

ISSN 2518-1467 (Online),
ISSN 1991-3494 (Print)

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

Х А Б А Р Ш Ы С Ы

ВЕСТНИК

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК
РЕСПУБЛИКИ КАЗАХСТАН

THE BULLETIN

OF THE NATIONAL ACADEMY OF SCIENCES
OF THE REPUBLIC OF KAZAKHSTAN

1944 ЖЫЛДАН ШЫҒА БАСТАҒАН
ИЗДАЕТСЯ С 1944 ГОДА
PUBLISHED SINCE 1944

4

АЛМАТЫ
АЛМАТЫ
ALMATY

2018

JULY
ИЮЛЬ
ШІЛДЕ

NAS RK is pleased to announce that Bulletin of NAS RK scientific journal has been accepted for indexing in the Emerging Sources Citation Index, a new edition of Web of Science. Content in this index is under consideration by Clarivate Analytics to be accepted in the Science Citation Index Expanded, the Social Sciences Citation Index, and the Arts & Humanities Citation Index. The quality and depth of content Web of Science offers to researchers, authors, publishers, and institutions sets it apart from other research databases. The inclusion of Bulletin of NAS RK in the Emerging Sources Citation Index demonstrates our dedication to providing the most relevant and influential multidiscipline content to our community.

Қазақстан Республикасы Ұлттық ғылым академиясы "ҚР ҰҒА Хабаршысы" ғылыми журналының Web of Science-тің жаңаланған нұсқасы Emerging Sources Citation Index-те индекстелуге қабылданғанын хабарлайды. Бұл индекстелу барысында Clarivate Analytics компаниясы журналды одан әрі the Science Citation Index Expanded, the Social Sciences Citation Index және the Arts & Humanities Citation Index-ке қабылдау мәселесін қарастыруда. Web of Science зерттеушілер, авторлар, баспашылар мен мекемелерге контент тереңдігі мен сапасын ұсынады. ҚР ҰҒА Хабаршысының Emerging Sources Citation Index-ке енуі біздің қоғамдастық үшін ең өзекті және беделді мультидисциплинарлы контентке адалдығымызды білдіреді.

НАН РК сообщает, что научный журнал «Вестник НАН РК» был принят для индексирования в Emerging Sources Citation Index, обновленной версии Web of Science. Содержание в этом индексировании находится в стадии рассмотрения компанией Clarivate Analytics для дальнейшего принятия журнала в the Science Citation Index Expanded, the Social Sciences Citation Index и the Arts & Humanities Citation Index. Web of Science предлагает качество и глубину контента для исследователей, авторов, издателей и учреждений. Включение Вестника НАН РК в Emerging Sources Citation Index демонстрирует нашу приверженность к наиболее актуальному и влиятельному мультидисциплинарному контенту для нашего сообщества.

Б а с р е д а к т о р ы

х. ғ. д., проф., ҚР ҰҒА академигі

М. Ж. Жұрынов

Р е д а к ц и я а л қ а с ы:

Абиев Р.Ш. проф. (Ресей)
Абишев М.Е. проф., корр.-мүшесі (Қазақстан)
Аврамов К.В. проф. (Украина)
Аппель Юрген проф. (Германия)
Баймуқанов Д.А. проф., корр.-мүшесі (Қазақстан)
Байпақов К.М. проф., академик (Қазақстан)
Байтулин И.О. проф., академик (Қазақстан)
Банас Иозеф проф. (Польша)
Берсимбаев Р.И. проф., академик (Қазақстан)
Велихов Е.П. проф., РҒА академигі (Ресей)
Гашимзаде Ф. проф., академик (Әзірбайжан)
Гончарук В.В. проф., академик (Украина)
Давлетов А.Е. проф., корр.-мүшесі (Қазақстан)
Джрбашян Р.Т. проф., академик (Армения)
Қалимолдаев М.Н. проф., академик (Қазақстан), бас ред. орынбасары
Лаверов Н.П. проф., академик РАН (Россия)
Лупашку Ф. проф., корр.-мүшесі (Молдова)
Мохд Хасан Селамат проф. (Малайзия)
Мырхалықов Ж.У. проф., академик (Қазақстан)
Новак Изабелла проф. (Польша)
Огарь Н.П. проф., корр.-мүшесі (Қазақстан)
Полещук О.Х. проф. (Ресей)
Поняев А.И. проф. (Ресей)
Сагиян А.С. проф., академик (Армения)
Сатубалдин С.С. проф., академик (Қазақстан)
Таткеева Г.Г. проф., корр.-мүшесі (Қазақстан)
Умбетаев И. проф., академик (Қазақстан)
Хрипунов Г.С. проф. (Украина)
Юлдашбаев Ю.А. проф., РҒА корр.-мүшесі (Ресей)
Якубова М.М. проф., академик (Тәжікстан)

«Қазақстан Республикасы Ұлттық ғылым академиясының Хабаршысы».

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print)

Меншіктенуші: «Қазақстан Республикасының Ұлттық ғылым академиясы»РҚБ (Алматы қ.)

Қазақстан республикасының Мәдениет пен ақпарат министрлігінің Ақпарат және мұрағат комитетінде
01.06.2006 ж. берілген №5551-Ж мерзімдік басылым тіркеуіне қойылу туралы куәлік

Мерзімділігі: жылына 6 рет.

Тиражы: 2000 дана.

Редакцияның мекенжайы: 050010, Алматы қ., Шевченко көш., 28, 219 бөл., 220, тел.: 272-13-19, 272-13-18,
www: nauka-nanrk.kz, bulletin-science.kz

© Қазақстан Республикасының Ұлттық ғылым академиясы, 2018

Типографияның мекенжайы: «Аруна» ЖК, Алматы қ., Муратбаева көш., 75.

Г л а в н ы й р е д а к т о р
д. х. н., проф. академик НАН РК
М. Ж. Журинов

Р е д а к ц и о н н а я к о л л е г и я:

Абиев Р.Ш. проф. (Россия)
Абишев М.Е. проф., член-корр. (Казахстан)
Аврамов К.В. проф. (Украина)
Апель Юрген проф. (Германия)
Баймуканов Д.А. проф., чл.-корр. (Казахстан)
Байпаков К.М. проф., академик (Казахстан)
Байтулин И.О. проф., академик (Казахстан)
Банас Иозеф проф. (Польша)
Берсимбаев Р.И. проф., академик (Казахстан)
Велихов Е.П. проф., академик РАН (Россия)
Гашимзаде Ф. проф., академик (Азербайджан)
Гончарук В.В. проф., академик (Украина)
Давлетов А.Е. проф., чл.-корр. (Казахстан)
Джрбашян Р.Т. проф., академик (Армения)
Калимолдаев М.Н. академик (Казахстан), зам. гл. ред.
Лаверов Н.П. проф., академик РАН (Россия)
Лупашку Ф. проф., чл.-корр. (Молдова)
Моход Хасан Селамат проф. (Малайзия)
Мырхалыков Ж.У. проф., академик (Казахстан)
Новак Изабелла проф. (Польша)
Огарь Н.П. проф., чл.-корр. (Казахстан)
Полещук О.Х. проф. (Россия)
Поняев А.И. проф. (Россия)
Сагиян А.С. проф., академик (Армения)
Сатубалдин С.С. проф., академик (Казахстан)
Таткеева Г.Г. проф., чл.-корр. (Казахстан)
Умбетаев И. проф., академик (Казахстан)
Хрипунов Г.С. проф. (Украина)
Юлдашбаев Ю.А. проф., член-корр. РАН (Россия)
Якубова М.М. проф., академик (Таджикистан)

«Вестник Национальной академии наук Республики Казахстан».

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print)

Собственник: РОО «Национальная академия наук Республики Казахстан» (г. Алматы)

Свидетельство о постановке на учет периодического печатного издания в Комитете информации и архивов Министерства культуры и информации Республики Казахстан №5551-Ж, выданное 01.06.2006 г.

Периодичность: 6 раз в год

Тираж: 2000 экземпляров

Адрес редакции: 050010, г. Алматы, ул. Шевченко, 28, ком. 219, 220, тел. 272-13-19, 272-13-18.

www: nauka-nanrk.kz, bulletin-science.kz

© Национальная академия наук Республики Казахстан, 2018

Адрес типографии: ИП «Аруна», г. Алматы, ул. Муратбаева, 75

E d i t o r i n c h i e f

doctor of chemistry, professor, academician of NAS RK

M. Zh. Zhurinov

E d i t o r i a l b o a r d:

Abiyev R.Sh. prof. (Russia)
Abishev M.Ye. prof., corr. member. (Kazakhstan)
Avramov K.V. prof. (Ukraine)
Appel Jurgen, prof. (Germany)
Baimukanov D.A. prof., corr. member. (Kazakhstan)
Baipakov K.M. prof., academician (Kazakhstan)
Baitullin I.O. prof., academician (Kazakhstan)
Joseph Banas, prof. (Poland)
Bersimbayev R.I. prof., academician (Kazakhstan)
Velikhov Ye.P. prof., academician of RAS (Russia)
Gashimzade F. prof., academician (Azerbaijan)
Goncharuk V.V. prof., academician (Ukraine)
Davletov A.Ye. prof., corr. member. (Kazakhstan)
Dzhrbashian R.T. prof., academician (Armenia)
Kalimoldayev M.N. prof., academician (Kazakhstan), deputy editor in chief
Laverov N.P. prof., academician of RAS (Russia)
Lupashku F. prof., corr. member. (Moldova)
Mohd Hassan Selamat, prof. (Malaysia)
Myrkhalykov Zh.U. prof., academician (Kazakhstan)
Nowak Isabella, prof. (Poland)
Ogar N.P. prof., corr. member. (Kazakhstan)
Poleshchuk O.Kh. prof. (Russia)
Ponyaev A.I. prof. (Russia)
Sagiyani A.S. prof., academician (Armenia)
Satubaldin S.S. prof., academician (Kazakhstan)
Tatkeyeva G.G. prof., corr. member. (Kazakhstan)
Umbetayev I. prof., academician (Kazakhstan)
Khripunov G.S. prof. (Ukraine)
Yuldashbayev Y.A., prof. corresponding member of RAS (Russia)
Yakubova M.M. prof., academician (Tadjikistan)

Bulletin of the National Academy of Sciences of the Republic of Kazakhstan.

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print)

Owner: RPA "National Academy of Sciences of the Republic of Kazakhstan" (Almaty)

The certificate of registration of a periodic printed publication in the Committee of Information and Archives of the Ministry of Culture and Information of the Republic of Kazakhstan N 5551-Ж, issued 01.06.2006

Periodicity: 6 times a year

Circulation: 2000 copies

Editorial address: 28, Shevchenko str., of. 219, 220, Almaty, 050010, tel. 272-13-19, 272-13-18,
<http://nauka-nanrk.kz/>, <http://bulletin-science.kz>

© National Academy of Sciences of the Republic of Kazakhstan, 2018

Address of printing house: ST "Aruna", 75, Muratbayev str, Almaty

G. Shmarlovskaya¹, Y. Nichkasova², K. Sadvokasova²

¹Belarusian State Economic University, Minsk, Belarus,

²Eurasian National University named after L. N. Gumilyov, Astana, Kazakhstan.

E-mail: Galina.shmarlovskaya@gmail.com , yunichka10@gmail.com, ksadvokas@mail.ru,

TRENDS, PROBLEMS AND PROSPECTS OF THE IPO'S MARKET DEVELOPMENT

Abstract. The globalization of the world economy leads to a change in the landscape of the world's fund infrastructure, the priority of financial capital over the economy, the stimulation of competition and integration processes in the capital markets. The last decade demonstrates the intensive development of new financial centers in emerging markets, which motivate the movement of financial resources to the points of innovative growth. The competitive struggle between the stock markets of developed and developing countries, the transformation of financial instruments, simplification of listing procedures provide an increasingly wide choice for issuers and investors.

The purpose of this research was to study the main current trends in the development of stock exchanges and the qualitative characteristics of the initial public offering, as well as analysis of the current state of the stock market of the Republic of Kazakhstan. Moreover, we analyzed the experience of using this financial instrument by Kazakhstan's companies to attract sources of financing for sustainable economic development.

The research resulted in the identification and description of current trends in international practice of attracting long-term capital, understanding of which is the opportunity to use this experience for the targeted development of the national stock market. For the Republic of Kazakhstan, located in the centre of the Asia-Pacific region, this is a unique opportunity to ensure the dynamic development of the country's stock market, having entered it into the global financial architecture.

Keywords: IPO, stock exchanges, competition, financial centers, capitalization, AIFC.

Introduction. Financial flows and business practices are becoming increasingly global, which stimulates the development of new innovative growth points in the architecture of financial markets for more effective capital raising. The changing external operating environment: the liberalization and deregulation of protected domestic markets, the increasing number of indexes for tracking the performance of shares in different countries stimulates the desire of business to work all over the world. At the same time, the development strategy of the company forces top managers to consider the possibility of attracting capital, not only on the local stock market (provided with sufficiently developed level of it), but also on the global stock market. In response to this requirement of time, stock exchanges are forced to make efforts to remain competitive by opening new specialized sites and simplifying listing procedures for them, expanding their geographical presence through mergers and acquisitions, consolidation, formation of strategic alliances.

Kazakhstan's stock market, being an element of the global stock market, demonstrates significant progress, and, nevertheless, refers to the least developed sectors of the domestic financial system. In our view, this problem requires careful study. Its relevance is also due to the fact that access to financial resources is the main restriction for the economic development of Kazakhstan and the achievement of its strategic goals for the level of welfare by 2050. This problem also was noted by the experts of the Organization for Economic Development in the special report on Kazakhstan [1], as well as by experts of the Global Economic Forum in the annual ranking of countries on the level of competitiveness [2].

In the system of the variety of instruments of the financial market, a special place is occupied by the instrument of initial public offering of shares, which reflects the intensity of investment processes in the

stock markets and formalizes the channels of access to sources of financing. A positive example of the strategic vision and use of the geopolitical potential of Kazakhstan for the development of the stock market is the creation of the International Financial Center Astana, as well as the practice of using the IPO tool on the local stock market.

In this regard, the study of the current state, trends in the global IPO market, as well as practical experience and prospects for the development of this financial instrument is relevant for the Kazakhstan stock market in its initial stage of development but an important element of the financial system for securing long-term and sustainable financing of the economy.

Methods. The methodology of the author's research is based on methods of economic analysis (economic monitoring), statistical research (statistical observation method and grouping method), abstraction method. The basis of the research is the system approach, the dialectical method of cognition, the logical method, the methods of analysis and synthesis. The theoretical basis was the scientific work of foreign and domestic scientists, reports of the World Economic Forum and OECD. Information basis are reports of auditing companies Ernst & Yang and PricewaterhouseCoopers, statistics World Federation of Exchanges.

Results.

1. Competition of stock exchanges: demuturization, consolidation, strategic alliances and financial technologies. The competition of stock exchanges and trading platforms of developed countries leads to the development of processes of consolidation and integration of stock exchanges in order to pool resources and increase liquidity. As equity markets become increasingly global, the world's leading exchanges are transformed through diversification, expansion of the business area, technological and innovation development. One of the tools of transformation is the process of demutualization [3], which involves the conversion of state or unit stock exchanges into profitable public companies. In 2006, after more than two centuries of work as a non-profit institution, the New York Stock Exchange became a publicly traded company.

The intensive competition of exchanges and, as a result, the loss of income, led to the need for consolidation as one of the ways to achieve expansion of the sphere of influence and improve liquidity by signing strategic alliances and cooperation agreements, mergers and acquisitions, changes in prices and time of bidding, sharing of technologies.

Along with the formation of national holdings: "Spanish exchanges", "Deutsche Bourse", transnational exchanges were formed. The first such exchange was the EURONEXT NV (pan-European exchange), in which the trading, clearing and settlement systems of stock, urgent and commodity markets of the three exchanges (Paris, Amsterdam and Brussels) were integrated. Euronext became the first exchange whose members were fully integrated, and the markets were transformed into a single system.

In December 2006, NYSE completed a \$25 billion deal to merge with Euronext, creating the first global exchange NYSE Euronext, in which it owns 91.4% of the shares. The market value of Euronext for 10 years increased from \$25.81 billion to \$4.2 trillion.

In November 2013, the US regulators approved the Intercontinental Exchange (ICE) acquisition of NYSE Euronext, which made ICE not only the world's largest stock exchange holding company, but also the operator of the largest stock market in the world. Intercontinental Exchange (ICE) – a network of exchanges and clearing houses for financial and commodity markets in the US, Canada and Europe, the world's largest operator of the derivatives market, where futures contracts for all types of underlying assets are traded.

NASDAQ (the second-largest US stock exchange), twice attempted to acquire the London Stock Exchange (LSE), but after receiving a refusal, eventually became its shareholder through the purchase of shares. Currently, NASDAQ owns more than 28% of LSE shares. In 2007, a \$3.7 billion deal was completed to acquire OMX: the European stock exchange, located in Stockholm, Sweden. This combination created a global exchange NASDAQ OMX Group with 4000 listing companies from 39 countries with a total market capitalization of \$5.5 trillion. A similar trend also exists in the Asian stock market.

In addition to mergers and acquisitions, exchanges also use another form of cooperation – strategic alliances. Thus, the NYSE Group entered into an agreement with the Tokyo Stock Exchange. The main areas of cooperation are the development of technologies and electronic trading systems, the simultaneous placement of securities and the creation of information products. In March 2014, NYSE EURONEXT signed an agreement with the Middle East exchanges in Beirut and Tunisia, as well as the Muscat Securities

Market of Oman. Also signed a partnership agreement with the owners of the automatic system Quandl, which provides access to a million financial instruments around the world, and the non-market trading platform BATS Chi-X Europe. It links Euronext, London Stock Exchange, Frankfurt Borse AG and OMX [4].

As the article was being prepared, on April 10, 2018, KASE and the Moscow Exchange signed an agreement on the intention of strategic cooperation, which is aimed at promoting the development of a single Eurasian Economic Area (EAE) and the establishment of a unified financial market of the countries – members of the EAE. The main objective of the aforementioned agreement is to improve regulatory markets, the clearing activities and activities of the central counterparty, as well as the convergence of the main financial markets of Russia and Kazakhstan, taking into account international standards [13].

Financial technologies make the trading of financial assets faster, more economical and accessible from anywhere in the world, both for large and small retail investors, which destroys the dominance of national exchanges. Technological innovations have become a fundamental driving force for competition for exchanges, not only with each other, but also with new players in the exchange market that provide alternative technologies for exchange trading, as well as for products. For example, private equity funds and hedge funds provide access to growing pools of private capital as potential alternatives for listing.

Automated trading systems such as POSIT, Liquidnet and E-crossnet are also competitors because they represent quasi-exchange, where shares are purchased and sold through smaller private networks of brokers, dealers and other market participants, and do not require listing costs [3].

The competition between different methods of carrying out settlement transactions between global custodians and central depositories, as well as between local and foreign central depositories, is intensifying. The two international central depositories Euroclear (Morgan Stanley) and Clearstream (Citibank) provide settlement on real-time exchange transactions in securities in the form of global certificates from 30-40 markets [5, p. 252].

We believe that strengthening the consolidation of the stock markets will attract new investors, provide them with a wider range of financial products and services with lower costs, which should improve the efficiency of the financial market as a whole. At the same time, the negative effect of the globalization of stock markets is systemic risk, which is reflected in the rapid transfer of shocks to local markets, which has a detrimental effect on developing markets with a low level of financial depth by increasing their volatility.

2. Characteristics of global IPO markets. To study the quantitative and qualitative characteristics of the instrument of a public offering of shares on the stock market, we examined the statistical data of the global IPO market provided in the EY reports. We managed to identify many trends that evidenced global changes in the landscape of the world's major financial centres over the past ten years. Chart 1 provides the information on the number of IPO's placed and the amount of capital raised. Over the past decade, the total volume of primary listings was about 11,000 units, attracted investments - more than \$1,738.5 trillion. In 2017, 1624 IPOs were held, which is 48% higher than in 2016 and 19% higher than in 2010. These indicators of quantity are a record in the decade after the crisis of 2008-2009. The total amount of investments attracted by companies in the financial market in 2017 was \$188.8 billion. However, it did not reach the level of 2010 (\$284.6 billion).

At the same time, it should be noted that these diagrams demonstrate the cyclical nature of the IPO market, which functions under the influence of political and economic factors. It is worth noting that the volatility of the annual number of IPOs is lower than the volatility of the volume of attracted resources in the same period, which has an impact on the amount of capital raised.

This trend can be interpreted on the one hand by the high interest of companies in entering the market, which stimulates the demand for this instrument of the financial market. However, the high sensitivity of investors to risks - in the form of increasing or decreasing market confidence, reflected in the Volatility Index (VIX). The index evaluates investor assumptions about the volatility or scope of the stock market movement, leads to an increase or decrease in the average size of the capital raised in the IPO process. When VIX is above 20%-25% of the range, it becomes much more difficult to complete the IPO [6, p. 18].

The dynamics of the average amount of attracted capital per listing IPO is presented in chart 2. This indicator characterising the cumulative effect of public offering allows us to conclude that 2014 was the most successful, as the average amount of capital raised was \$212 million, at the same time the indicator of 2017 – equalled 116,3 \$million which is the lowest in the last ten years.

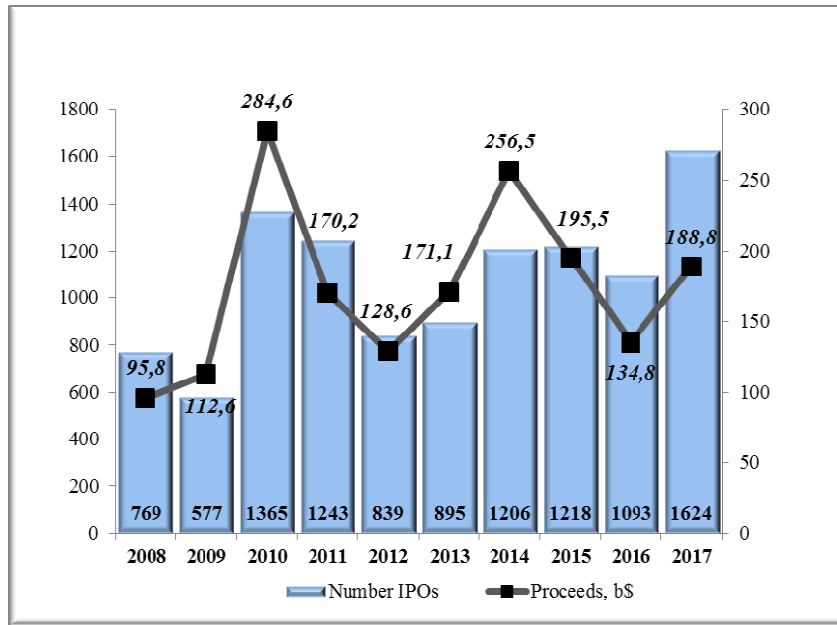


Chart 1 – The number of initial public offerings and attracted capital.

Source: compiled by the author on the basis of Global IPO reports, E&Y.

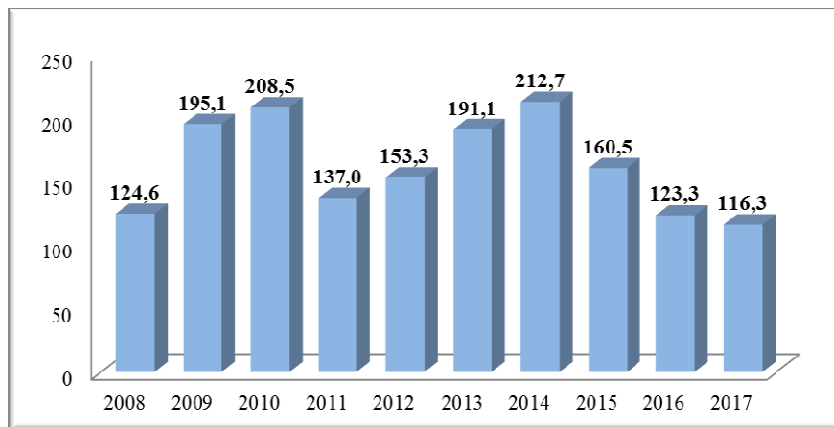


Chart 2 – The average amount of capital raised by IPO.

Source: compiled by the author on the basis of Global IPO reports, E&Y.

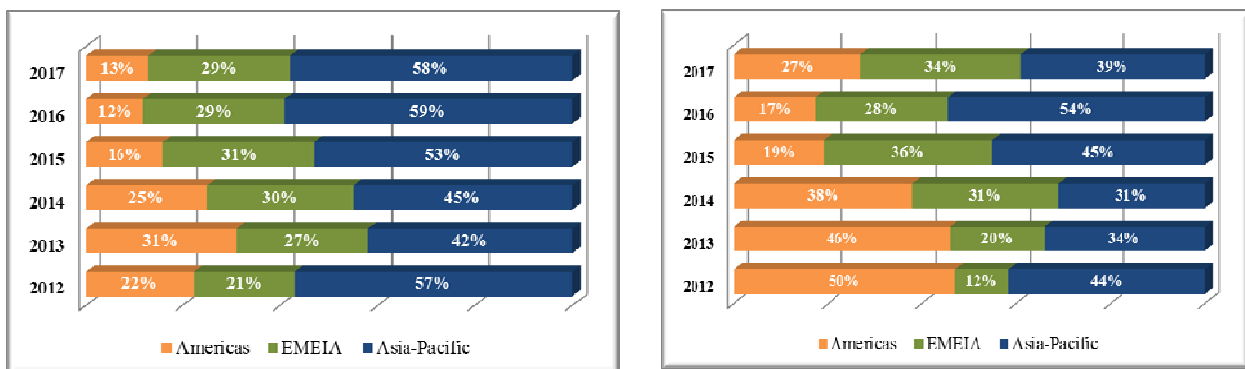


Chart 3 – Dynamics of distribution of IPO market shares and volumes of attracted capital

Source: compiled by the author on the basis of Global IPO reports, E&Y.

The success of 2014 is due to one of the largest IPOs in recent years: Alibaba Group Holding, Ltd, which raised capital of more than \$25 billion in September 2014, NYSE. The largest placement in 2010 was the Agricultural Bank of China Ltd, the commercial agricultural bank of China, which raised \$22.1 billion on the Hong Kong and Shanghai exchanges, while Snap, the market leader of the IPO in 2017, made a total investment of \$3.9 billion only, NYSE.

Chart 3 shows the dynamics of changes in the structure of the global IPO market in the regional aspect by the number of IPOs and the volume of capital. In particular, according to the methodology E&Y, stock exchanges are grouped into three market segments: Americas (North and South America), EMEIA (Europe, Middle East, India and Africa), Asia-Pacific (Asia-Pacific region).

Analysis of the data allows us to conclude the leading role of the Asia-Pacific region regarding the number of public offerings of shares and the volume of financing, which is 58% and 39% of the market share, respectively. However, regarding the number of deals, this region is the undisputed leader, by the volume of capital raised in 2017, the shares of the regions formed in the amount of 27%, 34% and 39% market share. It characterises the high level of global diversification of investors between "old" and "new" markets.

In the dynamics of the period from 2012 to 2017, there is a significant decline in the share of the US market in the total number of IPOs: from 22% to 13% in favour of the Asia-Pacific region, at the current share of EMEIA. Regarding capital raised, for the last six years, EMEIA's share has grown from 12% to 34%, or almost three times. Drivers of growth were the stock markets of India and the UAE at the current stable rate in the European market.

Analysis of the data of the top-10 world stock exchanges leading regarding IPOs number following the results of 2017 is presented in the chart 4. Over 35% of the initial public listings take place on the stock exchanges of China, and this trend, which began in 2006, is becoming more global. The number of IPOs in growing markets is more than three times higher than the number of IPOs in the advanced markets of the US, UK and Japan.

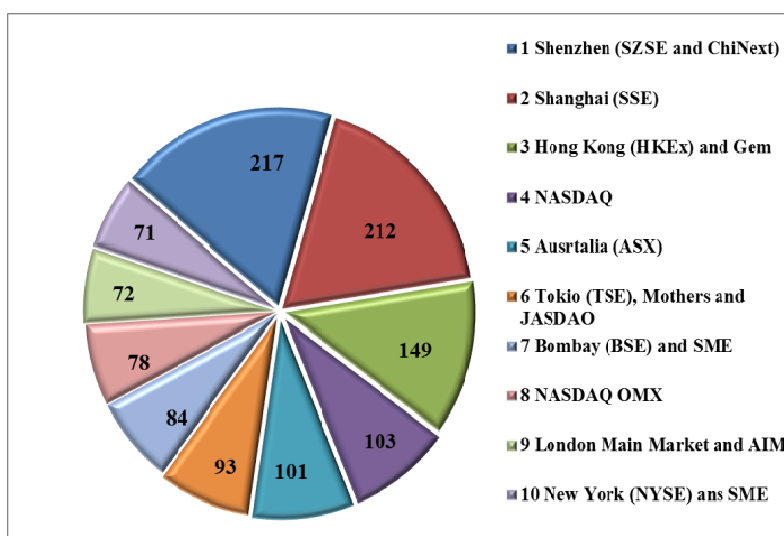


Chart 4 – Rating of stock exchanges by the number of IPOs held.

Source: compiled by the author on the basis of Global IPO reports, E&Y.

As for the amount of capital raised on the IPO, this trend is more restrained. The graph 5 illustrates that in 2017, the leader in raising capital in the IPO process is the New York Stock Exchange with a volume of \$30 billion. The London Stock Exchange ranks 4th with a total capital of \$14.8 billion, the Shanghai, Hong Kong and Shenzhen stock exchanges ranked 2nd, 3rd and 5th respectively, with total investment volume of \$48.9 billion.

However, we are observing an intensification of competition between stock exchanges and developed countries, regarding the volume of raised capital as well. For example, if in 2016 the volume of capital raised on stock exchanges of developed countries (US, UK, Japan) was \$52.8 billion, while on the stock

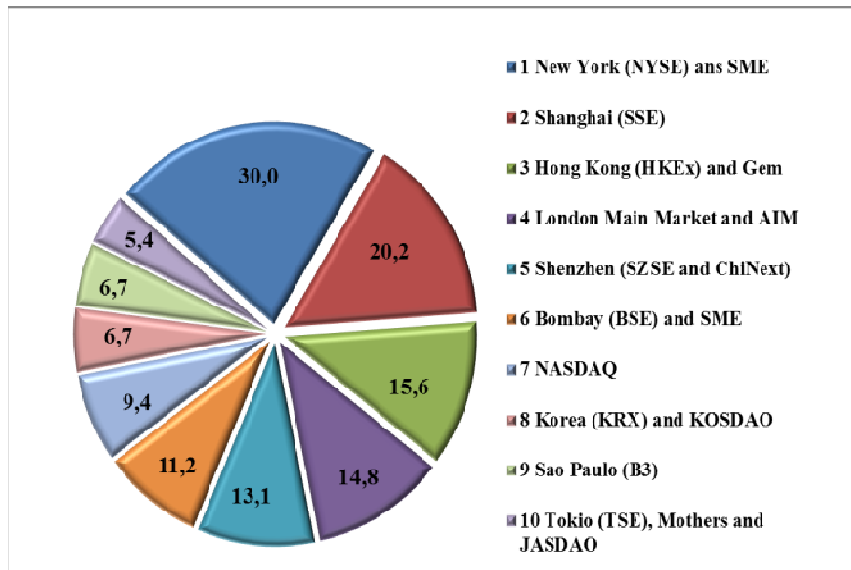


Chart 5 – Rating of stock exchanges by size.

Source: compiled by the author on the basis of Global IPO reports, E&Y.

exchange of developing countries (China, Korea, India, Brazil) – \$53.2 billion. Then in 2017 leadership of developing markets appears even more confident with: \$59.6 billion against \$73.5 billion, respectively. At the same time, stock exchanges of the developing markets are showing outperforming growth rates in comparison with developed markets.

The markets of China and India demonstrate the highest growth rates of the market capitalisation of the global stock market. The graphs 6 and 7 show the dynamics of the number and size of the capitalisation of the initial public offering of shares in 2008, 2010, 2016 and 2017.

China's stock markets, with fairly average indicators in 2008, since 2010 have demonstrated explosive growth and are unquestionably leading regarding the number of transactions, more than 1.7 times higher than those of stock exchanges in the US, UK and Japan. Despite a more extended and more rigorous procedure for assessing the prospects for IPO candidates by the new China regulator, the Committee for the Issue Examination, 530 applications for an IPO in 2018 were submitted to the Securities Regulatory Commission [5, p. 2].

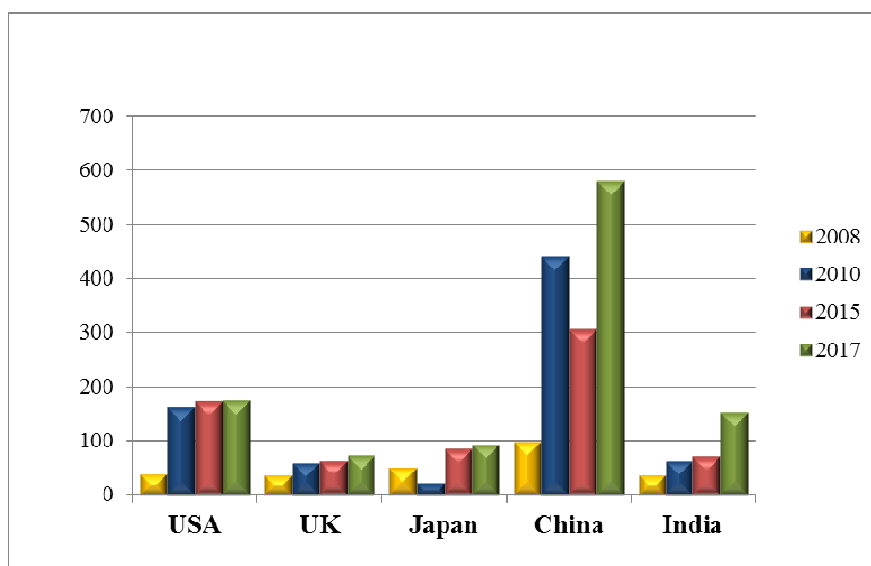


Chart 6 – Dynamics of the number of IPOs in the regional aspect.

Source: compiled by the author on the basis of Global IPO reports, E&Y.

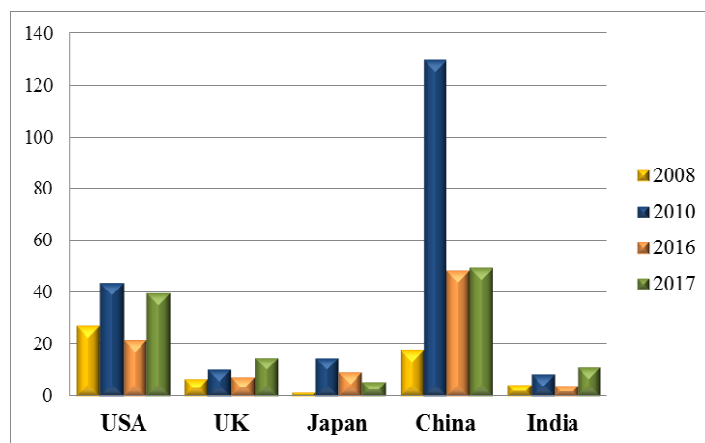


Chart 7 – Dynamics of the size of the capital involved at IPO, regional aspect.

Source: compiled by the author on the basis of Global IPO reports, E&Y.

The indicator of the volume of raised capital in 2010 was a record for the stock market in China. Deferred and cancelled by many companies IPO during the crisis of global stock markets, also, to discredit to the stock exchanges of developed countries and updated listing rules by the Chinese regulator, contributed to the achievement of a result of 129.8 \$billion.

On the Bombay and National stock exchanges in India, a 74 percent increase in the number of transactions was recorded in 2017 compared to 2016, and 153 IPOs brought the issuers of \$11.6 billion. In 2017, the highest transaction rates and revenues were noted in the market, reflecting the country's economic strength and the growing appetite of investors.

Stock markets of developed countries provide dynamism and depth, the necessary amount of institutional liquidity since they have access to large pools of local and international capital. The United States and Britain have huge financial resources under the control of institutional investors: \$35.6 trillion and 6.5 trillion respectively, while for the Asian region this figure is only \$1.6 trillion.

However, the US stock exchanges, have lost the position of a leader, they still keep the companies' steady demand for capital mobilisation. The most important characteristic when choosing a stock exchange is liquidity, the size of the investor base, the level of coverage by analysts, legal requirements for public listing and infrastructure [7, p. 7].

The Chart 8 presents data for 2016 on the size of the capitalisation of stock exchanges and the number of public companies that provide this capitalisation.

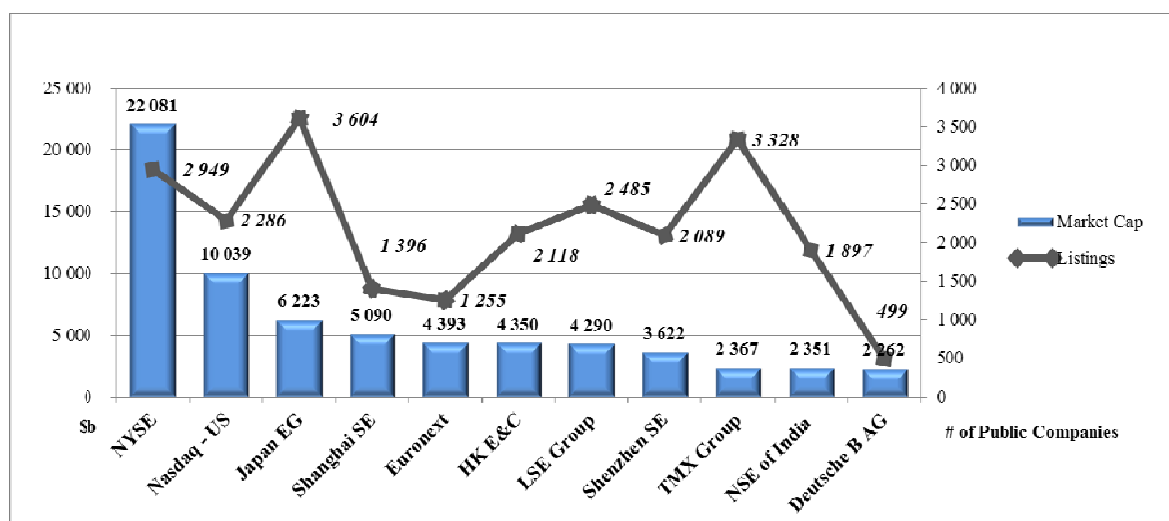


Chart 8 – Market capitalization of stock exchanges and listing of public companies at the end of 2017.

Source: compiled by the author on the basis of WFE [12].

Capitalization of the US stock markets is more than \$26 billion, and taking into account the UK and Japan stock markets, \$36.7 billion, which is 3.8 times lower than the total capitalisation of China's three stock exchanges (\$9.6 billion). The main obstacle for issuers in choosing the trading venues of developing countries is an undeveloped legal and regulatory base, combined with a lack of political stability, opaque market initiatives or government intervention in the regulation of the stock market.

Another important factor of choice in favour of mature stock markets human resources, who have accumulated experience and knowledge for a long period, which provides a high level of consulting and achieving a higher effectiveness of the IPO.

However, despite actual and competitive regulatory models and infrastructure, the markets of developed countries have lost their dominant positions. For London, it would be expected that losing the market will happen due to the reduction in the listing of foreign companies, the vulnerability of the economy associated with the increased uncertainty of the Brexit consequences, tightening of the regulatory regime. For US stock exchanges, the impact of factors is less significant due to the size of the US economy and the relaxation expectation of regulatory requirements for the financial sector in 2018.

3. Kazakhstan companies in the global and local IPO market. The IPO tool is not new for Kazakh companies. Moreover, market leaders have accumulated certain experience in attracting capital, listing, as well as compliance with corporate standards and international financial reporting standards in the status of a public company.

Analysis of available statistical sources [13, 14] allowed gathering information on the use of the IPO tool by Kazakh companies for the period from 2002 to 2017 inclusive. In total the available data during this period cover 32 IPOs, conducted by resident companies of Kazakhstan, as well as companies operating in Kazakhstan.

In general, the issue of shares was held in three countries (Great Britain, Kazakhstan and Russia), four stock exchanges (the London Stock Exchange (LSE): the main (MAIN) and the alternative market (AIM), the Kazakhstan Stock Exchange (KASE) and the Moscow Stock Exchange (MOEX) and using two instruments: through initial public offering of shares and placement of global depositary receipts (table 1).

Table 1 – Structure of IPO of Kazakhstan companies on stock exchanges and size of debt capital in the period from 2004 to 2017

	LSE MAIN	LSE AIM	KASE	MOEX	Sum-total
Capital, \$millions	7560,4	1418,0	335,0	10,5	9323,9
Structure	81.1%	15.2%	3.6%	0.1%	100%
Number of IPOs	12	12	7	1	32

Source: On the basis of information provided by [13, 14].

A total of 29 companies have issued shares and global depositary receipts, the total amount of attracted capital is \$9.3 billion. In the structure of the placement sites, both in terms of the number of IPOs and the amount of debt capital, the London Stock Exchange is undoubtedly leading, more than 96% of the capital of Kazakhstan companies.

The capital was attracted by two instruments: through initial public offering of shares - 61% and placement of global depositary receipts - 39%. The largest primary public offerings presented in table 2. They were held between 2005 and 2007, comprising two resource companies and three financial sector companies: Kazkommertsbank, Alliance Bank and Halyk Bank of Kazakhstan.

Table 2 – Top-5 the largest IPOs of Kazakhstan companies

Company	Volume of capital, million dollars	Stock exchange	Instrument	Year
ENRC	2792	LSE MAIN	IPO	2007
Kazakhmys	1156	LSE MAIN	IPO	2005
Kazkommertsbank	761	LSE MAIN	IPO	2006
Alliance Bank	704	LSE AIM	IPO	2007
Halyk Bank	680	LSE MAIN	GDR	2006

Source: author's development based on data [13, 14].

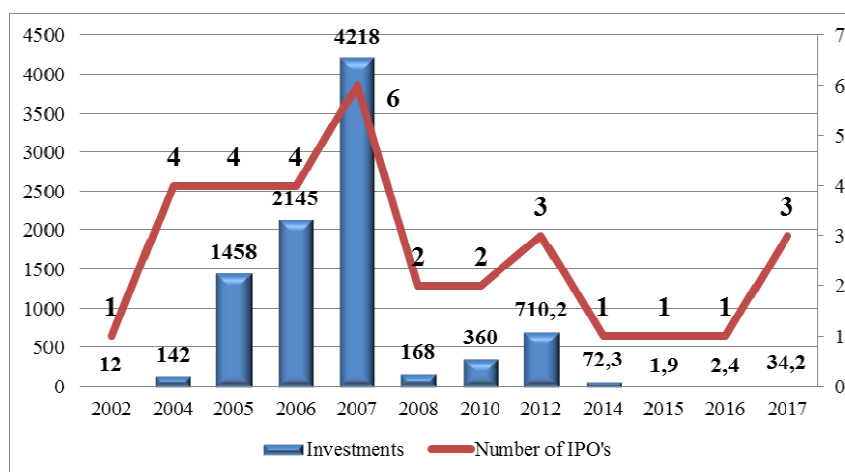


Chart 9 – Number of deals and amount of capital raised, \$mln.

Source: author's development based on data [13, 14].

Chart 9 provides a sample of the number of IPOs and the amount of debt capital shall be presented in annual segments.

As follows from the diagram, 2007 was a year of peak activity both in terms of the amount of debt capital - \$4,218 million, and in terms of the number of IPOs - 6 placements. After 2012, despite the availability of annual public offerings, the amount of attracted capital is not reflected in the schedule due to the insignificance of the amounts. This situation is explained by the absence of public placements on foreign stock exchanges and the transfer of the activity of issuers to the national stock market.

Starting from 2012, the Kazakhstan Stock Exchange accepted 7 IPOs, the total amount of debt capital was \$335 million, which is more than 26 times lower compared to the London Stock Exchange due to low capitalization and liquidity of the national stock exchange.

We believe it possible to conclude that this trend is a consequence of deterioration of Kazakhstan's macroeconomic indicators and a reduction in the country rating against the backdrop of the global economic recession, which is a negative prerequisite for companies to enter the IPO, as it entails a significant underestimation of the value of shares by potential investors.

In addition, stimulating the development of the national stock market by the Government of the Republic of Kazakhstan for a balanced provision of the economy with financial resources in conditions of deteriorating the stability of the banking sector may also be the cause of this situation. The tool for the implementation of these incentives was the "National IPO" program, which allowed to attract funds from local investors, to activate the activities of the national stock exchange and to privatize two national companies: KazTransOil (\$185.2 million) and KEGOC (\$72.3 million) in 2012 and 2014. The third in terms of attracted capital was the placement in 2012 of the shares of the national mobile operator KCELL (\$49.5 million). These placements became the largest in the history of the Kazakhstan stock exchange.

The event in the stock market was the placement of shares in the Bank of Astana in 2017, which attracted \$20.1 million to the national market and \$10.5 million through SPO on the Moscow Stock Exchange.

4. Tools to improve the liquidity of the Kazakhstan stock market. The growth of trading volume on the Kazakhstan Stock Exchange in 2017 compared to 2016 amounted to more than 60%, increasing from 94.6 to 151.5 billion. tenge, which amounted to more than 300% of GDP, the index reached the index of 2162 (+ 59%), capitalization - 17.1 billion tenge (+ 20%). The exchange trades 127 shares of 110 issuers and 262 corporate bonds from 66 issuers.

This dynamics allowed the national stock exchange to become one of the fastest growing stock exchanges in the world. As a result, in the annual review of the FTSE Russell Advisory Committee (Financial Times Stock Exchange group), in September 2017, it was announced that the Republic of Kazakhstan was assigned the status of the Frontier market within the framework of the FTSE country classification [13]. However, chart 10 allows us to conclude that the main driver of the growth of the national stock exchange is the money market.

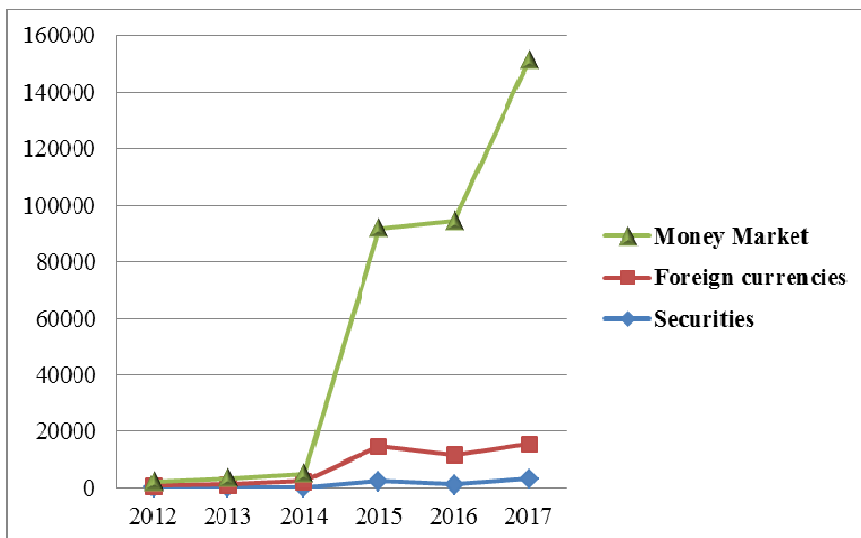


Chart 10 – Dynamics of trading of KASE in 2012-2017, billion tenge.

Source: compiled by the author on the basis of KASE data.

For example, the money market accounted for more than 89.6% and currencies – 8.1% of the volume of trades in KASE in 2017 respectively (chart 11). The share of trading in the instruments of the stock market (shares, corporate bonds, securities of investment funds, government securities and securities of international financial organizations) for this period is only 3.5 billion tenge or 2.3% of the volume of trading, which is equivalent to only 7% GDP of Kazakhstan (48,850 trillion tenge according to the preliminary estimate for 2017).

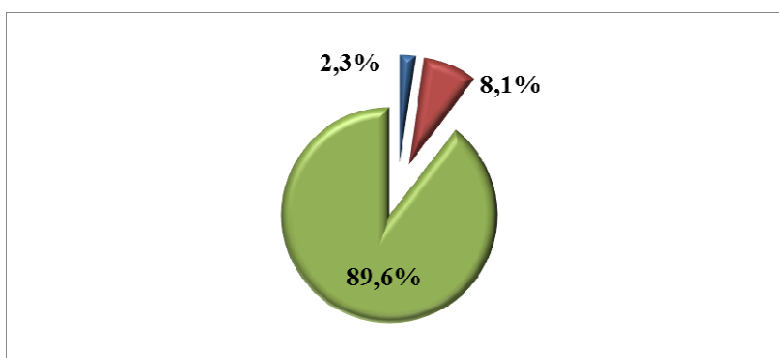


Chart 11 – Trades structure of KASE by types of instruments in 2017, billion tenge.

Source: author's development based on data [13].

Thus, at the moment the Kazakhstan stock market is not sufficiently liquid and its size does not match the size of the economy.

In the structure of trading on the stock market (chart 12), the largest share is held by government securities, which simultaneously show the highest growth dynamics. The second place in terms of trading volume is corporate bonds. The share market, after active dynamics in 2015, it reduced activity 4 times in 2016-2017. Nowadays the market share is at a consistently low level.

At the same time, we believe it necessary to note that during the period from 2012 to 2017 the volume of trading in securities increased from KZT180.4 billion to KZT 3,450.4 billion, or almost 19 times, which is the result of targeted efforts by the Government of the Republic of Kazakhstan to expansion of access to the capital of economic entities, as well as ensuring sustainable and balanced development of the economy. The result of this work in the period up to 2025 should be the creation of a developed capital market, which is one of the most important activities of the International Financial Center Astana (AIFC).

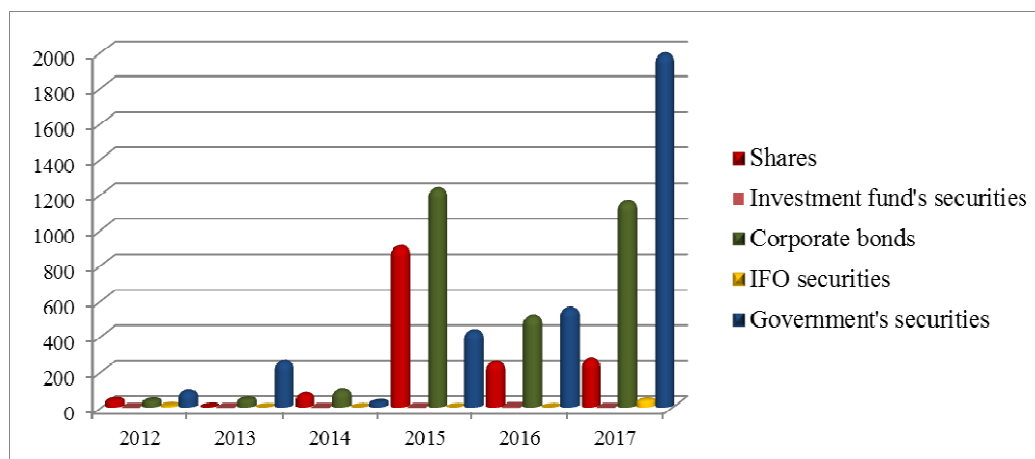


Chart 12 – Dynamics of the securities market on the Kazakhstan stock market, billion tenge.

Source: author's development based on data [13].

International Financial Center Astana officially began its work on January 1, 2018. In this project, the Government of the Republic of Kazakhstan takes advantage of its geopolitical position, the latest trends in the transfer of the dynamics of the development of stock markets to the Asia-Pacific region, actively introducing the best world practices, for the full development of the stock market. Thus, in the next 10 years it is expected not only to solve the local tasks of diversifying the risks of the sovereign financial system, but also its system integration into the global world financial architecture.

The AIFC development strategy is a consistent movement into the global financial market based on the best international experience: Local Expertise Center => Regional Clearinghouse => Regional Financial Center => Global Financial Center [15].

Experts claimed that these measures will attract more than 350 billion dollars of additional liquidity to the capital market of Kazakhstan in the period until 2025. We view this initiative as a unique opportunity for the countries of the Eurasian Economic Union to increase the capitalization and liquidity of the national stock markets, and to provide access to national economic entities for both regional and global capital markets through IPO and GDR tools in the context of the task of integrating the stock markets of the EAGE countries to 2025 year.

According to the joint action program of the Government and the AIFC, capital market development is planned on the basis of the infrastructure of the Astana Stock Exchange (AIX) in the period 2015-2025 due to:

- strategic partnership with the Shanghai Stock Exchange (SSE) and technology transfer NASDAQ;
 - issue of state treasury bonds, infrastructure bonds; corporate bonds by public and private companies;
 - expansion of the number and types of instruments, including the tool of ETF (exchange trade funds);
 - listing of large joint ventures in the oil and gas sector and the mining and metallurgical complex;
- opening of an additional market segment for subsoil users;
- conducting an IPO of not less than 25% of the outstanding shares of the most attractive companies in the investment plan of shares of Kazakhtelecom, Kazatomprom and AirAstana in 2018, for the period to the year 2020 of companies: KazMunayGaz, Samruk-Energo, Kazpost and KazakhstanTemirZholy.

The strategic objective of this initiative is to form the core of Kazakhstan's new financial infrastructure for integration into global financial markets and flows, build a full-fledged diversified financial system, and further create a financial hub for the Central Asian region.

Conclusion. The financial market belongs to the most dynamically developing objects of modern economic research. The world community is witnessing a change in the role of financial markets in the global economic system. Analysis of the current tendencies of the IPO market, testifies to the change in the landscape of the financial market that occurred in the post-crisis period through the formation of new leaders - large growth points in emerging-market exchanges [16].

This architecture is characterized by a high level of competition between the IPO markets of developed and developing countries. Stock exchanges of developed countries retain their leadership in terms of market capitalization, access to large pools of international investors and professional compe-

tencies. The stock exchanges of developing countries demonstrate high growth rates in terms of the number of primary public placements, taking advantage of the size of economies, exceeding the average world growth rates and increasing the number of wealthy people with investment assets [17]. Exceeding the growth and growth in the rates of the IPO market indicators of developing countries over developed markets make it possible to draw a conclusion about the growing process of convergence of capital markets of developing and developed countries.

Competition between stock exchanges stimulates the formation of transnational exchange holdings, strategic alliances, demutualization processes. Technological innovations have become the fundamental driving force for competition for exchanges, not only with each other, but also with new players on the exchange market, which ensures the provision of financial services at high speed from anywhere in the world at low cost to a wider range of investors. Thus, the globalization of financial markets increases their effectiveness and investor involvement, while increasing volatility and co-dependence on country-level political and economic shocks.

Primary public offering of shares is a global equity instrument of the stock market, which is used as the most effective way of attracting capital to solve strategic tasks of growth and development. This tool is applicable both in international and national financial markets. However, market selection and many other IPO parameters are a unique solution for each company, depending on the stage of its development, industry, goals and objectives. Kazakhstan's companies have experience in attracting capital, both on the external and national stock markets.

Discussion. Kazakhstan stock market is undergoing a transformation of its institutional structure. Against the backdrop of the activity of professional participants of the financial market, the Kazakhstan Stock Exchange, being a key institution of professional mediation, demonstrates the growth of performance indicators and the successful achievement of strategic objectives. However, analysis of the volume and structure of trading allows us to conclude that the volume of the stock market does not correspond to the size of the economy. We believe that the establishment of the International Financial Center Astana, based not only on the strategic vision, but also on the best world standards and practices, will give a new impetus to the development of the national stock market of Kazakhstan and effectively use the instrument of initial public offering of shares to solve the problems of the country's economic development.

Acknowledgements. Thanks to three anonymous referees for helpful criticisms and suggestions. The usual disclaimers apply.

REFERENCES

- [1] 'Multy-dimensional review of Kazakhstan' (2016). Vol. 1. Initial Assessment, OECD. Development Pathways [online] <http://dx.doi.org/10.1787/9789264246768-en> (Assessed: 19.03.2018).
- [2] Scwab K., World Economic Forum (2017), 'The Global Competitiveness Report 2017-2018', [online] <http://www3.weforum.org/docs/GCR2017> (Assessed: 19.03.2018).
- [3] 'IPO insights. Comparing global stock exchanges' (2009), Ernst&Young [online] [http://www.ey.com/Publication/vwLUAssets/IPO_Insights:_Comparing_global_stock_exchanges/\\$FILE/IPO_comparingglobalstockexchanges.pdf](http://www.ey.com/Publication/vwLUAssets/IPO_Insights:_Comparing_global_stock_exchanges/$FILE/IPO_comparingglobalstockexchanges.pdf) (Access-ed 01.04.2018).
- [4] Kravets F., 'Биржа EURONEXT' (2017), [online] https://equity.today/bir_haeuronext.html (Accessed 5.04.2018).
- [5] Lukashov A., Mogin A. (2008), IPO ot I do O, 'Posobie dlja finansovyh direktorov i investicionnyh analitikov', Al'pina Biznes Buks, Moskva. ISBN 978-5-9614-2415-7 (in Russ.)
- [6] 'Global IPO trends' (2011), Ernst & Young [online]. 20.01.2018)
- [7] 'Global IPO update. January- November' (2012), Ernst & Young, [online] <http://www.ey.com>, (Assessed: 19.01.2018).
- [8] 'Global IPO update January' (2014), Ernst & Young, [online] <http://www.ey.com>, (Assessed: 19.01.2018).
- [9] 'Global IPO trends', Report (2015), Ernst & Young, [online] <http://www.ey.cm>, (Assessed: 20.01.2018).
- [10] 'Global IPO trends, Q4' (2017), Ernst & Young [online] http://www.ey.com/RU/ru/SearchResults?query=IPO&search_options=country_name, (Accessed 11.01.2018).
- [11] 'IPO Watch Europe, Q3' (2017), PwC [online] <http://www.pwc.co.uk/ipowatch> (Accessed 10.01.2018).
- [12] Website of World Federation of Exchanges, [online] <https://www.world-exchanges.org/home/index.php/statistics/monthly-reports>, (Assessed: 01.12.2017).
- [13] Oficial'nyj sajt Kazahstanskoj fondovoj birzhi [Elektronnyj resurs] URL: <http://kase.kz/ru/shares>, (data obrashhenija 28.02.2018).
- [14] Website of London Stock Exchange, [online] <http://www.londonstockexchange.com/statistics/home/statistics.htm>, (Assessed 20.02.2018).
- [15] Website of Astana International Financial Centre, [online] http://www.aifc.kz/index_ru.html# (Assessed: 15.03.2018).
- [16] 'The future of equity capital markets. Capital markets in 2025' (2011), PwC, [online] www.pwc.ru/capital-market, (Assessed: 15.01.2018).
- [17] 'New value creators gain momentum', Report Billionaires insight (2017), UBS, PwC, [online] https://www.pwc.com/gx/en/financial_services/Billionaires%20insights/billionaires-insights-2017.pdf (Accessed 15.01.2018).

Г. Шмарловская¹, Ю. Ничкасова², К. Садвокасова²

¹Беларус мемлекеттік экономикалық университеті, Минск, Беларусь,

²Л. Н. Гумилев атындағы Еуразия ұлттық университеті, Астана, Қазақстан

ІРО НАРЫҒЫН ДАМУДАҒЫ КЕЙБІР МӘСЕЛЕЛЕРІ МЕН БОЛАШАҒЫ

Аннотация. Әлемдік экономиканың жаһандануы әлемдік қордың инфрақұрылымының ландшафтының өзгеруіне, экономиканың қаржы капиталының басымдығына, капитал нарықтарындағы бәсекелестікті және интеграциялық үдерістерді ынталандыруға әкеледі. Соңғы онжылдықта дамушы нарықтарда жаңа қаржы орталықтарының қарқынды дамуы көрсетіледі, бұл қаржы ресурстарының қозғалысын инновациялық өсу нүктелеріне ынталандырады. Дамып келе жатқан және дамушы елдердің қор биржалары арасындағы бәсекелестік күресі, қаржы құралдарын трансформациялау, листинг рәсімдерін жеңілдету эмитенттер мен инвесторлар үшін қор биржаларының барынша кең таңдауын қамтамасыз етеді.

Зерттеудің мақсаты қор биржаларын дамытудың негізгі ағымдық үрдістерін және бастапқы акциялардың сапалық сипаттамаларын, сондай-ақ Қазақстан Республикасы қор нарығының ағымдағы жағдайын талдау болып табылады. Бұдан басқа, біз бұл қаржы құралын тұрақты экономикалық даму үшін қаржыландыру көздерін тарту бойынша қазақстандық компаниялардың тәжірибесін талдадық.

Зерттеудің нәтижесі әлемдік қор биржаларын шоғырландырудағы ағымдық үрдістерді сәйкестендіру және жіктеу, акцияны акцияларды бастапқы орналастырудың халықаралық практикасы, оның түсінуі ұлттық қор нарығын мақсатты дамыту үшін осы тәжірибені пайдалану мүмкіндігі. Азия-Тынық мұхиты аймағының орталығында орналасқан Қазақстан Республикасы үшін әлемдік озық тәжірибені пайдалану - оны әлемдік қаржы архитектурасына енгізу арқылы елдің қор нарығының қарқынды дамуын қамтамасыз етудің бірегей мүмкіндігі.

Түйін сөздер: IPO, қор биржалары, бәсекелестік, қаржы орталығы, қаржы нарықтарында, KASE, AIFC, Қазақстан.

Г. Шмарловская¹, Ю. Ничкасова², К. Садвокасова²

¹Белорусский государственный экономический университет, Минск, Беларусь,

²Евразийский национальный университет им. Л. Н. Гумилева, Астана, Казахстан

ТЕНДЕНЦИИ, ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ РАЗВИТИЯ РЫНКА IPO

Аннотация. Глобализация мировой экономики приводит к изменению ландшафта фондовой инфраструктуры мира, приоритетности финансового капитала над экономикой, стимулированию конкуренции и интеграционных процессов на рынках капиталов. Последнее десятилетие демонстрирует интенсивное развитие новых финансовых центров на развивающихся рынках, которые мотивируют перемещение финансовых ресурсов в точки инновационного роста. Конкурентная борьба между фондовыми биржами развитых и развивающихся стран, трансформация финансовых инструментов, упрощение процедур листинга предоставляют все более широкий выбор фондовых бирж для эмитентов и инвесторов.

Целью данного исследования является изучение основных текущих тенденций развития фондовых бирж и качественных характеристик первичного публичного предложения, а также анализ текущего состояния фондового рынка Республики Казахстан. Более того, мы проанализировали опыт использования этого финансового инструмента казахстанскими компаниями для привлечения источников финансирования для устойчивого экономического развития.

Результатом исследования стали выявление и классификация современных тенденций консолидации мировых фондовых бирж, международной практики первичного публичного размещения акций, понимание которых является возможностью использовать данный опыт для целевого развития национального фондового рынка. Для Республики Казахстан, находящейся в центре Азиатско-Тихоокеанского региона, использование лучших мировых практик является уникальной возможностью обеспечить динамичное развитие фондового рынка страны, вписав его в глобальную финансовую архитектуру.

Ключевые слова: IPO, фондовые биржи, конкуренция, финансовые рынки, KASE, МФЦА, Казахстан.

Выражение признательности. Мы признательны двум коллегам-ученым за конструктивный и критичный взгляд на результаты исследования. Возражения принимаются в обычном порядке.

Information about authors:

Shmarlovskaya G. – Doctor of Economic Sciences, professor, Faculty of International Business, Belarusian State Economic University, Minsk, Belarus. E-mail: Galina.shmarlovskaya@gmail.com,

Nichkasova Y. – Doctorant Student, Faculty of Economics, Eurasian National University named after L. N. Gumilev, Astana, Kazakhstan. E-mail: yunichka10@gmail.com. Corresponding author.

Sadvokasova K. – Academician of the Russian Academy of Sciences, Doctor of Economics, Professor, Eurasian National University named after L. N. Gumilev, Department of Economics. E-mail: ksadvokas@mail.ru

Publication Ethics and Publication Malpractice in the journals of the National Academy of Sciences of the Republic of Kazakhstan

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

Submission of an article to the National Academy of Sciences of the Republic of Kazakhstan implies that the described work has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <http://www.elsevier.com/postingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. In particular, translations into English of papers already published in another language are not accepted.

No other forms of scientific misconduct are allowed, such as plagiarism, falsification, fraudulent data, incorrect interpretation of other works, incorrect citations, etc. The National Academy of Sciences of the Republic of Kazakhstan follows the Code of Conduct of the Committee on Publication Ethics (COPE), and follows the COPE Flowcharts for Resolving Cases of Suspected Misconduct (http://publicationethics.org/files/u2/New_Code.pdf). To verify originality, your article may be checked by the Cross Check originality detection service <http://www.elsevier.com/editors/plagdetect>.

The authors are obliged to participate in peer review process and be ready to provide corrections, clarifications, retractions and apologies when needed. All authors of a paper should have significantly contributed to the research.

The reviewers should provide objective judgments and should point out relevant published works which are not yet cited. Reviewed articles should be treated confidentially. The reviewers will be chosen in such a way that there is no conflict of interests with respect to the research, the authors and/or the research funders.

The editors have complete responsibility and authority to reject or accept a paper, and they will only accept a paper when reasonably certain. They will preserve anonymity of reviewers and promote publication of corrections, clarifications, retractions and apologies when needed. The acceptance of a paper automatically implies the copyright transfer to the National Academy of Sciences of the Republic of Kazakhstan.

The Editorial Board of the National Academy of Sciences of the Republic of Kazakhstan will monitor and safeguard publishing ethics.

Правила оформления статьи для публикации в журнале смотреть на сайте:

www.nauka-nanrk.kz

ISSN 2518-1467 (Online), ISSN 1991-3494 (Print)

<http://www.bulletin-science.kz/index.php/ru/>

Редакторы *М. С. Ахметова, Т. М. Апендиев, Д. С. Аленов*
Верстка на компьютере *Д. Н. Калкабековой*

Подписано в печать 20.07.2018.
Формат 60x881/8. Бумага офсетная. Печать – ризограф.
16,25 п.л. Тираж 500. Заказ 4.