The Financial Depth of Emerging Markets: The Case of Russia

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The purpose of this article is to assess the financial depth of the Russian economy in the context of its main rivalries within the BRIC group. The 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 1995–2010. The article demonstrates that, in comparison to other emerging markets, and its closest competitors Brazil, India and China, the financial depth of the Russian economy may be characterized as inadequate. In the Russian financial market potential for growth is combined with exceptionally high risks. Insufficient depth of the financial system undermines its long-term competitiveness and exacerbates its exposure to shocks in the international market.

Keywords Russia, emerging market economies, financial depth, financial markets, BRIC

Introduction

This article 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 emerging markets and, in particular, the so-called BRIC group. This is motivated by two considerations. First, whilst interest in emerging market economies has been growing fast (see Kearney, 2012, for a 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 (1993) agree, pointing at the need for further research to identify the determinants of domestic financial development in emerging market economies. This article will thus seek to shed light on the issue of homogeneity of emerging financial systems. Second, a meaningful representation of the financial depth and an assessment of its limiting potential are only possible when the parameters of one system are projected onto characteristics present in other economies. This has justified the choice of comparative approach.

The investigation of financial depth in Russia and other emerging market economies 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 inherent threats of instability for the global financial markets or, instead, act as a 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 emerging economies is necessary because it helps to better understand the causes of the fragility of the global financial sector and consequently to mitigate negative impacts (Beck et al., 2010).

Russia will be compared to Brazil, India and China and also 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. The BRIC group countries have been focused on in this article because of the comparable size of their respective financial markets. 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 effects on economic growth and competitiveness at various stages of national economic development, as well as establish which characteristic corresponds to any particular stage. For this reason comparative assessment of the financial markets of Russia in the context of emerging markets does not only have interest for academics specializing in emerging economies, but also for politicians and practitioners who can make a meaningful judgement on the performance and risk factors related to the emerging of the new economic order and deepening globalization.

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, to 2010. The study draws on the statistics and official forecasts of global economic trends and the economic performance of individual countries prepared by the IMF, the ECB, the OECD, the World Bank, the Bank for International Settlements, the International Energy Agency, 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.
Defining financial depth

This article 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 so doing, to increase the overall efficiency of business. The literature indicates (Levine, 1997; Stiglitz et al., 2010) that in the long term an efficient financial sector translates into improved 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, a poorly performing financial market may cause serious problems for economic growth and national competitiveness (Miller, 1998; Levine & Zervos, 1998; Levine et al., 2000). It follows, therefore, that without assessment of the state of the financial markets in emerging economies the full picture of their developmental capacity 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 the identification of 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 & Krishnamurthy, 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 modernization. Determining financial depth requires assessment of how far the economy is permeated with financial tools and relations. Financial depth reflects the compatibility between the volume 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 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 a 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 (King & Levine, 1993; Mirkin, 2011a; Andersen et al., 2012). To Stiglitz et al. (2010), however, the disproportional nature 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 capitalization, private and public bond market capitalization and so on; also widely used are indices that represent certain parameters, for example capitalization 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 emerging 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 prospect of its integration into the international financial environment.

**The development of the Russian financial system**

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 monetized and the producer goods market that could be regarded as, what Yi (1991) calls, semi-monetized, because, although producer goods had prices, these prices and the allocation of goods were regulated by the plan outside the market. The instantaneous liberalization 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 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) of the general market reforms and institutional building in Russia and their economic consequences, including budget deficits, high interest rates, rampant inflation, artificial and fixed exchange rates, dependence on the exports of raw materials and so on.

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- 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 responsible for 85 per cent of the market’s turnover. The capital market was almost destroyed as up to 50 per cent of traders stopped operating and the state had revoked nearly 90 per cent of professional licences. The corporate market was affected as well. Three leading industrial holdings — Sidanko Oil, Svyazinvest Telecommunications and Norilsk Nickel — saw their market capitalization 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. ‘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 investment in 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 trading on the Russian stock market, grew about 40 times, with turnover increasing 55 times. One of the principal outcomes of the development of the Russian financial sector during the last decade is 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 per cent of the regional turnover in 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 is characterized by large-scale state participation and influence. The market is not attractive for small residential investors: less than 2 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 monetization, market capitalization, banking activity and the state of financial services.

Monetization of the economy

Although publications on monetary issues in the BRIC countries often refer to monetization, the term remains somewhat vague because it has a variety of applications. In this article we follow the tradition set by development economics that defines monetization as the enlargement of the sphere of monetary economy (Chandavarkar, 1977). A link between economic growth, the financial market and monetization 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. Monetization is among the most important characteristics of economic development, but is very difficult to measure. In theory, monetization should describe the volume of transactions involving monetary instruments in the economy. Nonetheless, 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 monetization 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. Still, 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 monetization only if it does not result in inflation. However, because of our focus on comparative financial depth, in this article we do not look at the dynamics of monetization but, rather, consider its level.

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

The contrast between monetization 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 disruption of links between suppliers and buyers as well as rampant inflation. This caused a crisis of liquidity that forced firms to introduce barter transactions on a vast scale: by 1998 they represented up to 51 per cent 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 and 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 has a depressing effect on all financial activities. What really matters long term, however, is that the decade of relatively stable and successful development that was only interrupted by the 2008 crisis did little in terms of speeding up the monetization of the economy. It expanded, from 16–20 per cent of GDP in the mid-1990s to 22 per cent or slightly less than $80 billion in 2002 (Kuznetsova et al., 2011), at a pace that was far inferior to growth in the economy, which surged by 40 per cent over the same period. This situation may be seen as a

<table>
<thead>
<tr>
<th>Monetization level* (%)</th>
<th>Developed economies</th>
<th>Emerging market economies</th>
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<tbody>
<tr>
<td>&gt;200</td>
<td>Japan</td>
<td>China</td>
</tr>
<tr>
<td>&gt;150–200</td>
<td>UK, Switzerland</td>
<td></td>
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<tr>
<td>&gt;100–150</td>
<td>Eurozone, Australia, Canada, New Zealand</td>
<td></td>
</tr>
<tr>
<td>&gt;80–100</td>
<td>US</td>
<td>Brazil, India</td>
</tr>
<tr>
<td>&gt;60–80</td>
<td>Denmark, Sweden</td>
<td></td>
</tr>
<tr>
<td>&gt;40–60</td>
<td>Russia</td>
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</table>

Sources: IMF International Financial Statistics Reports.
* Calculated as broad money/GDP.
serious competitive weakness of the Russian financial market in comparison to other countries with emerging markets that now outperform Russia in this category.

Low monetization 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 monetization makes the country vulnerable to the movement of speculative capital. Inflows or outflows of even a few billion dollars may destabilize the cash-strapped Russian financial system. Low monetization 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, the inflated price of money in the economy and the low capitalization of the resident banks. All these limit consumer spending and create inducement for capital flight.

A by-product of low monetization 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 transactions. In the dollarization league table, comprised by the Moscow International Institute of Econometrics using the methodology of the US National Bureau of Economic Research, Russia is positioned immediately after Latin American countries that lead the table and far ahead of China (Izvestia, 15 April 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 US. According to the US Treasury, in early 2000 Russia had accumulated more than 40 per cent of all exported US dollars and more than 10 per cent of the total mass of dollars in world-wide circulation including the US (US Treasury, 2000). Unofficial dollarization destabilizes money supply and limits the effectiveness of monetary policies and exchange rate interventions. Equally significant 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 widespread in Russia.

Another striking feature of the money supply in Russia is the existence of vast official foreign currency reserves. They stand at close to 40 per cent of GDP and appear excessive in comparison to most other countries. According to our calculations, in 2007, 83–85 per cent of the developing countries maintained the level of international reserves to GDP at less than 30 per cent. The developed countries kept it even lower, on average at between 3 and 5 per cent. If we focus on the BRIC countries 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 provide evidence that the local financial systems have difficulty in properly channelling domestic savings into investment either because of a savings ‘glut’, as in China, or an investment ‘drought’, as in Russia (ECB, 2006).

Finally, an important characteristic of monetization is the structure of the money supply. A long-established trend has been a decrease in the proportion of cash in
circulation. World-wide the indicator ‘currency in circulation in the monetary base’, which averaged 40 per cent in 1980, fell to 30 per cent in 2007 (Beck & Demirgüç-Kunt, 2009). In the overwhelming majority of developed economies the cash component tends to be under 8 per cent (Table 2). In one-third of these countries this figure is less than 4 per cent. Meanwhile, in three-quarters of developing countries banknotes exceed 10 per cent of the nominal money stock, and in approximately one-third of them this share is greater than 20 per cent.

In Russia the share of cash in money stock (broad money) reached 23.7 per cent in 2010. This places Russia firmly in the group of lesser developed countries and sizably below the most advanced of the countries in the emerging markets group. China and Brazil, for example, by contrast, 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 per cent in 2020. Even then, nonetheless, 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, this structure of money supply is often associated in the literature with high political risk, flaccid social relations, lack of trust in financial institutions, high systemic risk and general economic frailty (Petryk, 1998; Mirkin, 2011c).

**Market capitalization**

There is a direct link between monetization of the economy and the development of a securities market and the amount of resources redistributed through it (Table 3). An increase in monetization encourages a steady trend towards diversification of the financial market and 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

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**TABLE 2**

**SHARE OF CASH IN MONEY SUPPLY, 2009**

<table>
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<tr>
<th>Cash/money Supply (%)</th>
<th>Developed economies</th>
<th>Emerging market economies</th>
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<tr>
<td>0–2</td>
<td>UK</td>
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<tr>
<td>&gt;2–4</td>
<td>Australia, Canada, New Zealand</td>
<td>Brazil, China</td>
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<tr>
<td>&gt;4–8</td>
<td>Japan, US, Denmark, Sweden, Switzerland</td>
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<tr>
<td>&gt;8–10</td>
<td>Eurozone</td>
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<tr>
<td>&gt;10–15</td>
<td>India</td>
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<tr>
<td>&gt;15–20</td>
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<tr>
<td>&gt;20–25</td>
<td>Russia</td>
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**Sources:** IMF International Financial Statistics Reports. Authors’ calculation: broad money/GDP, current prices, %; for Eurozone: M3/GDP, current prices, %.
assets and trading in them, greater monetization creates a platform for the massification of the securities market. In 2009, nearly two decades after the launch of mass privatization, the percentage of the Russian population owning shares, at 0.14 per cent, was one of the lowest in the world. To compare, in Brazil this share was 1.62 per cent, in India 2.0 per cent and in China 5.9 per cent, which was still a long way from the most developed economies where it varied between 12.5 per cent in Germany and 30.75 per cent in Japan (Grout et al., 2009).

The size of the securities market (the share price times the number of shares outstanding) as reflected in market value is known as capitalization. Capitalization is an important parameter of 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 structures, performance and per capita GDP, reflecting the 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 European Union, Austria had the smallest stock market in relative terms with a capitalization of 17 per cent of GDP and Finland had the largest with a capitalization of 286 per cent (Blum et al., 2002). Besides, the volume of capitalization may change very quickly. With capitalization 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 per cent, 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 capitalization to GDP (MCAP/GDP) ratio is often used as an important indicator of the financial depth and relative level of maturity of a market. It equals the market capitalization at the end of the year divided by GDP for the year.

<table>
<thead>
<tr>
<th>Market capitalization /GDP (%)</th>
<th>Monetization (%)</th>
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<td>10–25</td>
<td>&gt;25–40</td>
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<td>&gt;25–40</td>
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<td>&gt;60–100</td>
<td>&gt;80–100</td>
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<td>&gt;100</td>
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**TABLE 3**

INTERDEPENDENCE BETWEEN MARKET CAPITALIZATION AND MONETIZATION: DEVELOPED ANDEmerging Market Economies, 2000

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<thead>
<tr>
<th></th>
<th>10–25</th>
<th>&gt;25–40</th>
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<td>Russia</td>
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<td>China</td>
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<td>Italy</td>
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<td>Australia, Greece</td>
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<td>Belgium, Ireland, Spain, Germany</td>
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<td>Japan</td>
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<td>UK, US, Finland, Sweden</td>
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<td>Canada, France</td>
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<td>Luxemburg, Netherlands, Switzerland</td>
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*Monetization = Money + Quasi-money/GDP, current prices, %.
The result is the percentage of GDP that represents stock market value. As a rule, the MCAP/GDP ratio rises with per capita GDP and is seen as a measure of the available investment potential of the 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 per cent. However, the actual oscillation was quite intense, with the lowest point at about 35 per cent in 1982 and the highest point at 153 per cent in 2000.

Against this background the convulsive changes of this index in modern Russia may not necessarily look out of the ordinary (Figure 1). Yet, a closer look reveals some notable differences. The first one relates to the very unbalanced industrial structure of the Russian stock market. Six industries, led by oil and gas, cover 90.1 per cent of national capitalization, whilst such important industries as machine building, transport and chemicals have almost no representation on the stock market. This means that the dynamics of capitalization are excessively influenced by forces that are not representative of large sections of business. Second, because gas and oil are Russia’s two main exports, the stock market capitalization structure seems to correlate quite closely with 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, the MCAP/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 per cent of total turnover in the bond and stock markets. In effect, behind the impressive capitalization figures in Russia hides an investment model that is typical of emerging markets, according to which the largest domestic companies are financed mainly from abroad and have limited contact with resident investors.

**Banking activity**

Two of the traditional measurements of financial depth are related to banking (King & Levine, 1993). The first compares the roles of the central bank and the commercial

![Figure 1](image_url)

**Figure 1**  Market capitalization of listed companies as share of GDP in Russia (%). *Source: World Bank.*
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 sector, however, the central bank is a principal 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, the countries that are comparable in terms of their emerging financial systems. This organizational imbalance weakens the role of commercial and investment banks as financial intermediaries and limits their ability to increase their own operating capacity and contribution to growth.

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 its principal competitors — the group of countries with emerging market economies. The gap is visibly greater in comparison to the developed market economies (Table 4). There, this ratio normally exceeds 100 per cent, whilst in Russia it is in the region of 40–45 per cent.

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 mobilize resources necessary for economic development. It is also an indicator of public trust in banks. Again, as with previous measurements, the Russian banks demonstrate middling results, which put them on a par with Turkey and Argentina but behind not only developed countries but also China, a fellow in the BRIC group (Mirkin, 2011a).

Financial services
Alongside the quantitative measures, financial depth also has a qualitative aspect related to the range, breadth, reach and 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 national competitiveness, declares itself through the degree of sophistication of financial instruments, the multidimensionality of the market structure and the

<table>
<thead>
<tr>
<th>Bank credits /GDP 2008 (%)</th>
<th>Developed economies</th>
<th>Emerging market economies</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;300</td>
<td>Luxemburg</td>
<td></td>
</tr>
<tr>
<td>&gt;200–300</td>
<td>Portugal, Netherlands, Spain, UK, Denmark, Ireland</td>
<td></td>
</tr>
<tr>
<td>&gt;150–200</td>
<td>Malta, Hong Kong, New Zealand, Canada, Switzerland, Japan</td>
<td>China</td>
</tr>
<tr>
<td>&gt;100–150</td>
<td>Sweden, Australia, Austria, France, Germany, Singapore, Korea, Italy, Belgium</td>
<td></td>
</tr>
<tr>
<td>&gt;50–100</td>
<td>Israel, Greece, US, Finland</td>
<td>Brazil</td>
</tr>
<tr>
<td>&gt;10–50</td>
<td>Russia, India</td>
<td></td>
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</tbody>
</table>
accessibility of services (Kuznetsova et al., 2011). There is evidence that Russia is not performing well in this area. In terms of financial market sophistication and ease of access to the equity market, the 2009–2010 World Economic Forum Report places Russia 92nd and 96th, respectively, out of 133 countries (World Economic Forum, 2009). In turn, the 2011–2012 Global Competitiveness Report lists Russia 127th out of 142 countries in the section that describes the development of financial markets. By contrast, in the same section China is ranked 48th, Brazil 43rd and India 21st (World Economic Forum, 2011). Regarding access to financial services, Russia, in 119th position, is once again far behind other countries on the list of the most sizable and powerful emerging markets.

In practical terms, the facts described here present the financial market in Russia as being not sufficiently diversified and inclusive. In 2010, 92.7 per cent 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 per cent and was lowest in the US, at 27.7 per cent (Mirkin, 2011a). The concentration of banking 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). Concentration of control over assets is mirrored by the concentration of capitalization and turnover on the Russian stock market. By the end of 2010, just ten issuers accounted for more than 60 per cent of overall capitalization (NAUFOR, 2008, 2010). Most stocks lack liquidity and the essential part of turnover falls on a limited number of actively traded shares. In all dealings across all Russian exchanges in 2007, top ten liquid stocks accounted for 90.8 per cent of overall turnover; 30 most liquid stocks accounted for 98.9 per cent. By the end of 2010 the figures were still closer to the 90 per cent level (ibid). 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 demonstrating the relative immaturity of Russian financial services. In developed countries that are not international financial centres, financial services on average produce 5–8 per cent of the gross value added in national accounts. In Russia, the share of financial services in gross value added remains relatively low, at about 4 per cent (Mirkin, 2011a). On a positive note, in the period between the 1998 and the 2008 crises the contribution of the financial sector to national GDP increased from the level of 0.5–0.6 per cent (ibid). Such rapid growth could not have been achieved without the financial services enhancing the scope and availability of their products.

### Limitations to the development of Russia’s financial market depth

Over the last 20 years the Russian financial sector has been growing at a frantic pace. Importantly, it has gradually increased its share in terms of both volume of trade and capitalization and matches up adequately with all its competitors, particularly other countries in the BRIC group. But this growth, as we have seen, has rather shaky foundations. There is a potentially dangerous situation in the Russian securities sector because it combines high capacity for capitalization with insufficient depth. This
makes the market inherently unstable because investors find themselves confronted with elevated risks. The situation has implications for investors’ strategy. On the one hand, investors expect high returns to compensate for risk; on the other, they seek to avoid long-term commitment. This further conserves all inherent weaknesses of the Russian financial market such as high volatility and its great proclivity for speculative activities. Within a bigger picture, this amounts to a dangerous situation: because of the low monetization 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 by the available evidence on the volatility of the performance of the Russian stock market, as illustrated by Figure 2.

The RTSI reveals that the spread between high and low performance exceeds 50 per cent in almost every single calendar year. Under these conditions foreign investors fail to bring to the Russian market much needed commitment. Currently, operations in the Russian financial market are dominated by short-term speculative transactions, making the market vulnerable to and highly dependent on the behaviour of non-resident traders. This was demonstrated by the events of 2008, when dramatic capital flight created a crisis on Russia’s stock market. On 6 October, within the space of a few hours, the RTS Index had registered its greatest fall in history — 19.1 per cent — when trade was suspended. Characteristically, the Russian market has contracted more than its US counterpart, demonstrating its systemic weakness: domination by non-residents causes the stock market to collapse or grow irrespective of the domestic economic situation. Interestingly, in crisis the Russian financial system performed less strongly than the majority of other emerging markets, as witnessed by the fall in portfolio investment of up to 70% compared to Brazil’s 50% and India’s 30%; even

![Volatility of selected stock markets (%)](image)

**Figure 2** Volatility of selected stock markets (%).  
*Source: Mirkin (2011b).*
China 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 the country’s residents who hide their capital in 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, as evidenced by comparison of the foreign investment patterns in Russia and China in terms of portfolio and direct investment. Portfolio investments by non-residents flood the economy with money and aid capitalization. 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, 2010). Halligan (2012) notes that typically investors involved in foreign direct investment (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 modernization. Experts emphasize that, for developing economies, FDIs 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 and other relevant knowledge that contributes to economic growth, welfare and modernization (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 5). 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 financial crisis caused the exodus of speculative capital from the country, did the ratio between FDI and portfolio investment show an improvement.

Financial depth is not an isolated variable. It reflects the state of many economic and institutional parameters in the country. One of them is the valuation of the

<table>
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<tr>
<th>%</th>
<th>Developed economies</th>
<th>BRIC</th>
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<tbody>
<tr>
<td>&gt;16–18</td>
<td>UK</td>
<td>Brazil</td>
</tr>
<tr>
<td>&gt;18–20</td>
<td>Germany, US, Sweden</td>
<td>Greece, Denmark, Ireland, Italy, Luxemburg, Netherlands, Finland, Switzerland</td>
</tr>
<tr>
<td>&gt;20–22</td>
<td>Austria, Belgium, Canada, New Zealand, Norway, Portugal, France, Japan</td>
<td></td>
</tr>
<tr>
<td>&gt;24–26</td>
<td>Iceland</td>
<td>Russia</td>
</tr>
<tr>
<td>&gt;26–30</td>
<td>Australia, Spain</td>
<td>India</td>
</tr>
<tr>
<td>&gt;30–40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;40</td>
<td></td>
<td>China</td>
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</table>

Source: IMF International Statistics.
national currency, which has important consequences for economic development. Currently, the exchange rate of the ruble moves within a relatively narrow range: the coefficient of variation is within 8–10 per cent. 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 state intervention than market forces. One consequence is that the split ‘scissors’ the effect between the nominal and effective exchange rates, which stimulates the inflow of speculative capital. Because the influence on the exchange rate of supply and demand of funds is smoothed 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 markets in the face of adverse developments abroad, it is evident that the Russian capital market has been hit particularly hard by the 2008 crisis mainly because of 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 the 50,000 public corporations in Russia are quoted on the stock exchange (Rubtsov, 2006: 20)), lack of diversification and 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 are 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 of inflation dynamics in assessing the performance of selected emerging markets allows one 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. Also there is a visible difference between Russia and the most prominent emerging markets. Thus, China, Brazil and, to a lesser extent, India show much healthier inflation dynamics than Russia (Table 6), where 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, importantly, are manifestation of the problems associated with insufficient financial depth. High inflation causes capital flight, which, in turn, creates a shortage of financial resources. This prompts more regulations, resulting in an ever-increasing regulatory burden that pushes prices up and scares investors.

Continuous inflation is just one of the systemic factors that make the Russian financial market grapple with instability. Political uncertainties, corruption and 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 investor. 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 an oligopoly, with a handful of international financial centres acting as major providers of financial resources and operations world-wide. Regional and local centres were firmly positioned on the periphery of the global system. Self-centred and limited in scope because of their inability to initiate ‘long money’ and their general lack of financial sophistication, they were expected to play a subordinate role. This situation is about to change. The emerging market economies have joined the race for global economic dominance and they aspire to have financial markets to match. And yet, according to the characteristics of their financial depth, these economies have little in common with the established economic powers, or between themselves, indicating that the catchy grouping and labelling of these countries has severe deficiencies as an analytical platform when a country-centred approach can be more productive.

The growth demonstrated by the Russian financial market in the last ten years is in many respects unparalleled. However, the inherent volatility of the market has

### Table 6

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All developed countries*</td>
<td>2.6</td>
<td>2.5</td>
<td>1.9</td>
<td>1.4</td>
<td>1.8</td>
<td>2.5</td>
<td>1.4</td>
<td>2.1</td>
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<tr>
<td>All developing and emerging market countries*</td>
<td>29.4</td>
<td>16.8</td>
<td>11.8</td>
<td>16.0</td>
<td>9.5</td>
<td>8.4</td>
<td>7.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Brazil</td>
<td>22.4</td>
<td>9.6</td>
<td>5.2</td>
<td>1.7</td>
<td>8.9</td>
<td>6.0</td>
<td>7.7</td>
<td>12.5</td>
</tr>
<tr>
<td>China</td>
<td>10.1</td>
<td>7.0</td>
<td>0.4</td>
<td>-1.0</td>
<td>-0.9</td>
<td>0.9</td>
<td>0.12</td>
<td>-0.6</td>
</tr>
<tr>
<td>India</td>
<td>11.3</td>
<td>10.1</td>
<td>5.3</td>
<td>16.3</td>
<td>0.0</td>
<td>3.2</td>
<td>5.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Russia</td>
<td>131.3</td>
<td>21.8</td>
<td>11.0</td>
<td>84.4</td>
<td>36.5</td>
<td>20.2</td>
<td>18.6</td>
<td>15.1</td>
</tr>
</tbody>
</table>

**Sources:** World Economic Outlook Database.

* As defined in World Economic Outlook Database (IMF, 2011).
remained extraordinary too: the coefficient of volatility increased from 30 per cent in 2007 to 85 per cent in 2009. This demonstrates 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 long-term competitiveness of the national financial market and delays its progress toward achieving a leading position in the international hierarchy. Crucially, this situation keeps the Russian financial system on stand-by mode for a possible meltdown because, as the evidence presented here demonstrates, 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 countries — a leading emerging market 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’ that 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 economic stability world-wide, its deformities and shortcomings may be more consequential.

Further investigation into the destabilizing 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 a further increase in 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 strong domestic financial capability, to speed up monetization of the economy, to promote diversification and de-monopolization of the economy and to address the institutional aspects of economic reforms.

Notes

1 For a critical survey and evaluation of the literature on finance and growth, see Wachtel (2003).
2 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.
3 One notable exception is Fink and Haiss (1999), who found some evidence that during early stages of post-communist transition stock market expansion can have a detrimental effect on real output.
4 These expectations are not ungrounded: the Russian market offers a very high return. One dollar invested on the RTS in 1994 would generate a return of $117 in 2009. The same investment in China would return $26, in Brazil $58 and in India $75.

References


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