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Motives and effects of the initial public offerings on the Warsaw Stock Exchange

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**Motives and effects of the initial public offerings on
the Warsaw Stock Exchange**

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Motives and effects of the initial public offerings on the Warsaw Stock Exchange

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Abstract: This paper empirically investigates the links between the motives for going public and changes in the market value and efficiency of new stock companies. Using a sample of 200 firms from Warsaw Stock Exchange between 2005 and 2012 I find that the principal purpose of initial public offering is raising additional capital by the company but divestment grounds of initial shareholders are also important. I find evidence that the sale of secondary shares in the initial public offering may be seen as a negative signal at aftermarket performance of the firm. The data reveal that the most adverse long-term changes in the market value and business efficiency are observed for those companies, where in the initial public offering both primary and secondary shares were sold.

Introduction

The offering of the company's shares for the first time on a stock exchange is inextricably linked to the implementation of various strategic objectives of stock companies and their shareholders. The decision to undertake an initial public offering (IPO) is an extremely important step on the development path of the company, significantly changing its business conditions. On the one hand, the company gains access to new sources of capital, enabling development of the new investment projects, which are aimed at multiplying its value. On the other hand, the stock exchange listing of shares provides favorable conditions for the changes in the company's existing ownership structure, allowing the shareholders to sell their holdings. The multiplicity and complexity of the grounds for the IPO

gives the rise to seek answers to the question about the effects of this type of company's growth strategy.

The main aim of this study is to seek the relationships and dependencies between the motives underlying the initial public offering and changes in the market value and efficiency of new listed companies. The necessity to take research on these concerns is associated with the lack of the results of studies in the literature on the heterogeneous forms of the initial public offerings and their long-term effects for the companies and their shareholders. Especially noticeable is paucity of such analyzes for other markets than the U.S. The results of the research in this area may significantly contribute to the formation and development of effective financial strategies of enterprises.

In order to achieve the goal of the research the main hypothesis has been formulated and it states that the sale of shares by the initial owners in an IPO is related to a decrease in the efficiency of the enterprise and reduction its market value. At the core of the research hypothesis there are some reasons for which as the most important the existing among initial shareholders privilege in terms of access, possession and possibility to use the key information about the company's prospects can be regarded. The decision to cut back on the shareholders' involvement in the company can, therefore, be seen as a negative signal about the expected changes in the efficiency of the firm and its market value.

Primary and secondary shares in the initial public offering

The first listing of shares on the stock exchange is the result of the adoption of a specific business strategy of the company's development and the nature of the decision to go public is complex and multifaceted. The sale of shares in the IPO affects the enterprise in a number of ways that increase the liquidity of insiders' portfolios and the firm's access to capital (Kim & Weisbach, 2008, p. 282).

Most often it is pointed out that the main reason for going public is the wish to raise additional capital by the company (see Cumming (ed.), 2012, pp. 468–469) (compare Ritter & Welch, 2002, pp. 1796–1799). Although this reason is not questioned in the literature, there can be seen significant differences in the indicated ways of allocation of the raised capital. Extensive research in this area is carried out by Pagano et al. (1998). They conclude that companies do not go public to finance subsequent investment and further growth, but rather to rebalance their accounts after a period of high investment and dynamic development (Pagano et al., 1998, p. 61). The proceeds received from the issuance of new shares are often used to repay

the existing debt (compare Mikkelsen et al., 1997, Auret & Britten, 2008). Moreover, by going public, a company becomes stronger in relations with the banks, which allows reducing the cost of credit and diminishing the concentration of bank loans (Pagano et al., 1998, p. 29).

The significance of the demand for capital as the main motive for going public was also studied by Kim & Wiesbach (2008). Using a large, international sample of IPOs they show that firms generally issue equity to fund a series of projects over time rather than particular investments (Kim & Weisbach, 2008). Their results suggest that - contrary to the rebalancing of the financial structure of Pagano et al. (1998) - the investment financing motivation for equity offers can be a primary premise of the IPO.

There is no doubt that the going public decision should be considered from the perspective of the motives of the company's initial shareholders. It should be noted that IPO is a method of divestment. Investors, who have invested capital in the earlier stages of the life cycle of the firm, may sell their holdings and achieve the expected capital gain. This reason for IPO is particularly important in the activities of private equity funds (Barnes et al., 2003; Jeng & Wells, 2000; Black & Gilson, 1998), as well as other groups of investors seeking to exit from the investment, e.g. in the case of the privatization processes of the State Treasury's assets (Choi et al., 2010). What is more, the IPO is a mechanism to diversify the initial shareholders' portfolio and improve its liquidity.

Motives for going public outlined above¹, namely the demand for capital and divestment, are reflected in the securities offered to the stock market investors. Specifically, if the firm issues new shares in the IPO, the proceeds from selling newly created shares (i.e. primary shares) receives the company and the raised capital may be used to finance the growth or rebalance the financial structure. However, in order to allow initial owners to cut back the involvement in the company and exit from their investment, the previously existing shares have to be sold in the IPO, i.e. secondary shares. The proceeds from the sale of secondary shares receive the company's shareholders who sell shares. It should be noted that in IPO practice, there may be sold either only primary shares or only secondary shares, as well as a combination of both. The structure of the shares sold in IPO, based on the primary and secondary portion, actually distinguish subgroups of firms with different objectives for listing and motives for going public (Huyghebaert & Van Hulle, 2006, p. 318).

¹ The literature also draws attention to the importance of other reasons going public, i.e. the use of favorable market conditions, participation in the mergers and acquisitions market, to attract product market competition, to obtain additional benefits of being the first in an industry, to reduce of agency costs (see Ritter & Welch, 2002, pp. 1796-1799).

Bearing in mind the concept of Value Based Management (Rappaport, 1986; Copeland et al., 2000) you can ask a question about the importance of an IPO in the creation of the company's value, if initial shareholders seek to withdraw from the company the earlier invested capital and reduce their involvement. This question seems to be important for many reasons. One of them is the issue of getting certain capital benefits or avoid capital losses. One of them is the matter of getting certain capital benefits or avoid capital losses. Existing shareholders (especially insiders) have an information advantage about the condition of the issuing firm and its prospects (Megginson & Weiss, 1991). Taking into account the information asymmetry and agency theory, the dispose of secondary shares may suggest that initial owners sell overpriced shares opportunistically. This issue is particularly important in the context of a great deal of research which has been carried out in many markets and indicates the existence of some kind of anomaly. In fact, these studies show that in the long term the rates of return on shares of the new stock companies are lower than the average market return (Schuster, 2003; Siwek, 2005; Brav et al., 2000; Zheng, 2007), as well as companies similar to them in terms of capitalization and industry, but already publicly traded (Ritter, 1991; Loughran & Ritter, 1995). The literature points out the various reasons for the long term IPO overpricing, especially the divergence of opinion hypothesis, the impresario hypothesis, the windows of opportunity hypothesis and the IPO issuer costs (see Cumming & Johan, 2009, pp. 587-588). Furthermore, it is emphasized that after IPO the deterioration in the issuer's financial position can be expected. Relatively permanent, adverse changes in the financial condition of the new listed companies have been observed in many markets, such as USA (Jain & Kini, 1994; Mikkelsen et al., 1997; Teoh et al., 1998), Italy (Pagano et al., 1998), the United Kingdom (Coakley et al., 2007) and many Asian countries (Ahmad, 2011; Ahmad-Zaluki, 2008; Wang, 2005). Extensive scientific debate on this issue points out three potential explanations for the decline in the post-issue operating performance of IPO firms, namely potential for increased agency costs when a firm makes the transition from the private to public ownership (Kutsuna et al., 2002), managers' attempt to window-dress their accounting numbers before going public (Teoh et al., 1998; Rangan, 1998), as well as the entrepreneurs time their issues to coincide with periods of unusually good performance levels (Benninga et al., 2005). Klein and Li (2009) confirmed that the window-dressing practice as measured by discretionary current accruals is positively correlated with secondary share offerings. Moreover, their studies suggest that initial shareholders are more likely to

cash out their shares when the overall stock market condition is favorable (Klein & Li, 2009).

Although the IPO overpricing and the deterioration of the financial condition of new listed companies met with the interest of the researchers in the whole world, there is surprisingly little knowledge about the impact of the sale of primary and secondary shares on the market value and efficiency of firms in the long term. Jain and Kini (1994) point to the existence of a significant, positive relation between the long term post-IPO operating performance and the proportion of shares retained by the original entrepreneurs. In contrast, the study of Brau et al. (2007) shows that the aftermarket performance is not affected by the offering type (i.e. primary versus secondary offerings), implying that secondary share sales in general are due to the existing shareholders' portfolio diversification rather than opportunistic selling of over-priced stocks. Nevertheless, insider selling is related to poorer long-run performance, consistent with agency and asymmetric information theories (Brau et al., 2007, p. 2630). It is also worth mentioning the research on the secondary share sale of seasoned equity offerings that have been carried out by Lee (1997) as well as Clarke et al. (2004), where the results show that the long-run abnormal returns are significantly negative and that the operating performance of the firms in the study declines subsequently to the secondary offering for offers when insiders are secondary share sellers.

Methodology of the research

The empirical studies have been carried out on a sample of companies whose shares were listed on the main market of the Warsaw Stock Exchange for the first time between 2005 and 2012. There are 291 IPOs during this period in total. Then, from the research sample I exclude 44 foreign companies, take out 11 firms because their IPO does not include the sale of primary or secondary shares, delete 29 companies previously listed on NewConnect or MST-CeTo. In addition, due to the nature of business I also eliminate 3 banks and 1 insurance company, as well as 3 firms for which to obtain the necessary figures required for the research is not possible. After applying these filters, there are 200 IPOs left in the sample.

To investigate the changes in the market value of companies after the first listing on stock exchange I calculate the rates of returns resulting from the so called buy and hold investment strategy. It has been assumed, the investment strategy where an investor purchases shares at the end of the first day of trading at the closing price and holds them for a long time. This made it possible to eliminate the influence of unusually high rates of return

in the first day of trading, that is the observed in many markets and in different periods phenomenon of IPO underpricing (see Ljungqvist, 2006, pp. 8-10; Loughran et al., 1994; Boulton et al, 2010). This way calculated rates of return ($BHR_T^{IPO,i}$), in addition to factors specific to a particular company or group of companies also include general changes in the stock market sentiment. To eliminate the influence of this factor, the obtained results were adjusted by the normal rate of return, determined on the basis of the index model. According to this approach, the normal rate of return on the company's shares is equal to a rate of return on the market portfolio ($BHR_T^{WIG,i}$). Thus, I use the Warsaw Stock Exchange Index (WIG) on the particular day of stock trading as a benchmark. The rates of return resulting from the buy and hold investment strategy are given by the following formulas:

$$BHR_T^{IPO,i} = \prod_{t=2}^T (1 + R_{i,t}) - 1$$

$$BHR_T^{WIG,i} = \prod_{t=2}^T (1 + R_{WIG,t}) - 1$$

$$BHAR_T^i = BHR_T^{IPO,i} - BHR_T^{WIG,i} = \prod_{t=2}^T (1 + R_{i,t}) - \prod_{t=2}^T (1 + R_{WIG,t})$$

where $R_{i,t}$ is the rate of return on the shares of i -company in the t -day of trading, $R_{WIG,t}$ is the rate of return of the WIG index on the t -day of trading and $BHAR_T^i$ is the buy-and-hold abnormal rate of return on the shares of i -company in the t -day of trading.

The assessment of changes in the company's efficiency after the IPO is conducted on the basis of the return on total assets (ROA = net profit / total assets), which gives an idea as to how efficient management is at using firm's assets to generate profit. Unfortunately, the necessary financial data are listed as for a specific date, such as the end of the firm's financial year, creating difficulties for observation of changes in the company's efficiency (ΔROA). The reference point for further analysis is the return on assets reached at the end of the year prior to the first listing of the company's shares on stock exchange (ROA_{T-1}).

In order to investigate whether the issue of new shares and the sale of secondary shares by initial shareholders influence the post-IPO changes in the market value ($BHAR_T$) and efficiency of companies (ΔROA), I estimate the two following OLS models:

$$BAHR_T = \alpha_0 + \alpha_1 PRIMARY + \alpha_2 SECONDARY + \alpha_3 \ln MV + \mu$$

$$\Delta ROA = \beta_0 + \beta_1 PRIMARY + \beta_2 SECONDARY + \beta_3 \ln TC + \mu$$

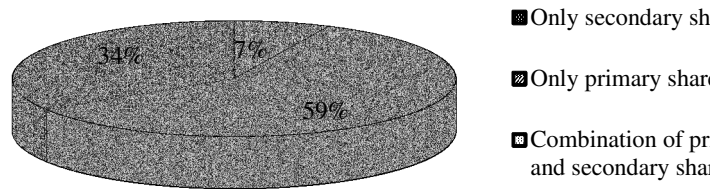
The explanatory variable PRIMARY is a dummy variable that equals one when in the IPO primary shares are sold and zero otherwise. SECONDARY is also a dummy that takes a value one when the initial shareholders dispose their shares in IPO and if not its value is equal to zero. Regarding the conclusions from the research on the company's market value of Fama & French (1996), the model for BHAR contains the control variable MV that determines the market value of the company at the end of the first day of stock trading. Similarly, in the second model the control variable TC is used, which is the total book assets of the company prior to the IPO and it reflects the size of the enterprise. The size of a firm is seen as a primary factor in determining the profitability of a firm due to the concept known as economies of scale which can be found in the traditional neoclassical view of the company (Niresh & Velnampy, 2014, p. 57; Pervan & Višić, 2012, pp. 213-223).

The information on the type of shares sold in IPO, that is primary and secondary shares are hand-collected from the Register of financial instruments maintained by the Polish Financial Supervision Authority. The post-IPO number of shares, the return on assets ratios and information on the total book assets for each company come from the unconsolidated financial statements available in the Notoria Service database. The source of information about the daily rates of return of companies' shares on the Warsaw Stock Exchange is <http://gpwinfostrefa.pl>.

Empirical results

Empirical studies of the IPO practice in the Polish capital market indicate that the decision to go public is associated with the wish to achieve a variety of purposes. Figure 1 presents the structure of IPOs, when firms are sorted according to the floatation structure (i.e. if company sells only primary shares, just secondary shares or a combination of both). The information presented in Figure 1 indicates that the dominant reason for IPO is the need to raise new capital to the company.

Figure 1. Public offerings of shares according to floatation structure

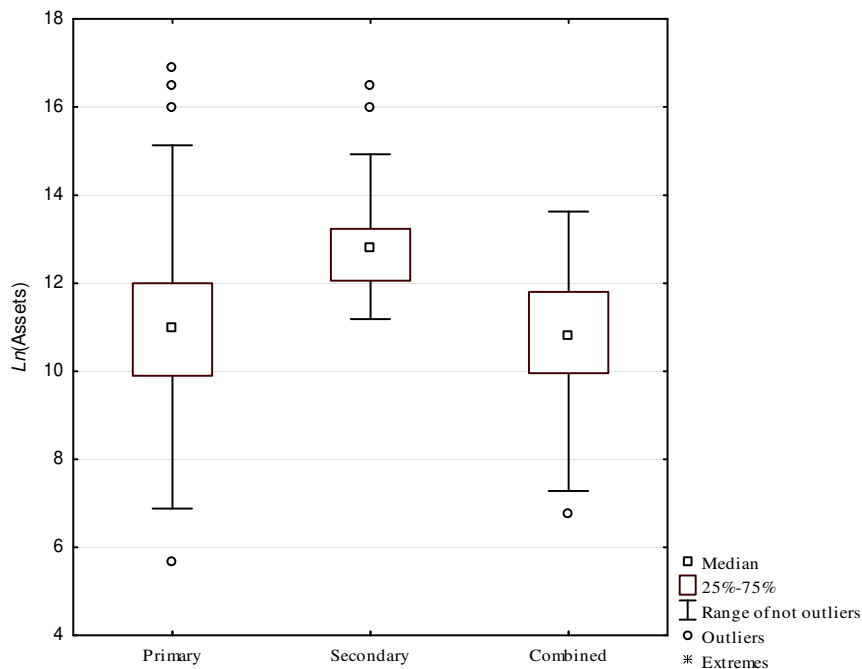


Source: the author's own study based on Register of financial instruments, Polish Financial Supervision Authority.

The analyzed IPOs are generally associated with the sale of only newly issued shares and thus the firm is entitled to all proceeds. This type offerings include 59% of the cases. However, based on the analyzed data it can be also said that the Polish stock market plays an important role in the divestment processes. Among the all IPOs 34% are those in which the issue of new shares was combined with the sale of shares owned by existing shareholders, namely secondary shares. Whereas, pure secondary offerings are relatively uncommon on the Warsaw Stock Exchange and represent only 7% of all observations. From the point of view of the type of shares sold to the public in IPO, Polish stock market is not very different from the stock exchanges in other European countries (see Kim & Weisbach, 2008, pp. 302-303). It is noteworthy that firms which IPO concerns only the sale of secondary shares are relatively bigger in comparison to other new stock companies (see Figure 2).

The analysis of the effects of the IPOs on the Warsaw Stock Exchange shows that the adoption of this strategy of business development can bring diverse results. On the basis of the rates of return resulting from the buy and hold strategy it can be concluded that the phenomenon of the long run underperformance of IPOs is present on the Polish stock market. Although for the total sample the mean of the buy-and-hold abnormal rates of return is positive in most intervals, special attention should be paid to the high standard deviation. This shows a significant variation in the changes of the stock prices across all companies.

Figure 2. The size of firm (the natural logarithm of total assets) at the end of of the fiscal year prior to the going public according to the floatation structure.



Source: the author's own study based on *Notoria Service Sp. z o.o.* and Register of financial instruments, Polish Financial Supervision Authority.

It should be emphasized that in the all analyzed intervals, the median is negative. Moreover, the existence of a clear downtrend can be noted. In the whole group of IPOs a deterioration in business efficiency measured by the change of return on assets is also seen (see Table 1).

The assessment of the long-term market effects of IPOs in each group of companies using buy-and-hold abnormal rates of return indicates that one can observe the existence of certain differences across all categories. Even though the highest rates of return are reported for these offerings, where only primary shares were sold, the small size of this group does not allow drawing generalizing conclusions. Whereas, the comparison of primary and combined offerings allows concluding that in the long run for stock investors investments in public offerings are more profitable, if the initial shareholders did not sell their stakes. One year after the first listing of the company's shares, both the mean and median of BAHR is lower for combined offers.

Table 1. Summary statistics of BAHR and ΔROA according to floatation structure

Specification	Mean	Median	Std. dev.	Min	Ma	N
	Whole sample					
<i>BHAR</i> ₁₂₅	0,0302	-0,0387	0,4327	-0,7983	2,7781	200
<i>BHAR</i> ₂₅₀	0,0381	-0,0543	0,6573	-1,2112	5,6055	200
<i>BHAR</i> ₅₀₀	0,2235	-0,1555	3,0066	-1,5405	40,2755	197
<i>BHAR</i> ₇₅₀	-0,0291	-0,2434	0,8545	-1,5278	5,5299	184
ΔROA_{T0T-1}	-0,0506	-0,0208	0,1486	-1,2277	0,2139	200
ΔROA_{T+1T-1}	-0,0817	-0,0462	0,2071	-2,1956	0,3124	200
ΔROA_{T+2T-1}	-0,1270	-0,0735	0,3674	-4,3542	0,4057	187
ΔROA_{T+3T-1}	-0,1659	-0,0773	0,5493	-6,5347	0,1527	165
Secondary						
<i>BHAR</i> ₁₂₅	0,0590	-0,0091	0,5224	-0,5973	1,5010	14
<i>BHAR</i> ₂₅₀	0,0861	0,0724	0,5757	-0,7667	1,2093	14
<i>BHAR</i> ₅₀₀	0,5939	0,1348	1,6246	-1,3180	4,0256	14
<i>BHAR</i> ₇₅₀	1,3454	1,0303	1,8756	-0,7162	5,5299	10
ΔROA_{T0T-1}	-0,0240	-0,0037	0,1138	-0,2641	0,1545	14
ΔROA_{T+1T-1}	-0,0414	-0,0372	0,1523	-0,3361	0,3124	14
ΔROA_{T+2T-1}	-0,0049	0,0035	0,1650	-0,2904	0,3497	11
ΔROA_{T+3T-1}	-0,0174	0,0014	0,0963	-0,1780	0,0644	5
Primary						
<i>BHAR</i> ₁₂₅	0,0398	-0,0417	0,5000	-0,7983	2,7781	118
<i>BHAR</i> ₂₅₀	0,0859	-0,0364	0,7889	-1,2112	5,6055	118
<i>BHAR</i> ₅₀₀	0,3753	-0,1604	3,8415	-1,5405	40,2755	117
<i>BHAR</i> ₇₅₀	-0,0828	-0,2394	0,7629	-1,5278	4,2050	110
ΔROA_{T0T-1}	-0,0361	-0,0176	0,1223	-1,0383	0,2139	118
ΔROA_{T+1T-1}	-0,0751	-0,0369	0,2333	-2,1956	0,1876	118
ΔROA_{T+2T-1}	-0,0954	-0,0546	0,1771	-1,0611	0,4057	111
ΔROA_{T+3T-1}	-0,1315	-0,0693	0,2453	-1,3524	0,1527	100
Combined						
<i>BHAR</i> ₁₂₅	0,0076	-0,0296	0,2565	-0,5053	0,7092	68
<i>BHAR</i> ₂₅₀	-0,0547	-0,0659	0,3450	-0,7531	1,1886	68
<i>BHAR</i> ₅₀₀	-0,1240	-0,1696	0,4477	-1,2126	1,2534	66
<i>BHAR</i> ₇₅₀	-0,1516	-0,2750	0,5396	-1,3679	1,8587	64
ΔROA_{T0T-1}	-0,0813	-0,0412	0,1884	-1,2277	0,1947	68
ΔROA_{T+1T-1}	-0,1014	-0,0810	0,1643	-1,0240	0,1427	68
ΔROA_{T+2T-1}	-0,2015	-0,0903	0,5693	-4,3542	0,0803	65
ΔROA_{T+3T-1}	-0,2354	-0,1001	0,8534	-6,5347	0,1321	60

Source: the author's own study

The analysis of the data presented in Table. 1 indicates that the smallest decline in return on assets is observed in companies where in the IPO only secondary shares were sold. Two years after the first stock listing in more than a half of the enterprises in this subsample one can observe the increase in return on assets compared to the period before the IPO. In the other group of companies there is a clear downward tendency of the average return on assets. In the all analyzed interval the ROA biggest drop is observed for those companies where IPOs were related to both the issue of new shares and the sale of the secondary shares. The results indicate that the reduction of the original owners' capital involvement in the IPO may be associated with a significant decrease in the company's efficiency at a later date.

Differences in the examined variables illustrating the effects of the going public observed across all categories are statistically significant only in the part of the comparisons (see Table 2).

Table 2. The p -value of non-parametric Wilcoxon rank-sum test

Specification	Primary versus Secondary	Secondary versus Combined	Primary versus Combined
$BHAR_{125}$	0,9676	0,8293	0,3876
$BHAR_{250}$	0,5921	0,3152	0,4309
$BHAR_{500}$	0,2467	0,1900	0,7925
$BHAR_{750}$	0,0049	0,0035	0,9068
$\Delta ROA_{T0/T-1}$	0,5870	0,1978	0,0512
$\Delta ROA_{T+1/T-1}$	0,9088	0,2492	0,0239
$\Delta ROA_{T+2/T-1}$	0,1286	0,0335	0,2099
$\Delta ROA_{T+3/T-1}$	0,0905	0,0666	0,2412

Source: the author's own study

In order to determine whether and how the secondary shares disposal by the initial owners in the IPO influences the changes in the company's market value and profitability of assets in the long-term I use the multiple linear regression models indicated above. The results presented in Table 3 - parameter estimates and p -values (in brackets) - shows that received equations slightly explain the dependent variables.

The analysis of the results indicates that the negative impact on the buy-and-hold abnormal return after IPO can have both the issue of new shares and the sale of secondary shares held by the initial owners. In all intervals the coefficients on PRIMARY and SECONDARY are negative, which is in line with the prediction of the research hypothesis. However, in most of the estimated equations, these two variables are not statistically significant.

Table 3. Determinants of BHR_T and ΔROA - the results from OLS regressions

Dependent variable	Explanatory variables					
	Intercept	Primary	Secondary	LnMV for BHAR LnTC for ROA	Adj. R ²	F-statistics
<i>BHAR</i> ₁₂₅	0,7876 (0,0175)	-0,1031 (0,4220)	-0,0103 (0,8760)	-0,0540 (0,0217)	0,0132	1,89 (0,1327)
<i>BHAR</i> ₂₅₀	1,2505 (0,0127)	-0,2169 (0,2648)	-0,1084 (0,2799)	-0,0794 (0,0257)	0,0204	2,38 (0,0706)
<i>BHAR</i> ₅₀₀	6,5488 (0,0045)	-1,1277 (0,2051)	-0,3272 (0,4791)	-0,4231 (0,0095)	0,0263	2,76 (0,0433)
<i>BHAR</i> ₇₅₀	2,6926 (0,0000)	-1,5802 (0,0000)	-0,0260 (0,8347)	-0,1003 (0,0208)	0,1621	12,80 (0,0000)
$\Delta ROA_{T0/T-1}$	-0,3804 (0,0000)	0,0124 (0,7728)	-0,0409 (0,0550)	0,0302 (0,0000)	0,1267	10,62 (0,0000)
$\Delta ROA_{T+1/T-1}$	-0,3254 (0,0133)	-0,0062 (0,9218)	-0,0229 (0,4617)	0,0234 (0,0071)	0,0278	2,90 (0,0362)
$\Delta ROA_{T+2/T-1}$	-0,4169 (0,0807)	-0,1095 (0,3706)	-0,1036 (0,0665)	0,0394 (0,0118)	0,0432	3,80 (0,0113)
$\Delta ROA_{T+3/T-1}$	-0,3938 (0,3472)	-0,1273 (0,6283)	-0,1015 (0,2582)	0,0358 (0,1430)	0,0054	1,30 (0,2770)

Source: the author's own study

Likewise, the data describing the change in efficiency of new listed companies (ΔROA) support the notion, also consistent with the research hypothesis, that the sale of secondary shares by existing shareholders may be associated with a decrease in return on assets in the future. In all models, where ΔROA is the explained variable, the coefficients for SECONDARY take the value below zero. Moreover, in models for $\Delta ROA_{T0 / T-1}$ and $\Delta ROA_{T+2 / T-1}$ these parameters are statistically significant at 0.1.

Conclusions

Initial public offering is a milestone on the growth path of a company. The adoption of this strategy of firm development radically affects the external and internal conditions of the business. Although this topic is the subject of many research studies, the knowledge about relationships and dependencies between the motives for going public and consequences of this decision in the form of changes in the company's market value and efficiency is still limited.

Results of empirical studies support the presumption that the sale of shares by the initial owners in an IPO favors the deterioration of the company's business efficiency and negatively affect its market value. The biggest decline in the market value and return on total assets is observed in companies where the IPO was associated with a combination of the issuance of new, primary shares and the sale of secondary shares by the initial owners. These findings are at least suggestive of the idea of the information asymmetry and agency theory that owners of private companies may use information advantage in IPO to achieve their personal goals and effectively accomplish the divestment process.

Results presented in this paper indicate a need for further studies on the structure of the shares offered in IPO and its impact on the short- and long-term effects of this type of company's development strategy. Furthermore, for the future research it becomes extremely important to find answers to the question about directions and effectiveness of the use of capital raised, when capital growth resulting from the issuance of new shares is accompanied by a decrease in the efficiency of the company.

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