# The Model of Financial Instruments Influence on the Capital Flow in Kazakhstan

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#### Abstract

The article objective is the study of exchange market and stock market financial instruments influence on capital flows in Kazakhstan. For this purpose possible influence factors on capital flows in Kazakhstan were analyzed. Statistical data on capital flows in Kazakhstan over a period from 2007 to 2013 were collected. Dynamics of capitalization on Kazakhstan Stock Exchange, the amount of issues of securities and number of issuers, Kazakhstan Stock Exchange index dynamics, banks residents' exchange transactions' volume, currency in cash transactions, foreign exchange cash import/ export by second-tier banks, currency trade volume in Kazakhstan Stock Exchange, interbank credit and deposits in Kazakhstan, on exchange average weighted exchange rate volume were collected and analyzed.

Regression analysis is carried out, conclusions and recommendations are given. Found determination coefficient of 99% confirms the hypothesis of stock market and exchange market instruments influence on capital flows in Kazakhstan. The conclusion on the interrelation of capital flows and exchange market and stock market instruments is drawn based on calculated model. The following factors were also detected: the number of issues of securities eligible for trading in Kazakhstan Stock Exchange (KASE); the number of issuers of securities eligible for trading in stock exchange; banks residents' transactions volume; net transactions by exchange offices (foreign exchange cash); foreign exchange cash import/ export by second-tier banks.

**Keywords:** capital flow, financial instruments, exchange market, stock market

## 1. Introduction

Researches revealed many causes for capital export such as investment climate deterioration, higher profit rate, cheaper labour and raw material in a capital-receiving country. The main cause for capital outflow is its surplus (Vasileva, 2013). The problems of liquidity shortage, Kazakh companies' growing need for financial resources to support the pace of domestic production and promote competitive performance of produced goods and services, heightens the significance of stock market and exchange operations. In this regard it's necessary to study financial instruments influence on capital flow. Academics classified financial market segments and correspondingly financial instruments by the models of markets common for each state. By the type of traded assets Lomtatidze refers credit market, stock market, exchange market, precious metals market, insurance market to financial markets (Lomtatidze, 2010). Selischev A. S. highlighting the tendency for world economy globalization distinguishes merger and acquisition market as one more segment of financial market (Selischev, 2013). Annenkova (2010) defines exchange market as a complex of currency exchange transactions by foreign exchange buy and sell subject to set conditions.

This paper presents studies of exchange market and stock market. It's hypothesized that stock market and exchange market instruments exercise influence upon capital flow in Kazakhstan.

- 1) The set tasks of the study;
- 2) The analysis of capital flows in Kazakhstan from 2007 to 2013;
- 3) The analysis of stock market influence factors on capital flows in Kazakhstan;

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- 4) The analysis of exchange market influence factors on capital flows in Kazakhstan;
- 5) Determination coefficient calculation;

The model calculation of financial market instruments influence on capital flows in Kazakhstan.

The found coefficient of determination 99% confirms the hypothesis of stock market and market exchange market instruments influence on capital flows in Kazakhstan. It's possible to draw the conclusion regarding interrelation of capital flow and the following indicators: the number of issues of securities eligible for trading in KASE, the number of issued securities eligible for trading in KASE; banks residents' transactions volume; net transactions by exchange offices (foreign exchange cash); foreign exchange cash import/ export by second-tier banks.

#### 2. Literature Review

The studies carried out by the scientists of various economic schools are concerned with development of capital flow conceptual framework. The nature and specific features of the modern international capital market, current and long-term results of its flow, the mechanisms of effective attraction and use of international investments are embodied in the works of Russian scientists: Abalkin (2010), Anikin (1999), Bulatov (1998), Golosov (1977), Illarionov (1999), Karelin (2010), Popov (1997), Smyslov (1997), Suvarevich (2010), etc.

The models of international capital flow and its adjustment are represented in the works of Dooly M. (Dooly M., 1995), Dornbusch (1988), Calvo (1993), Cardoso (1997), Kullman (1993), Saks (1996), etc.

Smith (2007) worked upon the issue of capital flow between national economies. They considered capital movement between metropolis and colonies. The theory of international capital movement was developed by the representatives of neoclassical economics. Marxism representatives also studied international capital movement. The works of Blomstrom (1986) and national scientist Avdokushin (2012) are related to the institutional analysis of capital flow causes and consequences from a perspective of transnational companies.

In the modern period the works of the following authors are concerned with studies in the field of capital flow and exchange market and stock market instruments: Borishpolets and Chernyavsky (2012); Kurmanalieva and Vinokurov (2011); Bernstamm (2013); Iskakov and Ruzieva, (2014); Sophie Brana and Delphine Lahet (2010); Jonathan, Ostry, Atish, Marcos and Mahvash (2012); Peter, Robert, Scott and Robert (2012); Khuhawar and Zeng (2013); asha Al-Sakka and Owain (2010); Gisela (2013); Odongo and Kalu(2013).

The studies of above-mentioned authors do not fully examine the factors of exchange market and stock market financial instruments influence on the migration of capital in Kazakhstan, that confirms the relevance of the chosen study.

## 3. Methods

## 3.1 Capital Flow in Kazakhstan

For the purpose of detection of exchange market and stock market instruments influence on capital flow the method of regression analysis is applied. To that end the statistics regarding capital inflow and outflow in Kazakhstan from 2007 to 2013 is collected. Possible exchange market and stock market instruments influence factors on capital flows in Kazakhstan are also estimated.

Capital flow is a process when capital leaves the economy of one country in order to earn higher income in another country. The study of capital migration influence is important since rapid growth in recent decades in international trade, international interbank credits, intergovernmental loans and operations in stock exchange and currency market of various countries all over the world has been accompanied by the rapid development of international capital market. International capital movement exercises enormous influence on the world economy.

One of the characteristic phenomena of the modern world economy is increase in capital flow scale between countries. International capital market is an important component of economy, which provides financial resources flow. The shift of production factors from countries with relatively inexpensive production factors to countries where they are relatively insufficient and expensive leads to adjustment of prices for production factors, i.e. welfare gain for participating countries.

The migration of capital in Kazakhstan has been explored by net capital import/export according to National Bank data, and also Private Capital flow indicator calculated by World Bank.

The indicator of World Bank Private Capital flow is used in 187 countries and calculated for all member states of World Bank. Private Capital flow calculated by World Bank, registers changes by functional categories, based on investment motives, and it is less volatile than indicator of the National Bank of Kazakhstan and can be

largely interpreted as economically determined indicator. Actually this indicator is the only unified indicator in the area of capital flow, calculated by relevant international organization. World Bank: Private capital flows = net assets balance change (direct investments + indirect investments) by all institutional sectors (Figure 1)

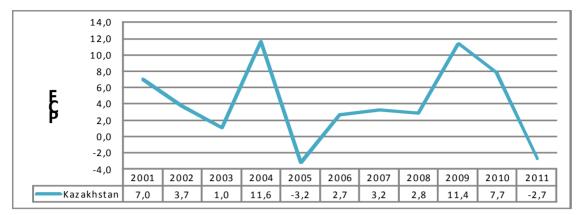


Figure 1. Private Capital flows in Kazakhstan

Source: Complied by the author according to World Bank reports, 2013.

Over the period from 2001 to 2011 the indicator of Private Capital flow declined. Over this period downward change was from 7% to 2.7%. From 2009, this indicator has declined from 11.4% to 2.7% of GDP.

According to the National Bank statistics in regard to capital net imports/exports in Kazakhstan from 2007 to 2013 reduction in capital flows took place. Significant capital outflow had been demonstrated over the period from 2007 to 2008, that made up 2384 mln dollars. In 2010 capital imports made up 1269 mln dollars. And in 2013 capital imports made up 8366 mln dollars (Figure 2).

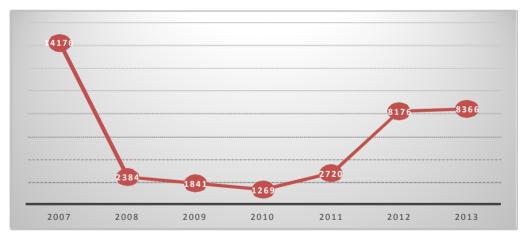


Figure 2. Capital net imports(+)/exports(-)in Kazakhstan, mln dollars

Source: Complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

Presented data concerning capital imports/export in Kazakhstan is used further in the order to find determination coefficient and the models of exchange market and stock market instruments influence on capital flows in Kazakhstan.

## 3.2 Stock Market in Kazakhstan

As any other markets stock market is a complex organizational and economic system with a high level of technological cycles' integrity and completeness.

It's known that Kazakh exchange market has been established in last few years. To this moment both markets—exchanging market and over-the-counter market—developed in parallel in the same way. Therefore when studying infrastructure components of market and its players it's necessary to turn attention to differences

between two main schemes of transaction organization—order-driven and dealer-driven. The main differences of these schemes relates to principle of transactors choice and security of trade settlement. Stages of stock market establishing is shown in Table 1.

Table 1. Stages of stock market establishing in Kazakhstan

Stages	Years	Stage brief description	New types of financial instruments		
I stage—market origination	before 1994	The lack of conceptual approaches to issue and circulation of securities; securities issue based on Provisional rules; budget deficit payment using National Bank's loans; mass privatization.	Monetary assets, securities, current transactions accounts payable and receivable		
II stage—establishing 1995-1998		Enhancement of legal framework and market infrastructure; termination of UITs, increase in the number of stock market players, infrastructure development; approval and implementation of the State program for stock market development for 1996-98, the beginning of pension reform.	shares, equity interests, exchange swaps, public securities (treasury bills, securities with a nominal value of 1000 tenge, turnover tax,		
			state short-term liabilities-public bonds), credits, loans		
III stage—infrastructure formation	1999 - 2004.	Further enhancement of legal base, appearance of new investor represented by non-state pension funds, insurance companies and unit investment trusts; expansion in types of securities, issue of local executive bodies' securities; involvement of non-state securities segment.	Securities of local executive bodies; corporate bonds of Non-state Pension Fund, insurance companies		
IV stage—development	2005-2007	Approval of state stock market adjustment programs; market performance transparency support; extension of opportunities for securities issue, protection of investors' rights and fair competition support; establishing of regional financial center Almaty	non-listing KASE securities, representative share-list, swaps, REPO transactions		
V stage—development	2010	Stock market development under the conditions of financial crisis. Adoption of Joint Operating Plan by the government of the Republic of Kazakhstan and the National Bank of the Republic of Kazakhstan regarding economic stabilization and financial system including stock market development measure.	Hedging financial instruments, Islamic financing instruments		
VI stage—development	2013 to date	Granting the status of a full member of WFE	New share index —Kazakhstan Traded index local (KTX local) calculated by NEWEX		

*Note.* complied by the author in accordance with government regulations review.

According to the law of the Republic of Kazakhstan "On the stock market" stock market participants are individual and institutional investors, issuers, securities traders, bidding process organizers and self-regulated organizations (Law of the Republic of Kazakhstan, 2014). The main indicator of stock market condition in Kazakhstan is organized market represented by the stock exchange—KASE. KASE capitalization change dynamics is shown in Figure 3.

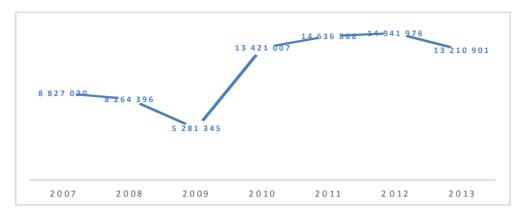


Figure 3. KASE capitalization change dynamics, mln tenge

Source: Compiled by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

Represented data demonstrate capitalization growth from 2009 to 2012 from 5281345 mln tenge to 14941976 mln tenge and subsequent decrease in 2013 to 13210901 mln tenge. According to the National Bank equity instruments dominate over debt instruments on the stock market.

Capitalization dynamics on the stock exchange of Kazakhstan is represented by the following sectors: shares, debt instruments, investment funds' securities, public securities. The amount of securities eligible for trades on the stock market of the Republic of Kazakhstan is shown in Figure 4.

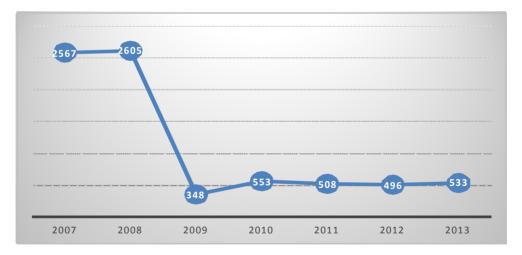


Figure 4. Securities eligible for trades on KASE, the number of issues, plotted according to

Source: Complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

According to the National Bank 2605 securities were issued in 2008, shares made up 2319. Such amount of share issues in 2007 and 2008 is attributed to establishment of new joint-stock companies in Kazakhstan. Drop is observed in 2011 and 2012. In 2013 the amount of issued securities made up 533.

The number of issuers of public securities eligible for trades on Kazakhstan Stock Exchange is shown in Figure 5.

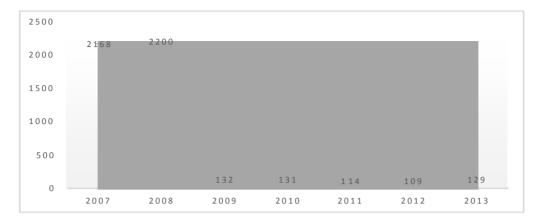


Figure 5. Securities eligible for trades on KASE, the number of issuers, plotted according to Source: complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013

Maximum by the number of issuers is observed in 2008-2200, then it decreases to 109 in 2012 and there's a slight growth in 2013. Issuers represent shares sectors, debt securities, investment funds' and international organizations' securities and public securities. KASE index dynamics is shown in Table 2.

Table 2. KASE index dynamics on the stock exchange of Kazakhstan (Kazakhstan Stock Exchange website, 2013)

Date	01.10.07	03.01.08	05.01.09	05.01.10	05.01.11	04.01.12	03.01.13
KASE index	2560.72	2640.15	892.34	1801.41	1701.37	1141.21	991.64
Cost (USD)	265 131.94	1 172 934.25	4 095 078.91	396 532.28	1 297 976.98	165 515.33	263 597.54

The highest KASE index within the prescribed period was observed in 2008 and made up 2640.15, maximum cost in USD was in 2009—4 095 078.91. As of 14.01.2015 KASE index was equal to 862.33 with a cost of 267779.78 USD (Kazakhstan Stock Exchange website, 2015).

## 3.3 Exchange Market of Kazakhstan

The development of Kazakhstan exchange market is based on the action of two main factors—firstly, exchange transactions liberalization and increase in national markets' transparency, secondly, introduction of new exchange and financial instruments and state-of-the-art technology on exchange market. Currently, exchange markets of developing countries are at the liberalization stage, which offer ample opportunities for further reinforcement of national economies' roles in the process of integration in the world financial and exchange market. Under the conditions of developing market exchange of Kazakhstan there are specific features of exchange mutual interrelations and executing exchange transactions. It's also important to compare the gain experience of the exchange system of the RK with international practice and elaborate proposals for the republic's exchange system in general taking into account major changes on the global foreign-exchange market.

Currently only several Kazakh banks offer a unique opportunity to execute exchange transactions on the FOREX market. Owing to extension of resource base of Kazakh banks and in the context of high degree of exchange risks when executing exchange operations it's necessary to fix a "limit" for exchange operations or so-called capital adequacy ratio on the Kazakh exchange market. Given this, it's possible to apply successful practices of Bank of England. Not only experience of capital adequacy indicators use by Bank of England is of interest for Kazakhstan, but also exchange market regulation experience. For example, "London Code of Conduct" issued by British Bankers Association under the aegis of Bank of England along with Central Bank's instructions plays a significant part in exchange and other operations on exchange market. This code was created by Bank of England and BBA with acting on the market dealers, brokers and other players of exchange market.

The main participants of global capital market are private sector, state, and international financial institutions (World Bank, International Monetary Fund).

A great deal of transactions in Kazakhstan is made on exchange market. Participants, which make transactions on exchange market in Kazakhstan are National Bank, commercial banks, companies, brokers, and households. As for National Bank these are currency buy and sell, interventions. These are currency buy and sell for clients, deals for insurance against exchange risks for commercial banks. Companies carry out foreign trade transactions, and also can raise or provide a credit in foreign currency. Brokers act as mediators during exchange and interest rate transactions. Households buy and sell currency.

Data on banks residents' transactions volume from 2007 to 2013 are shown in Figure 6 (mln units of currency).

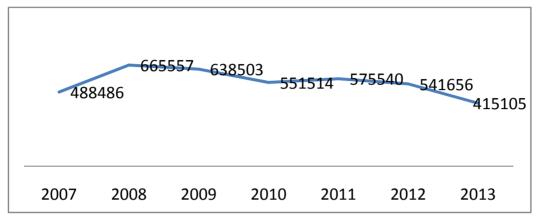


Figure 6. Banks residents' transactions volume

Source: Complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

From 2008 a large number of closed transactions are observed, subsequently decline is observed. Within the prescribed period apart from transactions made by banks residents, foreign exchange cash buy and sell were carried out in exchange offices.

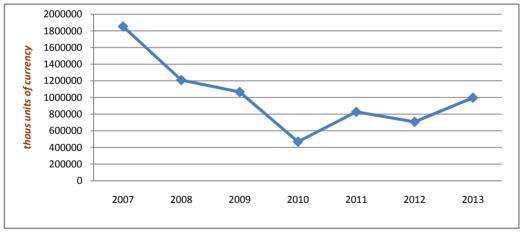


Figure 7. Exchange offices net-operations (foreign exchange cash), plotted according to

Source: complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

Exchange offices net-operations are shown in Figure 7, i.e. foreign exchange cash operations. The figure demonstrates reduction of this indicator value in 2010. The analysis of represented data shows intention to make transactions with foreign exchange cash in 2013. According to National Bank data the amount of transactions in roubles increases during this period. Imports and exports of foreign exchange cash by second-tier banks is possible factor of capital migration Kazakhstan (Figure 8).

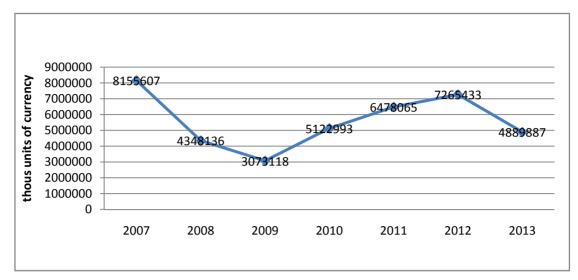


Figure 8. Imports and exports of foreign exchange cash by second-tier banks

Source: Complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

The graph demonstrates decrease in transactions amount from 2007 and increase from 2009. In the period of the global financial crisis of 2007-2008 decrease in foreign exchange cash imports reached 3073118 thous. units of currency.

Moreover, one of possible factors, which influences capital migration, can be volume of foreign exchange trades on Kazakhstan Stock Exchange. Data is shown in Figure 9.

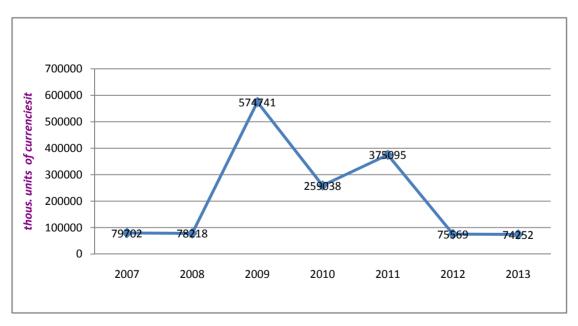


Figure 9. Volume of trades on KASE

Source: Complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

Volume of trades on KASE increased in 2009 and made up 574741 thous. units of currency in the period under study.

The next factor is interbank credits and deposits. Data regarding these factors are shown in Tables 3 and 4.

Table 3. Interbank credits provided in Kazakhstan

	Credits provided						
	in national currency		in USD		in EUR		
	Volume, mln tenge	Average weighted fee rate (%)	Volume, mln USD	Average weighted fee rate (%)	Volume, mln EUR	Average weighted fee rate (%)	
2007	208.7	6	634.8	4.75	24,5	3,74	
2008	610.1	7.08	33.5	5.99	0.5	13.52	
2009	1 426.20	4.5	883	8.5	-	-	
2010	266.8	5.38	0.8	8.02	-	-	
2011	142.1	5.32	1.6	5.75	-	-	
2012	7.1	7.51	0.7	7.64	0.3	4.07	
2013	441.1	8.39	15.6	0.81	80	8.5	

Source: Complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

Credits provided in national currency depend upon average weighted fee rate. Diminution in fee rate makes a credit more attractive for clients. For this reason maximum value of credits provided is observed in 2009. Credits were provided in 2009 in national currency and USD. During the period from 2009 to 2011 interbank credits were not provided in euro.

Table 4. Raised interbank deposits in Kazakstan

	Placed deposits						
	in national curre	ency	in USD		in EUR		
	Volume. mln tenge	Average weighted fee rate (%)	Volume, mln USD	Average weighted fee rate (%)	Volume, mln EUR	Average weighted fee rate (%)	
2007	209 143	6.94	24 119.10	4.59	5 205.30	3.82	
2008	415 314	6.81	22 552.80	0.53	9 240.00	2.2	
2009	1 706 400.8	0.64	210 292.70	0.18	14 462.40	0.27	
2010	1 444 757	0.58	17 606.40	0.28	1 115.10	0.46	
2011	523 655	0.57	31 828.10	0.84	395.1	2.46	
2012	122 100	1.23	9 643.10	0.13	26.5	2.83	
2013	166 232.1	1.9	10 817.50	0.08	42.3	0.21	

Source: Complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

Surge of raised interbank deposits is observed in 2009. Increase within the prescribed period is observed almost by all types of currencies, despite decrease in average weighted fee rate. This tendency is explained by the lack of other liquid investment vehicles on the market of Kazakhstan.

On-exchange average weighted exchange rate in the Republic of Kazakhstan is shown in Figure 10.

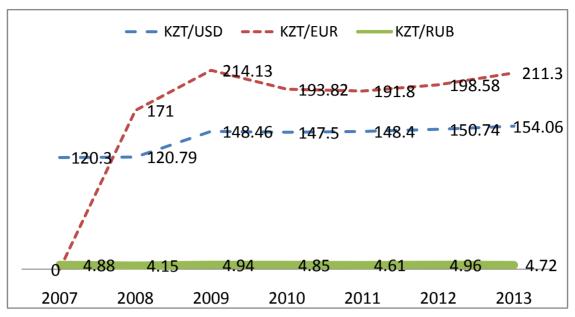


Figure 10. On-exchange average weighted exchange rate

Source: complied by the author according to reports of National Bank of the Republic of Kazakhstan as of 2007-2013.

On-exchange average weighted exchange rate was regulated by the National Bank of the Republic of Kazakhstan for a long time. Devaluation in February, 2014 fixed dollar rate at the average mark of 181 tenge. Similar leap took place in 2009 in relation to both USD and euro. It was the consequence of the global financial crisis of 2007-2008

## 4. Results

The analysis of each influence factor of exchange market and stock market on capital flow in Kazakhstan revealed the following factors, which demonstrated higher values of determination coefficient:

- 1) The amount of issued securities eligible for trades on KASE
- 2) The number of issuers of securities eligible for trades on KASE
- 3) Banks residents' transactions volume
- 4) Exchange offices net-operations (foreign exchange cash)
- 5) Imports and exports of foreign exchange cash by second-tier banks

Determination coefficient is 0.99 or 99%, that suggests interrelation of above-mentioned factors and capital flows in Kazakhstan. The model is the following:

$$Y = 50725-55,4x_1 + 60,5x_2 - 0,057x_3 - 0,0058x_4 + 0,017x_5$$
 (1)

In accordance with calculated model it's possible to draw the following conclusions:

The influence of issued securities amount on capital flows in Kazakhstan is negative, it means that increase in securities issue promotes capital exports from the country.

The influence of the number of issuers of securities eligible for trades on KASE is positive, i.e. the more issuers, the more capital import to Kazakhstan.

Banks residents' transactions volume has a negative effect, it suggests capital outflow when increasing transactions volume.

The factor of exchange offices net-operations is negative. It means the more operations with currency in cash, the greater capital outflow.

The influence of the last factor—reign exchange cash import/export by second-tier banks - is positive. When this factor (foreign exchange cash import) increases, more capital remains in the country.

## 5. Discussion

Private capital flows indicator in the period under study decreases, making up 2.7% of GDP. From 2009 this indicator has dropped from 11.4% to 2.7% of GDP.

According to the National Bank statistics in regard to capital net imports/exports in Kazakhstan from 2007 to 2013 reduction in capital flows took place. Significant capital outflow had been demonstrated over the period from 2007 to 2008, that made up 2384 mln dollars. In 2010 capital imports made up 1269 mln dollars. And in 2013 capital imports made up 8366 mln dollars.

Capitalization growth is observed on the stock exchange of Kazakhstan. From 2009 to 2012 this indicator made up from 5281345 mln tenge to 14941976 mln tenge. In 2013 it decreased to 13210901 mln tenge. In 2008 2605 securities were issued, 2319 of them are shares. Such amount of share issues in 2007 and 2008 is attributed to establishment of new joint-stock companies in Kazakhstan. Drop is observed in 2011 and 2012. In 2013 the amount of issued securities made up 533.

Maximum by the number of issuers is observed in 2008-2200, then it decreases to 109 in 2012. Issuers represent shares sectors, debt securities, investment funds' and international organizations' securities and public securities. Maximum KASE index was observed in 2008, it was 2640.15, maximum cost in USD in 2009 made up 4 095 078,91 USD. The amount of foreign exchange cash transactions in exchange offices decreased in 2010. The amount of transactions in roubles increases during this period.

Capital import/export by second-tier banks is also a factor of capital migration in Kazakhstan. The amount of capital import/export transactions by second-tier banks decreased in 2007, and has been increased since 2009. In the period of the global financial crisis of 2007-2008 decrease in foreign exchange cash imports reached 3073118 thous, units of currency. Volume of trades on KASE increased in 2009 and made up 574741 thous, units of currency in the period under study. Credits provided in national currency depend upon average weighted fee rate. Diminution in fee rate makes a credit more attractive for clients. For this reason maximum value of credits provided is observed in 2009. Credits provided in 2009 were in national currency and USD. During the period from 2009 to 2011 interbank credits were not provided in euro. Surge of raised interbank deposits is observed in 2009. Increase within the prescribed period is observed almost by all types of currencies, despite decrease in average weighted fee rate. This tendency is explained by the lack of other liquid investment vehicles on the market of Kazakhstan. On-exchange average weighted exchange rate was regulated by the National Bank of the Republic of Kazakhstan for a long time. Devaluation in February, 2014 fixed dollar rate at the average mark of 181 tenge. Similar leap took place in 2009 in relation to both USD and euro. It was the consequence of the global financial crisis of 2007-2008.

The study results determined the determination coefficient of 99% that confirms the hypothesis of stock market and market exchange market instruments influence on capital flows in Kazakhstan.

As the study has shown the following factors influence capital flow: the number of issues of securities eligible for trading in Kazakhstan Stock Exchange (KASE); the number of issuers of securities eligible for trading on the stock exchange; banks residents' transactions volume; net transactions by exchange offices (foreign exchange cash); foreign exchange cash import/export by second-tier banks.

The market of financial instruments differs from all others (goods market, money market, etc.) by the specific nature of traded product, and it defines aspects of its participants' status and rules of regulation, etc. Given this, the increase in state's significance on this market became the main tendency of financial instruments market regulation. The models diversity of financial instruments market regulation based on market maturity degree, characteristics of legislation, which in different countries differ widely by the level of rigidity, social and legal culture of society, organization of professional associations of financial instruments market's players able to undertake a good share of the work for regulation of activity on the market and many others. However, there are many problems in the development of financial instruments market. The absence of these key problems solutions on the part of the state makes further development of professional and liquid market of financial derivatives impossible.

Currently the National Bank of Kazakhstan pays greater attention to the process of national banking system consolidation. In this regard more detailed examination of capital adequacy ratios used in Great Britain seems appropriate, as well as exchange market regulation experience using Code of Conduct, which was used for the bank sector of Kazakhstan. On the other hand, it's necessary to bind gold and foreign currency reserves volumes to one of national measures and transfer foreign currency surplus from the external reserve of National Bank to federal budget for the purpose of public investments increase in economy. To solve these issues "Investment

Fund of Kazakstan" was established in 2003, which is a state institute of development and management company in the field of distressed assets restructuring and management. Strategic aim of the fund is enhancing growth in state funds and investments return, rehabilitation, and enhancement of activity of national institutes of development activity ("Bayterek" national management holding website, 2015).

#### 6. Conclusions

The findings confirm the necessity for analysis of the factors listed in the paper. Negative factors according to the model are issue of securities and volume of exchange transactions with banks residents. Particular attention should be turned on these factors regulation on the part of the state.

Practical relevance of this study involves the developed model, which allows analyzing and managing capital flows in Kazakhstan. Suggested influence factors can be used when developing financial sector strategic profile at macro level.

Research results may be used in further research activities, analytic and forecasting reviews of financial instruments development state in Kazakhstan.

The financial market of Kazakhstan requires new liquid financial instruments, which will be attractive for investing. In such a way derivatives of currency exchange transaction of Kazakh market can be marketable in years to come, and priority financial instruments are considered the following: forward foreign exchange outrights (FX outrights) traded on domestic market; FX (Curency) Options; non-deliverable forwards (NDS) for entities clients; currency dealing between forward dates—Forward/Forward swaps (spread); cross currency swaps.

It's also necessary to improve use efficiency of foreign exchange reserves of the country. Foreign exchange reserves of National Fund and reserves of the National Bank of Kazakhstan should be used for domestic economy financing and country's residents' international settlements lending, eliminating their return to economic turnover and subsequent influence on tenge rate.

Financial stability can be protected not only by means of new financial instruments, but also taxes or restrictions to trans-border capital flows. This method is used by Brazil, Thailand, and South Korea, which in 2009 imposed a tax on share and bond purchase by foreigners.

The study is carried out on exchange market and stock market of Kazakhstan. The research of segments and financial instruments of financial market, money market, loan market, deposit market, insurance market, pension market of Kazakhstan will be also relevant in this research trend. It is supposed that specified segments of financial market of Kazakhstan and their instruments can also exercise influence on capital outflow from Kazakhstan.

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## References

- Abalkin, L. (2000). Major changes in financial market structure and capital outflow from Russia. *Voprosy ekonomiki*, 2, 4-14.
- Anikin, A. (1999). Financial crisis and world economy. *Mirovaya ekonomika i mezhdunarodnye otnosheniya*, 4, 13-16.
- Annenkova, L. A. (2010). Enhancement of dealing operations investment strategy immunization financial mechanism in international exchange market (based on Forex exchange market materials) (synopsis of thesis of Ph.D. in Economics). Rostov-on-Don: Southern Federal University.
- Avdokushin, E. F. (2012). *International financial relations (finansomisc basics): Textbook* (p. 184). Dashkov & K.
- Bernstamm, B. E. (2013). Capital outflow under the conditions of globalization. *Gorizonty Ekonomiki*, 5(10), 44-46.
- Blomstrom, M. (1986). Foreign Investment and Productive Efficiency: The Case of Mexico. *Journal of International Economics*, 15, 97-110. http://dx.doi.org/10.2307/2098609

- Borishpolets, K., & Chernyavsky, S. (2012). Common economic space of Russia, Belarus, and Kazakhstan: reality and prospects. *Central Asia and Caucasus*, 15(1), 142-152.
- Bulatov, A. (1998). Capital exports from Russia: regulation issues. Voprosy ekonomiki, 3, 55-65.
- Calvo, G, Reinhart, C., & Leiderman, L. (1993). Capital Inflows to Latin America: The Role of External Factors. IMF Stuff Papers. http://dx.doi.org/10.2307/3867379
- Cardoso, E., & I. Goldfajn (1997). Capital Flows to Brazil: The Endogeneity of Capital Controls. *IMF Working Paper* (September, No. 115). http://dx.doi.org/10.5089/9781451942989.001
- Dooly, M. (1995). A survey of Academic Literature on Controls over International Capital Transactions. *IMF Working Paper* (No.127, No.161). http://dx.doi.org/10.5089/9781451935882.001
- Dornbusch, R. (1988). Mexico: Stabilization and Growth. In *Economic Policy* (Vol 2). Wash., World Bank. http://dx.doi.org/10.2307/1344488
- Golosov, V. V. (1977). Theories of capital exports (pp. 50-121). Moscow.
- Illarionov, A. (1999). Myths and lessons of August crisis. Voprosy ekonomiki, 10, 4-19.
- Iskakov, U. M., & Ruziyeva, E. A. (2014). Forming segments of the financial market at the present stage of Kazakhstan's economy development. *International Economic Journal*.
- Jonathan, D. O., Atish, R. G., Marcos C., & Mahvash S. Q. (2012). Tools for managing financial-stability risks from capital inflows. *Original Research Article Journal of International Economics*, 88(2), 407-421.
- Karelin, E. (2000). Management of international credit relations. Finansovy Business, 1, 20-28.
- Kazakhstan Stock Exchange website, KASE index. (2015). http://www.kase.kz/ru/index\_kase
- Kulmann, A. (1993). Economic mechanisms (p. 192). Moscow: Progress Publishing Group JSC, Univers.
- Kurmanalieva, E. S., & Vinokurov, E. Y. (2011). International capital flows in CIS countries ANCO. *Journal of the New Economic Association*, 149, 192.
- Law of the Republic of Kazakhstan. (2014). As of 2 July, 2003 461-II on securities market (amended and revised as of 10.06.2014).
- Lomtatidze, O. V., Lvova, M. I., & Bolotin, A. V. (2010). Securities market basics (p. 448). Moscow: KNORUS.
- Myers, R. J., Swinton, S. M., & Walker, R. T. (2012). Exchange rates soybean supply response, and deforestation in South America. *Global Environmental Change*, 22(2), 454-462. http://dx.doi.org/10.1016/j.gloenvcha.2012.01.004
- Odongo, K. & Kalu, O. (2013). Real exchange rates, trade balance and capital flows in Africa. *Journal of Economics and Business*, 66, 22-46. http://dx.doi.org/10.1016/j.jeconbus.2012.12.002
- Ozan, S., & Thomas, D. W. (2009). The reversibility of different types of capital flows to emerging markets. *Emerging Markets Review*, 10(4), 296-310. http://dx.doi.org/10.1016/j.ememar.2009.08.001
- Peter, D. R., Khuhawar, K. H., & Zeng, J. Q. (2013). Common currency for Asia "now or never". *Economic Modeling*, 35, 170-174. http://dx.doi.org/10.1016/j.econmod.2013.06.045
- Popov, V. (1997). Lessons of foreign-exchange and stock crisis in countries of South-East Asia. *Voprosy ekonomiki*, 12, 96-100.
- Rasha, Al-Sakka., Owain, ap Gwilym. (2010). Split sovereign ratings and rating migrations in emerging economies. *Emerging Markets Review*, 11(2), 79-97. http://dx.doi.org/10.1016/j.ememar.2009.11.005
- Sachs, J., Tornell, A. & Velasco, A. (1996). Financial crises in emerging markets: The lessons from 1995. *Working Paper Series*, 5576. NBER. http://dx.doi.org/10.2307/2534648
- Selischev, A. S., & Mohovikova, G. A. (2013). Paper market: Textbook for bachelors (p. 431). Moscow: Yurayt.
- Smith, A. (2007). An Inquiry into the Nature and Causes of the Wealth of Nations (p. 226). Moscow: EKSMO.
- Smyslov, D. (1997). Where world currency system goes? *Mirovaya ekonomika i mezhdunarodnye otnosheniya*, 7, 13-17.
- Sophie, B., & Delphine, L. (2010). Determinants of capital inflows into Asia: The relevance of contagion effects as push factors. *Emerging Market Review*, 11(3), 273-284. http://dx.doi.org/10.1016/j.ememar.2010.03.003
- Suvarevich, A. V. (2000). Specifics of capital markets development. Finansy i credit, 7, 70-75.

- The National Bank of Kazakhstan. *Statistical bulletin*. Retrieved from http://www.nationalbank.kz/?docid=310&switch=russian
- Vasilyeva, T., & Vasilev, L. (2013). Lectures summary. In *World economy* (p. 156). Moscow: FLINT, Moscow psychological and social institute.
- World Bank. (2014). http://www.tradingeconomics.com/kazakhstan/private-capital-flows-total-percent-of-gdp-wb-data.html

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