

FIRM-SPECIFIC FACTORS AND FINANCIAL PERFORMANCE OF FIRMS IN THE CZECH REPUBLIC

Pathirawasam Chandrapala, Adriana Knápková

Received: August 25, 2013

Abstract

CHANDRAPALA PATHIRAWASAM, KNÁPKOVÁ ADRIANA: *Firm-specific factors and financial performance of firms in the Czech Republic*. Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, 2013, LXI, No. 7, pp. 2183–2190

The objective of this study is to investigate the role of internal factors in generating financial performance of firms in the Czech Republic. The paper examines the impact of firm specific factors on company financial performance of 974 firms in the Czech Republic over the period 2005 to 2008, using data in the Albertina database. Pooled and panel cross-sectional time series techniques are used for the data analysis. Return on Assets (ROA) is the dependent variable of the model and eight firm specific factors are introduced as the explanatory variables. Using Return on Assets as the dependent variable, it is established that the firm size, sales growth and capital turnover are having significant positive impact on financial performance of firms. At the same time, debt ratio and inventory reflect significant negative impact on financial performance of firms. Overall explanatory powers of the two models are low and further research is necessary to increase the statistical power of the model. The results from the present study may be very encouraging and useful for managers as well as investors to plan investment and operational activities to achieve profitability objectives more efficiently and effectively. The findings have important managerial implications.

financial performance, Czech Republic, return on assets (ROA), firm specific factors

1 INTRODUCTION

Economists believe that the main objective of a firm is to maximize profit. Hence profitability of a firm has become the major criterion in determining its financial performance. Investors and other stakeholders pay most attention on profitability before dealing with firms. Even though all firms operate in the same industry and interact with same external variables, their financial performances are not the same. Many studies have shown that numbers of internal factors are responsible for firm performance. Among them size, age, debt ratio, quick ratio, inventory level, sales growth physical capital intensity and capital turnover are important (Chhibber and Majumdar, 1999; Barbosa and Louri, 2005; Kuntluru, Muppani and Kan, 2008; Pavelkova, Knápková, 2009). However, the impact of these factors on financial performance of firms is not same

throughout the world. It differs from country to country, industry to industry and even firm to firm.

The objective of this study is to investigate the role of internal factors in generating financial performance of firms in the Czech Republic. Financial performance of companies in the Czech Republic was good in 2008, companies in industry created positive Economic Value Added (Ministry of Trade, 2009). We can conclude that almost all firms in the Czech Republic use financial measures for measuring company's performance (Chandrapala, Knápková, Kramna, 2010). This study is especially important for managers and investors. Managers can use findings to make corporate strategies and investment decisions in the areas of profit goals, leverage, asset management and working capital. Potential and existing investors may use findings to select competitively profitable stocks and to revise portfolios of assets.

The remaining of the paper is organized as follows. Section 2 presents review of literature together with variables used in the study. Data and methodology are described in Section 3. Section 4 contains results of the analysis and discussion. Section 5 makes suggestions for further research. The last Section is conclusion of the study.

2 REVIEW OF LITERATURE

Papers dealing with the determinants of financial performance are of interest here. This section reviews the findings of past studies under independent and dependent variables. Such classification will make it easy to formulate a model of financial performance measurement of firms in the Czech Republic.

2.1 Dependent Variable

Even though there are criticisms, many researchers prefer to use financial measures to summarize the outcomes of economic and other events and transactions already taken place in firms. Financial performance measures indicate whether a company's strategy implementation and execution are contributing to bottom line improvement. Most of the financial objectives are relating to profitability measurements. Further, many researchers have used ROA to measure the financial performance of companies (Hansen, Wernerfelt, 1989; Mahmood and Mann, 1993; Chhibber and Majumdar, 1999; Barbosa and Louri, 2005; Kuntluru, Muppani and Kan, 2008). Since, ROA has been used in most of studies to measure financial performance of firms, this study also use ROA as the dependent variable for analysis.

2.2 Independent Variables

Business environment can broadly be divided into two parts. One is the internal or controllable environment where firm specific factors determine the corporate performance. The other one is the external to the firm and it is known as industry. The industry specific factors contribute to identify the differences of performance of firms in different industries. Even though the study considers large number of companies for analysis, industry characteristics are ignored in determining the performance of firms. Hansen and Wernerfelt (1989) reveal that organizational factors (firm specific factors) explain about twice as much variance of profit rates as economic factors (industry specific factors). Whereas, Cubin and Geroski (1987) report that industry effects do not contribute significantly to change in UK firms' profitability and they find that instead there are important firm specific dynamic efforts. This view is also accepted by Rumelt (1991).

Past literature points out number of organizational factors as influential factors on firms' financial performance. The organizational factors and past research findings are explained as follows.

Theoretically, **size** of the firm determines the level of economics of scale enjoyed by a firm. When a firm becomes larger it enjoys economics to scale and its average cost of production is lower and operational activities are more efficient. Hence, larger firms generate larger returns on assets. However, larger firms can be less efficient if the top management loose their control over strategic and operational activities with in the firm. Naturally, larger firms have tall organizational structures with more number of managerial levels in the hierarchy of the firm. This extensive hierarchy can reduce the incentive for managers to be efficient. Smaller firms do not enjoy economics to scale and the average cost of production is higher than that of the larger firms. However, less hierarchical and flat structure of the small firms can be more flexible in adapting changes in environment and their rapid decision making may allow them to obtain larger than average profits. When consider all above, sign of size variable can not be identified in determining the cross-sectional variability of firm performance. Kuntluru, Muppani and Kan (2008) and Chhibber and Majumder (1999) find statistically significant positive relationship between firm size and profitability (both ROA and ROS) of Indian firms. Leng (2004) also confirms the above findings in Malaysian companies.

Like size of the firm **age** also is an important variable in determining the performance variation of firms. Chhibber and Majumdar (1999) report that older industrial companies are more experienced and have enjoyed benefits of learning and can enjoy superior performance compared to new companies. However, well known economist Alfred Marshall suggests that older firms are inactive and that goes alone with age. Therefore, small firms are unlikely to successful in making adjustments to new environmental changes. Kuntluru, Muppani and Khan (2008) find statistically significant positive relationship between age and ROA. However, Chhibber and Majumdar (1999) report that the relationship between firm age and profitability (ROA and ROS) is negative.

Debts in the capital structure provide benefits to the firm by way of tax reduction. However, debts put pressure on the firm because interest and principle payments are obligations. The excess debts can increase the financial distress costs and decrease the value of the firm. Westerfield and Jaffe (2008) point out that when a firm has debts, conflicts of interest arise between shareholders and bond holders. This conflict is magnified when financial distress incurred. Under this situation shareholders are tempted to pursue selfish strategies to hurt the bond holders and help themselves. However, these strategies are costly because they will down the market value of the firm. According to the above it is difficult to determine a sign of relationship between capital structure and firm performance. It depends on whether the market condition is in recessionary or in boom. Kuntluru, Muppani and Khan (2008) find that **debt ratio** has a negative significant

relationship with ROA and ROS. Chhibber and Majumdar (1999) and Barbosa and Louri (2005) also verify it but they define debt ratio as total debt-to-total assets. Thomsen and Pedersen (2000) find a negative relationship between debt equity ratio and ROA in largest European companies.

Fixed assets alone are not sufficient to generate performance (profits). Working capital or day to day expenses are necessary to put fixed assets into operations in order to generate performance. If the firm does not have excess fixed capital to cover-up working capital then the firm should have to borrow in short-term (current liabilities). If the firm does not generate sufficient funds to pay back short term liabilities, it has to be paid out of permanent capital and eventually the company will go bankrupt. Therefore, the firm's ability to pay the short term liabilities is a key factor in determining the performance of a firm. In this study the **quick asset ratio** is introduced to capture the relative ability of firms to generate cash and other liquid assets as a proportion of other outstanding current liabilities. Assuming that there is no reason for a firm to keep unnecessarily excess amount of quick assets, we assume that there is a positive relationship between quick ratio and firm's performance. Barbosa and Louri (2005) and Kuntluru, Muppani and Khan (2008) support this hypothesis.

Inventory is one of the key inputs in the production process. Shortage of inventory may hinder the production process while excess inventory is a burden to the firm. The variable inventory may also affect on the amount of capital needed as well as the income of the period because the availability of inventory affects the likelihood of making sales as well as the cost of carrying inventory. Chhibber and Majumdar (1999) find that the variable inventory is negatively related to profits suggesting the large inventories create a drag on firm's ROA and ROS. Barbosa and Louri (2005) find that inventory value to total assets effect decreases as firms attain high profits, indicating that the relevance of inventory decisions falls as firms attain high profits.

Some firms in the industry may gradually turnout to be superior competitors and they may hold a major market share. These competitive positions of a firm are determined by the **sales growth**. Barbosa and Louri (2005) find that sales to total assets have a positive and statistically significant relations with gross ROA in Greece firms. Kuntluru, Muppani and Khan (2008) find a significant positive relationship between sales growth and the firms' profitability.

Barbosa and Louri (2005) introduced **physical capital intensity (PCI)** variable to capture the impact of labor intensity or capital intensity on the variability of profits of the firm. They find that

firms operating in Portugal appear to improve their performance if they choose a capital-intensive technology but firms operating in Greece are more prone to choose a labor intensive technology as a way to improve performance.

Kuntluru, Muppani and Khan (2008) introduce **capital turnover ratio (CTOR)** to measure the capital intensity of the firm and to see whether there is a positive relationship when profit margins are used as the dependent variable. The lower value of the ratio may imply greater efficiency in capital utilization and it will result in higher profitability. Therefore this ratio is supposed to be negatively related with the profitability of the firm. Kuntluru, Muppani and Khan (2008) support this hypothesis.

3 DATA AND METHODOLOGY

3.1 Data

Data includes 1095 companies in Czech Republic over the period 2005–2008. Source of the data is the Albertina database¹. One hundred and twenty one (121) companies out of 1095 have been excluded from the sample due to incomplete data records. Therefore this study uses 974 firms to analyze the financial performance. Further 202 rows in the data sheet were completely deleted due to missing values. Therefore, finally 2720 cross-sectional time series observations are used for the final analysis.

3.2 Methodology

The study uses two types of panel analytic models for the data analysis.

3.2.1 Constant Coefficients Model

Under this model all the data is pooled and run an ordinary least squares regression model. The fundamental assumption behind this model is that both intercepts and slopes are constant. That means there is no significant firm effect or temporal effect (time effect) on ROA (see Eq. 1).

$$\text{ROA}_{it} = \beta_1(\text{Size}_{it}) + \beta_2(\text{Age square}_{it}) + \beta_3(\text{Debt ratio}_{it}) + \beta_4(\text{Quick ratio}_{it}) + \beta_5(\text{Inventory}_{it}) + \beta_6(\text{Sales growth}_{it}) + \beta_7(\text{Physical capital intensity}_{it}) + \beta_8(\text{Capital turnover ratio}_{it}) + \varepsilon_{it}, \quad (1)$$

where $i = 1, 2, \dots, n$ (number of firms) and $t = 2008, 2007$ and 2006 . β values represent the regression coefficients of the independent variables.

3.2.2 Fixed Effect Model

Fixed effect model is used to capture any temporal effects on financial performance of firms. In this case it is assumed that the variables are homogeneous across the countries. However, technological changes, changes in macro economic factors or

¹ Albertina data deals with development, processing, issuing and distribution of the databases, that cover the dynamically changing free market environment in the Czech Republic.

national policies would lead to have group specific characteristics that may affect temporal changes in variables being analyzed. The time effect is considered over 3 years with 3-1(2) dummy variable least squares regression model. (See Eq. 2).

$$ROA_{it} = \alpha + \beta_1(Size_{it}) + \beta_2(Age\ square_{it}) + \beta_3(Debt\ ratio_{it}) + \\ + \beta_4(Quick\ ratio_{it}) + \beta_5(Inventory_{it}) + \beta_6(Sales\ growth_{it}) + \\ + \beta_7(Physical\ capital\ intensity_{it}) + \\ + \beta_8(Capital\ turnover\ ratio_{it}) + \\ + \lambda_1 Year\ 2008 + \lambda_2 Year\ 2007 + \varepsilon_{it}, \quad (2)$$

where, λ represents the year effect.

Definition for each variable is given in the following Tab. I.

4 RESULTS

Tabs. II and III provide the averages and standard deviations and correlation matrix for the variables used in the study.

Tab. III provides correlation matrix for the independent variables. Quick ratio is having a moderately positive correlation with capital turnover ratio ($r = 0.35$) as indicated in the table.

There is no any other pair of variables shows significant correlations.

Regression results are shown in Tab. IV and Tab. V. Tab. IV presents the regression (constant coefficient model) estimates of the coefficients of equation 1 for a measure of financial performance using the ROA as the dependent variable. The table shows that firm size, debt ratio, inventory, and capital turnover having significant effects on ROA. The panel A of the table presents the analysis of variance (ANOVA) for the model and the panel B of the table shows regression coefficients with their t-values.

The model explains the 5.23% (R^2) of the variability of ROA ($F = 18.73626$, $P < 0.01$). Panel B of the table shows that size, sales growth and capital turnover are having significant positive effect while debt ratio and inventory having significant negative effect on ROA.

The size variable is having statistically significant positive effect on ROA. This means when the firm becomes larger and larger its ability to generate returns is seems to be gradually improving. This finding proves the micro economic theory of economics to scale. Further, the result is in accordance with the Chhibber and Majumdar (1999)

I: Operationalization of variables

Variables	Description
Dependent Variable	
ROA	Profit before depreciation, interest and taxes divided by total assets
Independent Variables	
Size	Log of total assets **
Age	Number of years since incorporation till the date for which data are incorporated
Debt ratio	Total debt to total assets
Quick ratio	Ratio of cash and other short-term realizable assets to total current liabilities
Inventory	Ratio of inventory investment to investments in total assets
Sales growth	Ratio of current year to previous year's sales
Physical capital intensity (PCI)	Log of physical assets per employee
Capital turn over ratio (CTOR)	Ratio of net fixed assets to sales

** Ling Wu (2006) points out that there are a wide variety of operationalizations of organization size that are total assets, total sales, and number of employees. We use total assets to measure the size of the firm because all data for number of employees are not available. Our unreported findings show that total sales are highly positively correlated ($r = 0.96$) with total assets.

II: Pooled sample descriptive statistics

	Average	Standard Deviation
ROA %	12.27	12.74
Size*	13.53	1.36
Age square	13.10	6.95
Debt ratio	3.71	58.87
Quick ratio	1.61	9.49
Inventory/total assets	0.15	0.13
Sales growth	1.27	44.66
PCI	6.10	1.50
CTOR	0.66	2.88

* Measured by log value of total assets

III: Correlation among independent variables

	Size	Age square	Debt ratio	Quick ratio	Inven-tory	Sales growth	PCI	CTOR
Size	1.00	-0.07	-0.02	-0.01	-0.07	0.10	0.07	0.06
Age square		1.00	0.01	0.06	0.09	-0.02	-0.02	0.13
Debt ratio			1.00	0.01	0.02	-0.00	-0.01	-0.00
Quick ratio				1.00	-0.04	-0.00	-0.03	0.35
Inventory					1.00	-0.02	-0.13	-0.15
Sales growth						1.00	0.09	0.07
PCI							1.00	-0.01
CTOR								1.00

IV: Results of regression analysis using constant coefficient model

Panel A

ANOVA	df	SS	MS	F	Significance F
Regression	8	12580.8	1572.601	18.73626	1.3E-27
Residual	2711	227543.8	83.93354		
Total	2719	240124.6			

Panel B

Variable	Coefficient - β	t-statistic
Size	0.476***	2.68
Age	-0.016	-0.39
Debt ratio	-0.163***	-5.66
Quick ratio	0.019	0.88
Inventory	-9.294***	-6.24
Sales growth	0.910***	3.20
CTOR	-1.188***	-8.32
PCI	0.136	0.74
$R^2 = 5.23$		

*** Significantly different from zero at the 1% level.

and Kuntluru, Muppani and Kan (2008) who find statistically significant positive relationship between firm size and profitability (both ROA and ROS) of Indian firms. Leng (2004) also confirms the above findings in Malaysian companies.

Debt ratio having a negative relationship with the profitability of the firm ($\beta = -0.016$, $t = -2.42$). This means when the capital structure consists of more debts it cause to decrease profitability of the firm. It seems that the excess debts increase the financial distress costs and decrease the value of the firm. This finding is similar to the Chhibber and Majumdar (1999), Thomsen and Pedersen (2000) and Barbasa and Louri (2005).

Inventory has negative relation with ROA. Keeping excess inventory drastically decrease the profitability of the firm. This finding is similar to the Chhibber and Majumdar (1999) and Barbasa and Louri (2005). Tab. II shows that average inventory to total asset ratio is 0.15 and firms should try to apply efficient inventor control systems to keep minimum level of inventories to achieve better financial performance.

Sales growth shows positive effect on ROA. This may imply that marketing strategy have positive

impact on performance as Boxer and Wensly (1986) point out Czech organizations may keep good interactions with external environmental factors such as competition, customers, parties in the organization distribution channels etc. Barbosa and Louri (2005) and Kuntluru, Muppani and Khan (2008) also find a significant positive relationship between sales growth and the firms' profitability.

Capital turnover ratio measures how efficiently fixed assets are used in generating returns. Efficient utilization of physical assets is also a determinant of firms' financial performance as the coefficient of capital turnover ratio is negatively related with the firm performance ($\beta = -1.188$, $t = -8.32$). Capital intensity and capital turnover ratios jointly show that firms in Czech Republic appear to use capital-intensive technology efficiently to generate high returns.

Tab. V presents the regression (fixed effect model) estimates of the coefficients of equation 2 for a measure of financial performance. The panel A of the table presents the analysis of variance (ANOVA) for the model and the panel B of the table shows regression coefficients with their t-values.

V: Results of regression analysis using fixed effect model

Panel A

ANOVA	df	SS	MS	F	Significance F
Regression	10	14827.36	1482.736	17.82859	6.9E-32
Residual	2709	225297.3	83.16621		
Total	2719	240124.6			

Panel B

Variable	Coefficient - β	t-statistic
Size	0.481***	2.71
Age square	0.008	0.21
Debt ratio	-0.159***	-5.55
Quick ratio	0.016	0.78
Inventory	-9.30***	-6.28
Sales growth	0.751***	2.64
CTOR	-1.188***	-8.37
PCI	0.145	0.79
λ_1	0.580	1.34
λ_2	-1.559***	-3.65
$R^2 = 6.17$		

*** Significantly different from zero at the 1% level.

The model explains the 6.17% (R^2) of the variability of ROA ($F = 17.82859$, $P < 0.01$). Panel B of the table shows that size, debt ratio, sales growth, inventory and capital turnover having significant effects on ROA. However, this table further reveals that coefficients λ_2 which capture the timing effect of year 2008 on financial performance of Czech Republic is negative and statistically significant. It means in the year 2008 over all financial performance of firms in Czech Republic has decreased. This may be due to the deep financial crisis in the world.

5 FURTHER RESEARCH

The strength of both models reported in Tabs. IV and V is low, as measures by R^2 , indicating that there are more important factors which have not been included in the models. Therefore to increase the robustness of the study new variables should be introduced to the models.

One of the major limitations of the model is the ignorance of industry effects. Barbosa and Louri (2005) report that firms operating in Greece are found to be sensitive to industry characteristics, such as concentration, R&D intensity and growth. Therefore, it is important to consider the industry factors as a further research.

Claessens, Djankov, and Pohl (1997), using data for more than 700 Czech firms that were consistently listed on the Prague Stock Exchange over the period 1992–1995, find that there is indeed strong positive relationships between ownership concentration and profitability. Further the study finds that the Czech privatization program was effective in improving firms' management because of the concentrated ownership structure that resulted.

Therefore ownership concentration would be an important variable to determine the firms' financial performance of Czech Republic.

Studies have found that enterprises receiving foreign investment, or under foreign ownership, outperformed their domestic counterparts in the Czech Republic (Djankov and Hoekman, 2000; Hanousek *et al.*, 2004; Torlak, 2004). Harun and Kaya (2008) and Kuntluru, Muppani and Khan (2008) also support this view. Therefore, it is better to examine the impact of foreign direct investment (FDI) on financial performance of Czech firms.

6 CONCLUSION

This study attempted to identify significant factors pertaining to financial performance of 974 companies in the Czech Republic over the period 2005–2008. Pooled and panel cross-sectional time series techniques are used for the data analysis. ROA is the dependent variable of the model and eight firm specific factors are introduced as the explanatory variables. Data obtained from the Albertina data base.

Size sales growth and capital turnover have positive impact on ROA of firms. Inventory and debt ratios report negative impact on the ROA. Further, financial performance of Czech firms is generally negative in the year 2008. The results from the present study may be very encouraging and useful for managers as well as investors to plan investment and operational activities to achieve profitability objectives more efficiently and effectively.

The findings have important managerial implications. First, improvement of the market share will guarantee better financial performance. Next too much relying upon debt capital will hinder

the profitability of the firms. This is true specially in the period of bad economic outlooks in the economy. A quick inventory control system is a must to enhance the profitability. Last, capital turnover ratio reveals that firm profitability can be increased by increasing the efficiency in capital utilization.

Findings of the study shows that the overall explanatory power of the model is low and further research is needed with new explanatory

variables. One potentially fruitful extension of this study would be to identify industry effects on financial performance. Further, ownership concentration, level of foreign direct investments would be important to consider to the analysis. Moreover, there is a need for financial data to be supplemented with data on qualitative variables such as management style and employee attitudes.

SUMMARY

The objective of this study is to investigate the role of internal factors in generating financial performance of firms in the Czech Republic. The paper examines the impact of firm specific factors on company financial performance of 974 firms in the Czech Republic over the period 2005 to 2008, using data in the Albertina database. Pooled and panel cross-sectional time series techniques are used for the data analysis.

Return on Assets (ROA) is the dependent variable of the model and eight firm specific factors are introduced as the explanatory variables. Using ROA as the dependent variable, it is established that the firm size, sales growth and capital turnover are having significant positive impact on financial performance of firms. At the same time, debt ratio and inventory reflect significant negative impact on financial performance of firms. The findings have important managerial implications. First, improvement of the market share will guarantee better financial performance. Next too much relying upon debt capital will hinder the profitability of the firms. This is true specially in the period of bad economic outlooks in the economy. A quick inventory control system is a must to enhance the profitability. Last, capital turnover ratio reveals that firm profitability can be increased by increasing the efficiency in capital utilization. The results from the present study may be very encouraging and useful for managers as well as investors to plan investment and operational activities to achieve profitability objectives more efficiently and effectively.

Findings of the study shows that the overall explanatory power of the model is low and further research is needed with new explanatory variables. One potentially fruitful extension of this study would be to identify industry effects on financial performance. Further, ownership concentration, level of foreign direct investments would be important to consider to the analysis. Moreover, there is a need for financial data to be supplemented with data on qualitative variables such as management style and employee attitudes.

Acknowledgement

The authors are thankful to the Operational Programme Education for Competitiveness co-funded by the European Social Fund (ESF) and national budget of the Czech Republic for the grant No. CZ.1.07/2.3.00/20.0147 – “Human Resources Development in the field of Measurement and Management of Companies, Clusters and Regions Performance”, which provided financial support for this research.

REFERENCES

- BARBOSA, N. and LOURI, H., 2005: Corporate Performance: does ownership matter? A comparison of foreign-and domestic-owned firms in Greece and Portugal. *Review of Industrial Organization*, 27, 1: 73–102. ISSN 0889-938X.
- BOXER, P. J. and WENSLEY, J. R. C., 1986: The Need for Middle-Out Development of Marketing Strategy. *Journal of Management Studies*, 23, 2: 189–204. ISSN 1467-6486.
- BROWN, S., KIN, L. and LYS, T., 1999: Use of R^2 in Accounting Research: Measuring Changes in Value Relevance over the Last four Decades. *Journal of Accounting & Economics*, 28, 2: 83–115. ISSN 0165-4101.
- CHHIBBER, P. K. and MAJUMDAR, S. K., 1999: Foreign ownership and profitability: property rights, control and the performance of firms in Indian Industry. *Journal of Law and Economics*, 46, 3: 209–238. ISSN 0022-2186.
- CLAESSENS, S., DJANKOV, S. and POHL, G., 1997: Ownership and Corporate Governance—Evidence from the Czech Republic, Public Policy for the Private Sector- The World Bank Group Note No. 111. Available at: www.worldbank.org/html/fpd/notes/notelist.html.
- CUBBIN, J. and GEROSKI, P. A., 1987: The Convergence of Profits in the Long Run: Inter-firm and Inter-industry Comparisons. *Journal of*

- Industrial Economics*, 35, 4: 427–442. ISSN 1467-6451.
- DJANKOV, S. and HOEKMAN, B., 2000: Foreign Investment and Productivity Growth in Czech Enterprises. *The World Bank Economic Review*, 14, 1: 49–64. ISSN 0258-6770.
- HANSEN, G. S. and WERNERFELT, B., 1989: Determinants of Firm performance: the relative importance of economic and organizational factors. *Strategic management Journal*, 10, 5: 399–411. ISSN 1097-0266.
- HANOUSEK, J., KOČENDA E. and LIZAL, L., 2004: *Tale of the Czech transition: understanding the challenges ahead*. Praha: CERGE-EI, 120 pp., ISBN 8073430231.
- HARN, K. and DENİZ, E., 2008: Firm-specific capabilities and foreign direct investment activities of Turkish manufacturing firms. *Journal of management Development*, 27, 7: 761–777. ISSN 0262-1711.
- CHANDRAPALA, P., KNÁPKOVÁ, A. and KRAMNÁ, E., 2010: Financial Performance of Selected Firms in the Czech Republic. In: *Knowledge Management and Innovation: A Business Competitive Edge*, 1–3, Cairo, Egypt: Int Business Informat Managenent Assoc, 781–789. ISBN 978-0-9821489-4-5.
- KUNTLURU, S., MUPPANI, V. R. and ALI KHAN, M. A., 2008: Financial performance of foreign and domestic owned companies in India. *Journal of Asia-Pacific Business*, 9, 1: 28–54. ISSN 1528-6940.
- LENG, A. C., 2004: The Impact of Corporate Governance Practices on Firms' Financial Performance. Evidence from Malaysian Companies. *ASEAN Economic Bulletin*, 21, 3: 308–318. ISSN 0217-4472.
- LING WU, M., 2006: Corporate social performance, corporate financial performance, and firm size: a meta-analysis. *The Journal of American Academy of Business*, 8, 1: 163–171. ISSN 1540-1200.
- MAHMOOD, MO, A. and MANN, G. J., 1993: Measuring Technological Impact of Information Technology investment: An Exploratory study. *Journal of Management Information systems*, 10, 1: 97–122. ISSN 0742-1222.
- MINISTRY OF INDUSTRY AND TRADE OF THE CZECH REPUBLIC, 2009: *Financial analysis of the business sphere for the year 2008*. Available at: <http://www.mpo.cz/dokument67348.html>.
- PAVELKOVÁ, D. and KNÁPKOVÁ, A., 2009: *Výkonnost podniku z pohledu finančního manažera*, Praha: Linde nakladatelství, 302 pp. ISBN 978-80-86131-85-6.
- ROSS, S. A., WESTERFIELD and JAFFE, 2008: *Corporate finance*, 8th edition, McGraw-Hill companies, Inc., 1003 pages. ISBN 978-0-07-338233-3.
- RUMELT, R. P., 1991: How Much Does Industry Matter? *Strategic Management Journal*, 12, 3: 167–185. ISSN 1097-0266.
- THOMSEN, S. and PEDERSEN, T., 2000: Ownership structure and economic performance in the largest European Companies. *Strategic Management Journal*, 21, 6: 689–705. ISSN 1097-0266.
- TORLAK, E., 2004: Foreign direct investment, technology transfer and productivity growth. Empirical evidence for Hungary, Poland, Romania, Bulgaria and the Czech Republic. Presented at the *7th Annual Conference on Global Economic Analysis*, Washington DC. UNCTAD (2006). <https://www.gtap.agecon.purdue.edu/events/conferences/2004/default.asp> ISSN 2160-2115 (online).

Address

Chandrapala Pathirawasam, Ph.D., Faculty of Commerce and Management Studies, University of Kelaniya, Sri Lanka, Ing. Adriana Knápková, Ph.D., Faculty of Management and Economics, Tomas Bata University in Zlín, Mostní 5139, 760 01 Zlín, Czech Republic, e-mail:knapkova@fame.utb.cz, Pathi3@yahoo.com