assets that are less easy to use as collateral.
- Firms where informational asymmetries are higher will be more affected by underinvestment problems and will tend to accumulate more debt over time.

The model also implies what has been called the pecking order theory of corporate finance. This states that firms prefer internal to external finance and, when they have to resort to external finance, they prefer debt to equity.

The second stream in the theory of informational asymmetry applied to finance views the composition of capital as a direct signal from managers (insiders) to external investors (outsiders). In Ross (1977), the management has better information than the market since it knows the true distribution of the firm's returns. Managers benefit from an increase in share price and they are penalised by bankruptcy. Therefore, by choosing a higher debt level, managers signal the firm's higher quality. A crucial implication of this model is that there should be a positive relationship between firms' profitability and their debt/equity ratios.

Conceptually similar to the Ross model is the model of Leland and Pyle (1977). The authors focus more on managerial risk aversion. The paper's key insight is that as the amount of debt increases, management's share of the firm's equity increases. Since by definition equity is risky, this decreases managers' utility due to their risk aversion. Therefore managers can signal their quality by issuing more debt.

One of the limitations of this branch of the literature is that since the emphasis is on the effects of pre-contractual informational asymmetries, there is no explicit treatment of the incentive structure within the firm. In particular, it is always assumed that the interests of the firm's management and its shareholders are perfectly aligned. However, we know that this is not always the case and that informational failures can engender severe conflicts between the interests of managers and shareholders. This will be discussed in the following section.

## 2.2. Agency Costs

The agency costs of debt are borne by firm owners as the result of potential conflicts between debt holders and equity holders, and the agency costs of equity are the result of conflicts between managers and equity holders. The choice of capital structure can, in some circumstances, reduce the costs arising from these conflicts.

Jensen and Meckling (1976) highlight the agency costs arising from the fact that equity holders have limited liability while debt holders have fixed maximum returns. In the event that an investment is successful equity holders capture most of the gain. However if the investment is unsuccessful debt holders share the burden with equity holders. This asymmetry of expected returns may provide incentives for managers, acting on behalf of equity holders, to pursue risky investment projects, even though those projects have negative expected net present value, because they could turn out to be profitable.

Alternatively, agency costs may arise between managers and equity holders if projects are financed using debt. Because in the event of failure managers stand to lose their jobs, their reputation and their firm-specific capital, and because they cannot diversify this risk, managers may choose not to engage in projects with positive net present value if they must use debt finance. This type of agency cost can be reduced by financing using equity funds.

Jensen (1986) also proposes a control hypothesis that focuses upon a type of agency cost which can be reduced by high debt levels. He argues that if a firm has large cash flows (cash flows in excess of those required to finance all projects with positive net present values) then managers may spend funds on projects with negative net present values. Jensen suggests that managers have an incentive to waste funds in this way because management remuneration is positively correlated with firm size. High debt may diminish that incentive because the interest burden reduces free cash flow. In that sense debt has a disciplining role. Jensen postulates that this incentive towards debt eventually balances the other agency costs associated with high debt levels, and so determines the firm's optimal leverage.

While the agency cost literature is replete with theoretical models, testable implications are scarce. One testable implication is that a negative relationship exists between leverage and firm's growth opportunities. This negative relationship arises in two ways. Titman and Wessels (1988) note that, because growth opportunities are not fully collateralisable (they are very difficult to monitor and value), creditors demand a relatively high return when providing finance for these opportunities. Thus, firms with significant growth opportunities are expected to look to equity rather than debt as a source of finance. Similarly, firms in growing industries may have greater flexibility in their choice of investments, allowing equity holders more freedom to expropriate wealth from bond holders.

Either way the costs of debt for rapidly growing firms may lead to a preference for equity funds. In summary, agency cost theories imply that corporate leverage is chosen so as to reduce the capacity of shareholders to act in a manner contrary to the welfare of bondholders, and to reduce managers' capacity to act in a manner contrary to shareholders' interests.

### 3. Empirical Model

The methodology of investigation of capital structure determinants is based on the approach of Rajan and Zingales (1995), and of Cornelli et al. (1998); or for Slovak firms Kanderová (2003), Mikóczyová (2009) and Krištofik (2002). All focus on the static relationship between leverage and its determinants. We estimate a reduced form equation with a measure of leverage as the dependent variable. Our measure of leverage is the ratio of short term bank debt to total assets (STD/TA).

The literature review suggests a number of factors that may influence financial structure. For the purpose of this paper we distinguish between the demand side and the supply side determinants of leverage. As supply side determinants we will consider *growth, size and collateral*. Our demand side determinants are *cash flow* and *inter-enterprise* motivate the *debt*.

To determine the expected signs on these determinants of leverage, we draw on the literature review of section 2. Firms facing a hierarchy of funding costs are likely to have a positive relationship between leverage and their rate of growth. Higher growth rates are accompanied by greater demand for funds which will force firms to adopt external fund sources (first debt and then external equity). In the model we measure growth by the ratio of investments to total assets (INV/TA).

The coefficient on firm size is expected to have a positive sign because larger firms find it easier to get access to credit markets. Larger firms also tend to have diversified activities that reduce the risk of bankruptcy. Moreover, for reputational reasons the larger the firm the more averse is it to bankruptcy. The measure of size in the model is the logarithm of net sales (lnSAL).

We also anticipate that an increase in real tangible assets, by increasing the quality of collateral, will lead to higher leverage. Assets that serve as collateral provide an explicit guarantee over debts and reduce the risk of investment for the banks. We use the ratio of fixed to total assets as a measure of collateral (FIX/TA).

As in the case of firms' growth rates, if firms face a funding cost hierarchy then cash flow should have a negative sign. As cash flow increases, more internal funds become available to firms, allowing them to reduce their reliance on more expensive debt financing. The measure of cash flow is given by the ratio of profits before tax, interest and depreciation to total assets (EBITDA/TA).

The issue of inter-enterprise debt is relatively controversial. Certainly inter-enterprise debt can convey some limited information about the capital structure of firms. The observation of a negative relation between bank debt and inter-enterprise debt can be a signal of the existence of a pecking order in the firms' financial decisions. For example firms with no access to bank credit would resort to trade credit as a substitute. The measure of inter-enterprise debt is the ratio of net trade credit (payables less receivables) to total assets (NTC/TA).

Given these assumptions our theoretical review suggests the following eclectic regression model to explain leverage.

$$\frac{STD}{TA_i} = \beta_1 \frac{INV}{TA_i} + \beta_2 \ln SAL_i + \beta_3 \frac{FIX}{TA_i} + \beta_4 \frac{EBITDA}{TA_i} + \beta_5 \frac{NTC}{TA_i} + \varepsilon_i$$

The decision to use the ratio STD/TA as an endogenous variable is influenced by the fact that short term debt can reflect the decision-making process without distortion. If we use long term debt, then the decisions taken before the 1999 banking reforms could impact on our description of leverage in the post-reform period. If we replace the short term debt variable with a long term debt variable the results show that long term debt is not affected by either demand or supply-side factors. Moreover in our sample short term debt is the predominant form of firms' debt.

#### 4. Data Sample and Descriptive Statistics

As is customary for studies on corporate capital structure, we concentrate our analysis on the manufacturing and service sectors. The sample of 1350 focuses on firms from these sectors. The sample is representative, i.e. we excluded firms that went bankrupt during the sampling period. That period was 1996 – 2004, with 2000 as the threshold year when we expect to begin to see the main changes in capital structure caused by the 1999 banking reforms.

The data are in book values taken from the annual reports of larger Slovak corporations. A "larger" corporation is defined for the purpose of this analysis as a manufacturing and service sector firm with assets over 150 mil. SKK: about 5 million Euros. Book values rather than market values are used because only a very small number of firms in the sample are quoted, and therefore we are not able to estimate the market values. Also for the listed companies only a market value of equity is calculable since the firms' debt is usually non-traded or traded only infrequently. In general, despite arguments that decisions about capital structure are made by taking into account market value figures, the correlation between book and market values of debt is very high (e.g. Rajan and Zingales, 1995, or Titman and Wessels, 1988).

Table 1 reports descriptive statistics for the relevant variables for the representative sample of firms.

Table 1

**Descriptive Statistics for the Sample**  
(variable Size is in SKK, other variables are coefficients)

		Debt	Size	Inter-enterprise Debt	Collateral	Growth	Cash Flow
1996	mean	0.289	413 960	0.019	0.434	0.523	0.066
	std. dev.	0.268	2 193 059	0.213	0.273	0.258	0.207
	median	0.195	99 032	-0.002	0.471	0.542	0.047
	minimum	0.000	0	-0.958	0.000	0.000	-0.362
	maximum	2.134	48 828 221	1.758	0.989	1.000	5.280
1997	mean	0.303	436 876	0.024	0.433	0.540	0.063
	std. dev.	0.327	2 544 155	0.249	0.273	0.254	0.266
	median	0.214	104 092	-0.003	0.456	0.562	0.044
	minimum	0.000	0	-0.927	0.000	0.000	-0.675
	maximum	5.597	62 068 812	4.652	0.998	1.000	7.249
1998	mean	0.330	365 315	0.036	0.402	0.531	0.081
	std. dev.	0.378	1 566 448	0.282	0.285	0.273	0.462
	median	0.224	92 577	0.002	0.408	0.542	0.040
	minimum	0.000	0	-0.963	0.000	0.000	-1.002
	maximum	5.665	31 509 024	4.622	0.996	0.997	9.878
1999	mean	0.339	482 904	0.041	0.411	0.547	0.065
	std. dev.	0.356	3 299 750	0.252	0.298	0.282	0.377
	median	0.237	71 151	0.005	0.415	0.585	0.035
	minimum	0.000	0	-0.861	0.000	0.000	-0.914
	maximum	4.785	67 968 732	2.835	1.000	1.000	10.746
2000	mean	0.368	521 171	0.051	0.395	0.524	0.099
	std. dev.	0.722	2 772 027	0.252	0.297	0.292	0.753
	median	0.235	97 612	0.004	0.379	0.544	0.044
	minimum	0.000	1	-0.991	0.000	0.000	-1.011
	maximum	19.632	69 995 293	1.874	1.000	1.000	18.318
2001	mean	0.343	382 111	0.044	0.393	0.524	0.064
	std. dev.	0.403	1 316 736	0.291	0.300	0.291	0.122
	median	0.219	86 489	0.001	0.391	0.543	0.048
	minimum	0.000	0	-0.943	0.000	0.000	-0.846
	maximum	4.885	22 765 808	3.626	0.999	1.000	1.021
2002	mean	0.334	680 332	0.040	0.409	0.520	0.076
	std. dev.	0.404	3 505 081	0.272	0.306	0.293	0.216
	median	0.215	111 624	0.000	0.398	0.514	0.057
	minimum	0.000	0	-0.753	0.000	0.000	-0.775
	maximum	5.224	69 582 531	3.361	1.000	1.000	5.203
2003	mean	0.321	519 988	0.023	0.415	0.536	0.083
	std. dev.	0.461	2 815 307	0.284	0.303	0.288	0.336
	median	0.214	94 272	0.000	0.408	0.543	0.054
	minimum	0.000	0	-0.741	0.000	0.000	-0.586
	maximum	9.685	72 369 928	6.098	1.000	1.000	7.204
2004	mean	0.293	520 229	0.009	0.422	0.535	0.098
	std. dev.	0.266	2 564 925	0.217	0.289	0.280	0.752
	median	0.225	126 697	-0.005	0.424	0.552	0.057
	minimum	0.000	0	-0.982	0.000	0.000	-0.561
	maximum	2.497	69 739 842	1.832	0.999	1.000	22.405

Source: Authors.



## 5. Results

We estimated the model on an annual basis. Table 2 records the normalized regression  $\beta$ -coefficients, whose comparisons enable us to evaluate the time paths of the influence of different determinants on leverage. Additionally, we include values of F-statistics (column 9) and  $R^2$  (column 10) indicating that the model en bloc is statistically significant for all analyzed periods.

In Table 2, size, approximated by the logarithm of net sales, is positively related to debt: the larger the firm, the easier its access to bank credit; the smaller the firm the more likely is it to be constrained by financial market imperfections. This fact was evident both in both pre-reform and post-reform periods. The size of the company serves as a stability proxy for creditors, who also know that in central and eastern Europe large companies are also the likely targets of government bailouts due to the higher social costs imposed by their distress.

Company size and tangibility of assets are closely related variables. The latter is measured by the variable (FIX/TA). In Table 2, collateral value is positively related to leverage in the post-reform period, whereas in the pre-reform period the relation was negative. The positive relationship after 2000 is consistent with our expectations. Assets that serve as collateral provide an explicit guarantee for debts and so reduce the bank's risk. Most probably collateral assets emerged as a standard loan guarantee measure, as banking practice standardised after 1999.

Inter-enterprise debt is statistically the most significant variable. It suggests that in the short run firms prefer trade credit to bank credit. As well as being cheaper, such credit may be more accessible when the supply of bank credit is insufficient.

The inter-enterprise debt result also seems to indicate the existence of a "pecking order" in debt decision making; that there is a preference for internal or similar sources over bank debt. This conclusion would have been bolstered by the negative relationship between cash flow and leverage, except it is statistically insignificant.

We can observe the replacement of bank credit by trade credit in the pre-reform period. This situation has changed in the post-reform period, as the decreasing significance of the inter-enterprise debt variable shows.

Table 2 also shows that the importance of growth opportunities rises along with the volume of bank credit. Over time bank credits become more important for financing firms' investment opportunities. In turn, banks should also be concerned for firms' future prospects. In this sample, it looks as though firms that have invested more are treated as having better growth prospects. But the signaling effect of past investment does not seem to enable firms to take on more leverage, as the coefficient for investment (INV/TA) is negative.

Table 2

**Results of Regression Model**

Year		Intercept	Size	Inter-enterprise Debt	Collateral	Growth	Cash Flow	F	R <sup>2</sup>
1	2	3	4	5	6	7	8	9	10
1996	coeff. std. err.	0.625	0.005*** 0.001	-0.719*** 0.026	-0.087*** 0.029	-0.486*** 0.030	-0.053** 0.027	453.2***	0.657
1997	coeff. std. err.	0.652	0.006* 0.003	-0.857*** 0.022	-0.114*** 0.028	-0.472*** 0.030	-0.021 0.021	462.4***	0.676
1998	coeff. std. err.	0.731	0.007** 0.003	-0.750*** 0.028	-0.123*** 0.033	-0.536*** 0.035	-0.013 0.016	386.7***	0.644
1999	coeff. std. err.	0.663	0.026*** 0.003	-0.826*** 0.024	-0.121*** 0.032	-0.532*** 0.034	-0.0193 0.016	266.8***	0.521
2000	coeff. std. err.	0.930	0.021*** 0.007	-0.62*** 0.070	-0.07 0.082	-0.634*** 0.085	-0.006 0.027	310.5***	0.630
2001	coeff. std. err.	0.687	0.010*** 0.003	-0.491*** 0.024	0.087*** 0.033	-0.466*** 0.034	-0.015 0.038	402.3***	0.612
2002	coeff. std. err.	0.700	0.012*** 0.003	-0.096*** 0.028	0.05707 0.035	-0.488*** 0.037	-0.005 0.038	346.0***	0.600
2003	coeff. std. err.	0.703	0.009*** 0.003	-0.068** 0.026	0.086** 0.035	-0.517*** 0.037	-0.051* 0.024	497.1***	0.690
2004	coeff. std. err.	0.592	0.019*** 0.003	-0.077*** 0.026	0.088*** 0.023	-0.471*** 0.029	-0.016* 0.008	273.6***	0.550

Dependent variable: short-term bank debt over total assets, N = 1 350, Significance levels: \*10%, \*\*5%, \*\*\*1%.

Source: Authors.

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## Conclusions

In the past decade the Slovak financial system has undergone major changes in order to increase its efficiency. In particular, the commercial banking sector reform was aimed at the restructuring of commercial banks and creating an appropriate regulatory framework. The result was that in commercial banks between 1999 and 2003 the ratio of bad debts to total assets dropped from 38.34% to 11.06%, whilst the capital adequacy ratio increased from 3.94 to 21.95.

Institutional reforms, however, are not a sufficient condition for the achievement of an efficient credit allocation system. Once new rules are established, agents have to learn to play by them. Especially in transition economies, lenders have to develop project appraisal and monitoring skills and borrowers have to learn to respond appropriately to the new system of incentives.

The analysis focused on what determines Slovak firms' capital structure, with the object of investigating first: whether firms are constrained in achieving their optimal capital structure; and second the efficiency of the banking sector in providing credit. The results indicate, on the one hand, a pecking order in firms' financing choices, suggesting there are financial market imperfections that used to constrain, and to a lesser extent still constrain firms in the achievement of their optimal capital structure. On the other hand, reform seems to have rendered the credit allocation process more efficient and market oriented (Nivorozhkin, 2005).

It seems that the 1999 banking reform has contributed to a hardening of firms' budget constraints by changing firms' capital structure and banks' behaviour. More specifically, after the reform tangible assets play a role in credit allocation, inter-enterprise arrears no longer seem to provide a strong alternative source of credit, and size seems to give large firms easier access to bank credit.

The results of our firm-level empirical analysis suggest that the progressive liberalisation and development of financial markets together with significant institutional and regulatory reform were among the key factors explaining successful changes in the corporate environment. Financial market reform seems to have succeeded, albeit partially, in hardening firms' budget constraints and improving the efficiency of the credit allocation process.

Future research will determine whether the further evolution of the Slovak financial system and the accession to the European Union and EMU will impose financial discipline on all firms, irrespective of their size and ownership type: so further increasing the efficiency of credit allocation and providing additional support to the macroeconomic performance of the economy.

## Literature

- CORNELLI, F. – PORTES, R. – SCHAFFER, M. E. (1998): The Capital Structure of Firms in Central and Eastern Europe. In: BOUIN, O., CORICELLI, F. and LEMOINE, F. (eds.): *Different Paths to a Market Economy: China and European Economies in Transition*. London: CEPR.
- JENSEN, M. C. (1986): Agency Costs of Free Cash Flow, Corporate Finance and Takeovers. *American Economic Review*, 76, No. 2, pp. 323 – 339.
- JENSEN, M. C. – MECKLING, W. (1976): Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, No. 4, pp. 305 – 360.
- KANDEROVÁ, M. (2003): Zhodnotenie vplyvu determinantov kapitálovej štruktúry na vzorke podnikov Slovenskej republiky. *E+M Ekonomie a management*, 6, No. 2, pp. 126 – 133.
- KRIŠTOFÍK, P. (2002): Determinanty kapitálovej štruktúry a finančného rozhodovania v podmienkach slovenských podnikov. *Ekonomický časopis/Journal of Economics*, 50, No. 2, pp. 197 – 216.
- LELAND, H. – PYLE, D. (1977): Information Asymmetries, Financial Structure and Financial Intermediation. *Journal of Finance*, 32, No. 2, pp. 371 – 388.
- MIKÓCZIOVÁ, J. (2009): Empirické skúmanie determinantov miery zadlženosti podnikateľských subjektov. In: *Finance a výkonnosť firiem ve vědě, výuce a praxi*. [Proceedings of the Conference.] Zlín: Univerzita Tomáše Bati. ISBN 978-80-7318-798-9.
- MODIGLIANI, F. – MILLER, M. (1958): The Cost of Capital, Corporation Finance and the Theory of Investment. *American Economic Review*, 48, No. 3, pp. 261 – 297.
- MUSA, H. (2004): Kapitálová štruktúra podniku. In: *Finančné účtovníctvo a riadenie s aplikáciou IAS/IFRS. II. diel/2.časť*. Banská Bystrica: Fakulta financií UMB. ISBN 80-8083-022-3.
- MYERS, S. C. (1984): The Capital Structure Puzzle. *Journal of Finance*, 39, No. 3, pp. 575 – 592.
- MYERS, S. C. – MAJLUF, N. S. (1984): Corporate Financing and Investment Decision When Firms Have Information That Investors Do Not Have. *Journal of Financial Economics*, 13, No. 2, pp. 187 – 221.
- NIVOROZHKIN, E. (2005): Financing Choices of Firms in EU Accession Countries. *Emerging Market Review*, 6, No. 2, pp. 138 – 169.
- RAJAN, R. – ZINGALES, L. (1995): What Do We Know About Capital Structure? Some Evidence from International Data. *Journal of Finance*, 50, No. 5, pp. 1421 – 1460.
- ROSS, S. (1977): The Determinants of Capital Structure: The Incentive Signalling Approach. *Bell Journal of Economics*, 8, No. 1, pp. 23 – 40.
- TITMAN, S. – WESSELS, R. (1988): The Determinants of Capital Structure Choice. *Journal of Finance*, 43, No. 1, pp. 1 – 19.
- ZIMKOVÁ, E. – ÚRADNÍČEK, V. (2004): Inflačné ciele a možnosti predikovania inflácie v podmienkach Slovenska. *Ekonomický časopis/Journal of Economics*, 52, No. 6, pp. 658 – 669.