



DOI 10.2478/ethemes-2020-0006

## THE IMPORTANCE OF INITIAL PUBLIC OFFERING FOR CAPITAL MARKET DEVELOPMENT IN DEVELOPING COUNTRIES

## Aleksandra Pešterac

University of Kragujevac, Faculty of Economics, Republic of Serbia

 $\boxtimes$  apesterac@kg.ac.rs

UDC 336.76	<b>Abstract:</b> The first issue of shares is the key moment in the life cycle of any company that was not previously listed on a stock exchange. Considering the fact that transformation into a public open joint stock company brings along a number of advantages and challenges, it would be of great importance to possess knowledge about initial public offering (IPO) issuing activity, as well as stay updated with the
Review	number and value of globally realised IPOs. The aim of the paper is to
paper	use the comprehensive analysis of IPOs realisation process in order to point out the importance of going public, having in mind both the corporations and investors in the capital market, as well as the economy as a whole. In accordance with the set goal, the paper will present the effects of the realised IPO processes in the countries of Western Europe, China, Japan and the USA. When it comes to developing countries, the IPO of shares on a stock exchange is of special importance, since it contributes to the further development of capital market. Due to the particularity of the Serbian macroeconomic environment, the trends of privatisation process, the insufficient protection of investors, the high level of information asymmetry and the lack of corporate education, there have been no IPO processes realised on the Belgrade Stock Exchange over the past eight decades.
Received: 14.01.2019	<b>Keywords:</b> initial public offering (IPO), going public, capital market, underpricing, information asymmetry, stock exchange
Accepted: 20.4.2020	JEL classification:F39, G14, G24

### 1. Introduction

In the legal sense, the process of initial public offering of shares (IPO) represents the process of creating joint stock companies, while, substantively, this procedure leads to raising investment capital for company funding. The creation of a joint stock company is not an end in itself; it is rather a number of advantages that stock companies bring along, starting from an unlimited lifetime, the possibility of an easy transfer of ownership by selling shares, as well as limited obligations and responsibilities (the maximum loss an owner can suffer is the amount of funds invested in shares). An IPO is the first issuance of shares of companies that were not previously listed on a stock exchange. In this way, shares are offered to the widest market investors, i.e. interested investors who put their money in share purchase, which enables companies toraise necessary capital for their own development.

The willingness of a company to go public and thus raise necessary capital to a large extent depends on the conditions, nature and efficiency of a financial system. It is assumed that positive performance in IPO markets could be achieved by the economies that have more favourabletrends of macroeconomic variables, efficientlegislation which is consistently applied, and a high degree of corporate education. The success of this processin capital markets is reflected in the total number and value of realised IPOsduring the course of a year.

A comprehensive analysis of IPO issuing activity is aimed at highlighting the strengths and challenges of the process of going public in developing countries. In order to bring the realisation of this process to the public in Serbia as close as possible, the paper will highlight the effects of the realised IPOs in the developed capital markets of Western Europe, China, Japan and the USA. Apart from introductory and concluding observations, the paper is structured in three parts. The focus of section 2 is the specific characteristics of launching and realisation of the process of going publicthrough an IPO. The attention in section 3 is focused on the phenomenon of underpricing the initial shares, as well as on the macroeconomic variables that determine the success of an IPO process. Section 4 analyses IPO market, both in countries with developed capital markets, and in those whose stock markets are in the process of development.

### 2. Joint-stock corporations going public

The transformation into an open joint stock company was caused by the development of capital market, a wide range of financing sources and, accordingly, the emergence of a large number of diversified investors. Due to potentially high economic power and ability to attract a large number of investors by selling rights to future income in the form of shares, these companies make a significant contribution to national economies in gaining the advantage over other economic systems (Malinić, 2007). Through an IPO, the company goes public, i.e. it changes its form into a public open joint stock company, gaining thus the possibility to be listed / quoted on a stock exchange (Malinić&Denčić-Mihajlov, 2010). This process marks an important milestone in the life cycle of private companies, since it has significant effects on the ownership structure and the control of existing owners' rights. The first issue of shares of previously unlisted companies on the stock exchange is known as an initial public offering (IPO). Unlike private share issue, when shares are sold directly to well-known individuals or large institutional investors, in the process of public issue, shares are offered to widely interested public investors (Ljutić, 2007). Private financing at an early stage is associated with industries characterised by uncertain sustainability, high research and development costs, and a low possibility of being left behind technologically advanced competitors on the market. On the other hand, public funding in the early stage of development is typical for industries characterised as sustainable, entailing low start-up costs, and facing low competition (Maksimovic& Pichler, 2001).

From the point of view of shareholders and managers, the motives for IPO activity can be classified into two groups of theories – market timing theory and the life-cycle theory. According to market timing theory, companies go public when there are favourable conditions on the market, i.e. when companies try to maximise their value by an IPO issuing activity in the period of overvaluation of their shares (Malinić, et al., 2010). According to this theory, it is logical to expect companies to postpone going public, if founders consider shares to be underpriced. A favourable market situation will be used to raise a larger amount of capital (Loughran & Ritter, 1995). The survey conducted by Ritter & Welch (2002) also confirms that favourable market conditions encourage the transformation to public open joint stock companies, provided that companies are not at a certain stage of the life cycle. The life-cycle theory is based on the premise that strategic financial decisions, such as the one ongoing public, depend on the phase of a company life cycle. The life-cycle theory is essentially based on three important factors influencing acompany'sgoing public: growth and development, ownership control and liquidity (Malinić, et al., 2010). IPO issuing activityis motivated by the needs for financing growth in both short and long term. The decision to go public will be made at the stage of a life cycle when the acquisition of external equity capital leads to the achievement of an optimal capital structure. Due to the owner's efforts to maintain the existing ownership structure, an IPOseems to be a proper solution for the optimalownership dispersion and liquidity provision that will enable the realisation of future investment projects.

Having evaluated the results and scope of business operations and estimated them to be sufficiently attractive for investment, owners and management make the decision to go public through an IPO and enter a capital market. A detailed analysis of the benefits that should be used during this process, as well as the weaknesses that the company will inevitably face, should help management in making the right decision. Besides strengths and weaknesses, Table 1 also provides opportunities and threats accompanying an IPO issuing activity.

Opportunities	Strengths		
<ul> <li>Possibility of optimal ownership dispersion;</li> <li>Increasing the negotiating strength of a company;</li> <li>Realisation of long-term development goals;</li> <li>Possibility of reducing financial leverage;</li> <li>Achieving greater competitiveness on the market;</li> <li>Motivating managers and employees by providing opportunities for acquiring company shares.</li> </ul>	<ul> <li>Raising large amounts of funds;</li> <li>Achieving financial structure flexibility;</li> <li>Reduction of borrowing costs;</li> <li>Gaining liquidity through equity of shares;</li> <li>Prestige, recognition, visibility of a company;</li> <li>Sudden capital raising at no risk;</li> <li>Determining market value of a company.</li> </ul>		
Threats	Weaknesses		
<ul> <li>Shareunderpricing;</li> <li>Exposure to negative selection and moral hazard;</li> <li>Hostile takeover by larger companies.</li> </ul>	<ul> <li>Public disclosure of information;</li> <li>High issuance costs;</li> <li>Complexity of the process of issuing shares through IPO.</li> </ul>		

Table 1: SWOT analysis of going pub	lic vi	a IPO
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#### Source: author

According to stock market participants, the basic reasons a company joins a stock market are raising additional capital, achieving better image, increasing publicity, motivating managers and employees, and providing liquidity by selling shares (Ellingsen&Rydqvist, 1997). An PO also provides the opportunity for founders to diversify their risk; it facilitates the sale of the company and increases its transparency by subjecting it to capital markets discipline (Celikyurt, et al., 2010). The main advantage that can be expected from this process is related to opening new possibilities in shaping the financial structure, given the fact that the company must adhere to strict rules on disclosing relevant business information (Marinković, et al., 2012). Traditionally, the company's going public is considered to be the best choice for private companies, with the most successful companies deciding on an IPO, while the less successful ones undergoing an acquisition by larger and stronger companies in the market. An empirical research conducted by American scientists (Chemmanur, et al., 2018) shows that factors such as company size, total productivity, sales growth, market share, and access to private funding significantly increase the possibility of choosing an IPO over acquisition. Moreover, industries with a smaller information asymmetry and greater market ability of shares on a stock market more often decide to go public through an IPO (Chemmanur, et al., 2018).

In addition to the positive effects that going public has on the future business performance, there are certain shortcomings of this process to be highlighted. From the point of view of a founder, i.e. issuer, the following are the greatest challenges they face - the problem of negative selection and moral hazard, administrative costs and public disclosure of information (Marinković et al., 2012). It is most often the case that managerial structure of a company will possess more complete and precise information concerning the current state and prospects for further development of a company compared to an investor intending to purchase its shares. A discrepancy in the share of revealed information between an issuer and an investor about the value of the company that goes public can result in a significant underpricing of IPO shares, which, from the issuer point of view, would imply a significantly smaller amount of capital raised (Amihud, et al., 2003). The very process of going public implies certain administrative costs, as well as fees imposed by the Securities Commission, the regulatory body responsible for collecting and publishing important information concerning share issuance. In addition to these, there is also a number of costs related to the services of investment banks, registration and information costs (Jakšić&Todorović, 2015). The fact that the company goes public implies being more intensely exposed to the judgement and attention of the public, since there is an obligation to make public the information on business performance and the financial condition of the company. The aforementioned increases the possibility of uncontrolled confidential information outflow. Research shows that the largest number of successfully implemented IPOs are in the fields of information and communications, finance, insurance, mining and construction, while in the sectors of agriculture and administrative support there is somewhat lower performance of the companies that went public (Baluja& Singh, 2016).

### 3. Characteristics of an IPO process

One of the accompanying phenomena of the process of going public is the underpricing of the initial price of shares. The problem is focused to the questions of who possesses information, what type of information is possessed and at what time the information is available. Although the underpricing of the initial price of shares proven in numerous empirical research the degree is papers, ofunderpricingsignificantly variesovercountries. Therefore, macroeconomic variables play an important role in determining the effectiveness of the IPO process.

### 3.1. Underpricing of the initial price of shares

The fact that shares are underpriced can be confirmed by the difference existing in the price of IPO shares and the first-day market price. The reasons leading to the phenomenon of underpricing can be divided into two broad groups of theoretical models based on *information asymmetry* and *signalling*.

### 3.1.1. Models based on AsymmetricInformation

The underpricing of IPO shares based on the premise of information asymmetry existence was presented by Rock (1986) in the winner's curse model. According to the knowledge which investors possess concerning the future market price of the shares to be sold, it is possible to divide them within the model into groups of informed and uninformed investors. Informed investors decide to buy only shares of attractive IPOs, while uninformed investors participate in the purchase of new shares of all companies that go public. This is the moment the uninformed investors face the curse of the winner. Namely, the reason they get all the shares they require is that informed investors do not place any demand on them. As uninformed investors participate in unattractive IPOs, and only partially in attractive ones, the expected return will be either lower than the average level of underpriced shares or it will be negative (Denčić-Mihajlov, 2013). In the case of a negative expected return, the interest of uninformed investors for further investment in IPO will cease (Boone &Mulherin, 2008). Thus, uninformed investors will invest only if the underpricing of an IPO is large enough to cover the loss they incur as a result of the tendency to invest in new shares of all the companies that go public.

The information asymmetry between informed investors and an investment bank is described in the model known as *costly information acquisition*. Namely, the investment bank may underprice shares from an IPO in order to encourage interested investors to disclose information in the period prior to sale, which can further be used to help determine issuing prices (Chang, et al., 2014). In the core of the model developed by Benveniste and Spindt (1989) is theeffort of an investment bank to gain information on the value of share issue from potential buyers. An investment bank must compensate for the underpricing shares in a given issuance by its efforts to encourage interested investors to truly disclose their valuations on the market (Ibbotson & Ritter, 1995). Therefore, underpricing will be higher in those issuances where favourable information was released, in relation to those issuances in which that did not happen.

The *investment banker's monopsony power* model is focused on the asymmetry of information between an investment bank and an issuer (Baron &Holmström, 1980). The investment bank takes advantage of a better knowledge of market conditions in order to underprice the shares, which allows it to invest less in marketing activities, as it already has contacts with large institutional investors. It is only a small exclusive group of investors who are well informed. This exclusivity is expensive - investment banks could reduce the level of underpricing if they involved a larger number of informed investors in an IPO process (Malinić, et al., 2010).

Information asymmetry between potential and previous investors may be reflected in the decision to determine the price of the issuer. When shares from an IPO are sold sequentially, potential investors can gain buying experience from previous investors. This can quickly lead to *information cascades* in which potential investors ignore their own personal information and follow the behaviour of previous investors (Welch, 1992). In an effort to prevent this from happening, the issuer is willing to underprice the issued shares in an issuance, in order to attract the first few potential investors to purchase, thus causing an *information cascade* within which consecutive investors would like to make purchase regardless the content of personal information they may possess (Amihud, et al., 2003).

#### 3.1.2. Signalling models

When going public, high quality companies try to burden themselves with additional signalling costs in order to distinguish themselves from the less efficient companies. If there was no signal sent to future investors, the existence of asymmetric information would lead to negative selection. The underpricing of IPO shares, in addition to being an immediate loss for an issuer, is also a credible signal to investors that the company is favourable for investment (Allen &Faulhaber, 1989). Quality companies can be expected to compensate for this loss in the period after share issue through an IPO by sending signals (which are not free of charge). If a market takesunderpricingas a signal of the issuer quality, it is logical to expect a positive ratio between the underpricing the initial shares and the price reaction to the announcement of seasonedissue, and, consequently, to the inflow of financial resources realised in such a way (Denčić-Mihajlov, 2013). On the other hand, knowing their expected returns, the owners of less-effective businesses cannot afford signalling, since they are not able to compensate for the initial loss caused byshare underpricing.

The primary characteristic of a quality signal is its visibility on a market. Furthermore, the signal should be difficult to imitate by other companies. The employment of prestigious investment banks is indicated as one of the possible signals. Also, the percentage of ownership held by original shareholders may be the signal that current shareholders will consciously bear greater risk of non-diversified investment in the period followingIPO realisation. Alavi's research (Alavi, et al., 2008) confirms that a company's ownership structure before going public makes a significant factor in the process of IPO realisation. Namely, private firms are not always in the full ownership of a manager or entrepreneur, which can lead to the potential emergence of a principal-agent problem between shareholders and managers. As a signal of company quality, a *lock-up agreement* is often mentioned in the literature. It is a contract between the current shareholders and the underwriters which prohibits shareholders from selling shares without the consent of the issue signatory in the previously specified period of time following IPO realisation (Denčić-Mihajlov, 2013).

# 3.2. Macroeconomic variables as success determinants of an IPO process

As the question of determining the IPO shareprices is of great significance, it is important to know the factors influencing both the price range and the further success of IPO issuing activity. As a result, macroeconomic variables, whose trends vary over countries, lead to the creation of different economic environments that further influence the effectiveness of an IPO process. In particular, macroeconomic variables include the characteristics of a financial market and institutional framework as well as those of the very industry (Satta, et al., 2017).

The financial market with its segments represents an efficient mechanism of rational allocation of financial resources. The stable and efficient activity of the global financial market is ensured by international regulations and standards imposed by global competition. The dynamics of activities in the primary capital market, where an IPO takes place, also determines the underpricing level in this process. During the period of intensive IPO activity (*hot IPO market*), a higher level of share underpricing can be noticed (Denčić-Mihajlov, 2013). This period is characterised by investors' increased demand for IPO shares, which further leads to intensified activity and the formation of favourable expectations regarding the returnonequity issue (Satta, et al., 2017). The periods of poor activity in the primary capital market (*cold IPO market*) are characterised by low degree of underpricing or even overvaluation of IPOshares. Empirical research of global IPOs shows that there is a positive correlation between the reputation of the stock exchange and the positive performance of acompany which goes public, as it is observed that the share issue in high-reputable markets is followed by a lower level of underpricing (Satta, et al., 2017).

In order to implement the decision on issuance and placement of shares through an IPO, i.e. to meet the conditions for trading in securities, it is necessary that the issuer and the corresponding intermediary comply with theappropriate legal procedure of the country in which the company goes public. According to Ljutić (Ljutić, 2007), the goal of legislation is to create an open, public, equitable, efficient and economical securities market, as well as to protect investors, other users of financial services and other market participants. Thus, smaller and narrower capital markets in certain countries occur as the result of poor protection of investors, measured by the character of legislative norms and the quality of law enforcement (La Porta, et al., 1997). As long as the country provides appropriate legal protection to all financial market participants, it can be expected that there will be a large number of investors who are ready to offer entrepreneurs financial support under more favourable conditions.

Besides the aforementioned, the success of going public largely depends on the characteristics of the industry within which the company operates. First of all, this refers to the average level of profitability of a particular industry, the recognition of product and sales programmes and markets, the growth potential, the human potential

to provide effective corporate management and quality financial reporting. Globally speaking, some of the most attractive areas for investors are technology, energetics, finance, telecommunications, pharmaceutical industry, and consumer products.

# 4. The effects of IPO issuing activities on the world stock exchanges

Although the main beneficiaries in the primary capital market are companies which go public in order to raise capital and investors who are interested in investing in the company's shares in order to make profit, there is also economy as a whole which gains an indirect benefit from this process. These benefits are primarily reflected in a more favourable trend of economic growth, a larger number of innovations and the creation of a stronger and more robust economy.

### 4.1. An IPO in developed capital markets

The process of going public is a widespread practice in countries with a developed capital market. During the last decade of the 20<sup>th</sup> century, there was an accelerated growth recorded in IPO markets. However, such a positive trend was interrupted by the onset of the global financial crisis. The reduction in the number of IPOs on the world capital markets was accompanied by a reduced value of total capital raised in this way. Graph 1 shows the fluctuation in the number and value of globally realised IPOs for the period 2001-2017.



In the years preceding the global economic crisis, the total annual value of IPOs ranged between \$ 200 billion and \$ 300 billion, whereas after 2008, this figure dropped to just \$ 100 billion. Although the latest data on the IPO market indicate a significant recovery compared to 2008 and 2009 (the years with the lowest number and value of IPOs), the current trend in the number and value of realised bids is still modest compared to 2006 and 2007. While the IPO markets continue to operate well for large enterprises, at the same time they are becoming less and less available to small and medium-size enterprises. The reduced number of IPOs in 2012 and 2013 is explained by the decline in the number of small and medium-size enterprises that decide to move to open joint stock companies.

**Graph 2:** Regional share (%), the number of realised IPOs,2013-2018

**Graph 3:** Regional share (%), the value of realised IPOs, 2013-2018



After a two-year decline in the number and value of IPOs, 2013 marks a positive trend and redistribution of the success of different regions in the world capital market. Graphs 2 and 3 indicate that the number and value of IPOs made in the United States and Europe decreases after 2013, while Asia-Pacific countries record an increase in the IPO market activity. In 2016, the region generated 638 IPOs, raising \$ 71.5 billion of capital, with a global share of 54% and 59%, concerning the number and value of IPOs, respectively. Although the overall activity in 2016 was lower compared to 2015, the Asia-Pacific region managed to preserve stability and avoid the pressure of geopolitical uncertainty that hit America and the countries of Europe, the Middle East, India and Africa (EMEIA). Six out of ten largest IPOs in

2016 took place in the Asia-Pacific capital market, three on Hong Kong Stock Exchanges, and the remaining three on the lists of stock exchanges in South Korea, Tokyo and Shanghai (Global IPO trends report, 2016).

The first half of 2018 suggests the emergence of certain changes (Graph 2 and Graph 3). Namely, risks and uncertainties are returning to capital markets, as geopolitical tensions and changes in trade policies have led to major fluctuations in the market, shaking thus confidence in IPOs in many parts of the world. This is exactly what happened in the Asia-Pacific region, whose share in the first half of 2018 was lower in both categories, compared to the same period of the previous year. According to reports on global IPO markets (Global IPO trends report, 2018), there are forecasts that the second half of 2018 will record reactivation of the IPO market, driven by the anticipated favourable economic activity.

	Number of IPOs	IPO value (billions, \$)	Value growth/decline compared to 2016 (%)	Most attractive sectors
America	220	51.6	122	<ul> <li>technology;</li> <li>healthcare;</li> <li>raw materials.</li> </ul>
USA	174	39.5	84	<ul> <li>technology;</li> <li>healthcare;</li> <li>finances.</li> </ul>
Asia-Pacific	935	73.3	0,2	<ul> <li>industry;</li> <li>technology;</li> <li>consumer goods.</li> </ul>
China	582	49	3	<ul> <li>industry;</li> <li>technology;</li> <li>consumer staples.</li> </ul>
Japan	95	5.4	- 42	<ul> <li>consumer goods;</li> <li>technology;</li> <li>industry.</li> </ul>
Europe, Middle East, India, Africa	469	64	67	<ul> <li>technology;</li> <li>industry;</li> <li>finances.</li> </ul>
Europe	250	46.1	44	<ul> <li>technology;</li> <li>consumer goods;</li> <li>energetics.</li> </ul>
UK	72	14.8	106	<ul> <li>technology;</li> <li>energetics;</li> <li>real estate.</li> </ul>
Overall activity in IPO markets in 2017	1624	188.8	40	<ul> <li>industry;</li> <li>technology;</li> <li>consumer goods.</li> </ul>

Table 2: The IPO globally in 2017: number, value and the most attractive sectors

Source: author, based on Global IPO trends report

The highest number of IPOs in the last ten years was recorded in 2017. The list is topped by Asia-Pacific countries, whose growth in the IPO value compared to 2016 is modest and amounts to 0.2% (Table 2). Among those countries, China has the most significant activity in IPO markets, with the largest number of companies who opt for going public in the fields of industry, technology and consumer staples. In the regions of South and North America, the prevailing trend of decline was additionally confirmed in 2017. More than a half IPOs in America are realised in the USA. Technological, financial and health care sectors represent the leading sectors according to the number of IPOs in the USA. The European authorities have recognised the importance of capital market, which is confirmed by the increase in the number and value of IPOs year in year out. As in the previously mentioned regions, technology sector stands out, followed by consumer goods and energy. The uncertainty about the referendum in the UK and the subsequent decision to leave the European Union had a significant impact on the capital market in 2016. In total, only 55 IPOs were realised, which represents a decrease of 11% compared to 2015, while the IPO value decreased by a dramatic 52%. In 2017, there was a recovery with the number of IPOs amounting 72, while the value doubled. Technology, energetics and real estate are the leading sectors by the number of IPOs in the UK.

The beginning of 2018 was marked by the risk and uncertainty in the world market. The data indicate that the number of IPOs decreased, while their value increased by 5% (Table 3). The American continent, led by the USA, made a significant shift in comparison with previous years, with 31% increase in IPO value compared to 2017. The sectors of technology and health care held the leading position in this region. Asia-Pacific countries lost 17% of their value in the total amount compared to the same period in 2017. Only Japan stands out in this region as a country with the growth rate of 8%. As for the structure of the most active sectors, it remains almost unchanged in these regions withtechnology and consumer goods taking leading positions. In the countries of Europe, the Middle East, India and Africa, in the first half of 2018, therewas 10% increase in the IPO value, with India standing out with an increase of 32%, whereas the IPO value in the UK fell by 46%. The sectors of technology and consumer goods remain the most active in Europe in 2018, so it is assumed that this trend of going public in these sectors will continue in the future.

Europe has recognised the importance of private investment, which will play a significant role in the growth of European economies, given that the volume of additional public investment in a large number of countries is limited by the existing levels of debt and deficit. In order to recover, European companies need to raise money to be invested in new projects, so as to enable entry into new markets as well as growth and development of new products. A suitable means for financing such investments would be healthy and well-organised IPO markets, especially those that attract both companies operating in a fast-growing sector and investors to European markets.

	Number of IPOs	IPO value (billions, \$)	Value growth/decline compared to 2017 (%)	Most attractive sectors
America	122	35.5	31	<ul> <li>technology;</li> <li>consumer goods;</li> <li>healthcare.</li> </ul>
USA	101	29.9	30	<ul> <li>technology;</li> <li>consumer goods;</li> <li>healthcare.</li> </ul>
Asia-Pacific	302	29.6	- 17	<ul> <li>technology;</li> <li>raw material;</li> <li>consumer goods.</li> </ul>
China	163	20.9	- 17	<ul> <li>technology;</li> <li>industry;</li> <li>consumer staples.</li> </ul>
Japan	39	2.7	8	<ul> <li>consumer goods;</li> <li>technology;</li> <li>industry.</li> </ul>
Europe, Middle East, India, Africa	236	29.5	10	<ul> <li>technology;</li> <li>industry;</li> <li>consumer goods.</li> </ul>
Europe	119	23.8	5	<ul> <li>technology;</li> <li>consumer goods;</li> <li>industry.</li> </ul>
UK	22	3.9	- 46	<ul> <li>technology;</li> <li>finances;</li> <li>energetics.</li> </ul>
Overall activity in IPO markets in the first half of 2018	660	94.3	5	<ul> <li>technology;</li> <li>consumer goods;</li> <li>industry.</li> </ul>

# Table 3: The IPO globally in the first half of 2018: number, value and the most attractive sectors

Source: author, based onGlobal IPO trends report

### 4.2. IPO in developing countries

Former socialist countries, both in Europe and Asia, have opened their economies and liberalised capital flows, which has created the basis for the development of financial markets, as well as national economies as a whole. Thus, the IPO process has become extremely attractive for those companies which aim at transformation into open joint stock companies. High market capitalisation companies will continue to be active on the world's leading stock exchanges, while successful and highly efficient small firms re looking for their place on the stock exchanges in Central and Eastern Europe. For medium-size enterprises operating in Southeast Europe, geographical position is not the primary criterion for choosing an IPO on the Central and Eastern European stock exchanges. It is rather possibility to(1) establish successful business cooperation in a simpler and more efficient way, (2) achieve the planned success of IPO and (3) list shares in an efficient and stable wayover an extended period of timeat relatively low listing and other regulatory costs (Đorđević, 2014).

It is the fact that the IPO process is of immenseimportance for developing countries, since it encourages the development of capital markets. Among numerous examples in practice, the European Union most often points out to the Warsaw Stock Exchange, which in 2012 announced the highest number of IPOs, a total of 105, representing a share of 39.5% of all realised IPOs in Europe (EU IPO Report, 2015). Although the macroeconomic environment and the privatisation process greatly contributed to such a good result on the Warsaw Stock Exchange, it is also necessary to mention certain structural characteristics that help explain the enlarged number of IPOs in this market (EU IPO Report, 2015):

- A large number of low-value IPOs- The largest part of the market consists of small companies that are the driving force of this market (99% of Polish companies belong to a group of small and medium-size enterprises);
- A stable and diverse base of both domestic and foreign investors–In the first quarter of 2013, foreign investors accounted for 50% of the turnover in the capital market;
- *Pension funds invest in public capital* According to Polish Pension Funds Law, capital should make high percentage of assets (this is considered to be one of the main reasons for the high investment of pension funds into public capital in Poland);
- A large number of retail investors–It represents the drivingforce of this process (Poland has 1.5 million individual accounts opened for participation in trade, 300,000 of which are very active investors who routinely participate in IPOs);
- *A diversified base of stock exchangemembers* –It should include small brokers willing to act in the market of small and medium-sizeenterprises.

The key lessons to be learned from the example of the Warsaw Stock Exchange are that (1) it is desirable to build a capital market with a large number of small and medium-size brokerage houses, (2) it is important to have a large number of retail investors and (3) strong state support is a necessity. While some aspects of the Warsaw Stock Exchange experience cannot be transferred to other markets, the aforementioned structural elements are very important because they put emphasis on the importance of small and medium-size enterprises opening to the public.

In all of the emerging markets on the BalkanPeninsula the absence of a high number of IPOs points to an existing weakness present in these markets (Karanović&Karanović, 2016). The public offer in Serbia is made unattractive, primarily due to the particularity of the Serbian environment, as well as the legal regulations that existed at the time of the privatisation of large state-owned companies. Namely, after the completion of the privatisation process, all joint stock companies were treated as open, which indicates that the turnover of their shares was public. In other words, in practice, with force of law, such companies had to be immediately included in the organised market, as if they had been fully prepared to withstand all demands that the capital market and regulatory bodies imposed uponthem (Malinić, et al., 2010). Instead of deepening the market, a different effect was achieved. In this way, privatised companies in the form of open joint stock companies became an easy takeover target. Although formally open, joint stock companies operated as closed entities seeking the formal ways maintaining such a status (Malinić, et al., 2010). Under such conditions, the company management sought to maintain the existing ownership structure by preventing issuance of shares on an organised market, which further led to the concentration of ownership and formingof one or several major owners whose redemption of shares caused companies become closed. The aforementionedresulted in market disruption and liquidity reduction.

The Serbian capital market is characterised by strong information asymmetry among participants in market processes, lack of corporate education, low quality of both corporate management and the level of investors'protection (in particular minority shareholders), as well as high systemic risk (Denčić-Mihajlov, 2013). In general, the more pliable and illiquida market, the more intense capital market interest to make companies go public. Serbian capital market faced numerous obstacles and challenges, the biggest of which was certainly theimplementation of efficient and sufficiently transparent legislation. Quality legislation should always be in the function of creating an environment in which it is possible to provide a high degree of protection for investors. Investment safety is a key precondition for the arrival of serious investors, just as it would be natural for them to withdraw from unstable markets. In addition to legal regulations, another form of constraint for developing countries is the extremely high costs of the process of going public, especially if it is an opening to the public that is followed by a new issue of stocks. Namely, apart from regular costs such as emission costs, administrative costs, and fees, there are also additional costs related tomandatory regular reporting obligations. Given the fact that the entire process of IPO is very complex, often demanding the engagement of an investment bank, the growth of additional costs due to such an engagement is unavoidable. Since the cost structure is dominated by fixed costs, it is likely that smaller companies, which should be a key driver of economic development, would face more difficulties in bearing the burden of these costs.

Despite the clearly visible interests of companies and investors, on the one side, and the State, on the other, it was not before 2018 that the funding through IPOs in Serbia was realised. Namely, Fintel Energy, headquartered in Serbia, whose total ownership is held by the Italian group of Fintel SpA, is trying to raise €27 million of capital from institutional and individual investors for the purpose of providing the necessary funds for the construction of Košava wind farm. The IPO process was launched in June of the 2018. On the other hand, there is a low level of interest of domestic companies for going public through an IPO due to the existing concerns in the Serbian capital market. Despite the fact that there have been changes in the legislation that led to the realisation of the first IPO in Serbia, the success of capital raising in this way continues to be an uncertain process in the Serbian capital market. The reason for this can be found in the unstable financial position of potential participants on the demand side, investment funds and individual investors. The insufficient financial strength of investment funds in Serbia, the low purchasing power of citizens and the lack of corporate education create an environment overwhelmedby anxiety concerning the success of IPO implementation, even when it comes to companies with good performance.

### 5. Conclusion

The factors that may form a sound basis for IPO to become a standard practice for financing the growth and development of the capital market in the Republic of Serbia area permanent access to financial resources, an access to alternative sources of financing, liquidity, recognisability and visibility. The decision to go public is an important step in the development of a company, which brings significant changesto the conditions in whichbusinessis done. Namely, enabling an access to new sources of capital enables the realisation of investment projects which further leads to the multiplication of company value. On the other hand, the process of going public is neither simple nor cheap. Information asymmetry, IPO underpricing, and hostile takeover by larger companies make just some of the reasons that diminish the benefits of going public.

In many countries, IPOs have proven to be a good way of financing growth, attracting capital, improving brand, knowledge and skills of management and employees, and diversifying shareholder structure. Although company loan supported by financial intermediaries will always play a significant role, there is a need to emphasise the advantages that the developed capital market, as the basis of strong and stable long-term financing, brings to investors and companies. The evidence is provided by practical examples of developed market economies, such as the USA, China, Japan and the countries of Western Europe, which have a significant activity and record high performance in the IPO markets, measured by the number and value of the realised processes.

Unlike the economies of developed capital markets, developing countries or countries whose markets have characteristics of underdeveloped ones take the process of financing through IPOs as a serious challenge. The particularity of the Serbian macroeconomic environment, the unstable financial position of potential stakeholders on the demand side, the insufficient financial strength of investment funds in Serbia, the low purchasing power of citizens and the lack of corporate education create an anxious environment concerned with the question of the success of IPO implementation, even when it comes to companies with good performance. Only time will tell how big a progress we have made in this field, and whether the first IPO has managed to break down the prejudices of investors in the Serbian capital market.

### References

- Alavi, A., Kein Pham, P., & My Pham, T. (2008). Pre-IPO ownership structure and its impact on the IPO process. *Journal of Banking and Finance*, 32, 2361-2375.
- Allen, F., & Faulhaber, G. R. (1989). Signaling by underpricing in the IPO market. Journal of Financial Economics, 23, 303-323.
- Amihud, Y., Hauser, S., & Kirsh, A. (2003). Allocations, adverse selection, and cascades in IPOs: Evidence from the Tel Aviv Stock Exchange. *Journal of Financial Economics*, 68, 137-158.
- Baluja, G., & Singh, B. (2016). The survival analysis of initial public offerings in India, *Journal* of Advances in Management Research, 13(1), 23-41.
- Baron, D. P., & Holmström, B. (1980). The Investment Banking Contract For New Issues Under Asymmetric Information: Delegation And The Incentive Problem. *The Journal of Finance*, 35(5), 1115-1138.
- Benveniste, L. M., & Spindt P. A. (1989). How investment bankers determine the offer price and allocation of new issues. *Journal of Finance Economics*, 24, 343-361.
- Boone, L. A., & Mulherin H. J. (2008). Do aucions induce a winner's curse? New evidence from the corporate takeover market. *Journal of Financial Economics*, 89, 1-19.
- Celikyurt, U., Sevilir, M., & Shivdasani, A. (2010). Going public to acquire? The acquisition motive in IPOs. *Journal of Financial Economics*, 96, 345-363.
- Chang, H., Chen, A., Kao, L., & Wu, C. (2014). IPO price discovery efficiency under alterantive regulatory constraints: Taiwan, Hong Kong and the U.S.. *International Review of Economics and Finance*, 29, 83-96.
- Chemmanur, J. T., He, J., He, S., & Nandy, D. (2018). Product Market Characteristics and the Choice between IPOs and Acquisitions. *Journal of Financial and Quantitative Analysis*, 53(2), 681-721.
- Denčić-Mihajlov, K. (2013). Marketing inicijalne javne ponude akcija. *Marketing*, 44(2), 137-148.
- Denčić-Mihajlov, K. (2013). Zašto dolazi do potcenjenosti akcija iz inicijalne javne ponude?. *Teme*, 37(1), 163-182.
- Đorđević, Z. (2014). Mehanizmi inicijalne javne ponude akcija na berzama Centralne i Istočne Evrope. Ekonomija – teorija i praksa, 4, 39-49.
- Ellingsen, T., & Rydqvist, K. (1997). The Stock Market as a Screening Device and the Decision to Go Public. *SSRN Electronic Journal*.

- EU IPO Report. (2015). *Rebuilding IPOs in Europe Creating jobs and growth in European capital markets*. European IPO Task Force.
- EY, Global IPO trends report (годишта: 2013; 2014; 2015; 2016; 2017; 2018).
- Ibbotson, G. R, & Ritter, R. J. (1995). Initial Public Offerings. *Handbooks in Operations Research and Management Science*, 9, 993-1016.
- Jakšić, M. (2016). *Finansijsko tržište institucije i instrumenti*. Kragujevac, Republika Srbija: Ekonomski fakultet Univerziteta u Kragujevcu.
- Jakšić, M. & Todorović, V. (2015). Inicijalna javna ponuda kao pokretač razvoja tržišta kapitala. U: Leković, V. (ured.) (2015). Institucionalne promene kao determinanta privrednog razvoja Srbije, 293-308. Kragujevac, Republika Srbija: Ekonomski fakultet Univerziteta u Kragujevcu.
- Karanović, G. & Karanović, B. (2016). IPOs performance analysis: evidence from emerging markets in the Balkans. *Scientific Annals of Economics and Business* 63(3), 381-389.
- La Porta, R., Loperz-de-Silanses, F., Shleifer, A., & Vishny R. W. (1997). Legal Determinants of External Finance. *The Journal of Finance*, 52(3), 1131-1150.
- Ljutić, B. Ž. (2007). Bankarsko i berzansko poslovanje: investicioni pristup. Beograd, Republika Srbija: Mladost biro.
- Loughran, T., & Ritter, J. (1995). The New Issues Puzzle. Journal of Finanace, 50(1), 23-51.
- Makcimovic, V., & Pichler, P. (2001). Technological Inovation and Initial Public Offerings. *The Review of Financial Studies*, 14(2) 459-494.
- Malinić, D. (2007). *Politika dobiti korporativnog preduzeća*. Beograd, Republika Srbija: Ekonomski fakultet Univerziteta u Beogradu.
- Malinić, D., & Denčić-Mihajlov, K. (2010). Proces otvaranja preduzeća: izazovi za srpsku korporativnu praksu. *Ekonomika preduzeća*, 58(7-8), 261-276.
- Marinković, S., Ljumović, I., & Stojković, D. (2012). Going public and initial public offering: an exploratory study of motives from Serbian companies. *Industrija*, 2, 125-143.
- Ritter, R. J., & Welch, I. (2002). A review of IPO activity, pricing and allocations. *The Journal of Finance*, 57(4), 1795-1828.
- Rock, K. (1986). Why new issues are underpriced. *Journal of Financial Economics*, 15, 187-212.
- Satta, G., Notteboom, T., Parola, F., & Persico., L. (2017). Determinants of the long-term performance of initial public offerings (IPOs) in the port industry. *Transportation Research Part A*, 103, 135-153.
- Welch, I. (1992). Sequential Sales, Learning, and Cascades. *The Journal of Finance*, 47(2), 695-732.

### ZNAČAJ INICIJALNE JAVNE PONUDE ZA RAZVOJ TRŽIŠTA KAPITALA ZEMALJA U RAZVOJU

Apstrakt: Prvo emitovanje akcija preduzeća koje nije bilo listirano na berzi, predstavlja ključan momenat u životnom ciklusu preduzeća. S obzirom da prelazak u javno otvoreno akcionarsko društvo nosi sa sobom niz prednosti, ali i izazova, saznanja o toku realizacije postupka inicijalne javne ponude, kao i praćenje podataka o broju i vrednosti realizovanih inicijalnih javnih ponuda na svetskom nivou mogu biti od velikog značaja. Cilj rada je da se kroz sveobuhvatnu analizu postupka realizacije inicijalnih javnih ponuda ukaže na značaj otvaranja preduzeća u javnosti kako za same korporacije i investitore na tržištu kapitala, tako i za privredu u celini. Shodno postavljenom cilju, u radu će biti predstavljeni efekti sprovedenih postupaka inicijalnih javnih ponuda u zemljama zapadne Evrope, Kine, Japana i SAD-a. Kada je reč o zemljama u razvoju, inicijalna javna ponuda akcija na berzanskim tržištima ima poseban značaj jer doprinosi podsticanju daljeg razvoja tržišta kapitala. Specifičnosti srpskog makroekonomskog okruženja, kretanje procesa privatizacije, nedovoljna zaštita investitora, visok stepen informacione asimetrije i nedostatak korporativnog obrazovanja uticali su na činjenicu da u poslednjih osam decenija nije sproveden nijedan postupak inicijalne javne ponude na Beogradskoj berzi.

**Ključne reči:** inicijalna javna ponuda, otvaranje preduzeća, tržište kapitala, potcenjenost akcija, informaciona asimetrija, berza

**Acknowledgement:** The paper presents a result of the project number III 47009 supported by The Ministry of Education, Science and Technological Development of the Republic of Serbia.

### Authors' biography

Aleksandra Pešterac was born in 1993 in Kruševac. She completed elementary and secondary school in Trstenik. After she has finished Bachelor and Master academic studies at the Faculty of Economics, University of Kragujevac in October 2017, she enrolled into postgraduate studies in the academic year of 2017/18.During the course of her studies, she received multiple awards for best students provided by the Faculty of Economics in Kragujevac, the Ministry of Youth and Sports, as well as the scholarship "Dositeja". She works at the Faculty of Economics, University of Kragujevac, as a junior researcher. She is engaged in a project (No. 47009) titled "European Integration and Socio and Economic Changes in Serbian Economy on the way to the EU" of the Ministry of Education, Science and Technological Development of the Republic of Serbia. The basic areas of the scientific interest are the financial markets, financial institutions, investment banking, bank performance management.