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FINANCIAL DEPTH OF THE BRIC

### FINANCIAL DEPTH OF THE BRIC: THE RUSSIAN DIMENSION

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### FINANCIAL DEPTH OF THE BRIC: THE RUSSIAN DIMENSION

### Abstract

The purpose of the article is to assess the financial depth of the Russian economy in the BRIC context. Russian financial market is evaluated by a set of key indicators that characterize the level of maturity of the national financial system in respect to international standards. This task is implemented through descriptive analysis of extensive international data generated from a time series covering the period of 1995-2010. The paper demonstrates that in comparison to other BRIC countries, the financial depth of the Russian economy may be characterised as inadequate. In the Russian financial market potential for growth is combined with exceptionally high risks. Insufficient depth undermines its long-term competitiveness and exacerbates its exposure to shocks in the international market.

Keywords: Russia, Emerging Market Economies, Financial Depth, Financial Market, BRIC.

# Introduction

This paper has as its central theme the assessment of the financial depth (otherwise known as completeness of the domestic financial markets) of Russia in relation to other BRIC countries. This is motivated by two considerations. First, whilst interest in emerging markets led by the BRIC countries has been growing fast (see Kearney, 2012 for comprehensive review), there is still a question mark over the actual degree of similarity of conditions in this group of countries. Comparative analysis of their financial markets is one area that has not received adequate coverage. As noted by Dorrucci *et al.* (2009), there have been no major attempts to quantify parameters of financial development in emerging markets. Christian and Pagoulato (2007) agree, pointing at the need of further research to identify the determinants of domestic financial development in emerging market economies. This paper will seek to

shed light on the issue of homogeneity of BRIC as far as their financial systems are concerned. Second, the comparative approach has been chosen because meaningful representation of the financial depth is only possible when the parameters of one system are projected on characteristics present in other economies.

The investigation of financial depth in Russia and other BRIC countries is topical because, even though these countries are not a prevailing factor of the global financial market as yet, they are a growing force within the global financial system. Their unsettled financial markets may either present an inherent instability threats for the global financial markets, or, instead, act as safety valve for the global financial flows, reducing the volatility of the global financial system. In this respect, the analysis of the relative financial depth of the BRIC countries is significant because it helps to better understand the causes of the fragility of the global financial sector and consequently to mitigate their impact (Beck, *et al.* 2010).

Russia will be compared both to BRIC countries and to some leading world economies in order to evaluate the readiness of the Russian financial market to support economic growth in the country in the near future. By looking at the example of economies acknowledged as international powerhouses one may attempt to deduce the characteristics of the financial market that have beneficial effect on economic growth and competitiveness at various stages of national economic development, as well as to establish which characteristic corresponds to any particular stage. For this reason comparative assessment of the financial markets of Russia in the context of BRIC does not only have interest for academics specializing on emerging markets, but also for politicians and practitioners who can make a meaningful judgment on the performance and risk factors related to the emerging markets in question.

Financial markets will be evaluated with the help of a set of key parameters that characterize the level of maturity of the national financial system in respect to international standards, its stability and level of associated risks and the ability of the financial system to perform its functions without producing deformities.

This task will be implemented though descriptive analysis of extensive international data generated from a time series covering the period from 1995, when the Russian financial market established itself, up to 2010. The study draws on the statistics and official forecasts of global economic trends and the economic performance of individual countries prepared by IMF, ECB, OECD, the World Bank, the Bank for International Settlements, the International Energy Agency; by industry associations, renowned research centres and consultancies. We also employ the statistics and forecasts published by Russian ministries and state departments, monetary authorities and national research centres.

### Financial depth

The paper is based on the premise that the financial sector is a critical element of the modern market economy responsible for improving the economy's ability to manage risk and allocate capital, and in doing so, to increase overall efficiency of business<sup>1</sup>. Literature indicates (Levine, 1997; Stiglitz, *et al.*, 2010) that in a long term an efficient financial sector translates

<sup>&</sup>lt;sup>1</sup> For a critical survey and evaluation of the literature on finance and growth, see Wachtel, 2003.

into the increased outputs of the economic performance, as better management of risk enables the economy to take greater chances while obtaining a higher return on operations. In addition, greater financial depth translates into a sustainable growth model as the financial market works as a mechanism for driving capital to its most efficient use (Bonin & Wachtel, 2003; Rousseau & Wachtel, 2005). At the same time, poorly performing financial market may cause serious problems for economic growth and national competitiveness (Levine & Zervos, 1998; Levine, *et al.*, 2000; Miller, 1998). It follows, therefore, that without the assessment of the state of the BRIC's financial markets the full picture of the developmental capacity of their economies may not be complete. In turn, such assessment cannot be implemented without recourse to international comparisons. There are no absolute measures that may be used to determine the maturity of a financial system in isolation. Only international comparisons allow to identify relations between different measures and characteristics of the financial market and positive macroeconomic developments.

In a nutshell financial depth may be defined as the ability of the financial system to supply funds to the government and the private sector (Caballero & Krishnamurth, 2004). Sufficient financial depth signifies that the economy enjoys an ample provision of money, securities, financial instruments and institutions and is endowed with more advantageous conditions for long-term economic growth and modernisation. Determining financial depth would require the assessment of the permeation of the economy with financial tools and relations. Financial depth reflects the compatibility between the volumes of production and the size and structure of the financial sector in terms of savings, investments, and redistributive mechanisms. Financial depth also reveals the level of development of financial markets in terms of the efficiency of financial intermediation (Honohan, 2004). The greater the financial depth, the

5

more significant is the ability of the financial sector to reallocate financial resources in support of economic development (Klein & Olive, 2008). There is hardly any discord in the literature regarding the necessity of the economy to develop certain financial depth in order to function smoothly. This does not mean though that the same depth suits all. Literature predicts that financial markets in the emerging economies may pursue developmental trajectories that defy the conventions (Andersen *et al.*, 2012; King & Levine, 1993; Mirkin, 2011a). To Stiglitz *et al.* (2010), however, the disproportionality of the financial markets is always worrisome, suggesting that they fail to fully provide the services required by the economy.

Commonly used comparative measurements of financial depth employ a variety of financial indicators such as the structure of the money supply, stock market capitalisation, private and public bond market capitalisation, etc.; also widely used are indices that represent certain parameters, for example, capitalisation or money stock, as a proportion of GDP (Khan & Senhadji, 2000). In this study as the first step we examine a range of key financial indicators of the Russian market to determine its position in relation to other BRIC markets as well as some leading international markets. This will allow us to reach certain conclusions about the state of the market, the degree of its maturity and, eventually, the prospects of its integration into the international financial environment.

It is appropriate at this point to provide some background information on the development of the Russian financial system during the period of post-communist transition. Under central planning the economy consisted of two major segments: the consumer market that was monetised and the producer goods market that can be regarded as what Yi (1991) calls semimonetized because, although producer goods had prices, these prices and the allocation of goods were regulated by the plan outside the market. The instantaneous liberalisation of prices in January 1992 sent shock waves throughout the economy as demand for liquid assets and financial intermediations had shot up overnight. Removal of the Soviet-era price control made apparent the monetary overhang inherited from the Soviet period and caused hyperinflation exacerbated by excessive money emission. This resulted in the near bankruptcy of much of Russian industry and forced the government to restrict new emission drastically. During the 1990s the developments in the financial system were reflecting the progress (or lack of it) of the general market reforms and institutional building in Russia and their economic consequences, including budget deficit, high interest rate, rampant inflation, artificial and fixed exchange rate, dependence on the exports of raw materials, etc.

During the second half of the 1990s, the Russian capital market acquired the features of an emerging market similar to the financial markets of some newly industrialized and developing countries in Latin America and South-East Asia (Claessens, *et al.*, 2000). Its emerging status was reflected in such characteristics as a relatively limited range of instruments, low liquidity and operational volumes, dependence on international investors, high volatility (for more details see Kuznetsova, *et al.*, 2011). During this period profound dependence upon the short-term and long-term fluctuations of the global economy and the poor state of the national economy were making the Russian financial market highly unstable and susceptible to manipulation and speculative attacks. The greatest turmoil followed the default of the Russian state on its short-term bonds in August 1998. The immediate consequences were dire, which was not surprising considering that government bonds were

7

FINANCIAL DEPTH OF THE BRIC

responsible for 85% of the market's turnover. The capital market was almost destroyed as up to 50% of traders stopped operating and the state had revoked nearly 90% of professional licenses. The corporate market was affected as well. Three leading industrial holdings – Sidanko Oil, Svyazinvest Telecommunications and Norilsk Nickel – saw their market capitalisation collapsing from the peak of about \$31 billion in October 1997 to \$3.8 billion a year later (Fox & Heller, 1999). In the end, however, the market has emerged from this calamity as a stronger entity. The 'natural selection' diminished the number of players from 447 in October 1998 to 106 in December 2001, as only the largest and the strongest were able to stay in the market.

Russia's recovery from the August 1998 financial crash was surprisingly quick. The main reason for this speedy revival and fast and steady growth until the financial crisis of 2008 was the rapid growth of world oil prices, allowing Russia to run a large trade surplus and increase investments into the economy. Between 1998 and 2006 the Russian Trading System Index (RTSI), which has been widely accepted as the official benchmark and indicator of the dynamics of the trading in the Russian stock market, grew about 40 times, with the turnover increasing 55 times. One of the principal outcomes of the development of the Russian financial sector during the last decade was that the capital market has grown to become the largest amongst Russia's main competitors – the countries from Central and Eastern Europe and Central Asia. Currently it generates 65–75% of the regional turnover of securities. At the same time, the market remains highly volatile, with great proclivity for speculative activities; it depends heavily upon the operations of non-residents and characterises by a large-scale state participation and influence. The market is not attractive for small residential investors: less than two per cent of the population hold shares or mortgages (Rutland 2008); as a result

the largest domestic companies are financed from abroad and are served predominantly by the Western investment banks.

### **Assessing Financial Depth**

The aspects of financial depth that we are assessing are monetisation, market capitalisation, banking activity and the state of financial services.

### Monetisation of the economy

Although publications on monetary issues in the BRIC countries often refer to monetisation, the term remains somewhat vague because it has a variety of applications. In this paper we follow the tradition set by development economics that defines monetisation as the enlargement of the sphere of monetary economy (Chandavarkar, 1977). A link between economic growth, the financial market and monetisation is well established in the literature (Berthelemy & Varoudakis, 1996): expansion of money in the economy increases the mobility of resources by enabling the transfer of funds from one sector to another, stimulates demand, diminishes the cost of transactions and improves access to capital. Monetisation is among the most important characteristics of economic development, but is very difficult to measure. In theory, monetisation should describe the volume of transactions involving monetary instruments in the economy. However, because of the complexity of modern economies and shortage of data, it is not always possible to determine this volume (Yi, 1991), making it necessary to turn to proxies. One widely used indirect measure of monetisation is the proportion of liquidity, composed of currency in circulation and demand deposits plus time deposits in domestic currency, plus deposits denominated by foreign currencies, to GDP. It is easy to calculate and is widely available, making it useful for cross-national comparisons. However, it is far from being ideal. On its own, monetary growth is not necessarily a reliable indicator of a greater financial depth. For example, Yi (1991) has found that growth of money supply may be seen as a sign of increasing monetisation only if it does not result in inflation. However, because of our focus on comparative financial depth, in this paper we do not look at the dynamics of monetisation, but consider its level.

The levels of monetisation in BRIC and other countries are presented in Table 1<sup>2</sup>. In developed economies monetisation, as a rule, is higher than 60% of GDP; three-quarters of the developed countries have monetisation level above 80% of GDP. Monetisation in Russia reached its maximum rate in 2009 when it stood at 49.5%. At the time, this figure was sill nearly five times lower than in Japan, three times smaller than in China and Canada, and almost two times less than in the United States. The spread among the BRIC countries is wide: while China features among a small group of countries with the highest level of monetisation and Brazil and India are in the middle bracket, Russia is positioned among the countries with a low monetisation level. This is a noteworthy anomaly: the data suggest that the degree of monetisation we observe in Russia is typical of countries that in terms of economic development and per capita income are generally far below Russia.

### Table 1 about here

The contrast between monetisation and other economic parameters in Russia has historical roots. The "shock therapy" that was applied to the Soviet economy during the initial period of reforms had found businesses completely unprepared and provoked major disruptions of links

<sup>&</sup>lt;sup>2</sup> There is no established convention for the designation of "developed" and "developing" countries. According to common practice, we include in the first group Japan in Asia, Canada and the United States in northern America, Australia and New Zealand in Oceania, Denmark, Sweden, Switzerland, the UK and the eurozone countries, except Estonia, Slovakia and Slovenia, in Europe.

between supplies and buyers as well as rampant inflation. This caused a crisis of liquidity that forced firms to introduce barter transactions on a great scale: by 1998 they represented up to 51% of all turnover (Kuznetsova, et al., 2011). Further reasons indicated by Russian experts include lack of confidence in economic policy, poor investment climate, uncertain prospects of economic growth, insufficient propensity to save (Gavrilenkov, 2004). In addition, it is essential to convince wealthy Russians to keep money in the Russian financial system, rather than offshore. This is not an easy task: the 1998 default and the expropriation of bank deposits that followed has done little to increase general trust in the legal tender in the country and exerted a depressing effect on all financial activities. What really matters longterm, however, is that the decade of a relatively stable and successful development that was only interrupted by the 2008 crisis did little in terms of speeding up the monetisation of the economy. It expanded, from 16-20% of the GDP in mid 1990s to 22% or slightly less than \$80 billion in 2002 (Kuznetsova, et al., 2011), at a pace that was far inferior to the growth in economy, which surged by 40% over the same period. This situation may be seen as a serious competitive weakness of the Russian financial market in comparison to other BRIC countries that now outperform Russia in this category (Table 2).

### Table 2 about here

Low monetisation is fraught with problems. Thus, it forces the government to adhere to tight fiscal policy because of fear that even a small emission would immediately accelerate inflation. Low monetisation makes the country vulnerable to the movement of speculative capital. Inflows or outflows even of a few billion dollars may destabilise the cash-strapped Russian financial system. Low monetisation also undermines the resource base of the financial sector and may inhibit growth perspectives because of over-reliance on short-term investments of financial non-residents, inflated price of money in the economy, the low capitalisation of the resident banks. All these limit the consumer spending and create inducement for capital flight.

A by-product of low monetisation has been the spontaneous dollarization of the Russian economy that shows the share of funds held by households and companies in foreign exchange. This was an attempt on the part of residents and businesses to hedge high risks of political and economic uncertainty by using hard currency, initially US dollars and later increasingly the euro, in formal and informal transaction. In the dollarization league table, comprised by the Moscow International Institute of Econometrics using the methodology of the U.S. National Bureau of Economic Research, Russia is positioned immediately after Latin American countries that lead the table and far ahead of China (Izvestia, 15.04.2005). It is believed that during the first two decades of transition Russia's population has become the world's largest holder of dollars outside the USA. According to the US Treasury, in early 2000 Russia had accumulated more than 40% of all exported US dollars and more than 10% of the total mass of the dollars in the world-wide circulation including the USA (US Treasury, 2000). Unofficial dollarization destabilizes money supply and limits the effectiveness of monetary policies and exchange rate interventions. Equally consequential is that foreign cash transactions reduce the costs of tax evasion and facilitate participation in the "grey" economy. By obscuring financial transactions, currency substitution reduces the cost of enterprise theft and facilitates corruption and rent seeking (Feige & Dean, 2002), the two "vices" that are widely spread in Russia.

FINANCIAL DEPTH OF THE BRIC

Another striking feature of the money supply in Russia is the existence of vast official foreign currency reserves. They stand close to 40% of the GDP and appear excessive in comparison to most other countries. According to our calculations, in 2007, 83-85% of the developing countries maintained the level of international reserves to GDP at less than 30%. The developed countries kept it even lower, on average between 3 and 5%. If we focus on BRIC alone, however, Russia stops looking like an exception. Brazil and India closely follow Russia by value of reserves; however, China is in the lead with the largest foreign exchange reserves in the world. The literature claims that the general objective of this accumulation has been to resist or delay currency appreciation (Mohanti & Turner, 2006). From the point of view of financial depth, the existence of disproportionate reserves may evidence that the local financial systems have difficulty in properly channelling domestic savings to investment either because of a savings "glut" as in China or of an investment "drought" (e.g. Russia) (ECB, 2006).

Finally, an important characteristic of monetisation is the structure of money supply. A longestablished trend has been a decrease in the proportion of cash in circulation. Worldwide the indicator "currency in circulation in the monetary base," that averaged 40% in 1980, fell to 30% in 2007 (Beck & Demirgüc-Kunt, 2009). In the overwhelming majority of developed economies the cash component tends to be under 8% (Table 3). In one third of them this figure is less than 4%. Meanwhile, in three-quarters of developing countries banknotes exceed 10% of the nominal money stock, and in approximately a third of them their share is greater than 20%.

# Table 3 about here

In Russia the share of cash in money stock (broad money) reached 23.7% in 2010. This places Russia firmly in the group of lesser developed countries and sizably below the rest of the BRIC group. By contrast, China and Brazil are in the same group as the United States and Switzerland. On a positive side, according to some expert estimates (Vedev, 2010), the share of cash in money supply in Russia has been steadily declining and is expected to approach 15-17% in 2020. Even then, it will be elevated by the standards prevailing in developed economies. In this context, a high proportion of cash in circulation in Russia sends a strong signal that, *ceteris paribus*, one deals with a lesser developed financial sector and an economy in which the informal segment plays a greater role. Accordingly, such structure of money supply is often associated in literature with high political risk, flaccid social relations, lack of trust in financial institutions, high systemic risk, and general economic frailty (Mirkin, 2011c; Petryk, 1998).

### Market capitalisation

There is a direct link between monetisation of economy and the development of securities market and the amount of resources redistributed through it (Table 4). Increase in monetisation encourages a steady trend towards diversification of the financial market, an increase of its size and liquidity, ensures risk reduction and the emergence of new segments and innovative financial products. For countries like Russia, in which the population has no established tradition of owning financial assets and trading in them, greater monetisation creates a platform for the massification of the securities market. In 2009, nearly two decades after the launch of mass privatisation, the percentage of the Russian population owning shares, at 0.14%, was one of the lowest in the world. To compare, in Brazil this share was

1.62%, in India – 2.0% and in China – 5.9%, which was still a long distance away from the most developed economies where it varied between 12.5% in Germany and 30.75% in Japan (Grout, *et al.* 2009).

### Table 4 about here

The size of the securities market (the share price times the number of shares outstanding) as reflected in market value is known as capitalisation. Capitalisation is an important parameter of the financial depth (Bonin & Wachtel, 2003); however, considering its value alone is not enough to characterize a market as advanced and efficient or otherwise. In fact, the size of stock markets varies considerably even in countries with quite similar economic structure, performance and per capita GDP, reflecting different historical paths that their financial systems have followed: some of them are "bank-oriented", others are "securities-oriented". For example, within the pre-enlargement EU Austria had the smallest stock market in relative terms with a capitalisation of 17% of GDP and Finland had the largest one with a capitalisation of 286% (Blum, 2002). Besides, the volume of capitalisation may change very quickly. With capitalisation of €1.02 billion, at the beginning of 2008 the Russian financial market was ahead of all Central and Eastern European counterparts and getting close to the markets of Germany and Spain. By the end of the same year, however, the combined trading at the Russian exchanges had fallen by more than 70%, making Russia one of the world's worst performers over this period (Rosner, 2008). This illustrates the difficulty of achieving a meaningful international comparison of the value of the securities market.

The market capitalisation to GDP (MCAP/GDP) ratio is often used as an important indicator of the financial depth and the relative level of maturity of a market. It equals the market

FINANCIAL DEPTH OF THE BRIC

capitalisation at the end of the year divided by GDP for the year. The result is the percentage of GDP that represents stock market value. As a rule, MCAP/GDP ratio rises with per capita GDP and is seen as a measure of the available investment potential of public equity market. The issue here is that there is no agreement regarding the optimal level of this index. In addition, it is susceptible to extreme fluctuation. For the US market, to take one example, the historical average since 1924 has been around 65%. However, the actual oscillation was quite intense with the lowest point at about 35% in 1982 and the highest point at 153% in 2000.

# Figure 1 about here

Against this background the convulsive changes of this index in modern Russia may not necessarily look out of ordinary (Figure 1). Yet, a closer look reveals some notable differences. The first one relates to a very unbalanced industrial structure of the Russian stock market. Six industries, led by oil and gas, cover 90.1% of the national capitalisation, whilst such important industries as machine building, transport and chemical have almost no representation at the stock market. This means that the dynamics of capitalisation are excessively influenced by forces that are not representative of large sections of business. Second, because gas and oil are the two main exports of Russia, the stock market capitalisation structure seems to correlate quite closely with the Russia's export structure, which makes it highly sensitive to exogenous shocks such as movements in global commodity prices (Vaatanen, 2000). For the same reason market capitalisation/GDP ratio tends to be strongly affected by the movement of "hot money", i.e. short-term speculative investment from abroad: in 2004 – 2007 non-residents were responsible for 60-70% of total turnover in the bond and stock market. In effect, in Russia behind impressive capitalisation

largest domestic companies are financed mainly from abroad and have limited contacts with resident investors.

### Banking activity

Two of the traditional measurements of the financial depth are related to banking (King & Levine, 1993). The first compares the roles of the central bank and the commercial banks on the assumption that private banks are likely to offer better risk management and investment information services than central banks, and therefore the domination of deposit banks may be seen as a sign of greater financial depth. In the Russian banking, however, the central bank is a principle force controlling a very high proportion of financial flows. The share of its assets in money supply fluctuates between 40 and 50 per cent. This is almost twice as high as in the developed countries, and noticeably more than in Brazil, India and China. This dominance weakens the role of commercial and investment banks as financial intermediaries and limits their ability to increase own operating capacity.

The second measurement is the ratio of bank claims on other sectors and other depository corporations to GDP. In terms of this ratio, Russia is behind all other BRIC countries. The gap is even greater in comparison to the developed market economies (Table 5). There, this ratio normally exceeds 100%, whilst in Russia it is in the region of 40-45%.

# Table 5 about here

In addition to the two measurements discussed above it is appropriate to consider bank leverage, defined as the ratio between liabilities and own capital of the banking sector, as an important characteristic of the potential of this sector to support the real economy. Leverage demonstrates the ability of banks to mobilise resources necessary for economic development. It is also an indicator of public trust towards banks. Again, as with previous measurements, the Russian banks demonstrate middling results, which put them on par with Turkey and Argentina, but behind not only developed countries but China as well (Mirkin, 2011a).

### Financial services

Alongside the quantitative measures, the financial depth also has a qualitative aspect related to the range, breadth, reach and the volume of services provided by the financial market (Honohan, 2004). These reflect the density and coherence of the financial relations developed in the country. The quality of the financial market, being among the pillars of the national competitiveness, declares itself through the degree of sophistication of financial instruments, the multidimensionality of the market structure and the accessibility of the services (Kuznetsova, *et al.*, 2011). There is evidence that Russia is not performing well in this department. In terms of financial market sophistication and the easiness of access to equity market the 2009-2010 World Economic Forum Report places Russia the 92nd and 96th respectively out of 133 countries (World Economic Forum, 2009). In turn, the 2011-2012 Global Competitiveness Report lists Russia the 127th out of 142 countries in the section that describes the development of financial markets. By contrast, in the same section China is ranked the 48th, Brazil – 43rd, India – 21nd (World Economic Forum, 2011). Regarding

access to financial services Russia, in the 119th position, is once again far behind other BRIC countries.

In practical terms, the facts present the financial market in Russia as not being sufficiently diversified or inclusive. In 2010, 92.7% of all financial assets were in the hands of the banks. By comparison, for 16 developed countries this share on average was close to 66% and was the lowest in the US at 27.7% (Mirkin, 2011a). The presence of banks in Russia is high even by the standards of the developing countries. This may be seen as a deficiency because the prevailing view in the literature is that stock markets make a superior contribution to real output compared to banks (Blum, *et al.*, 2002)<sup>3</sup>. Concentration of control over assets is mirrored by the concentration of capitalisation and the turnover in the Russian stock market. In late 2007, just ten issuers accounted for more than 63% of the overall capitalisation (NAUFOR, 2008). Most stocks lack liquidity and the essential part of the turnover falls on a limited number of a few actively traded shares. In all dealings across all Russian exchanges in 2007, top ten liquid stocks accounted for 90.8% of the overall turnover; 30 most liquid stocks account for 98,9%. This level of concentration is extremely high if compared to other stock markets. In essence, Russia still relies on a poorly diversified and weakly integrated financial market, more typical of a developing country.

There are other symptoms of a relative immaturity of the Russian financial services. In developed countries that are not international financial centres financial services on average produce 5-8% of the gross value added in national accounts. In Russia the share of financial

<sup>&</sup>lt;sup>3</sup> One notable exception is Fink and Haiss (1999) who found some evidence that during early stages of postcommunist transition stock market expansion can have a detrimental effect on real output.

services in gross value added remains relatively low at about 4% (Mirkin, 2011a). On a positive side, in the period between the 1998 and the 2008 crises the contribution of the financial sector towards the national GDP increased from the level of 0.5-0.6% (*ibid*). Such a rapid growth could have not be achieved without the financial services enhancing the scope and availability of their products.

### Limitations to development of the profundity of financial market

Over the last twenty years the Russian financial sector has been growing at a frantic pace. Importantly, it gradually increased its share in terms of both the volume of trade and capitalisation in respect to the other BRIC countries and other competitors. But this growth, as we have seen, has rather shaky foundations. There is a potentially dangerous controversy in the Russian securities sector as it combines high capacity for capitalisation with insufficient depth. This makes the market inherently unstable as investors find themselves confronted with elevated risks. This has implications for their strategy. On the one hand, investors expect high returns to compensate for the risk<sup>4</sup>; on the other, they seek to avoid long-term commitment. This makes the Russian market highly volatile, with great proclivity for speculative activities. Within a bigger picture, this amounts to a dangerous situation: because of the low monetisation of the economy the withdrawal of just a few billion dollars is capable of producing extremely serious consequences both for the investment market and the economy as a whole. This situation is reflected in the very high degree of volatility in the Russian stock market, as illustrated by Figure 2.

### Figure 2 about here

<sup>&</sup>lt;sup>4</sup> These expectations are not ungrounded: the Russian market offers a very high return. One dollar invested on the RTS in 1994 would bring the return of \$117 in 2009. The same investment in China would return \$26, in Brazil \$58 and in India \$75.

FINANCIAL DEPTH OF THE BRIC

The RTSI reveals that the spread between high and low exceeds 50% in almost every single calendar year. Under these conditions foreign investors fail to bring to the Russian market so much needed commitment. Currently, the operations on the Russian financial market are dominated by the short-term speculative transactions, making the market vulnerable to and highly dependable on the behaviour of non-resident traders. This was demonstrated by 2008 events when heavy capital flight caused a crisis in Russia's stock market. On October 6, within a few hours, the RTS Index had registered its greatest fall in history -19.1%, when trade was suspended. Characteristically, the Russian market has contracted more than its US counterpart, demonstrating its systemic weakness: domination of non-residents cause the stock market collapse or grow irrespectively to the domestic economic situation. Interestingly, in crisis the Russian financial system performed weaker than other BRIC countries as witnessed by the fall of portfolio investment of up to 70%, against Brazil's 50% and India's 30%; while China even showed growth of about 10%. In 2008 Russia performed much worse than practically all of the developing world and the emerging markets. It is important to remember that, in the case of Russia, a significant cohort of "foreign" investors consists of country's residents who hide their capital on offshore accounts and then reinvest it in the Russian market. This category of investors is likely to be particularly sensitive to local institutional risks that may not be fully shared by global investors. This can be a factor that augments the vulnerability of the Russian financial system and increases uncertainty surrounding its performance.

The "boom and bust" nature of the Russian securities market has wider implications evident from the comparison of the foreign investment patterns in Russia and China in terms of the proportion between portfolio and direct investment. Portfolio investments by non-residents

21

saturate economy with money and help capitalisation. At the same time, in countries with unbalanced financial systems, they increase the risk of speculative attacks, financial "bubbles", capital flight and market shocks (Kaltenbrunner, 2012). Halligan (2012) notes that typically investors involved in FDI are much better informed about the relative merits of doing business in a country of choice than portfolio investors, making them far more susceptible to "fads" and alarmist newspaper headlines. Meanwhile, the prevalence of direct investment is associated with economic stability, higher rates of growth and economic modernisation. Experts emphasize that for developing economies FDI are particularly beneficial as they may lead to the transfer of intellectual property, technological and technical expertise, managerial know-how, modern standards of business culture, other relevant knowledge that contributes to economic growth, welfare and modernisation (UNCTAD, 2010). From this perspective, China has a palpable advantage, showing a greater proportion of direct investment in total foreign assets in comparison to Russia (Table 6). Between 1994 and 2007, foreign portfolio investments in Russia were higher or equal to FDI for 13 years in a row. Only in 2008, when the crisis caused the exodus of speculative capital from the country, the ratio between foreign direct and portfolio investment showed an improvement.

### Table 6 about here

Financial depth is not an isolated variable. It reflects the state of many economic and institutional parameters. One of them is the valuation of the national currency, which has important consequences for economic development. Currently, the exchange rate of the ruble moves within a relatively narrow corridor with the coefficient of variation within 8-10%. This is not dissimilar to the exchange rate "corridor" characteristic of the developed countries. In Russia, however, the exchange rate is more a product of the state intervention than market forces. One consequence is the split "scissors" effect between the nominal and the effective

exchange rate, which stimulates the inflow of speculative capital. Because the influence of supply and demand of funds on the exchange rate is smoothened by the state, foreign operators of "hot money" can take full advantage of a high yield of financial assets inside Russia while avoiding some of the risks. The combination of a relatively stable national currency and high yield makes the Russian domestic financial market, which still has a relatively small turnover, easy to overheat.

While the dominant presence of foreign investors has been a factor that destabilizes the Russian bond and stock market in the face of adverse developments abroad, it is evident clear that the Russian capital market has been hit particularly hard by the 2008 crisis mainly due to the inherent weaknesses of the Russian economy in general. Many of the flaws of the securities market, such as limited links with the real sector (only 300 of 50,000 public corporations in Russia are quoted in the stock exchange (Rubtsov, 2006: 20)), lack of diversification, and the excessive concentration of power, are a continuation of the problems of the national economy as a whole with its shortage of modern investment opportunities, weak internal market and volatile prices.

Positive changes in the economic environment contribute to gains that augment financial depth. Other things being equal, inflation statistics is a good indicator of the health of the economy. Low levels of inflation are a signal of a relatively balanced economy endowed with incentives and resources for growth, savings and investment. The use the inflation dynamics in assessing the performance of BRIC allows to see once again a notable gap between this group and the leaders of the industrialized world, where the level of inflation is on average two to five times lower. Within the BRIC group, however, there is no uniformity. China,

Brazil and, to a lesser extent, India show much healthier inflation dynamics than Russia (Table 7). A sustained inflation has been a feature of her economy since the beginning of the market reforms, reflecting persistent imbalances in the economic system. Some of them are manifestation of the problems with insufficient financial depth. High inflation causes capital flight, which, in turn, creates a shortage of financial resources. This prompts more regulations, resulting in ever increasing regulatory burden that pushes prices up and scares investors.

### Table 7 about here

Continuous inflation is just one of the systemic factors that make the Russian financial market grapple with instability. Political uncertainties, corruption, weak enforcement of regulations are some others that affect the financial depth of the economy. But there is one aspect of the business environment that appears to be of particular importance. It is political risk, a permanent stress-factor that can easily lead to the isolation of the Russian market in the long-term and undermine its performance in the short-term. The strong and expanding presence of the state in the economy and the financial markets is an undeniable cause of anxiety among all categories of non-residential investors. Ultimately, this drags down the ratings of the Russian market, together with other factors, including increasing regulatory pressures, problems with ruble convertibility, price control and other restrictive policies in general.

### Conclusions

For centuries the global financial markets have been operating as oligopoly, with a handful of international financial centres acting as major providers of the financial resources and operations worldwide. Regional and local centres were firmly positioned on the periphery of

FINANCIAL DEPTH OF THE BRIC

the global system. Self-centred and limited in scope due to inability to initiate "long money" and the general lack of financial sophistication, they were expected to play a subordinate role. This situation is about to change. The BRIC countries have joined the race for the global economic dominance and they aspire to have financial markets to match. And yet, in the characteristics of their financial depth, the BRIC economies have little in common, indicating that the catchy acronym has severe deficiencies as an analytical platform.

The growth demonstrated by the Russian market in the last ten years is in many respects unparalleled. However, the inherent volatility of the market has remained extraordinary as well: the coefficient of volatility increased from 30% in 2007 to 85% in 2009. This evidences that in Russia a promising potential for growth is combined with exceptionally high risks. Alongside other factors, some economic and some institutional, this undermines the longterm competitiveness of the national financial market and delays its progress towards achieving a leading position in the international hierarchy. Crucially, this situation keeps Russian financial system in a stand-by mode for a possible meltdown because, as we have seen, the non-residents who are responsible for the bulk of the total turnover of the bond and stock markets, but are hardly controllable, can easily trigger a chain reaction in the financial market.

Our analysis depicts the Russian financial market in its present state as almost certainly not the strongest contender in either the BRIC group or in comparison to the leading financial powerhouses. It shows some impressive quantitative and qualitative gains but at the same time suffers from developmental "diseases" which act as barriers to robust and stable growth. The size of the Russian financial market and the speed at which it grows makes it a notable player at the regional level. However, it is far from creating a competitive threat to established financial centres. As a matter of fact, in terms of impact on the economic stability worldwide, its deformities and shortcomings may be more consequential.

Further investigation into the destabilising potential of the emerging financial markets as well as their ability to mitigate the volatility of the global financial system presents itself as a promising avenue for future research. The policy implications of the findings reported in this article can be summed up in the view that further increase of the efficiency of these markets will demand changes that go beyond simple regulatory measures. Data presented in this article indicate that in Russia the key issues are to assure the growth of demand for financial assets and instruments by the residents, to build a strong domestic financial capability, to speed up monetisation of the economy, to promote diversification and demonopolisation of the economy, to address the institutional aspect of the economic reforms.

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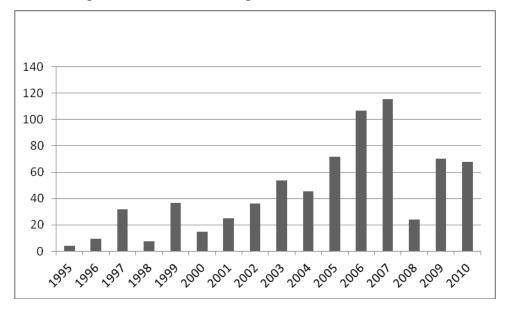
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# Figure 1

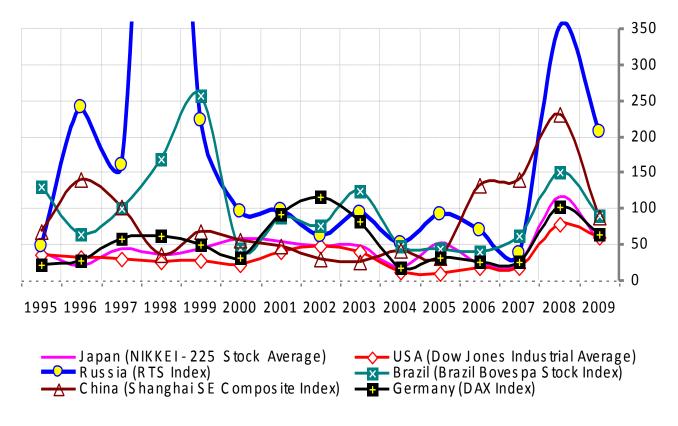


Market capitalisation of listed companies as share of GDP in Russia (%)

Source: World Bank

# Figure 2

# Volatility of selected stock markets (%)



Sources: Mirkin, Y. (2011), Finansovoje buduscheje Rossii: extremumi, bumi, systemnije riski, GELEOS Publishing House, Moscow.

# BRIC vs Developed Economies: Level of Monetisation\* of National Economies (2009)

Monetisation (%)	Developed economies	BRIC
>200	Japan	China
>150-200	UK, Switzerland	
>100-150	Euro zone, Australia, Canada, New	
	Zealand	
>80-100	USA	Brazil, India
>60-80	Denmark, Sweden	
>40-60		Russia

Sources: IMF International Financial Statistics Reports

\* calculated as Broad Money/GDP

# Table 2

# Growth of monetisation\* of the BRIC economies in 1985-2009

#### 1985 1995 1996 1997 1998 1999 2000 2004 2007 2009 2002 Brazil Na 29,7 28,1 29,3 30,7 27,1 24,9 28,4 56,9 71,9 96,7 Russia 53,6 17,4 17,8 23,4 21,7 21,4 25,9 31,6 44,5 49,5 16,2 India 44,2 45,6 48,2 49,8 52,4 56,0 63,4 66,3 71,6 81,5 Na China Na 103,8 111,4 122,7 133,6 146,4 152,2 147,1 151,6 156,8 180,9

# (current prices, % to the previous year)

Sources: IMF International Financial Statistics Reports

\* calculated as Broad Money/GDP

# Share of cash in money supply in 2009

Cash/Money Supply (%)	Developed economies	BRIC
0 - 2	UK	
>2 - 4	Australia, Canada, New Zealand	
>4 - 8	Japan, USA, Denmark, Sweden,	Brazil, China
	Switzerland	
>8-10	Euro zone	
>10-15		India
>15-20		
>20-25		Russia

*Sources:* IMF International Financial Statistics Reports. Authors' calculation: Broad Money/GDP, Current Prices, %; for euro zone: M3/GDP, Current Prices, %.

# Table 4

### Interdependence between Market Capitalisation and Monetisation:

### Developed Economies vs BRIC in 2000

Market	Monetisation (%)						
capitalisatio n/GDP (%) 10-25 >25-40 >40-60		>60-80 >80- 100		> 100			
>10-25	Russia				Austria		
>25-40		Brazil	India		New Zealand		
>40-60			Denmark			China	
>60-100			Italy	Australia, Greece	Belgium, Ireland, Spain, Germany	Japan	
> 100			UK, USA,	Canada,		Luxemburg,	
			Finland,	France		Netherlands,	
			Sweden			Switzerland	

*Sources:* IMF Economic Outlook Database, (2001); IMF International Financial Statistics; FIBV Annual Report 2000; S&P/IFC Emerging Stock Markets Review (2000).

\*Monetisationn= Money + Quasi-Money/GDP, Current Prices, %

Bank Credits /GDP 2008	Developed economies	BRIC		
(%)	Lunnahung			
>300	Luxemburg			
>200-300	Portugal, Netherlands, Spain, UK, Denmark, Ireland			
>150-200	Malta, Hong Kong, New Zealand, Canada, Switzerland, Japan			
>100-150	Sweden, Australia, Austria, France, Germany, Singapore, Korea, Italy, Belgium	China		
>50-100	Israel, Greece, USA, Finland	Brazil		
>10- 50		<b>Russia</b> , India		

The ratio of bank claims on other sectors and other depository corporations to GDP

Sources: IMF International Financial Statistics, IMF Economic Outlook Database.

# Table 6

# Net FDI inflow to GDP (2008)

%	Developed economies	BRIC
>16-18	UK	
>18-20	Germany, USA, Sweden	Brazil
>20-22	Greece, Denmark, Ireland, Italy, Luxemburg, Netherlands, Finland, Switzerland	
>22- 24	Austria, Belgium, Canada, New Zealand, Norway, Portugal, France, Japan	
>24 - 26	Iceland	Russia
>26 - 30	Australia, Spain	
>30-40		India
>40		China

Sources: IMF International Statistics.

Countries/Years	1995	1996	1997	1998	1999	2000	2001	2002
All developed countries*	2,6	2,5	1,9	1,4	1,8	2,5	1,4	2,1
All developing and emerging market countries*	29,4	16,8	11,8	16,0	9,5	8,4	7,3	7,1
Brazil	22,4	9,6	5,2	1,7	8,9	6,0	7,7	12,5
China	10,1	7,0	0,4	-1,0	-0,9	0,9	0,12	-0,6
India	11,3	10,1	5,3	16,3	0,0	3,2	5,2	4,0
Russia	131,3	21,8	11,0	84,4	36,5	20,2	18,6	15,1
Countries/Years	2003	2004	2005	2006	2007	2008	2009	2010
All developed countries	1,6	2,3	2,5	1,9	3,1	1,7	1,0	1,9
All developing and emerging market countries	5,9	6,3	5,7	5,7	7,6	8,1	5,3	6,7
Brazil	9,3	7,6	5,7	3,1	4,5	5,9	4,3	5,9
China	2,7	3,2	1,4	2,0	6,6	2,5	0,7	4,6
India	2,9	4,6	5,3	6,7	5,5	9,7	15,0	9,5
Russia	12,0	11,7	10,9	9,0	11,9	13,3	8,8	8,8

# BRIC vs Developed Economies: Inflation Dynamics 1995 - 2010 (% to the previous year).

*Sources:* IMF World Economic Outlook Database \* Defined as in IMF World Economic Outlook Database, 2011.