

Does spatial concentration of the Russian banking sector hinder lending to peripheral regions and SMEs?

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Abstract

We examine the role of Russian banking system with regard to the allocation of financial resources across Russian regions. Over the past two decades there had been a steady decline in the number of Russian banks. The issue is very contradictory since it is resulting in an increasingly Moscow-centred and state-oriented banking system with large banking networks at the expense of smaller private and regional banks. We use information from Central Bank of Russia (CBR) website to investigate the role of the Moscow-based banking networks in lending to regional economies outside Moscow. We conclude that very specific Russian centralized economy is naturally complemented by very centralized banking system. Large network banks headquartered mainly in Moscow provide regular flows of financial resources concentrated in the capital for lending needs to other regions. We examine the "flight to home" and "flight to quality" effects during the crisis period after 2014 and find that lending to SMEs remains especially vulnerable in such a situation.

Introduction

For Russia it is especially true that geographical unevenness in the financial development is obvious and has pronounced political and institutional reasons. The paper considers the spatial transformation of the Russian banking system from the point of view of regularities and trends revealed in modern financial geography for other countries. We examine the role of Russian banking system in allocation of financial resources to Russian regions. We pay particular attention to the problem of financing small and medium-sized enterprises (SMEs) in Russia. SMEs are less global entities, they are embedded in local markets and bound to specific locations, so for them the geography of financial institutions is important. Also for SMEs bank loans the source of external financing is important because of their limited ability to attract funds from the stock market. There are only eight Russian SMEs listed at the Moscow Exchange. Other SMEs fully rely on 'traditional' credit relationships with their banks.

It is a well-known fact that in recent decades banking systems of most countries are going through the processes of centralization and concentration that led to geographical concentration. The number of independent banks is decreasing and large banking networks that are often operating globally concentrate their head-offices in large financial centers. The reasons are the liberalization of regulation in the 1980 and 1990s and the development of new informational and financial technologies. After the global financial crisis of 2008-2009, the tightening of regulation in banking sector was working in the same direction and favoring large banks (Koch, 2013). The strength of these processes varies across countries. In Europe "banking nationalism" contributed to the strengthening of the large banks (Alessandrini et al., 2016) while in the United States there is different regulatory regime for small and large banks (Fratianne, 2015). But in some European countries, such as in Germany and Italy, the role of small regional banks is still important. The

institutional features and policies of a country can either stimulate or hinder financial concentration and centralization (Alessandrini et al., 2016, Papi et al., 2017).

Both theoretical and empirical studies reveal the following possible negative consequences of a banking sector's concentration and centralization:

1. The large banking networks headquartered in other regions do not sufficiently finance the regional economy, especially SMEs. Large banks with headquarters outside the region of SMEs' locations redistribute capital from the peripheral regions to central regions where head offices of banks are located, especially during crisis times (Klagge et al., 2017, Presbitero et al., 2014).
2. Large network banks usually have a complex hierarchical structure. It made them less suitable to work with SMEs especially in remote regions (Papi et al., 2017, Udell, 2009).

At the same time, it has been noted that small regional banks often work in connection with the regional economy and regional SMEs in particular by providing them with better access to credit and therefore protecting them against external shocks. Because they are embedded in the local context they suffered less from information asymmetry and moral hazard problems. The difficulty is that regional banks are nevertheless subject to local shocks, with less liquid and diversified assets and small economies of scale.

Thus it is not clear what model and size of banks are more appropriate for regional economies. Is it reasonable to support decentralized local and small financial institutions? We are applying this issue to very specific Russian economy. To what extent do the consequences of banking concentration affect the access of SMEs to credit in Russian regions? More specifically, could Russia's large multiregional banks, most of which have head offices in Moscow, meet the needs of the economy in other regions outside Moscow?

Over the past two decades there had been a steady decline in the number of Russian banks. It is a result both of the concentration and consolidation processes taking place in the industry around the world and of the Central Bank of Russia (CBR) "cleaning" policy in the banking sector which again intensified since the second half of 2013.

From CBR's point of view it is crucial to clean the banking sector of unsustainable and unscrupulous banks. The policy will ultimately raise the effectiveness of the banking system and its sustainability. The fewer banks in the system the easier it is to regulate them, and monetary control is more effective. CBR's supporters underline the ambiguity of the connection between concentration in the sector, competition and stability. The CBR assumes that competition in the sector is not diminishing while stability of the banking system is improving and in the future increasing confidence will strengthen the positions and stability of small and medium-sized banks and the monopoly of large banks will eventually be undermined. In the same direction the reform of banking licensing (establishing different regulatory regimes for small and larger banks) should have been working since 2018, but in fact it has not yet begun.

The opposite view is that this policy is directed towards the actual liquidation of both private banks in favor of banks with state participation and regional banks in favor of Moscow banking networks. The Association of Russian Banks is criticizing the massive revocation of licenses and many experts note the necessity (due to poor condition of many banks) but also negative consequences of such policy. The formation of the highly centralized and largely state-owned banking system can hardly be a desirable result for any country with a modern market economy. So the issue is very contradictory since it is resulting in an increasingly Moscow-centered and state-oriented banking system with large banking networks at the expense of smaller private and regional banks.

Multiregional banks and lending to the economy in Russian regions beyond Moscow

We use information from the CBR website to investigate the role of Moscow-based banking networks in lending to regional economies outside Moscow such as information on the loan portfolio and customer funds raised by the banks in the regions. This information is available on the CBR website from the end of 2010. Data have a regional structure indicating the location of offices where money for deposits and accounts were accepted and the location of borrowers but without indicating by which bank - regional or not. The main source of banks' liabilities are clients' funds (individuals, firm and state organizations). The largest part of assets is loans. So we can see regions where these funds were attracted and where borrowers received loans.

There are substantial regional differences in Russia's regions. We can see that from 2010-2017 in most regions, except for Moscow and the Moscow region, the amounts of loans given to the regional economy are larger than clients' funds accepted in those regions. At the same time, the opposite is observed in Moscow and in the country as a whole (see Table 1).

Could regional banks cover the gap between loan portfolio and clients' money in Russian regions outside Moscow? Regional banks may use their own capital, issue securities, and use inter-bank loans and CBR funds. However, data show that it is very unlikely that they cover a significant part of the gap. First, because regional banks do not only credit local clients but also use money for other purposes such as buying securities, cash, interbank loans, reserves from the CBR and other assets. Second, the total amount of their liabilities (assets) is completely insufficient, and in 2014 was even less than the gap between loans and the funds raised in the regions (see table 1).

Table 1. The amounts of loan portfolio based on borrowers' location and clients' funds based on offices' location, by the end of the year, trillions of rubles.

	2010	2011	2012	2013	2014	2015	2016	2017
Moscow region								
clients' funds	12.2	15.8	17.9	20.6	26.0	31.3	28.7	30.2
loan portfolio	6.7	8.5	10.0	11.4	14.4	15.2	14.7	15.6
clients' fund minus loan portfolio	5.6	7.3	7.9	9.2	11.7	16.1	14.0	14.6
Russia outside Moscow region								
clients' funds	9.1	10.8	12.6	14.7	16.6	20.3	21.4	22.8
loan portfolio	11.0	14.1	17.3	20.8	24.7	25.3	24.3	25.7
clients' fund minus loan portfolio	-1.9	-3.3	-4.7	-6.1	-8.1	-5.0	-2.9	-2.9
assets (liabilities) of regional banks	4.6	5.0	5.7	6.4	6.6	7.6	7.6	7.9

Source: Calculated by authors using data from www.cbr.ru (accessed 05/15/2018)

According to CBR's data, a small part of the loans is received by regional borrowers directly in the offices of banks located in other regions, mainly in Moscow. Thus it is obvious from Table 1 that through the Moscow banking networks or directly from Moscow offices the regional economies are getting loans. So they are getting funds from Moscow and net transfers from the banks' head offices (the passive balance of settlements between regional branches and headquarters) are one of the important sources of funds for the regional banking sector. These transfers reached their maximum in 2014, when they could provide up to a third of loans issued in the regions.

However, this fact should be considered taking into account another very important feature of spatial organization of the Russian economy. Moscow contains the head offices of the major non-financial companies of the whole country. So their financial resources as well as state financial resources are concentrated here. From CBR data we can see that in Moscow about 70% of clients' money are the funds of companies and organizations and only 30% are household deposits, while in the rest of Russia there is the opposite ratio (30% and 70%). In such a situation the Russian banking system complements and partly compensates this super-concentration of finance in the Capital while returning some part of the money to other regions in the form of loans.

After the global financial crisis of 2008-2009, some researchers introduced the term "flight to home" or "flight to headquarters", depicting a disproportionate reduction in lending by large network banks to the economy in regions that are remote from their headquarters or in other countries (in the case of transnational banks). The phenomenon is resulting in the overall shift in lending in favor of banks' headquarters' home regions at the expense of remote regions especially to SMEs in such regions. Examples are the highly centralized financial system of the UK and the less centralized system of Italy (Presbitero et al., 2014, Klagge et al., 2017). On the contrary, in the more decentralized German banking system during the crisis lending to regional small borrowers had hardly suffered as small local banks were doing relatively well and even received inflow of clients' money (Klagge et al., 2017).

The Russian banking system is highly centralized and had experienced a shock since the crisis of 2014 had started. The financial crisis in Russia in 2014–2017 was the result of the collapse of the Russian ruble beginning in the second half of 2014. The crisis stemmed from at least two major sources. The first is the fall in the oil price in 2014. Crude oil, a major export commodity of Russia, declined in price by nearly 50% between its yearly high in June 2014 and 16 December 2014. The second is the result of international economic sanctions imposed on Russia following Russia's annexation of Crimea and the so-called Russian military intervention in the Ukraine. For the period since 2014, the CBR provided more information than for previous years. So we examine whether there is a "flight to home" effect in our country.

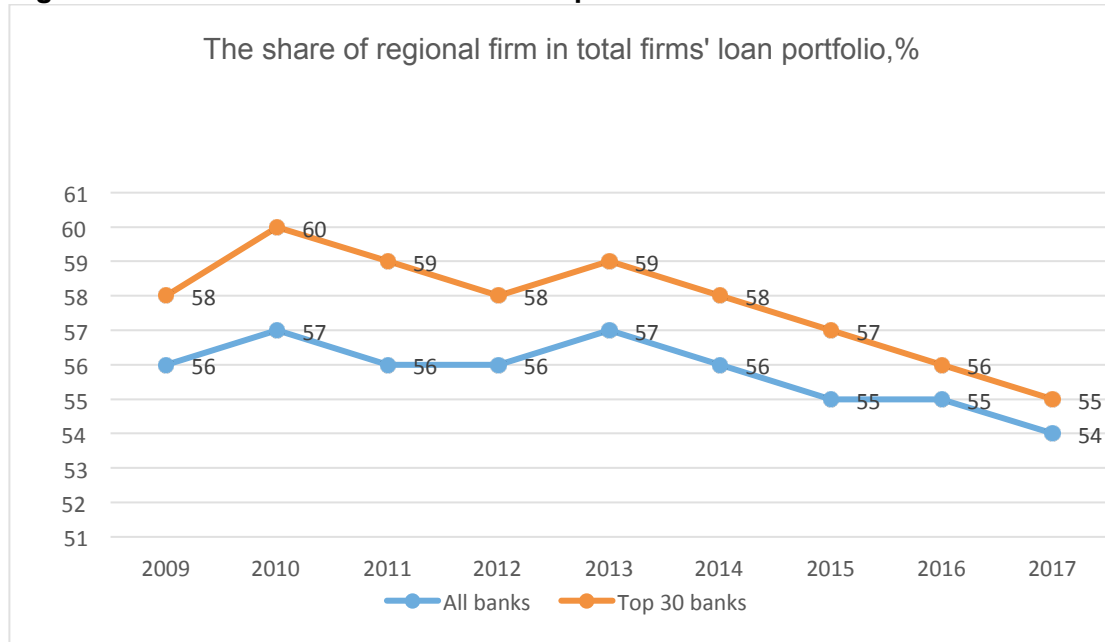
Table 1 shows that since 2014 net transfers of large banks' head offices to regional economies shrunk by several times but remained positive. At the same time, at first glance, the lending dynamics in Moscow and other regions did not significantly differ from each other.

The reduction in the amount of funds transferred from the head offices to regional offices was mainly due to growth of clients' funds in banking institutions when the size of the loan portfolio was stagnating both in Moscow and outside the Capital. The clients' funds in the banks increased in 2015 for several reasons, e.g. the revaluation of accounts in foreign currencies, the intention of households to protect savings from inflation and the withdrawal of firms' money from their businesses as a reaction to the crisis. This increase in clients' money in the banks was slightly more pronounced in the regions than in the Capital due to the growth of households' funds. Despite the crisis the loan portfolio of the banking system increased slightly in 2015 mainly due to the revaluation of debts in foreign currencies

and then only slightly decreased in 2016. We can say it remained relatively stable in Moscow and in other regions. Thus, the needs for net transfers from the banks' headquarters to the regions probably significantly decreased.

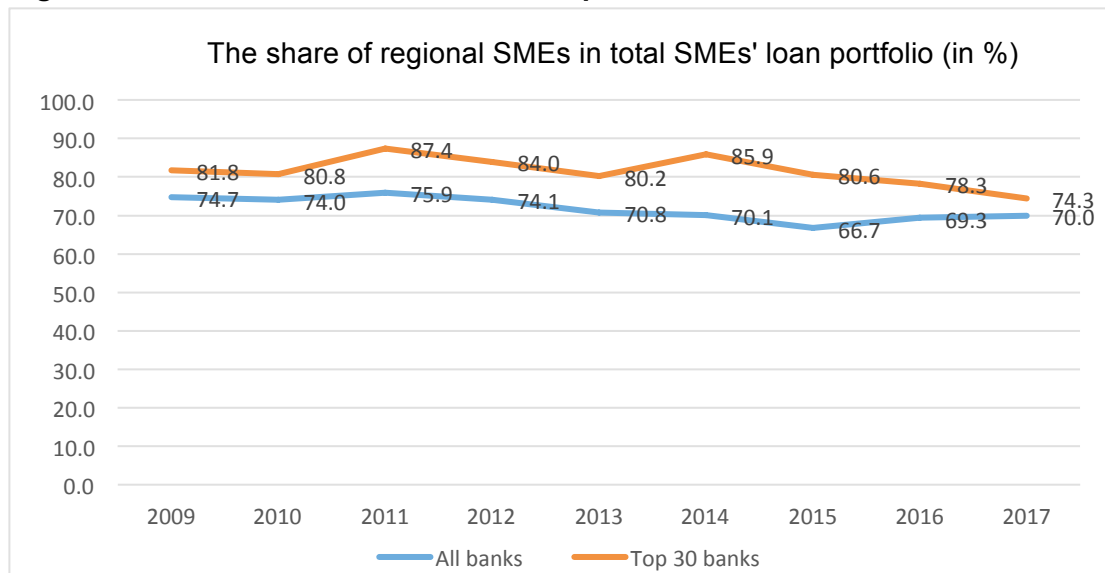
However, if we look more closely at firms' lending then we can see that dynamics of the firms' loan portfolio in Moscow is better than in other regions. Figures 1 and 2 show the share of regional borrowers (those outside the Moscow region) in the firms' loan portfolio and in SMEs' loan portfolio for all banks and for the 30 largest banks in terms of the size of their assets. The top-30 banks are the backbone of Russia's banking system. They provide 80% of firms' lending and about 60% of SME lending in the country. As we see from the graphs below, they are active in lending in the regions outside the capital especially to SMEs.

Figure 1. Was there a shift of firms' loan portfolio in favor of Moscow?



Source: own calculation, based on data from www.cbr.ru (accessed 15/05/2018)

Figure 2. Was there a shift of SMEs' loan portfolio in favor of Moscow?



Source: own calculations, based on data from www.cbr.ru (accessed 15/05/2018)

Figure 1 shows that since 2014 about 3% of the firms' loan portfolio have shifted in favor of the Moscow region and at the expense of other regions mainly due to the largest banks. In the Figure 2, we can see the shift in SMEs' lending by the top-30 banks in favor of the Capital between 2014 and 2017. The size of the shift is about 12% of the top-30 banks' loans to SMEs. For all Russian banks the effect is not so pronounced. Since the 2014 crisis began, SME lending has declined significantly (see below) and large banks had reduced lending to SME in the regions outside Moscow to a larger degree than in Moscow. Although during the crisis period dynamics of the firms' loan portfolio appeared to be slightly better in the Moscow region, the difference is not so significant. So we can conclude there is not a very pronounced "flight to home" effect especially with regard to the loans to large companies. The Russian economy is dominated by large financial and non-financial firms and what is more that large firms in the regions are either subsidiaries of Moscow-based ones or have Moscow owners or have other close ties with Moscow firms and organizations. Another fact is that many large companies actually operating in the regions are registered in Moscow. So regional economies are not "remote" from the center in an institutional sense despite the long distances. Nevertheless, some "flight to home" is also typical for the Russian economy during the crisis period as for other countries with centralized banking system.

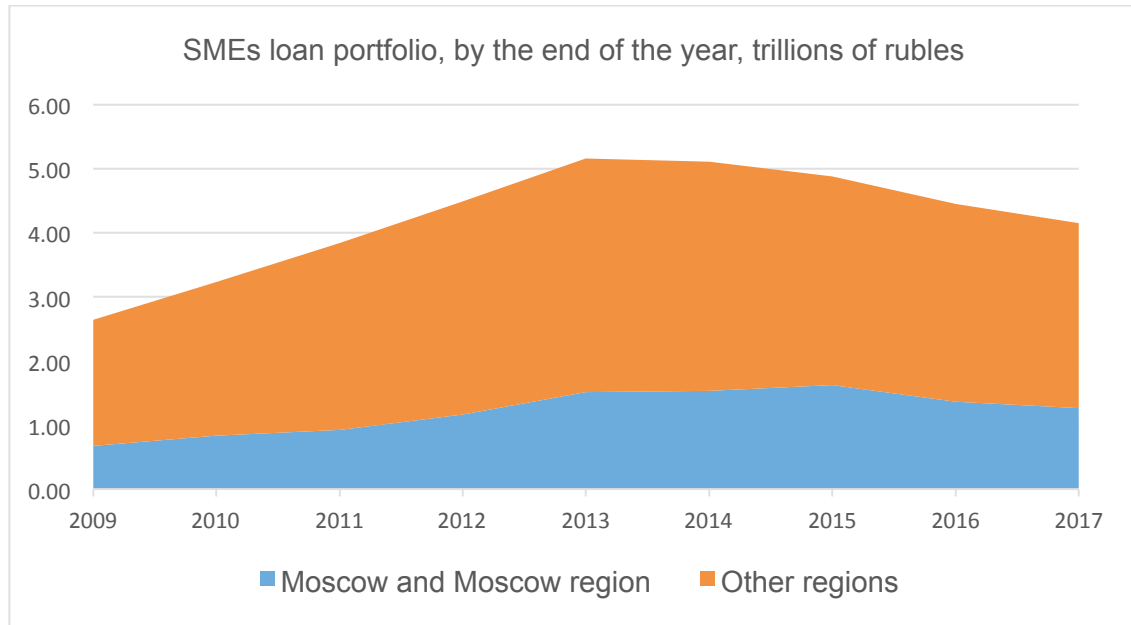
Largest banks, regional banks and lending to SMEs

In Russia, the SMEs sector is insufficiently developed and is far behind developed and some developing countries. At the same time, small and new enterprises are widely recognized as drivers of innovation, employment and development (see, for example, Hasan et al., 2017). Now the contribution of SMEs to the Russian economy is about 20% of GDP while in accordance to Russia's "Strategy for the development of SMEs until 2030", issued by the government of the Russian Federation in 2016, it should rise up to 40%. One of the main ways to SME development is to stimulate lending to the sector.

The expansion of subsidized state lending programs is now proposed as a remedy for SMEs. It is supposed that SMEs due to their low credit worthiness cannot afford commercial credit products. The subsidized state lending program is partially realized. Since 2008, there is a federal law "on the development of small and medium-sized entrepreneurship in the Russian Federation". In different regions special state funds were established which provide loan guarantees for SMEs. In 2015, the Federal Corporation of Development of Small and Medium-sized Entrepreneurship was established and it also began to provide loan guarantees for SMEs. Within this Corporation a specialized development bank was created. This is the so-called "SME bank" which provides credits at subsidized interest rates through commercial banks. The "Program 6.5" can be an example developed by the Corporation in cooperation with the Ministry of Economic Development and the central bank of Russia to provide participating banks with money for lending to SMEs at a 6.5% interest rate.

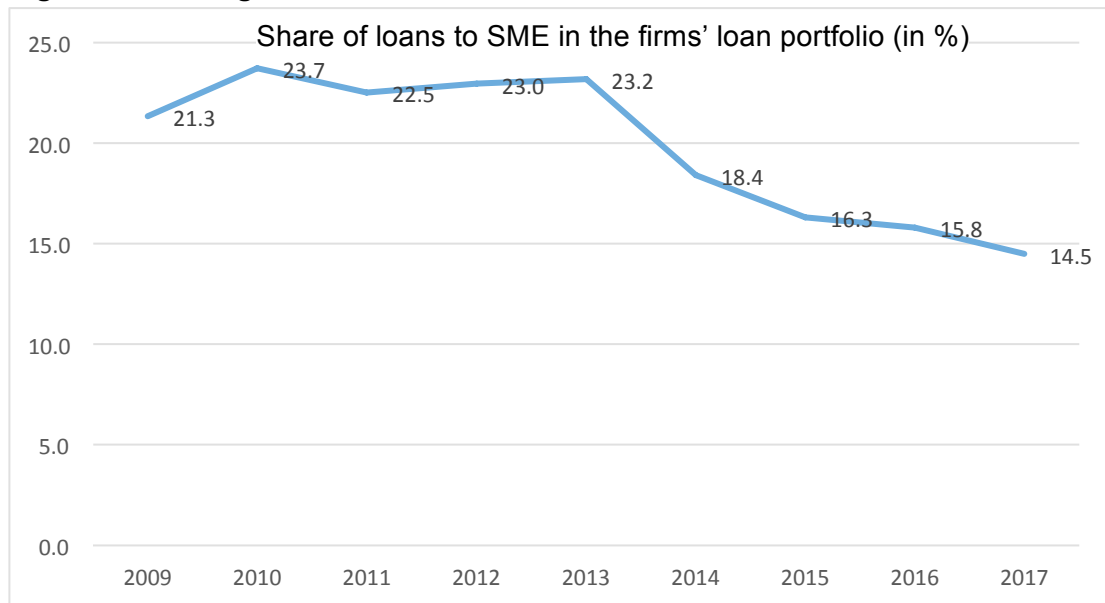
At the same time SMEs, especially in regions outside Moscow, are often perceived as a "factory for laundering of illegal money" (statement by G. Gref, head of the largest Russian bank, Sberbank). The state's fight against money laundering, tax evasion schemes and the "cleaning" policy in the banking sector led to tighter requirements for banks in servicing SMEs. In the case of small businesses there are several obstacles for lending to them. They include the complexity of asset evaluation, informational opacity and a high heterogeneity of the small firms, as well as higher risks and transaction costs per unit of credit. As a result, banks instead of making lending decisions for SMEs on individual basis are trying to reduce work with the sector. That was especially obvious during the crisis period from 2014.

Figure 3. SME lending in Moscow and in other regions



Source: own calculations, based on data from www.cbr.ru (accessed 15/05/2018)

Figure 4. Lending to SME in Russia



Source: own calculations, based on data from www.cbr.ru (accessed 15/05/2018)

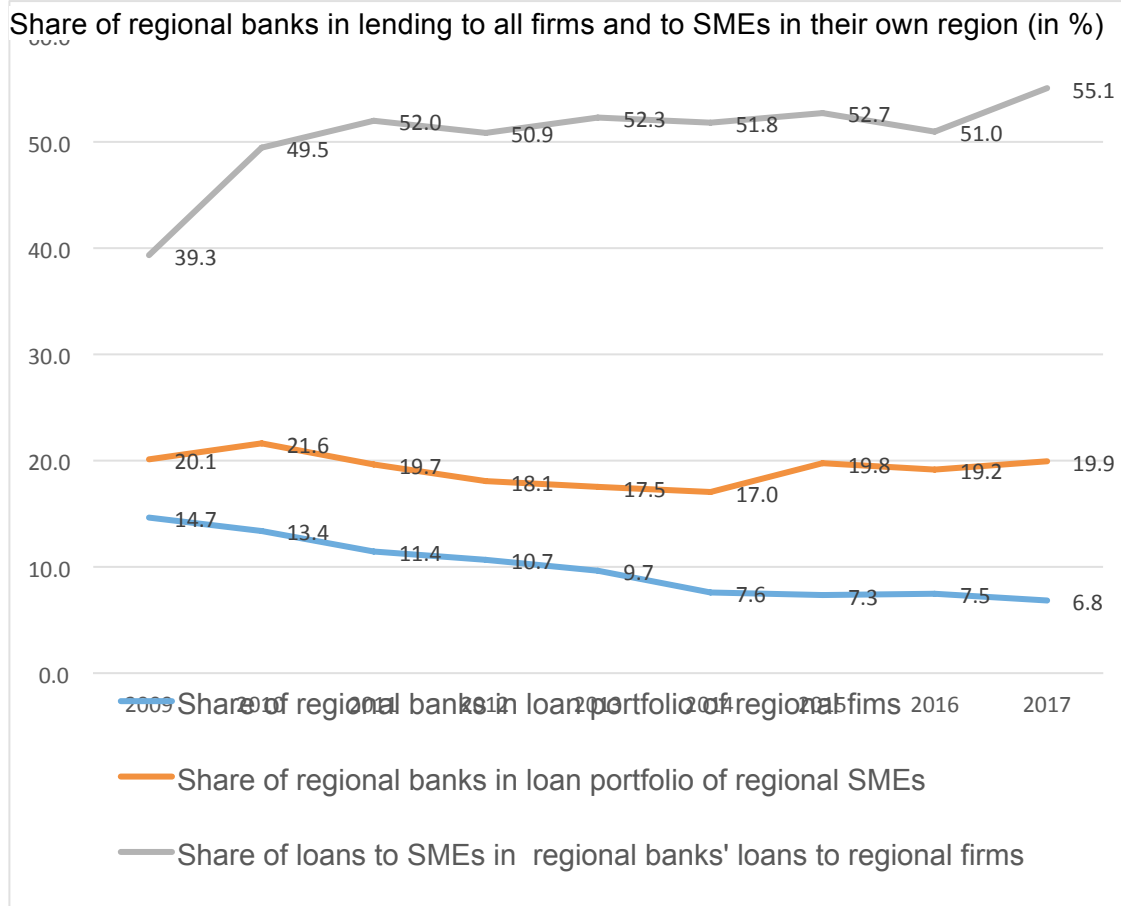
We use information from the CBR website on SME lending in Russian regions (for comparability except of Crimea and Sevastopol) by regional banks and bank offices from other regions (mainly from Moscow). Since 2014, SME lending had been declining both in absolute and relative terms (Figures 3 and 4) despite of growth of the total loan portfolio of Russian banks in 2014, 2015 and 2017. The reasons are macroeconomic instability, the collapse of the national currency and a sharp increase in the central bank's interest rate at the end of 2014. When in July 2015 the criteria of classifying enterprises as SMEs had changed this did not improve the dynamics. Banks argue that demand for loans from SMEs and number of reliable

borrowers had fallen, while risks and the level of overdue debts became larger (up to 14-15% of loan portfolio in the SME sector). Entrepreneurs often said that interest rates and collateral requirements are too high. We cannot separate demand and supply factors but see the final result that is the size of SME loan portfolio (Figure 3). In regions outside the Capital the decline in SME lending started earlier.

We examine the role of the largest banks and regional banks in the shrinkage of SME lending. Figure 5 shows the role of regional banks (those registered in regions outside Moscow) in lending to all firms and to SMEs in their own regions. Their share in lending to SMEs is higher than their share in lending to all firms. Despite the reduction in number and share of regional banks as a result of the CBR's "cleaning" policy, their role in SMEs lending in their own regions did not decrease in 2015 but even grew. The share of SME loans in the firms' loan portfolio is consistently high (about 50%). So the regional banks' lending to local economy is really biased in favor of SMEs.

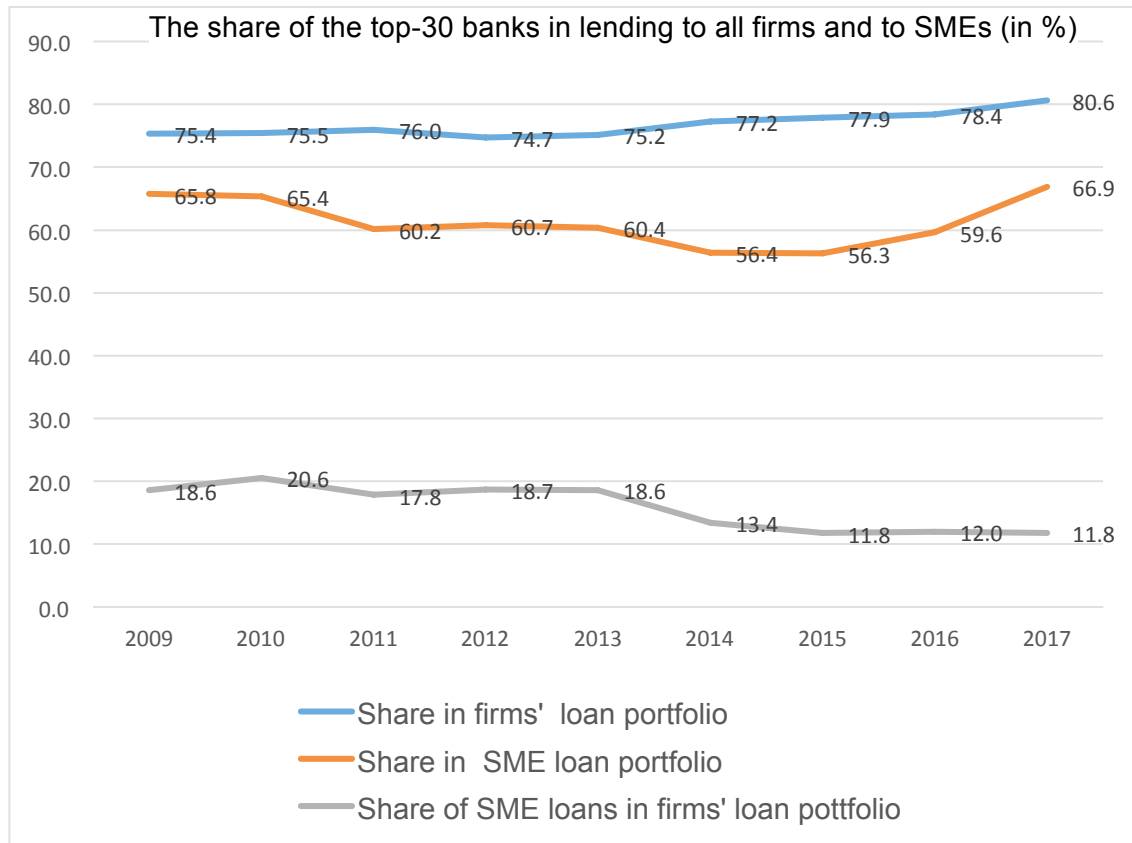
At the same time the 30 largest banks whose role in the economy is growing all the time (Figure 6) are relatively less involved in lending to SMEs in comparison with other banks (see the shares of SME loans in firms' loan portfolio in Figures 4 and 6). But they provide more than half of total amount of credits to the sector (Figure 6). Interestingly, few of them are formally regional banks but they are large banking networks but registered not in Moscow.

Figure 5. Regional banks in regions outside Moscow



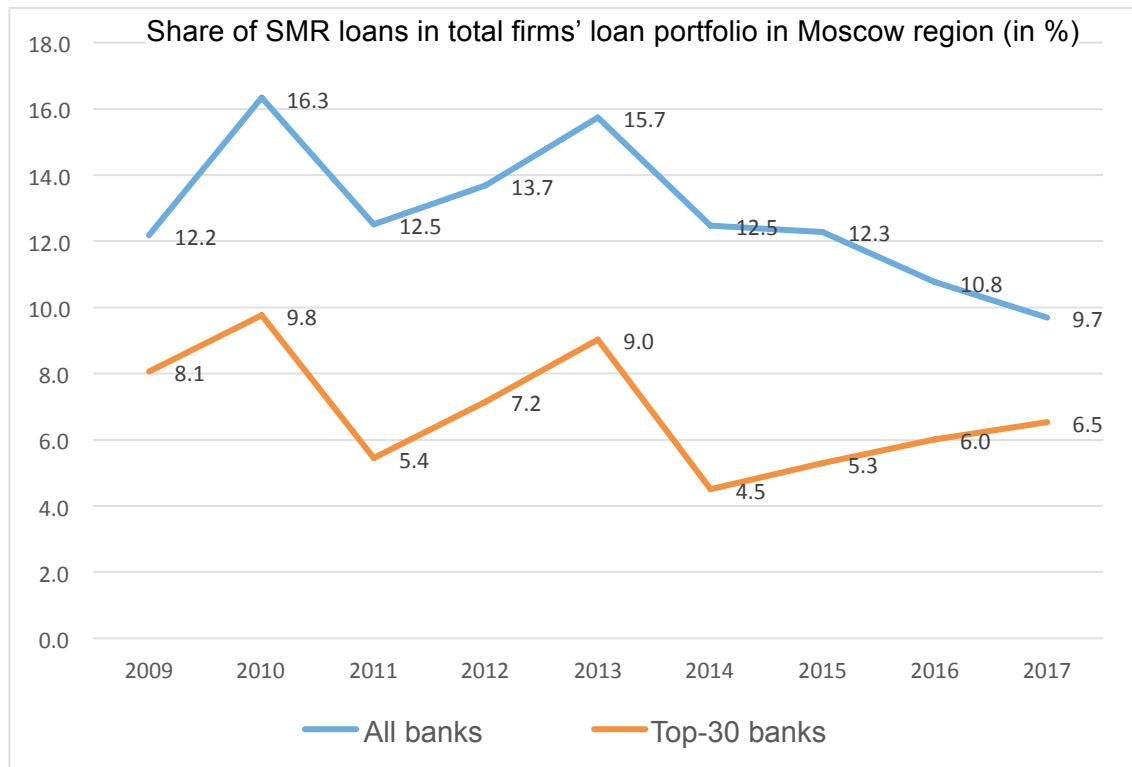
Source: own calculations, based on data from www.cbr.ru (accessed 15/05/2018)

Figure 6. The largest banks and SME lending in Russia



Source: own calculations, based on data from www.cbr.ru (accessed 15/05/2018)

Figure 7. Lending to SMEs in the Moscow Region



Source: own calculations, based on data from www.cbr.ru (accessed 15/05/2018)

It is interesting that in Moscow the largest banks also lend to SMEs relatively less than others (see Figure 7) despite the fact that their head offices are mostly located in Moscow. That indicates the importance of hierarchical "distance" and bank's size for bank's suitability to serve SMEs and not only geographical distance between offices and headquarters.

Another concept that appeared in the post-crisis period since 2009 is the "flight to quality" or the redistribution of credits in favor of large and economically strong firms (Presbitero et al., 2014). Firstly, when banks' credit resources are decreasing, large banks primarily seek to support their large and well-known clients. In an unstable crisis period risks become higher and banks can no longer rely on standardized lending procedures (such as "credit factory") while an individual approach to risk assessment for every small or new firm is expensive, especially in remote regions. In Italy and Germany, the phenomenon of "flight to quality" was not prominent because SMEs are more often served by local small regional banks (Klagge et al., 2017, Presbitero et al., 2014, Gärtner and Flögel, 2014, Flögel, 2018). In the UK there is the opposite situation (Klagge et al., 2017,) while Brexit may be viewed as a challenge for rebalancing the UK economy (Pollard, 2018). We examine this issue in the case of Russia and find that Russia's highly centralized banking system clearly demonstrated a "flight to quality" effect and the geography of the borrowers also was a significant factor.

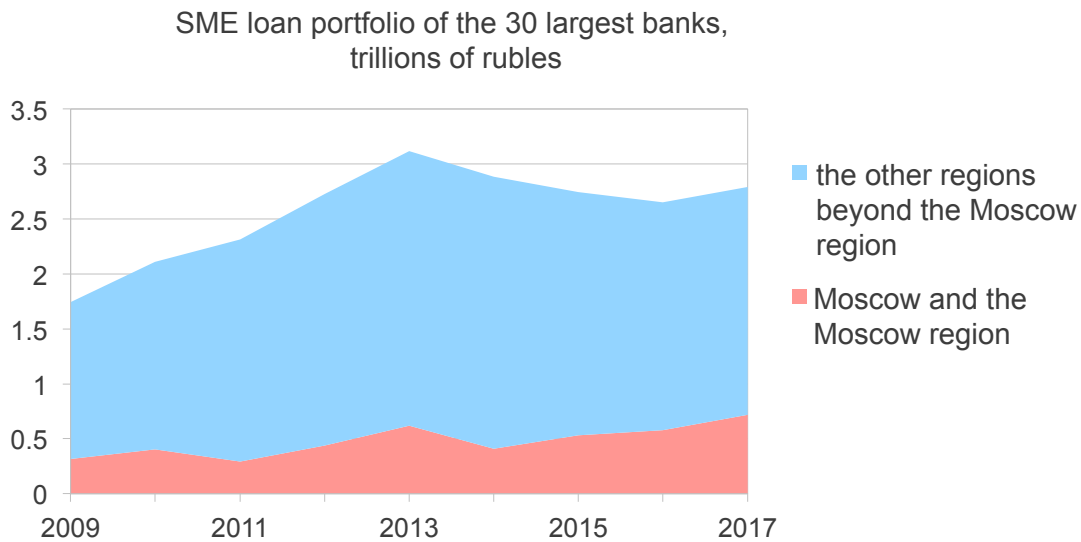
The CBR's data show that firstly in 2014 only the largest banks reduced their lending to SMEs (see Figures 8 and 9). Access to external capital markets became limited. Risks in the SME lending segment increased that made banks to cut drastically their SME lending and to shift to lending to large companies which also suffered from blocked access to foreign capital markets. In the crisis period, banks had to move from a standardized assessment of borrowers to individual assessment, but for large banks this shift meant a significant increase in costs per transaction.

Table 2. SMEs' loan portfolio, at the end of a year, trillions of rubles

	2009	2010	2011	2012	2013	2014	2015	2016	2017
All banks									
All Russia	2.65	3.23	3.84	4.49	5.16	5.11	4.88	4.45	4.16
Moscow region	0.67	0.84	0.93	1.17	1.51	1.53	1.62	1.36	1.26
Russia without Moscow region	1.98	2.39	2.92	3.33	3.65	3.58	3.25	3.09	2.89
Regional banks									
Russia without Moscow region	0.40	0.52	0.57	0.60	0.64	0.61	0.64	0.59	0.55
Top-30 banks									
All Russia	1.74	2.11	2.31	2.73	3.12	2.88	2.74	2.65	2.79
Moscow region	0.32	0.41	0.29	0.44	0.62	0.41	0.53	0.58	0.72
Russia without Moscow region	1.42	1.70	2.02	2.29	2.50	2.48	2.21	2.08	2.07

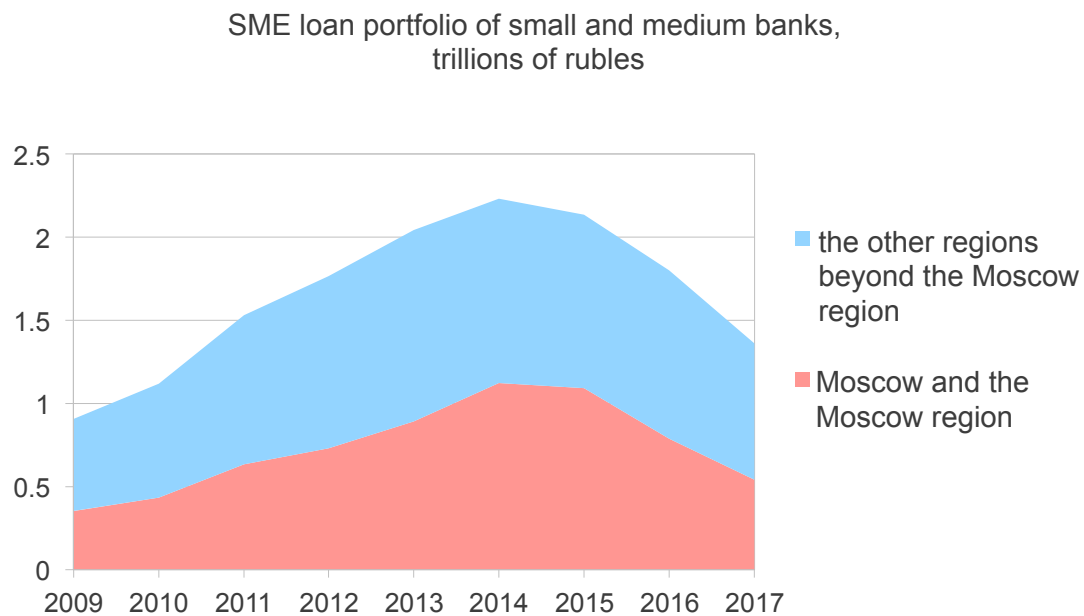
Source: own calculations, based on data from www.cbr.ru (accessed 15/05/2018)

Figure 8. Lending to SMEs by the top-30 banks



Source: own calculations, based on data from www.cbr.ru (accessed 15/05/2018)

Figure 9. Lending to SMEs by small and medium banks



Source: own calculations, based on data from www.cbr.ru (accessed 15/05/2018)

Medium and small banks in most cases made their decisions on SME loan applications on an individual basis even before the crisis. They also received an inflow of SME clients from the largest banks. So they even increased their SME loan portfolio in 2014 (see Figure 9). However, this fact did not compensate for the overall decline in lending to the sector in 2014 (see Table 2).

Since 2015 a new trend in SME lending has been emerging. The largest banks have access to cheaper state credit resources in comparison with other banks. Their interest in SME lending increased due to state stimulating measures and support. As a result, there was an increase in SME lending in Moscow by the largest

banks that participated in state incentive programs for SME lending. In Figure 7, we see that since 2015 the dynamics of SME lending by the top-30 banks and other banks in the Moscow region diverges. The SME loan portfolio of the 30 largest banks in Moscow is the only line in Table 2 that grew since 2015. In other regions, SME loan portfolio of the top-30 banks continues to decline. Finally, in 2017, the total SME loan portfolio of the largest banks grew again.

However, the portfolio of SME loans of all banks continues to decline both in the Capital and outside. Thus, state support for the sector working through large banks has not reversed the overall negative trend. Those small businesses that served by small and regional banks are faced difficulties in revoking licenses from these banks. The decreasing number of regional banks has reduced SME lending since 2016 (Table 2) but remains focused on this sector (Figure 5).

Thus, the collapse of SME lending initially occurred primarily because of the "flight to quality" effect in large banks. The process started more intensively in Moscow and then in other regions (see Table 2). Nevertheless, since 2016 the concentration of SME lending in the largest banks has been increasing (Figure 6) largely due to Sberbank's and other major banks' participation in the government programs for SME support. Also for the largest banks it is easier to meet the CBR' requirements for servicing SME that are more difficult for smaller banks.

Are regional and small banks better for SMEs in Russia?

Although small and regional banks can be closer to customers, larger banks can serve them more efficiently and cheaper due to their scale, centralized organization, risk tolerance, larger network of offices and new technologies. Large banks (of various forms of ownership) may also be interested in SME lending although they have a different approach to lending (Beck et al., 2011). Within so-called new SME lending paradigm, it is argued that banks of different types and sizes are able to serve SMEs using different approaches and technologies. They can develop appropriate services including leasing, factoring, asset valuation systems and credit scoring. In Russia there was also great enthusiasm for the introduction of these technologies in SME lending especially until 2014. SMEs often want to communicate personally with bank managers, but banks often prefer to communicate with small businesses based on digitalization, remote channels and automated processes to increase number of clients per manager. Some researchers argue that modern credit scoring systems allow transforming "soft" information received in the process of personal communication and knowledge of local features into standardized "hard" form thereby easing the transmission of information between hierarchical levels of large banks (Petersen, Rajan, 2002, Berger, 2015, Udell, 2015). At the same time other authors argue that it is impossible to completely remove the problem of informational asymmetry. Therefore, the distance between the local and head offices of banks continue to significantly influence the behavior of bank employees and the amount of loans issued (Filomeni et al., 2016, Flögel, 2018).

In Russia, we see that it is also easier for large banks to use government support for SME lending than it is for smaller banks. Large state-owned banks can also have less reliable borrowers and cheaper loans relying on state support than this is the case for the smaller banks. Almost all authors agree that institutional differences between developed and developing countries such as law and contract enforcement, cost of registering property, protection of property rights, transparency and openness of businesses, access to information and ease of firms' registration, are more important in SME lending (Beck et al., 2006, Djankov et al., 2007, Beck, et al., 2011). In developing countries banks give relatively fewer SME loans for investment purposes and with worse conditions. But note that this argument is not in favor of small banks. Small banks should have the advantages of close and stable relationships with borrowers based on trust and accumulated social capital that can

be problematic in unstable and imperfect institutional environment of developing economies.

In a paper by Beck et al. (2013) using data on developing countries, it was found that the average size of a bank in the countries is positively related to their availability of loans for SMEs. But the authors interpret this result very cautiously referring to desirability of competition and the variety of sizes and the types of financial institutions. Other research (Shen et al., 2009) shows for the very specific Chinese institutional environment that a bank's size does not affect its propensity to lend to small businesses although strictly speaking it is more about size of large banks' branches than about size of independent banks. But SME lending is strongly affected by motives and power of the branches' managers and employees as well as by competition and other regional peculiarities.

Although there is extensive literature on the relationship between size of the financial institutions and their effectiveness in terms of economic development, the optimal bank's size or a bank's model is still not found (Alessandrini, 2016). We do not know any research work on the topic that includes and considers the case of Russia although this issue is important for the country and CBR's policy in the banking sector, for example, in the capital adequacy requirements for banks and others.

In Russia, we see that the large share of SME lending is provided by large banks and this share is growing again since 2016 (Figure 6). But in regions outside Moscow, the share of regional banks in SME lending still is not decreasing as well as the role of SMEs for these banks despite the reduction in the number of regional banks (Figure 5). The experience of these years in Russia shows that the more SMEs loans are provided by large banks the greater volatility of the SME loan portfolio. That is because during the crisis large banks primarily preferred to lend to large firms ("flight to quality"). Even not a very large shift in the loan portfolio of the top-30 banks in favor of large business results in a noticeable decline in SME lending in the country. For example, from 2013 to 2015, the share of SMEs in firms' loan portfolio of these banks fell from 18.6% to 11.8% and this shift completely explained the decrease in SME loan portfolio by 5.5% in Russia as a whole. At the same time, SME lending by smaller banks during this period even increased.

Conclusion

We conclude that the very specific Russian centralized economy is naturally complemented by a very centralized banking system. Large network banks headquartered mainly in Moscow provide regular flows of financial resources concentrated in the Capital to lending firms and households in other regions.

A reduction of this flow during the crisis period after 2014 was mainly due to the increase in raised deposits of banks' customers in the regions but not due to "flight to home" and unwillingness to lend in remote regions. This is because of the fact that large companies dominate the Russian economy and many large companies actually operating in the regions are registered in Moscow or have other close ties with the center. So regional economies are not "remote" from the center despite the long geographical distances. But some "flight to home" is also typical for Russian economy during the crisis period as for other countries with centralized banking system.

However, lending to SMEs and new enterprises remains very vulnerable in such a situation. It is largely dependent on government support programs and the CBR's requirements for banks in servicing SMEs. The latest crisis has shown that SME lending suffers most during crisis period, especially outside the Moscow region.

Although it is impossible to improve quickly the institutional environment in Russia in more favorable ways for SME lending, it is more realistic to change the policy in banking sector. Strengthening of medium, small and regional banks could

be a solution. But with the general super-concentration of businesses and finance in the Capital, this policy might be hard to implement and unreasonable due to the prominent role of the large Moscow banks in distributing finance from the Capital to other regions. In such a situation, SME lending and the economy's development are held hostage to the overall concentration of finance in the Capital. So it is hardly worth to expect any successful independent development of SMEs in Russia and the increase of their share in GDP.

References

- Alessandrini P., M. Fratianni, L. Papi, A. Zazzaro (2016). Banks, regions and development after the crisis and under the new regulatory system. *Credit and Capital Markets* 49(4), 535-561.
- Beck T., A. Demirguc-Kunt, D. Singer (2013). Is Small Beautiful? Financial Structure, Size and Access to Finance. *World Development* 52, 19-33.
- Beck, T., Demirguc-Kunt, A., Martinez Peria, M. S. (2011). Banking financing for SMEs: Evidence across countries and bank ownership types. *Journal of Financial Services Research* 39(1), 35-54.
- Beck, T., Demirguc-Kunt A., Laeven L., Maksimovic V. (2006). The determinants of financing obstacles. *Journal of International Money and Finance* 25(6), pp 932-952.
- Berger A. (2015). Small Business Lending by Banks: Lending Technologies and the Effects of Banking Industry Consolidation and Technological Change, in AN Berger, P Molyneux, JOS Wilson (eds.), *The Oxford Handbook of Banking*. Oxford: Oxford University Press, pp 292-311.
- Djankov, S., McLiesh, C., Shleifer, A. (2007). Private credit in 129 countries. *Journal of Financial Economics* 84(2), 299-329.
- Gärtner, S., Flögel, F. (2014). Call for a spatial classification of banking systems through the lens of SME finance - decentralized versus centralized banking in Germany as an example. Gelsenkirchen: Institute for Work and Technology. IAT discussion paper, no. 14/01.
- Filomeni S., G. F. Udell, A. Zazzaro (2016). Hardening Soft Information: How Far Has Technology Taken Us? Naples: University of Naples, Centre for Studies in Economics and Finance (CSEF). Working Papers 455.
- Flögel, F.(2018). Distance and modern banks' lending to SMEs: ethnographic insights from a comparison of regional and large banks in Germany. *Journal of economic geography* 18(1), 35-57.
- Flögel, F. (2018). *Distance, Rating Systems and Enterprise Finance*. London: Routledge.
- Fratianni, M. (2015). Basel III in reality. *Journal of Economic Integration* 30(1): 1-28.
- Hasan I., K. Jackowicz, O. Kowalewski , L. Kozłowski (2017). Do local banking market structures matter for SME financing and performance? New evidence from an emerging economy. *Journal of Banking and Finance* 79, 142-158.
- Klagge B., Martin R., Sunley P. (2017). The spatial structure of the financial system and the funding of regional business: a comparison of Britain and Germany. In R. Martin and J. Pollard (eds) *Handbook of Geographies of Money and Finance*. Cheltenham: E. Elgar.
- Koch C. (2013). Regulatory burden rising, in Federal Reserve Bank of Dallas, Financial stability: Traditional banks pave the way.
- Papi L., Sarno E., Zazzaro A. (2017). The Geographical Network of Bank Organizations: Issues and Evidence for Italy. In: *Handbook of Geographies of Money and Finance*, R. Martin and J. Pollard (eds), E. Elgar Publisher, Cheltenham.
- Petersen, M.A., Rajan, R.G., 2002. The Information Revolution and Small Business Lending: Does Distance Still Matter? *Journal of Finance* 57, pp.2533-2570.

- Pollard, J. (2018). Brexit and the wider UK economy. *Geoforum*
<https://doi.org/10.1016/j.geoforum.2018.02.005>
- Presbitero, A.F., G.F. Udell, Zazzaro A. (2014). The Home Bias and the Credit Crunch: A Regional Perspective. *Journal of Money Credit and Banking*, 46: 53-85.
- Shen Y., M.Shen, Z.Xu, Y.Bai (2009). Bank Size and Small- and Medium-sized Enterprise (SME) Lending: Evidence from China. *World Development* 37(4), pp. 800-811.
- Tickell A. (2000). Finance and Localities. In Gordon L. Clark, Maryann P. Feldman, and Meric S. Gertler (eds). *The Oxford handbook of economic geography*. Oxford: Oxford University Press.
- Udell G. (2009). Financial innovation, organizations and small business lending. In: Alessandrini P., Fratianni M., Zazzaro A. (Eds.). *The Changing Geography of Banking and Finance*. New York: Springer Springer.
- Udell, G (2015). SME Access to Intermediated Credit: What Do We Know and What Don't We Know? *Small Business Conditions and Finance Conference Volume*, Reserve Bank of Australia, 61-109.