

## **BANKING SECTOR IN THE RUSSIAN REGIONS: NONOPTIMAL STRUCTURE AND INSUFFICIENT LENDING TO NON-RESOURCE SECTORS?**

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In terms of financial depth Russian economy is still behind of developed countries. Standard measure of financial development - the ratio of private sector credit to GDP is increasing in last few years but is still well below that in developed countries. The reason for this previously was the transitional nature of Russian economy but now we can speak of its persistent features. The reason could be resource dependence and weak diversification and also state policy in the banking sector.

There is a certain thread of literature connecting financial development with resource dependence and concentration/diversification (Hattendorff, 2014, 2015, Yuxiang and Chen, 2011, Ramcharan, 2006, Nili and Rastad, 2007, Beck, 2011, Kurronen, 2015). So resource abundant countries and regions may have some peculiarities in finance development including banking. In these countries firm have more difficult access to bank loans (Beck, 2011). Resource-dependent economies have less developed banking sector which formed to meet the needs of the extractive sector and isn't favourable to development of new industries (Kurronen, 2015).

We analyze Central Bank of Russia data on banking sector activity at the regional level. Our task is to detect banking sector peculiarities in resource dependent regions in order to understand whether or not resource-dependence affects the banking sector development and thus the development of the whole regional economy.

Financial structure must correspond to the structure of the economy. It is believed that market-based financing and large banking networks are more suited for large capital-intensive and innovative companies while small local banks are better for smaller enterprises and traditional industries. If financial structure doesn't match economic structure then bank lending is more difficult and insufficient. But public policy can distort the optimal financial structure that leads to the mismatch (Lin et al., 2009).

Usually the question of optimal financial structure is discussed in the context of the whole country but for a country with large territory and diversity of regional economies financial structure should vary within the country in different regions. Thus it is expected that in resource-dependent regions we can see relatively small size of the banking sector (but greater role of market-based

financing) as well as large share of large banking networks at the expense of smaller regional banks.

However this is not quite true in Russia. In regions with significant share of the extractive sector in the gross regional product (20-25%) the ratio of banking sector size to GRP is noticeably smaller. Also in these regions banks grant fewer loans relative to their borrowings and funds, which are mostly formed by funds of organizations and firms compared to funds of individuals. Extractive companies including those in Russia in order to attract funds mainly rely on security market, internal sources or state funds, rather than bank loans. The reasons are some characteristics of the extractive sector such as the size and timing of projects, risks and resource price volatility, and special relations with the state. The question is whether or not this fact has some negative impact on bank lending and servicing of non-resource sectors, small and medium-sized firms, households and thus on their development?

We've analyzed the banking sector structure in resource regions, for example the number of banks, branches and offices in the regions, the number of regional banks and their share in regional banking system (the degree of localism), the share of the 30 largest banks, as well as information on the structure of borrowed funds and loans.

We didn't find any specific anticipated features of the structure of the banking sector in the resource regions such as prevalence of large banking networks in greater degree than anywhere else. Moreover there are even some indications that smaller and regional banks are slightly more active in these regions, particularly in the republic of Tatarstan. But the main fact is that each region has its own specifics and the structure of the banking system varies from region to region but it is not clear how these variations are related to the structure of regional economy. The latter is true for all Russian regions. Our assumption is that the policy of favoring large network banks is held across the country and its results are evident in all regions not only and not so much in the regions with large and/or extractive companies.

At the same time we find out that credit depth (ratio of granted loans to production volumes) in non-resource sectors of the resource regions is smaller. There are regional data on amount of loans granted to firms by economic activity, data on loans to small and medium enterprises, individual businessmen, households, data on deposits of firms and individuals from the CBR website. This information allows to analyze how activity of banking sectors in terms of servicing different sectors of the economy depends on the regional characteristics.

In 2013 in nine Russian regions with more than 25% share of extractive sector in GRP the total volume of bank lending to non-resource sectors relative to the size of non-resource sectors was

significantly below the national average. At the same time in regions with small or absent extractive sector this ratio varies greatly, and in many such regions relative level of loans to non-resource sectors is much higher than the average level. In 2009-2013 in all regions (except for Moscow and the Moscow region) situation is the same. Those regions that had in those years a significant resource component in their economy had credit depth in non-resource sector below average (which was only 32-35% in those years). This is also true for particular non-extractive sectors such as manufacture, agriculture and others.

So the question is about the specifics of banking sector in resource regions in Russia and how it impacts on the development of non-resource industries including small and medium-sized businesses. We assume that resource dependence is one of the factors of financial development of Russian regions which along with other factors create the large differences in credit depth in various sectors of the regional economies.

Using panel data analysis we estimate the impact of various factors on the regional banking system in terms of lending and servicing various categories of legal entities and individuals. The data is available for 2009-2013 years, mainly from Central Bank of Russia website and from the website of the Federal State Statistics Service. We use data for all Russian regions, except the Crimea and Sevastopol, Moscow and Moscow region. The focus of our study is outside of the capital because well-known trend towards concentration of financial resources and institutions in Moscow region had turned this region into the obvious exception from regional development of banking system due to its capital status. St. Petersburg and Leningrad region are considered together.

The dependent variable is *credit depth in the non-resource sectors* in Russian regions calculated as the volume of loans issued during a year, or outstanding loans to the firms from these sectors at the end of the year, in relation to the value added created in these sectors. The ratio of credit to size of economic activity is the standard indicator of development and depth of financial market. The main explanatory variable is resource dependence (share of the extractive industry in GRP).

As control variables we use GRP per capita as measure of regional economic development, population number, concentration of population in large cities, educational level, some institutional and political variables and distance from Moscow as geographical factor. In studies explaining financial development of countries and regions these factors are believed to be significant though direction of causality is discussed (Beck, 2011; Hattendorff, 2014; Filippidis, Katarakilidis, 2014). Using panel data analysis we include time dummy variables accounting for year-specific factors such as state policy, energy prices and etc.

In the long run the population size, GRP and their structure potentially could depend on banking sector development so there is a possibility of endogeneity problem. To address the problem we run two-stage LS method using structure and size of industrial production and population, export abroad and extraction of natural resources in 1989-1993 as instruments. The demographic, industrial and natural resource inheritance of the Soviet period is exogenous and to the large extent determines population, size and structure of regional economy during the postsoviet years.

Our results show that amount of production per capita in Russian regions is negatively related to lending to the non-resource sectors of regional economy. This fact contradicts to variety of studies across countries and to the logic of modern economic development. The reason is that in Russian regions (except Moscow) the high GRP is largely created by the extractive sector which has a negative impact on credit depth. That can be seen from the regression results with the share of the extractive sector in GRP as explanatory variable. But the share of manufacturing industry is positively related to the credit depth in non-resource sector of regional economy. The population size and the distance from Moscow affects the relative size of bank credit as expected.

Some institutional factors especially presence of capital city of Federal District in a region are also significant since these cities are centers of concentration of financial institutions and resources. Regions with republic status which have national specifics, clannishness and often low level of industrial and economic development show a low level of bank lending despite the relatively large number of local and regional banks in the structure of their banking sector.

Our conclusion is that policy aimed at formation of banking system with dominance of the large banking networks usually with headquarters in Moscow, mainly public or with significant state participation have great consequences for regional banking sector in Russia.

First, the structure of regional banking sector was not formed in accordance with the structure of regional economy. In regions with larger share of small and medium enterprises, service sector and agriculture the share of small and medium-sized regional banks should be greater. In reality no such relationship exists or even we can see the opposite. Such regions are less developed and rich and so small banks cannot compete here with major banking networks. Thus reversal of the policy towards the support of regional banks could improve the accessibility of banking services for all sectors of the economy.

Second, regions with a large share of the extractive sector in the economy though haven't any significant structural differences in the banking sector have lower level of lending to non-resource sectors. This is due to the banks orientation toward servicing the extractive industries supported by relevant structural characteristics in the banking sector of the whole country.

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