

*Preliminary communication*  
(accepted December 10, 2014)

# CORPORATE MOTIVES FOR PUBLIC SHARES OFFERING DURING THE FINANCIAL CRISIS

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## **Abstract**

Despite greater constraints for obtaining bank loans, public shares' offerings ceased in the SEE region since the onset of the financial crisis in 2008. With scarce IPOs and SEOs as well as debt offerings, Croatian capital market stands as prime example of mandatory shares' listing rule application. Surveys of CFOs on going-public vs staying-private decisions are rare even in developed countries and are mostly conducted during the hot IPO markets. In this paper the motives of shares' issuance are compared between publicly- and privately-held companies during the financial crisis. Research results showed that companies would not issue shares to the public to raise funds for their investments and growth.

**Keywords:** shares, initial public offering, CFOs' survey, capital market, financial crisis, Croatia.

*Jel Classification:* G30; G38; N24; O16

## **INTRODUCTION**

The main role of financial systems is to spur economic growth by channelling collected savings to real economy for investments, job creation and growth. The enlargement of the European Union (EU) caused a unique regulatory financial infrastructure development and gradual transition from purely bank-based towards market-based financial systems. Domestic capital markets' development is strongly encouraged by the EU as they facilitate access to finance for millions of firms operating in the single European market. However, national capital markets in the European member countries are fragmented and European regulatory convergence seems not to be working in practice when it comes to fundraising over domestic stock exchanges. Secondary data show that initial public

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offerings (IPOs) and secondary equity offerings (SEOs) in Southern and Eastern European (SEE) region have been rare and this activity has mainly been related to privatisations or the times of economic boom (FESE statistics, Andritzky 2007). Shares' issuance cyclicity, well-known in developed capital markets (Brailsford et al. 2000; Lowry 2003) has never been an issue in the SEE region, as far as raising funds for corporate growth is concerned.

Croatian capital market, although one of largest in the SEE region is rather thin and illiquid in the European context. It was re-established in 1990s after Croatia declared its independence from the former Yugoslavia. During the early 1990s the market barely existed, having neither firm rules on stock exchange listing, trading, nor investor protection. Owing to the fact that Croatia has a bank-based financial system, Croatian capital market development is closely related to regulation enforcement. At first, the listing of Croatian companies was voluntary from 1995–2002 like in Estonia, Hungary, Latvia, Poland and Slovenia (Berglöf and Pajuste 2003). In mid-2002 the listing of shares became mandatory not only for privatised companies, like in Bulgaria, Czech and Slovak Republic, Lithuania and Romania (ibid. 2003), but for all companies regardless of their ownership structure. The Law on Securities' Market (Croatian Official Gazette 2002) obliged established Croatian companies having more than 30 million kuna shareholders' capital or more than 100 shareholders to list their shares in the capital market by the end of June 2003.<sup>2</sup> In addition, all companies whose shares were or should be traded publicly had to publish their prospectuses on the website of the domestic stock exchanges.<sup>3</sup> The companies started to list their shares in the capital market massively, especially during the first half of 2003, but it was the listing of secondary shares that were previously mainly kept in corporate treasuries. In other words, stock listings were not followed by capital inflow either to the owners or to the companies and some shares, although listed, have never been traded in the market. The stock exchange as an operator of capital market followed the regulatory path in establishing listing rules, by allowing the companies to list their shares even if less than 5% of their ownership stake had been publicly held. For this reason some shares were convicted to illiquidity from the first day of their listing.

At the same time the regulation was creating a sound soil for institutional investors' presence and activity. The first law on investment funds was enacted in 1995, while the three-pillar pension reform commenced in 2002. With certain restrictions, investment funds could heavily invest into domestic stocks. Mandatory pension funds could buy only a few shares from first (official) market quotation until 2007, when they were allowed to purchase the shares from other quotations provided that little free float of companies was offset with higher market capitalisation. Except for a few IPOs held from mid-2006 to the beginning of 2008 by companies that were mainly catching positive investor sentiment provoked by two partial privatisation IPOs, the market stood silent for further IPO or SEO activity. Neither the listing of shares nor the presence of institutional investors provoked raising capital by listed Croatian companies. Companies have relied on the banks even during the financial crisis when the supply of bank loans was scarce and limited to high quality borrowers. Despite the fact that mandatory shares' listing obligation is not in force from the beginning of 2009 when European capital market

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<sup>2</sup> On 25 July 2002, when the law came into force, 1 euro was worth 7,363046 kuna, meaning that 30 million kuna corresponded to 4,07 million euros of shareholders' capital.

<sup>3</sup> Until the beginning of 2007, there were two stock exchanges in Croatia.

directives came into force, most companies left their shares listed in the market either as a result of inertia or due to lack of firm rules on delisting.

A brief overview of the Croatian capital market development from 2002 to 2012 is shown in table 1. Stock market capitalisation exceeded the level of GDP in 2007 only corresponding to the highest value of the Croatian stock market index — CROBEX.

**Table 1.** Brief overview of the Croatian financial market indicators

Name of the indicator	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GDP (current prices)	181,231	228,932	247,428	266,652	291,044	318,308	343,412	328,672	323,807	330,171	330,232
Bank assets	165,622	195,278	225,546	255,320	299,258	336,349	367,925	377,369	396,287	413,744	407,857
Stock market capitalisation	28,320	37,131	61,734	80,725	161,692	352,238	142,064	135,368	140,850	130,631	127,796
Total market capitalisation	38,451	50,549	86,298	115,124	201,704	393,935	177,037	171,624	193,599	184,734	191,574
Total yearly shares turnover	1,171	1,495	2,619	4,730	10,459	22,001	16,842	7,434	5,777	5,223	2,915
Loans to corporate non-financial sector	36,708	39,777	42,845	49,106	64,666	74,002	86,536	85,206	87,099	93,019	84,260
Average daily turnover	23.7	49.7	94.6	136.3	181.3	269.2	124.8	44.0	29.5	23.5	15.4
Average daily number of transactions	134	143	210	402	569	2,102	3,045	1,965	1,144	1,395	1,124
Number of listed shares	73	175	183	194	202	383	377	280	258	254	227
Number of actively traded securities	66	143	153	169	197	376	372	310	250	344	367
CROBEX	1,172.6	1,185.1	1,565.8	1,997.5	3,209.50	5,239.0	1,722.3	2,004.1	2,110.9	1,740.2	1,740.4
Public offering of shares by non-financial sector***				34.7		46.2					

*Note:* \* Market turnover and capitalisation are expressed in million kuna, all data are at the year-end except for the averages.

\*\* The data on Zagreb stock exchange indicators were presented until 2006 only because the data on Varazdin stock exchange (that existed until 2006 when it merged with Zagreb stock exchange) are not publicly available.

\*\*\* Public offering of shares is based only on the approved amount of funds that is to be collected by the firms by primary shares offerings, i.e. paid-in shareholders' capital. The amount of any premia earned on the shares is excluded.

*Source:* Adopted from the official statistics of the Zagreb Stock Exchange, Croatian National Bank, Croatian Chamber of Commerce and Croatian Financial Services Supervisory Agency.

Stock market capitalisation comprised almost 90% of total market capitalisation in 2007, but its share fell to 66% in the total in 2012. While average daily number of transactions, the number of listed and the number of actively traded securities are larger than at the beginning of the 21<sup>st</sup> century, market liquidity is very thin. Illiquidity is evidenced by the data on average daily turnover that was at the end of 2012 smaller than 10 years ago. Two jumps in number of listed shares happened in 2003 as a consequence of the mandatory listing regulation and in 2007 as a follow-up of the merger of two stock exchanges in Croatia. The number of listed shares gradually decreases as the capital market has not been recovering from the financial crisis. However, loans to corporate non-financial sector are on steady increase despite still present banks' caution to lend funds to corporate non-financial sector. Compared to funds lent to corporate non-financial sector, the capital raised by public shares' issuance is slightly above 80 million kuna in 10 year period, witnessing that the capital market in Croatia does not help corporate issuers to raise funds for their investments and growth.

Numerous factors influence corporate decisions to borrow funds or raise funds from either the existing or new shareholders. They range from external or macroeconomic factors such as political stability, interest and inflation rates, market liberalisation, investor protection, market depth and liquidity, interest of institutional investors, presence of retail investors, direct and indirect costs of securities issuance, availability of bank loans, to internal factors such as ownership concentration, firms' reputation, creditworthiness, characteristics of the decision-making process, corporate governance, capital structure, investment opportunities, lack of funds.

This paper primarily focuses on the companies' motivation and decision to raise funds by issuing shares publicly. It studies public and private companies' CFOs' attitudes towards public offering of shares in Croatia after the onset of the financial crisis. The aim of the paper is to investigate which motives prevail in managers' decisions to issue shares, and whether the availability of loans and previous experience in securities' issuance influence that decision. The main hypothesis, assumed on the basis of collected secondary data, is that companies would not issue shares to raise funds in the Croatian capital market in the foreseeable future. Apart from descriptive statistics analysis, a binomial logistic regression model on influencing factors on the possibility of companies to issue shares is constructed. The authors believe that research presented in this paper partially explains corporate financing policies in bank-based financial systems with emerging capital markets. To the knowledge of authors, this is the first survey in Croatia and in the SEE region that questioned public companies' managers' motives on shares issuance decision after shares' listing in the capital market and private companies' managers' motives to go public.

The paper is written in five parts. A brief overview of the Croatian capital market is given in the introductory part. Section 2 compares available survey results on motives and obstacles of shares issuance. Data collected and research methodology are described in section 3, while research results are discussed in section 4. Last part concludes.

## 1. LITERATURE REVIEW

The principal motives of going public are either to raise capital or to enable (partial) exit of current owners of the company. If the first motive is in question, the firm issues primary shares and the collected capital comes to the company, while in the second case, secondary shares are offered for subscription to investors and existing owners cash in their stake. Quite often a combination of primary and secondary shares is offered. Many academic papers deal with motivation of companies to go public (Zingales 1995; Röell 1996; Pagano et al. 1998; Kim and Weisbach 2008). Share issuance activities are cyclical, exhibiting growth during economic booms and decrease during recessions (Lowry 2003). Going public motives based on survey data offer an inside view on the possibilities and constraints of shares issuance and on overall effects of shares' issuance decision. Yet, surveys have some limits and drawbacks related to design of research questions, sample selection, time frame of the research and subjective bias of the answers. Despite their limitations and changeable attitudes of managers over time, the value of the surveys is in presenting research based on primary data. First cited surveys on management's view of stock exchange listing and delisting date from the 1980s (Baker and Pettit 1980; Freedman and Rosenbaum 1987). They are followed by noteworthy Baker's and Johnson's survey (1990). The research on CFOs perceptions on going public

has been quite rare in financial management literature and it is mostly limited to the developed financial markets, especially the US (Baker and Johnson 1990; Ang and Brau 2003; Brau et al. 2003; Brau and Fawcett 2006a, 2006b). The surveys on going public are usually intertwined with surveys on capital structure (Graham and Harvey 2001; Bancel and Mittoo 2004). The most comprehensive survey-based research on the motives of public and private companies to go public was conducted by Brau and Fawcett (2006b). It distinguished between the companies that completed the IPO successfully, the companies that have given up from going public during going public process, and private companies that are possible candidates to go public. An overview of surveys of managers that question managers' readiness to issue and list shares in the capital markets is presented in table 2 (Authors' compilation).

Marchisio and Ravasi (2001) and Burton et al. (2006) confirmed pecking order theory of capital structure because companies that choose to issue shares have already exhausted other available sources of finance. Further theories on going public that were confirmed by surveys are: investor recognition hypothesis (Bancel and Mittoo 2009), financial flexibility hypothesis (Graham and Harvey 2001; Bancel and Mittoo 2004), need for capital (Brau and Fawcett, 2006b), market timing (Brau and Fawcett 2006b; Burton et al. 2006), and issuing shares to facilitate payment in acquisitions (Brau and Fawcett 2006b). The most important concern of public companies when making decision to issue stock is that their earnings would be diluted and that the price of shares is undervalued (Graham and Harvey 2001). Generally, the motive to increase visibility, prestige and reputation prevails (Baker and Pettit 1982; Freedman and Rosenbaum 1987; Baker and Johnson 1990; Bancel and Mittoo 2009), followed by financial flexibility, improved liquidity and marketability of shares. Some motives cannot be compared as different authors used different questions on IPO motivation in their surveys.

Some research studies distinguish between benefits of shares' listing in the official capital market versus listing in the OTC market (Baker and Pettit 1982; Baker and Johnson 1990), while other differentiate between benefits of listing in home market compared to benefits of cross-listing (Bancel and Mittoo 2001). The motive of appealing investors prevails with shares' listings in the foreign market, followed by greater visibility and prestige (Bancel and Mittoo 2001). Unlike public companies, the motive to finance growth is dominant within private companies (Marchisio and Ravasi 2001; Garcia-Pérez-de-Lema et al. 2011). Ensuring survival of the company (Garcia-Pérez-de-Lema et al. 2011), creating the market for shares (Brau and Fawcett 2006b), enhancing reputation (Marchisio and Ravasi, 2001; Garcia-Pérez-de-Lema et al. 2011), gaining financial flexibility (Marchisio and Ravasi 2001; Brau and Fawcett, 2006b; Garcia-Pérez-de-Lema et al. 2011) and attracting and rewarding managerial staff (Graham and Harvey 2001) are also identified as important reasons to list shares in the market by companies in private.

**Table 2.** Overview of survey-based empirical papers on going public decision

Author and market	Number of sent questionnaires	Research question	Period of the research	Number of received answers (response rate)
Baker and Johnson (1980) U.S.A.	608 ▪ 200 NYSE ▪ 209 AMEX ▪ 199 NASDAQ	Motivation to list shares on AMEX, NYSE and NASDAQ	▪ NYSE from 1985 to mid-1987 ▪ AMEX from 1982 to mid-1987 ▪ firms on NASDAQ that fulfilled listing criteria for AMEX and NYSE on 31/8/1987	284 (46.7%) ▪ 93 (46.5%) NYSE ▪ 93 (44.5%) AMEX ▪ 98 (49.2%) NASDAQ
Graham and Harvey (2001), U.S.A.	4,440	Capital structure	-	392 (8.8%)
Bancel and Mittoo (2001), 6 European countries	305	Managers' perceptions on net benefits of foreign listing	-	79 (26%)
Bancel and Mittoo (2004), 16 European countries	707	Capital structure of large public companies	-	87 (12%)
Yamori and Baba (2001), Japan	2,230 overall • 121 dual-listed companies • 2,109 domestically listed companies	Management views on overseas exchange listing	May 1996	384 (17.2% overall) • 47 (38.8%) for dual-listed companies • 337 (16%) for domestically listed companies
Brounen et al. (2004), Europe	2,000 firms from Germany, France and the U.K., and 500 firms from the Netherlands	Capital structure of the private and public companies	Nov 2002 – Jan 2003	313 (5% overall) • 68 from the U.K. • 52 from the Netherlands • 132 from Germany • 61 from France
Marchisio and Ravasi (2001), Italy	74	Motives of firms in family ownership to go public	Jan 1995 – April 2000	54 (73%)
Von Eije et al. (2004), the Netherlands	53	Organisational changes after the IPO	1987– 1997	27 (51%)
Brau and Fawcett (2006a; 2006b), U.S.A.	1,785 • 340 firms that successfully completed IPO • 179 firms that gave up from going public during the IPO process • 1,266 firms that could go public, but decided to stay private	Motivation of IPO, timing of the IPO, underwriter selection, underpricing, signalling and decision to stay private	2000– 2002	336 (18.8%) • 87 (25.6%) firms that successfully completed IPO • 37 (20.7%) firms that withdrew from going public • 212 (16.7%) firms that could go public but stayed private
Brau et al. (2006) U.S.A.	834 firms in the period of hot IPO market, and 150 firms in the period of cold IPO market	The relation between the motivation to go public in theory of finance and practice	1996– 1998 and 2000– 2002	45.6% in the period of hot IPO market, and 38.7% in the period of cold IPO market
Burton et al. (2006), the UK	450	Key factors of the IPO process	2000– 2002 on London Stock Exchange	102 (23%)
Bancel and Mittoo (2009), 12 European countries	1,808	Determinants of going public and exchange listing decision	1994-2004	78 (4.3%)
García-Pérez-de-Lema et al. (2011), Spain	Target population of 18,789 businesses	Private, family and non-family owned firms' CFOs' stance on benefits of listing on Spanish alternative stock market (MAB)	April 25 – June 8, 2009	102 firms obtained by stratified sampling

The motives to go public differ across countries and surveys. The evidence from the study on capital structure conducted by Brounen et al. (2004), revealed that only the German would issue shares primarily to finance growth, while the French and the Dutch would do that to rebalance capital structure (maintain or achieve target debt/equity ratio). According to the Brounen et al. (2004), favourable market trend is ranked as the highest

triggering factor to issue shares in the US which is closely followed by the wish to reward key employees. However, no author researching the determinants of capital structure has asked the companies about the reputational reasons of going public. If the latter motive had been included, the total ranking of the motives would probably have been somewhat different.

Besides the research on motives to list shares on the stock exchange, few authors present managers' beliefs on the benefits of stock exchange listing subsequent to IPO. The views on benefits of listing domestically and internationally differ. The prime benefits of listing in foreign markets are increased reputation, visibility and prestige, broadening the shareholders' base and increased financial flexibility, followed by better liquidity and marketability of shares (Yamori and Baba 2001; Bancel and Mittoo 2001). The perceptions of managers on benefits of listing shares in domestic markets give somewhat mixed view. Easier financing of growth, better stock liquidity and marketability, greater financial flexibility, increased incentives to improve performance due to higher monitoring by both shareholders and stakeholders prevail. Timing the market was an important benefit of IPO identified in the US (Brau et al. 2006) and the UK market (Bancel and Mittoo 2009). The most important role in timing the issue to the market was the need for funds, that is followed by major investors' interest, wish to increase corporate reputation, current industry trends and investment bankers' and other advisors' advice (Burton et al. 2006). Most companies managed to reduce cost of capital, rebalance capital structure and increase their bargaining power with stakeholders after the listing. The view of firm's brokers, major investors and costs of listing were crucial in deciding on the type of market to list shares on (Burton et al. 2006). Reputational reasons were not ranked highly in the domestic market, probably because the companies that listed shares domestically already had good reputation in that market.

The costs of IPO are considered as most important reason to stay private. The costs of shares' issuance are sometimes regarded as unavoidable part of the decision to go public. For example, about 42% of survey respondents in Bancel and Mittoo's survey (Bancel and Mittoo 2009) answered that the cost of the IPO does not significantly impact the EPS as it can be deducted from the share issue premium. Respondents of Brau and Fawcett's survey (Brau and Fawcett 2006b) justified IPO underpricing with compensating investors for taking the risk of the IPO, ensuring a wide base of owners, gathering attention of institutional investors, and ensuring post-issue shares' liquidity. Even less attention is drawn to trading costs investors are further exposed to in the secondary market, that are, according to Burton et al. (2006) regarded as the most important factor of stock exchange choice. Disclosure costs take the lead while legal and accounting fees are ranked second and third, respectively. Costs of investors' relations are particularly high for companies that decide to list their shares internationally. The issuers in the US are mostly concerned with indirect costs such as openness to public scrutiny and reduction of control, while underwriters' fees are ranked just in front of listing fees and other direct costs of IPO.

The key motives to stay private are resistance to change of owners and managers and possible loss of control (García-Pérez-de-Lema et al. 2011). US managers identified bad market conditions and loss of confidential information as main obstacles to go public. Subsequent ranking of the motives to stay private includes the on-going obligations of the public companies and some internal weaknesses. Costs of IPOs are not structured in detail in surveys of private companies' unlike the surveys of public companies. The emphasis of private companies is rather on the necessity of internal change when issuing shares publicly than on the costs of IPOs.

## 2. RESEARCH DESIGN AND DATA

Apart from the studies on capital markets' development in transition countries that is mainly bound to privatisations (Berglöf and Pajuste 2003), survey-based research on the motives of the managers to go public or stay private in transition countries is unknown to the authors of this paper. The research presented in this paper is based on the data collected from two surveys targeted to the CFOs of the companies doing business in the non-financial sector of the Croatian economy.<sup>4</sup> Financial sector was excluded because the main players in the Croatian capital market are financial institutions. An earlier survey's results also showed institutional investors' interest in investing in Croatian corporate bonds (Milos 2004), whose liquidity is much thinner compared to stocks.

The first survey was aimed to the CFOs of public companies that had their shares listed in the Croatian capital market at the end of 2009. The initial sample has been chosen regardless of the company size and regardless of the reason for listing. Only companies whose shares have not been traded in the three-year period prior to survey and companies with negligible number of shares available for trading, i.e. companies with negligible free float, whose market capitalisation of freely traded shares did not reach 2.5 million kuna, have been excluded from the sample.

The second survey was targeted to the CFOs of the companies in private that have not listed their shares in the market, regardless of whether their shares had been listed in the past and regardless of whether such companies already listed corporate bonds or commercial papers. It contained both the joint-stock companies and limited liability companies. For the companies whose financial results were available for 2008, the selection criteria were that both total revenues and assets exceeded 75 million kuna or that total revenues exceed 100 million kuna, or that they provide job to more than 200 employees.<sup>5</sup> The companies with less than 15 employees, companies owned by local or central state, subsidiaries of foreign firms, bankrupt companies and companies that had not have their own internet pages were excluded from the sample.

After determining the target companies in the samples of private and public companies, the CFOs contacts have been searched either by means of Internet or by means of the commercial database Poslovna Hrvatska (Business Croatia). The questionnaires were typed in and hosted by one of the available survey providers' internet sites for limited period of time. Each CFO was tried to be get through phone first, to increase the chance of getting the response to the survey. The CFOs were explained the purpose of research and importance of their participation. Unless the CFOs immediately declined to participate in the survey, they were asked to leave their e-mails to be sent the internet link with access to the questionnaire. The CFOs were questioned about company identifiers, experience in raising funds in the financial market including bank relationships and about possibilities of shares' listing in the capital market in the future. The specifics of the survey process for both samples are shown in Table 3.

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<sup>4</sup> Both surveys were conducted in 2010. The initial goal of the authors was to compare corporate issuers' motives on going public during and after the financial crisis, but since the capital market is not recovering for years, the authors decided to present their research results all the same.

<sup>5</sup> 1 euro was worth 7,32 kuna at the end of 2008, meaning that in order to be selected in the sample the company needed to achieve approximately 10,24 million euros revenues and have assets of at least that size, or earn 13,65 million revenues regardless of its assets size.



**Table 3.** Survey details

Survey characteristics	Public companies	Private companies
Targeted number of companies	165	229
Number of companies that immediately refused to participate in the survey	15	30
Number of sent questionnaires	150	199
Number of returned questionnaires	48	47
Response rate	32%	24%

Apart from investigating and comparing the motives to issue shares within the samples of managers of public and private companies, this paper aims to test the following three hypotheses, that are deemed to be relevant not only for Croatia but for other SEE countries as well.

*Hypothesis 1: Raising funds does not motivate Croatian companies to issue shares publicly.*

Croatian firms in public have generally not had an active policy towards initial and/or subsequent shares' offerings. A small number of mainly secondary shares offerings' happened during the market rise between 2006 and early 2008. They were conducted around two partial privatisations of Croatian companies through an IPO mechanism that provoked rising investors' expectations, temporary market and liquidity boom. This hypothesis is based on the fact that possibility of companies to issue shares is low regardless of their availability of funds. Therefore, it is expected that raising funds would not be a significant motive in coming to shares' offering decision to the public. It is expected that other reasons guide shares' issuance decision such as timing the market, owners' exit or reputational reasons.

*Hypothesis 2: Availability of bank loans influences negatively the decision of companies to issue shares.*

Although this hypothesis at first sight looks a bit contradictory as debt and equity choice influence capital structure differently, it is about funds' availability in general. Croatian companies are traditionally relied on bank loans and if not indebted too much, they do not have need to issue shares as long as bank loans are available. Why would companies engage into such a complex procedure and pay high costs of public offers if they can obtain funds in a much easier way!? Struggling companies with dubious financial ratios have difficulties in obtaining funds either through relationship banking or in the capital markets because of low creditworthiness or bad reputation. In other words, only sound and credible companies could expect to be backed by their financial advisors to enter capital market if they decide to do so. Therefore, bank loans availability is expected to exhibit negative influence on the decision of companies to issue shares.

*Hypothesis 3: Experience in securities issuance positively influences decisions on shares' issuance.*

The process of offering shares to the public is described in the literature as one of the most time-consuming activities for management of the companies. Apart from doing everyday business, management has to dedicate significant time to close collaboration with financial and legal advisors in shares' issuance structuring, law requirements' fulfilment and presentations to investors during at least six months of the shares' issuance preparation process. The controversies that regularly arise in structuring a stock issue are bound to the valuation of the company, the amount of capital to be collected, changing ownership structure, pricing and timing the issue, type

of investors whom to offer shares, expected subsequent liquidity in the market, prevention of massive sell-off of shares after the listing, and so forth. The issuers are faced with similar procedure in structuring debt securities although this procedure is much faster compared to stocks as such issues are mainly offered to institutional investors. Once when the whole process of security structuring is behind the management, it is reasonable to expect less resistance of management towards subsequent shares' and other securities' offerings. Previous experience in securities issuance is therefore considered to have positive influence on decision to issue shares.

### 3. RESEARCH RESULTS

The samples of private and public companies were initially compared according to the industry, age, and number of shareholders. There were no significant differences in terms of belonging to either non-manufacturing or manufacturing sector. Private companies are much younger than public companies with mean age of 33 compared to 58 years, and median age of 17 compared to 55 years of public companies, respectively. Two samples differ significantly in number of shareholders. The majority of private companies (73%) have up to 10 owners, while in any privately held company total number of shareholders did not exceed 500 owners at the end of 2009. Total number of shareholders in public companies is concentrated between 100 and 5000, while 10% companies have up to 100 owners and only 13 companies have more than 5000 owners. Although it was expected that private companies would have significantly less owners compared to the public companies, relatively small number of shareholders within public company sample confirms scarce free float of public companies, and thus thin liquidity in the market. It is in line with the research results on ownership concentration from other transition countries such as from Poland and Hungary (Filatotchev et al. 2007).

The representatives of both public and private companies were allowed to choose one or more motives of going public. As it is shown in Table 4 (Calculated from the survey results) significant differences between public and private companies are, according to the chi-square test, present in: law obligation, raising funds, standing out among competitors, financial flexibility, lower costs of financing, rising market prices, better liquidity and changing the way of doing business. There are no significant differences between public and private companies in owner' exit, market valuation, corporate divestiture and better reputation, with the latter motive being the most pronounced common feature of the two samples. Overall, private companies would go public due to financial flexibility (49%), changing way of doing business (47%), raising funds (45%), followed by better reputation, greater liquidity and lower financing costs (40%), as well as because of favourable market trend and standing out among competitors (38%). Public companies mainly went public due to legal obligation (77%), followed by reputational reasons (40%) and market valuation (27%). CFOs of private companies are more prone to issue shares than public issuers when all motives, except for law obligation, are taken into account.

Two-sample t-test, assuming inequality and equality of variances, was performed to compare total number of motives to issue shares excluding law obligation between public and private companies. The difference is significant showing that private companies have more motives to go public than public companies have for subsequent shares' issuance. That difference could be expected, considering slight experience in shares issuance that public companies had in 2003. Apart from the motives to issue shares, univariate tests of

stipulated hypotheses were performed between public and private companies. Availability of bank loans has mainly small or neutral effect on possibility to issue shares among the sample of public companies, but almost 45% private companies' CFOs claimed that availability of bank loans has great effect on decision to issue shares. Over one third of private companies expressed positive relation between prior experience in securities' issuance and possibility to issue shares. Private companies are surprisingly more experienced in securities' issuance, i.e. corporate bonds and commercial papers, confirming the significant influence of law obligation on subsequent securities issuance activity for public companies.<sup>6</sup>

**Table 4.** Univariate Tests of Hypotheses: Factors influencing possibility of shares' issuance

Hypotheses	Independent variable	Expected influence of the independent variable on decision to issue shares	% of affirmative answers		Test of difference between samples	
			Public companies	Private companies	(Pearson) chi-square test value	Asymp. sig. (2-sided)
H1: Companies would not issue shares to raise capital	Raising capital	Very small	10.4%	44.7%	14.026	0.000***
	Reputational reasons		31.3%	40.4%	0.870	0.351
	Owners' exit		16.7%	12.8%	0.288	0.592
	Timing the market	Reasonably	10.4%	38.3%	10.061	0.002***
	Law obligation	great	77.1%	19.1%	31.914	0.000***
	Financial flexibility		10.4%	48.9%	16.951	0.000***
	Lower costs of financing		10.4%	40.4%	11.326	0.001***
	Market valuation	Neither small	27.1%	29.8%	0.085	0.770
	Better liquidity	nor great	12.5%	40.4%	9.551	0.002***
	Corporate divestiture		2.1%	8.5%	1.967	0.161
H2: Availability of bank loans influences negatively the decision of companies to issue shares.	Changing corporate philosophy	Very small	10.4%	46.8%	15.460	0.000***
	Availability of bank loans:				0.272	0.000***
	Small effect	Smaller with	37.5%	27.7%		
	Neutral effect	greater availability of loans	56.3%	27.7%		
H3: Experience in securities issuance positively influences decisions on shares' issuance.	Great effect		6.3%	44.7%		
	Experience in securities' issuance	Greater with growing experience	8.3%	34.0%	9.444	0.002***

Note: \*\*\* 1% significance level

Expected influence of independent variables on the decision (odds) to issue shares was noted in column three of table 4, to be analysed by binomial logistic regression models. Survey questions further targeted the factors that might influence decision of companies to issue shares. Possibility to issue shares is taken as dependent variable, taking value of 1 if there is possibility to issue shares, and value 0 if there is no such possibility. Perception on effect of shares listing, perception on illiquidity of listed shares, number of banks the companies have business relationship with, underwriters' offer, as well as the type of the company (public or private) are used as control variables.

Survey data presented in Table 5 (Survey results) show that neither public nor private companies will issue shares in the foreseeable future, although private companies would somewhat easier come to this decision. Despite substantial fall of market prices of shares

<sup>6</sup> Both public and private companies are allowed to issue corporate bonds and commercial papers in Croatia.

from 2008 thereon, overall perception on the effect of shares listing is neutral to positive in 2:1 ratio in both samples.

**Table 5.** Possibility of shares issuance and perception on shares listing by private and public companies

Type of company/ Characteristics		Possibility of shares issuance		Perception on effect of shares listing			Illiquidity of listed shares			Number of banks			Underwriters' offer			Total
		No	Yes	Neg.	Neu- tral	Pos.	Yes	No	<=2	3-4	>5	Never	Some- times	Very often		
Pri-vate	Count	37	10	0	32	15	21	26	11	21	15	37	8	2	47	
	% within Type	78.7	21.3	0.0	68.1	31.9	44.7	55.3	23.4	44.7	31.9	78.7	17.0	4.3	100%	
Pub-lic	Count	42	6	3	30	15	11	37	9	23	14	31	12	5	48	
	% within Type	87.5	12.5	6.2	62.5	31.2	22.9	77.1	18.8	49.6	30	64.6	25	10.4	100%	
Total	Count	79	16	3	62	30	32	63	20	44	29	68	20	7	95	
	% within Type	83.2	16.8	3.2	65.3	31.6	33.7	66.3	21.1	46.3	30.5	71.6	21.1	7.4	100	
Pearson Chi-square test value		1.306		3.054			5.036			1.577			2.605			-
Asymp. sig. (2-sided)		0.253		0.217			0.025**			0.904			0.272			-

Note: \*\* 5% significance level

The stipulated hypotheses are tested by binomial logistic regression. Possibility to issue shares is a dependent variable, having value 1 if the company is likely to issue shares, and value 0 if company is not likely to issue shares. Selected exogenous variables are presented in the rows of Table 6 (Authors' work based on the survey data). All motives to issue shares are structured as dummy variables, having value 1 if a particular motive is present and 0 if there is no such a motive. The same holds for previous experience in securities' issuance. Control variables are also dummy variables in the models. Illiquidity of listed shares and neutral and positive perception of shares' listing are awarded value 1. Underwriter offer and availability of bank loans are qualitative variables having three values to distinguish between seldom, occasional and great frequency. Number of banks is a quantitative variable. Number of exogenous variables in the models gradually increases with hypotheses added. The estimation method is maximum likelihood. Due care was taken in selecting the most frequent category of answers in all variables as the reference category, i.e. seldom underwriter offer and availability of loans are taken as reference categories in the models.

Summary results of the models are shown in lower part of Table 6. Only the first hypothesis is represented by two models whereby the second model shows a small effect of control variables on the increase of the explanatory power and overall prediction power of the model. Nevertheless, models 2-4 gradually attempt to check the significance of stipulated hypotheses with three control variables included: type of company (public or private), perception of CFOs on shares' listing and illiquidity of listed shares. All models show significant improvement in predicting affirmative answers of companies on the possibility to issue shares compared to the base model that did not correctly capture any positive answer. Furthermore, overall percentage of correctly predicted answers by baseline model (with constant only) was 83.2% with 26.1% pseudo-R<sup>2</sup>.

**Table 6.** Determinants of the possibility of shares' issuance, results of binomial logistic regressions

Independent variable	Hypothesis 1		Hypothesis 2		Hypothesis 3		Hypothesis 3	
	Model 1		Model 2		Model 3		Model 4	
	Coef. (st.dev)	Odds	Coef. (st.dev)	Odds	Coef. (st.dev)	Odds	Coef. (st.dev)	Odds
Raising funds	1.453 (.887)	4.275	1.427 (.915)	4.166	.739 (1.123)	2.094	.656 (1.263)	1.927
Favourable market trend	.572 (.958)	1.772	.741 (.977)	2.097	2.394 (1.495)	10.956	3.931** (1.954)	50.957
Financial flexibility	.728 (.903)	2.071	.680 (.917)	1.974	.218 (1.203)	1.244	-.292 (1.319)	.747
Lower costs of financing	.802 (.882)	2.229	.694 (.902)	2.002	.534 (1.134)	1.706	.204 (1.143)	1.226
Better liquidity	-1.305 (1.039)	.271	-.921 (1.172)	.398	-1.217 (1.453)	.296	-1.081 (1.624)	.339
Changing corporate philosophy	1.434 (.955)	4.197	1.523 (.952)	4.587	1.944 (1.238)	6.990	1.908 (1.355)	6.738
Market valuation	-1.125 (.896)	.325	-1.116 (.907)	.328	-1.510 (1.165)	.221	-1.458 (1.286)	.233
Owner exit	.216 (.829)	1.241	-.033 (.870)	.967	.079 (.998)	1.082	.936 (1.125)	2.550
Better reputation	-1.230 (.949)	.292	-1.300 (.952)	.273	-2.035*** (1.235)	.131	-2.846** (1.494)	.058
Corporate divestiture	1.291 (1.256)	3.637	1.413 (1.279)	4.110	.574 (1.546)	1.775	.375 (1.805)	1.454
Law obligation	-.010 (.763)	.990	-.320 (.909)	.726	-.333 (1.133)	.717	-.473 (1.388)	.623
Number of banks					.793** (.361)	2.211	.835** (.365)	2.306
Underwriter offer (1)					-1.683 (1.528)	.186	-3.435* (2.079)	.032
Underwriter offer (2)					-.456 (1.355)	.634	-1.059 (1.499)	.347
Availability of bank loans (1)					-2.023 (1.336)	.132	-2.001 (1.451)	.135
Availability of bank loans (2)					.177 (1.065)	1.193	.825 (1.248)	2.281
Experience in securities issuance							2.515** (1.192)	12.369
Perception on share listing			.250 (.786)	1.284	-.377 (.948)	.686	-.509 (1.099)	.601
Illiquidity of listed shares			.163 (.736)	1.177	.746 (.971)	2.108	.409 (1.063)	1.505
Type			-.814 (1.085)	.443	-.487 (1.454)	.615	-1.391 (1.791)	.249
Constant	-2.581*** (.668)	.076	-2.223** (.937)	.108	-4.922** (2.305)	.007	-5.170** (2.500)	.006
Nagelkerke R2		.332		.345		.539		.599
Correctly predicted "no"		93.7%		96.2%		94.9%		97.5%
Correctly predicted "yes"		25.0%		43.8%		56.3%		62.5%
Correctly predicted "overall"		82.1%		87.4%		88.4%		91.6%
Test of model coefficients		20.918**		21.902*		36.809***		41.980***
H-L tests		5.866		14.283*		10.050		11.973

Note: \*\*\*1% significance level; \*\*5% significance level; \*10% significance level.

Some interaction effects were also tested with none improvement in accuracy of shares' issuance prediction and thus they were disregarded. Overall accuracy of the prediction of the models ranges between 82.1% to 91.6%. The last, fourth, model has largest accuracy in predicting negative answers on possibility to issue shares — 62.5%. It

is therefore considered as the best. In addition it has the largest number of significant variables and the highest value of pseudo-R<sup>2</sup>. According to the last model, timing the market and gaining reputation would be the prime motives driving CFOs' decision to issue shares. The odds of issuing shares in line with rising market trend are by far the greatest in comparison to all other motives in all presented models. Timing the market increases the odds to issue shares by more than fifty times in the last model comparing to meagre 6% contribution of reputational reasons. The result on timing the market is consistent with survey results from the US market (Brau et al. 2006; Bancel and Mittoo, 2009). Better reputation is significant for models 3 and 4. Raising funds is insignificant variable in all models, confirming the first hypothesis on meaningless importance of the motive to raise funds by issuing shares. Its influence on odds to issue shares is, however, greater than expected. All other motives, though insignificant, increase the odds of shares' issuance from 23% (market valuation) to 6.7 times (changing corporate philosophy). The latter is, contrary to expectations, a substantial driver to issue shares.

Number of banks and previous experience in securities' issuance are significant variables in all models, increasing odds to issue shares from more than two to more than twelve times, respectively. Greater availability of bank loans and the greater underwriters' offer correspond to greater possibility to issue shares, meaning that only companies that do have choice in financing instruments are actually entering the capital market. Perception on shares' issuance is not a significant factor in shares' issuance and the same holds for illiquidity of listed shares. In other words, if management and ultimately the owners of a company decide to issue shares, they would do that. The more experienced management in securities' issuance is and the greater the number of banks the company has relationship with, the greater the odds for shares' issuance. This conclusion is also confirmed by lack of funds variable that did not help in explaining any of the models, meaning that the companies that do not have funds, also do not have access to the capital market.

## CONCLUSION

This paper analyses and compares the motives of public and private companies to issue shares and the possibility of public shares' issuance by Croatian companies. Unlike typical motives to issue and list shares in developed capital market, present among companies from other countries, the primary motive to list shares for today's public companies was law obligation. Contrary to regulator's expectations, mandatory shares' listing rather suppressed than encouraged subsequent shares offerings by publicly listed companies. Some privately-held companies have been more active in the capital market than publicly listed companies, collecting funds mainly through corporate bonds and commercial paper offerings to institutional investors. In addition, CFOs of companies in private would be more prone to issue shares than CFOs of companies in public, when all motives, except for law obligation, are taken into account.

The results of binomial logistic regression run on the data collected from the sample of public and private companies' CFOs showed that factors that contribute to possibility of shares issuance are: favourable market trend and better reputation, experience in securities' issuance, and number of banks companies do business with. The odds of issuing shares when market prices are rising are the greatest, making the results of this research consistent with the surveys conducted in the US market. Other factors that could

logically be related to the decision to issue shares, such as illiquidity of capital market, perception on shares' issuance, underwriter offer, type of company (public or private), have not been proved as significant for the decision to issue shares to the public. It is only the management that can provoke shares' issuance while the owners of companies make ultimate strategic decision on shares' issuance. However, companies that do not have funds also do not have access to the capital market, while companies that do have access to capital market would generally not use it for primary shares' issuance.

With all limitations and drawbacks common to survey research, in authors' opinion the results of this paper contribute to the financial management literature of emerging capital markets. They may serve not for academic purpose but also as useful guidance to policy-makers working on facilitating capital market access to SMEs throughout the European Union.

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