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Macro- and microeconomic aspects of going public in the Czech Republic and Poland

Tomáš Meluzín^{a*}, Marek Zinecker^b

^{a, b} Brno University of Technology, Brno, Czech Republic

Abstract

The intent of this study is to explore macro- and microeconomic aspects of going public in the Czech Republic and in Poland. There are significant differences in the going public activity on both markets and we firstly aim to determine the influence of GDP growth rates, reference interest rates, industrial production growth rates and a main stock exchange index on numbers of IPOs. Secondly, we survey chief financial officers (CFOs) in the Czech and Polish enterprises to compare practice in the CEE region to findings in previous empirical studies and theoretical approaches in the area of initial public offering motivation.

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1. Introduction

The past decade has witnessed a worldwide rise in the importance of financing corporate growth through ‘Initial Public Offerings’ (IPOs). Under the conditions of developed capital markets the finance theory of going public decision making has been extensively researched. Based on the literature review there are some key macroeconomic and microeconomic aspects that have significant effect on the financing choice of enterprises via IPOs.

*Corresponding author. Tel.: NA

E-mail address: meluzint@fbm.vutbr.cz

Relations between the number of IPOs and the macroeconomic factors (i.e. external conditions) have been investigated in a limited number of studies. Loughran et al. (1994) investigate the timing of IPOs in fifteen countries in relation to inflation-adjusted stock price indexes and GDP growth rates. The results suggest a positive relationship between the number of IPOs and stock price levels, however no positive correlation with the cycle movements. Rydqvist and Högholm (1995) compare the data for a sample of family-owned enterprises in Sweden (1970–1991) and eleven European countries (1980–1989). They find that “most going public activity took place after an exceptionally sharp stock price increase, and that going public activity is not related to the business cycle”. Ljungqvist (1995) suggests that high number of IPOs is positively correlated with both high stock index levels and good business conditions and tends to follow phases of extensive IPO underpricing. Breinlinger and Glogova (2002) investigate the explanatory power of selected macroeconomic factors influencing IPOs by analysing a data set of annual IPO volumes for six developed continental European countries over a time period of 18 years. The authors followed the question if there are stable indications that IPOs depend on stock index returns for what they termed consolidated periods. The results show that a “logarithmic transformation of IPO volumes (representing authors’ supposition of a nonlinear relationship between IPO volumes and stock index returns) leads to persistently significant estimates for both pooled and individual country regressions”. The hypothesis that percentage changes in savings, GDP growth and interest rates have explanatory power for IPO volumes could not be supported by empirical evidence.

A paper by Ameer (2012) shows a significant negative relationship between the interest rate and the number of IPOs and a significant positive relationship between the industrial production and the number of IPOs in the emerging market of Malaysia. Bilson et al. (2002) find a moderate evidence to support the connection between local macroeconomic factors and stock returns in emerging markets.

Microeconomic studies deal first of all with the motivation of going public. The main factors taking influence on decision to go public in a firm are divided in both academic and professional literature into four groups.

Authors in the first group point out the situation of a firm which needs to obtain external funds to undertake external net present value projects. The primary securities market offers an opportunity to raise capital from a large number of previously unknown investors. As a result, more capital is accumulated than a single investor, or a limited number of investors, would be able or willing to provide. Raising funds through an IPO should be an alternative to borrowing, particularly in companies with high investments (now or in the foreseeable future), high proportion of debt in the capital structure, and high potential for growth (Chemmanur and Fulghieri, 1999; Ritter and Welch, 2002). Pagano et al. (1998) investigated a comprehensive data set of Italian companies. They conclude that U.S. companies usually undergo a considerable growth process after listing while the decision of Italian independent companies can be interpreted as “an attempt to rebalance their balance sheet after large investments and growth. Brau and Fawcett (2006) investigated 336 nonfinancial U.S. companies that had successfully completed an IPO or attempted and subsequently withdrew an IPO. More than a half of the interviewed CFOs strongly supported the notion that “an IPO serves to create public shares for use in future acquisitions”.

Pagano et al. (1998) followed by Black and Gilson (1998) connect IPOs with another reason. Public trading of shares provides a great advantage to both the issuers, to whom the shares issued provide a long-term source of financing, and to the investors, who can sell the shares purchased at any time on secondary markets and thus recover the desired liquidity, i.e. the money they invested. The short-term financial funds of individual investors are thereby transformed into long-term sources, which then make it possible to implement large-scale investment projects. Raising the stock capital through a public issue also eliminates the difference between the large shareholders, who tend to take a long-term approach to investing, and the small ones, who value liquidity and are therefore inclined to take a short-term view of their investment.

Zingales (1995) and Black and Gilson (1998) argue that going public is the way how the majority shareholder's desire to reduce his stake in the company. Thereby, an IPO allows venture capitalists to cash out and resolves the problem of generational succession in a family-run enterprise. From the shareholder's perspective, the option to cash out his co-ownership by selling the shares of stock at any time on the secondary market is an advantage that imparts a great deal of flexibility to his financial decisions. On the other hand, Brau and Fawcett (2006) findings do not support the public statement of many venture capitalists that an IPO is an integral part of their harvest strategy because “firms with VC presence rank four motivations higher than the opportunity to allow VCs to cash-out”.

The last reason for going public is to gain a non-financial advantage from IPO implementation (Maksimovic and Pichler, 2001; Ježek, 2004). Going public is therefore associated with positive effects in the area of marketing. First of all, an IPO can increase the publicity or reputation of the firm. The prestige can be very advantageous in

recruiting key employees as well as marketing products and services. Brau and Fawcett (2006) point out that the motivation for going public in the form of firm reputation enhancing and analysts' attention attracting is significant for "smaller, younger, high-tech, and VC-backed firms".

The Czech primary stock capital market is rather poorly developed. On the contrary, the Warsaw Stock Exchange belongs to the European stock exchanges with the highest number of completed IPOs (see Table 1).

The motivation of this study is to make a contribution to the academic literature by addressing the question if local macroeconomic factors have any influence on the number of IPOs in Poland and in the Czech Republic and what is the motivation of Czech and Polish enterprises to conduct an IPO. Both the theory and corporate practice grapple with insufficient empirical results for these markets apart from studies by Sejkora (2013), Jargot (2006) and Dudko – Kopczewska (2004).

This study is organized as follows. The second part represents the problem formulation and deals with research design, i.e. data and methodology. The third part presents the empirical research results. The last section summarizes and provides concluding remarks.

Table 1. Number of IPOs on the selected CEE Capital Markets in 1998–2011

Stock Exchange	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Warsaw Stock Exchange	5	6	36	34	35	68	29	10	22	20
Prague Stock Exchange	0	0	1	0	2	1	1	0	0	1
Budapest Stock Exchange	0	0	1	0	3	0	1	2	1	5
Bratislava Stock Exchange	1	0	0	0	0	0	0	0	0	0
Ljubljana Stock Exchange	0	0	0	0	2	1	1	0	0	1
Total	6	6	38	34	42	70	31	12	23	27

Source: Paleari et al. (2006, 2007, 2008, 2009, 2010, 2011)

2. Methods

The nature of this study is based on the theory, previous empirical research and original empirical data.

The macroeconomic part of the paper is based on evidence from the Czech and Polish capital market. We take into account qualitative and quantitative features of the individual markets. Only the Polish capital market within CEE countries allows conducting a research based on hypotheses. We studied the influence of macroeconomic factors, consequently GDP growth rates, the reference interest rate, industrial production growth rates, Warsaw Stock Exchange Index (WIG) on the numbers of IPOs in an emerging market, Poland, over the period of 1992 to 2012. The Spearman correlation analysis is used to identify the relations between the macroeconomic (external) determinants and the number of IPOs.

The intent of the microeconomic part of our research required to collect primary data in Czech and Polish companies. Two techniques were employed while collecting primary data, a semi-structured interview and a questionnaire. In January 2010 we interviewed CFOs of selected companies that had gone public between 2002 and 2011. Two main steps were undertaken to analyse the qualitative data. After reading through the responses, the IPO motives were extracted from the records.

The "Polish" sample is composed of companies that had entered the Main Market of Warsaw Stock Exchange via an IPO in the years 2007-2009. The time limitation on the entry into the capital market was necessary to ensure that the source data would come from CFOs who had been personally involved in a recent IPO process. This group of respondents was drawn from the data published on the Warsaw Stock Exchange website. The entire list contained 107 companies, or possibly their CFOs or Chairmen of the Board of Directors. The data was collected in two main stages. In early 2010, the questionnaire accompanied by a personalized and signed cover letter was sent to all companies on the survey list. To increase the return rate, the questionnaire was put into an electronic form and, in April 2010, sent by an e-mail to the respondents who had not replied the first time around, with a request for completion.

The respondents were asked to indicate, on a five-point scale with two anchors (1-unimportant and 5-very important), "how important the individual reasons were/are for conducting an IPO?" Overall, 21 CFOs submitted usable answers (i.e. the response rate is 19.6 %). It should be pointed out that the return rates fall within the range

mentioned in other survey-based financial studies. The questionnaire-collected data was treated by statistical methods reflecting its nature and quantity. First of all, descriptive analysis of all the parameters studied was performed. A more detailed analysis of contingency tables was performed by correspondence analysis. The normality of the data was checked by the Kolmogorov–Smirnov test and its conversion to normality was performed by a logarithmic transformation. The data was evaluated at the significance level of $\alpha=5\%$.

3. Results

The findings obtained in the macroeconomic part of our research can be summarized as follows: the differences in the IPO activity on the Czech and Polish capital market are based on the different size of surveyed economies, historic development of the capital market regulation in the 1990s and a strong segment of domestic investors in Poland.

In Poland, using the Spearman correlation analysis a significant difference was found to exist between the number of IPOs and GDP growth rates at the 5% level of significance ($R_s=0.547$; $p=0.015$). Next, the Spearman correlation analysis shows a significant positive relationship between the number of IPOs and industrial production growth rates at the 5% level of significance ($R_s=0.504$; $p=0.028$). The findings from the Polish market also imply that there exist no statistically significant relationships between other macroeconomic indicators and the number of IPOs in Poland. The hypothesis that the reference interest rate, the Warsaw Stock Exchange Index and the private equity investments have explanatory power for IPO numbers in the Polish capital market could not be supported by empirical evidence.

Under conditions of the Czech capital market we found that the main motive for going public is predominantly to raise capital before undergoing a considerable growth process after listing. An IPO is perceived as an appropriate way of capital structure optimization both from the costs minimizing and liquidity improvement point of view. The interviewed CFOs suggest that an IPO improved their creditworthiness with the positive impact on the willingness of banks to provide loans with lower interest rates and longer payback periods. Other empirical findings indicate that the cashing out motivation is noteworthy only in the case of venture capital backed firms. The listing of these companies on the public stock market was a long-term financial goal of investors and going public was defined as an integral part of their harvest strategy. Non-financial motivations for going public attracted relative to financial motivations less attention. However, the CFOs point out that “enhancing firm reputation and publicity” helps enterprises to increase their bargaining position against all groups of stakeholders with a positive effect on the company goodwill. The CFOs share the opinion that listed companies are viewed as the best in their business branch. The CFOs viewed the company listing as an important milestone in its life cycle. In this context, an IPO is perceived as an attribute of a successful management of the listed company first of all.

In Poland a questionnaire based survey approach was used. Main findings are expressed as an arithmetic mean \pm standard deviation followed by the relative frequency of answers 4 and 5.

It is obvious that the raising of external capital is the most important reason for a great majority of respondents (4.86 ± 0.48 ; 95.24%). The second most important reason for completing an IPO is the availability of publicly traded shares for use in future mergers and acquisitions (3.81 ± 1.08 ; 76.19%). It means that newly issued shares allow the issuer to become either an acquirer or a target, particularly in stock-financed transactions. Other important reasons for conducting an IPO include publicity and corporate image enhancement (4.00 ± 1.10 ; 66.67%), greater attractiveness of the company as an employer (3.71 ± 1.06 ; 61.91%), and the establishment of company market value (3.71 ± 1.06 ; 61.91%). The issuing companies do not typically see the IPO as a tool for the direct reduction of company debt (2.38 ± 1.40 ; 19.05%), but rather as an instrument for strengthening its bargaining position in dealing with prospective providers of external capital (3.71 ± 1.10 ; 66.67%). The survey results further indicate that the exit of venture capitalists is not among the major reasons for conducting an IPO on the Polish capital market (1.95 ± 1.56 ; 19.05%). The respondents have the same attitude towards the problem of succession (1.38 ± 0.67 and 0.00%).

4. Discussion/Conclusions

In Poland, a statistically significant difference was found to exist between firstly the number of IPOs and GDP growth rates and secondly between the number of IPOs and industrial production growth rates. On the other hand, the hypothesis that the reference interest rate have explanatory power for the number of IPOs could not be supported

by empirical evidence; neither two other factors, i.e. Warsaw Stock Exchange Index and the volume of private equity investments. These findings are similar to those of existing studies on the one hand (e.g. La Porta et al., 1997); however, at the same time, it differs from other studies on the other hand (e.g. Rydqvist and Högholm, 1995; Loughran et al., 1994; Breinlinger and Glogova, 2002). A further research on the macroeconomic issues addressed in this paper assumes, firstly, a modification of the dependent variable (IPO volumes) and explanatory variables (government bond yields, stock index returns, changes in savings deposits, secondly, a modification of the methodology outlined in studies by Ameer (2012) and Breinlinger and Glogova (2002).

Based on empirical findings we can conclude that the main motivation of Czech and Polish firms why to conduct an IPO is financial in its character. Raising external capital for future investments as the most important motivation for an IPO received a strong support from a majority of respondents in both groups of companies (Czech and Polish). Regarding this reason, our empirical findings are consistent with some previous questionnaire based surveys and theoretical approaches formulated for conditions of well-developed U.S. and western European markets (e.g. Chemmanur and Fulghieri, 1999; Ritter and Welch, 2012). Surveyed companies tend to conduct an IPO in the expansion stage of their life cycle, which is perceived as a positive signal, especially for the investors. In contrast to Pagano et al. (1998), Czech and Polish companies do not consider an IPO as a strategy how to “rebalance their balance sheets after large investments and growth”.

Regarding the non-financial, i.e. marketing, motivation, our findings show that more than 50% of respondents in both subsamples believe that the company listing on the capital market will have a positive effect on its image and publicity. The ability to trade shares on the capital market is one of the signs of competent corporate management. Most of the respondents also believe that an IPO will improve the company valuation, strengthen the management's bargaining position in negotiations with providers of external capital, and increase the attractiveness of the company as an employer.

A comparison of the theoretical approaches with the survey results demonstrates that the theoretical models of the IPO motives explanation is, in principle, applicable to the conditions in the Czech and Polish capital markets. However, our empirical findings must be seen in light of the market specifics wherein the survey was conducted (e.g. a short modern history of the CEE capital markets). Results of this survey made it possible to formulate new insights as contributions towards a better understanding of corporate financing strategies, particularly in the conditions of the CEE region.

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