

Money laundering and financial market performance in Russia

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Abstract— Financial market efficiency can serve as an indicator of investment attractiveness of the country. We expected that the performance of capital flight will depend on the dynamics of the securities market, as part of the financial market and it must explain the problem of withdrawal of capital from developing countries to more efficient markets of developed countries. We examined the dependence of GDP, foreign direct investment, dynamics of the index RTSI, and the Net capital exports by the private sector. Our research has shown that the criterion of the effectiveness of regional financial market is not decisive for Russian foreign direct investment abroad. Until 2009, Russia shadow income laundered through the securities market intermediaries and brokers found themselves in the derivation of assets outside the Russian jurisdiction. In recent years, capital outflow occurs through trade deals and transactions. This suggests that in modern Russia capital flight from the country does not depend on the efficiency of financial markets and investment attractiveness of the country.

Index Terms— Financial market efficiency, investment attractiveness, foreign direct investment, Gross Domestic Product, money laundering.

1 INTRODUCTION

IN the world economy system there is a deficiency of capital, which creates fierce competition for investment resources.

Total investment attractiveness of the country for foreign direct investment is determined by several variables: tax rates, governance, corruption [1]. In the context of the integration of the Russian economy in the global financial markets, the formation of an attractive investment climate today is one of the priorities of the economic policy of the country. Researchers have shown that high levels of corruption indicators, inadequate public policy initiatives in anti-money laundering, negatively affect the investment climate of the country, the FDI ratio to GDP, and financial development [2].

The problem capital outflow from the country's typical for Russia's economy in recent decades. The problem of illicit capital flows raises serious concerns about the economic and political stability of the country [3]. In this case a small fraction of the shadow sector of individual countries can be a source of problems in the scale of the world economy since the slightest change in capital flows in the global economy can easily lead to a collapse of the financial systems of individual national economies [4].

Studying the causes of capital flight is essential for a full understanding of the economic system of Russia. Today in Russia along with the problems of poor investment climate, weak financial market and a substantial outflow of capital, there was a problem depreciation of the national currency. These issues are inextricably linked, but may also be due to a significant outflow of capital from crime. In their study, D.K. Bhattacharyya, [5] noted, the relationship between the currency demand and the "hidden economy". The results of

his research fully reflect the situation on the Russian interbank market today.

Some researchers have noted that in countries with a high level of shadow economy and substantial illicit money flows, there are professional laundering occurs in illicit markets [6]. In Russia, the main outflow of illicit capital by professional communities through institutions of foreign trade, which use imperfect system of exchange control and regulation.

2 LITERATURE BACKGROUND

The identification of the money laundering problem was only made possible in the 1970s, alongside with the development of information technologies, which enable data structuring and the statistical analysis of crimes. Presently, the Walker Model is the leading model of quantitative assessment of money laundering around the world. According to the Walker Model, money tends to flow to "Tax havens, "No questions asked banks", and countries with stable economies and low risk" [7]. National and international efforts are focused on the protection of the global financial system against money laundering, terrorist financing and the financing of weapons of mass destruction [8]. When assessing money laundering risks, countries should analyze and seek to understand how such risks affect them.

Capital outflow is a serious problem for developing countries [9], which presents equal danger to either the country losing money or the country receiving it. The danger itself lies within the fact that, at a certain moment, the country that loses money also loses the ability for further development, while its economy loses the ability for stable functioning, because the country no longer has internal sources for growth. The state, which receives the capital, is also at risk, since the influx of illegal capital is an unreliable source and can therefore undermine the economic state of the country at any given moment. It can either run low (if the cash flows change the direction and go to a different country) or flood the economy of the receiving country with "dirty money", which might create a

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3 METHODS

We used data the Central Bank of the Russian Federation Indicator "Outward Foreign Direct Investments by Russian Residents (Balance of Payments Data, outflows minus inflows) in millions of US dollars" to estimate capital flight (see Table 1). These "Net inflows / outflows of capital by private sector" also obtained from the official website the Central Bank of the Russian Federation. Sing "-" denotes an outflow of capital, sing "+" implies an inflow. These "Net inflows / out flows of capital by private sector" are not used in the calculations, but are given for general information to characterize the overall findings. We used the market value of the index RTSI on Moscow Exchange to analyze the dynamics of the securities market. RTSI is a composite index in US dollars is calculated from September 1, 1995, the base value to 100.00 points. For ease of calculation the value index RTSI the end of 1994 is taken as 100. At the end of 1995 - 83 points, at the date of December 28, 1995.

TABLE 1
REGRESSION ANALYSIS DATA

Data	Financial Outflows, in millions of U.S. dollars	GDP (constant 2005), in millions of U.S. dollars	Dynamics of the index RTSI	Net inflows/outflows of capital by private sector, in billions of U.S. dollars
1994	281	546 325	100	-14,4
1995	606	523 688	83	-3,9
1996	923	504 835	201	-23,8
1997	3 184	511 903	397	-18,2
1998	1 270	484 772	59	-21,7
1999	2 208	515 797	175	-20,8
2000	3 177	567 377	143	-24,8
2001	2 533	596 268	260	-15
2002	3 533	624 553	359	-8,1
2003	9 727	670 119	567	-1,9
2004	13 782	718 207	614	-8,9
2005	17 880	764 001	1 126	-0,3
2006	29 993	826 293	1 922	43,7
2007	44 801	896 818	2 291	87,8
2008	55 663	943 883	632	-133,6
2009	43 281	870 057	1 445	-57,5
2010	52 616	909 242	1 770	-30,8
2011	66 851	948 013	1 382	-81,4
2012	48 822	980 583	1 527	-54
2013	86 712	993 514	1 443	-61

Until 2009 the Russian shadow income laundered through the securities market and brokers turned out to be in the derivation of assets outside the Russian jurisdiction. The most popular scheme of money laundering in the securities market at the time was the scheme to the acquisition of securities by a resident and transfer these securities to non-residents and the further withdrawal of money from their sale to foreign banks. In recent years, capital outflow occurs through trade transactions and transactions (Institute for Foreign Trade). Money laundering occurs through the banking sector as the government imposed currency control agent on the banks and some banks deliberately evade its diligent performance. The Central Bank

of the Russian Federation continues to struggle with Money laundering in the banking sector. Figure 1 shows the dynamics of the elimination of the commercial banks and the withdrawal of licenses from them The Central Bank of the Russian Federation in period from 1991 to 2014.

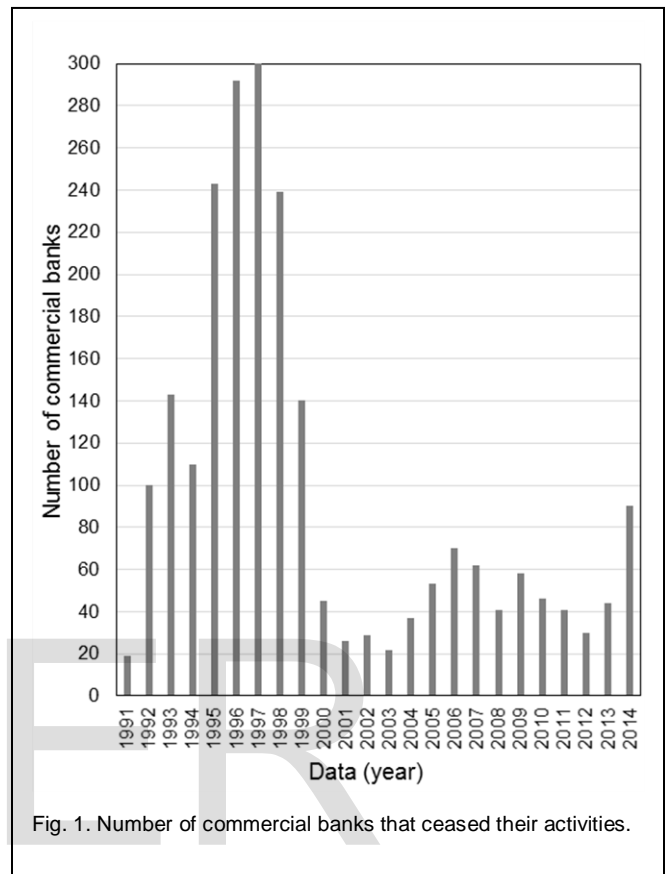


Fig. 1. Number of commercial banks that ceased their activities.

Since the beginning of 2013 access to trading on the FX Market Moscow Exchange received professional participants of the securities market. And the Russian economy is faced with the problem of using the services of foreign exchange brokers in order to legalize and withdrawal of capital from the country. This scheme is one of the schemes of the legalization of income using the securities industry in accordance with the FATF typology report 2009. Using the services of the foreign exchange broker in the chain of money laundering scheme allows complicate money laundering and reduce the costs of currency conversion. Regardless of the scheme legalization of capital occurs through the foreign exchange market. Therefore, the dynamics of the financial market and the index dual-currency basket of some interest for research money laundering and financial market performance in Russia. In our study, we were not looking for a relationship between Financial Outflows and the dynamics of the national currency. Can not use the index dual-currency basket to match the dynamics of Financial Outflows, since the Central Bank of the Russian Federation during the period under review a policy of supporting the national currency with the tool of currency interventions at the boundaries of the corridor dual currency (operation and). However this technique seems promising for future research as to November 10, 2014 the Central Bank of the Russian Federation canceled regular interventions on and outside the borders of

operation band. In our study, we used the presented data in Table 1, since only these official data may be used for the analysis of capital outflow and indirect estimation of the level of money laundering in the country.

4 RESULTS

An analysis of the correlation helps to discover the trend and level of interrelatedness between two variables. In the study, we assumed that the rate of outflow of capital from the country must depend on the dynamics of the securities market as part of the financial market and it should explain the problem of withdrawal of capital from developing countries to more efficient markets of developed countries. The hypothesis can be stated as follows: "If the economy, growth in the presence of prospective investment targets -Financial Outflows should be reduced." To evaluate this hypothesis based on the three series of comparable data: Financial Outflows, GDP and index RTSI, we did a regression analysis. The regression results are presented in Table 2. The relationship between the X and Y-variables is portrayed as points on the coordinate plane (X, Y) and form an empirical linear regression Y of X.

Table 2 shows that the Financial Out flows is highly correlated with the dynamics of GDP, high R-squared - 0,878. The dependence of the dynamics index RTSI and GDP has a smaller

TABLE 2
 STATISTICS OF REGRESSION

Independent variable (X)	Dependent variable (Y)	R-squared
GDP	Financial Outflows	0,878429
index RTSI	Financial Outflows	0,564781
GDP	index RTSI	0,705338

R-squared - 0,705. Dependence Financial Out flows from index RTSI has a relatively small R-squared - 0,56. The data in Table 2 suggest that the Financial Out flows depends largely on GDP and the dynamics of the securities market are irrelevant. Our research is based on the principles of The Walker Model and "illicit financial flows" by Raymond W. Baker. We conducted the analysis of the processes taking place in Russia, in a country that loses money. The current economic situation in Russia proves the statement that capital outflow is one of the major factors influencing a country's development. It is vitally important to outline the fundamental parameters that direct capital outflow / inflow for both Russia, which is losing its capital, and for the countries receiving it. Our research showed that the quality of a financial market is not the key parameter in defining the direction of capital outflow / inflow. However, based on the results of the research, we can make the following conclusions:

1. Our research is based upon the works of Raymond W. Baker and it serves as proof to the fact that illicit financial flows gradually weaken the economy, as if it were bleeding money. The continual outflow of capital from Russia weakens its banking system and destroys its financial market, and even the attempts of the government to improve the current investment climate cannot stop the money from flowing out of

the country.

2. The problem of uncontrolled capital, illicit capital including, is not only the problem of the country that loses it. It will also be a problem of the world economic stability and security. In particular, as the research shows, cash flows in Russia, illicit cash outflow included, are not always directed to quality markets, and can therefore have a subversive effect on the receiving country and its economy. Only quality financial markets can accept and redirect any cash flows; for weak economies such practices can be disastrous [10], [11]. Recent papers published on this issue have covered the problems of the countries receiving illicit cash flows, e.g. growing corruption levels of tax havens in the global financial markets [12].

3. Our research is based upon the principles of The Walker Model. The results of the research show that the statement of The Walker Model, which says that "laundering money seeks countries with stable economies and low risk", is not workable for Russia as a country losing money. This can be explained by the fact that money still continues to flow out of the country even during 'capital amnesty', when the domestic investment climate is being improved.

5 DISCUSSION

Data analysis indirectly refute the hypothesis of "capital flight from developing countries to more efficient markets" as we in their study did not confirm this hypothesis. Capital flight from Russia is a permanent state of the economy, regardless of the effectiveness of the internal market. Volumes Financial Out flows directly depend on the GDP. In periods of economic growth and financial stability, in terms of investment attractiveness of the financial market, the dynamics of Financial Outflows correspond to the growth dynamics of the financial market (index RTSI). Index RTSI grew up in periods of rising GDP, and Financial Outflows not reduced. This fact testifies to the serious structural problems in the economy, as in the presence of attractive investment, capital as legal and illegal continues to run away from Russia, to the detriment of economic and political stability [13]. But our study may be modified by a more detailed analysis of the factors affecting the dynamics of the Financial Out flows. Also, since Russia is a developing country with a large share of primary commodities in exports unambiguously interpret the results as Net Financial Out flows impossible. Future research should study in detail the structure of the Financial Out flows and typologies of money laundering in Russia to get more accurate results.

6 CONCLUSION

We investigated the dynamics of Outward Foreign Direct Investments by Russian Residents, GDP, Index RTSI for understanding the problem of capital flight from developing countries to more efficient markets of developed countries. We expected that the performance of capital outflow will depend on the dynamics of the stock market as part of the financial market. Analysis showed that the capital outflow from Russia is not dependent on the nature of the investment climate, because even in the presence of attractive investment and growth of the financial market - the outflow continues. This

phenomenon requires more detailed study and find the true causes of such events.

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