



**GOVERNMENT BANKING IN RUSSIA:
A CHALLENGE TO CONVENTIONAL WISDOM?**

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Outline

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- ❑ The size of the public sector in banking: A deviation from the norm or the norm itself?
- ❑ The helping hand or the grabbing hand?
- ❑ Are public banks condemned to inefficiency?
- ❑ Policy implications

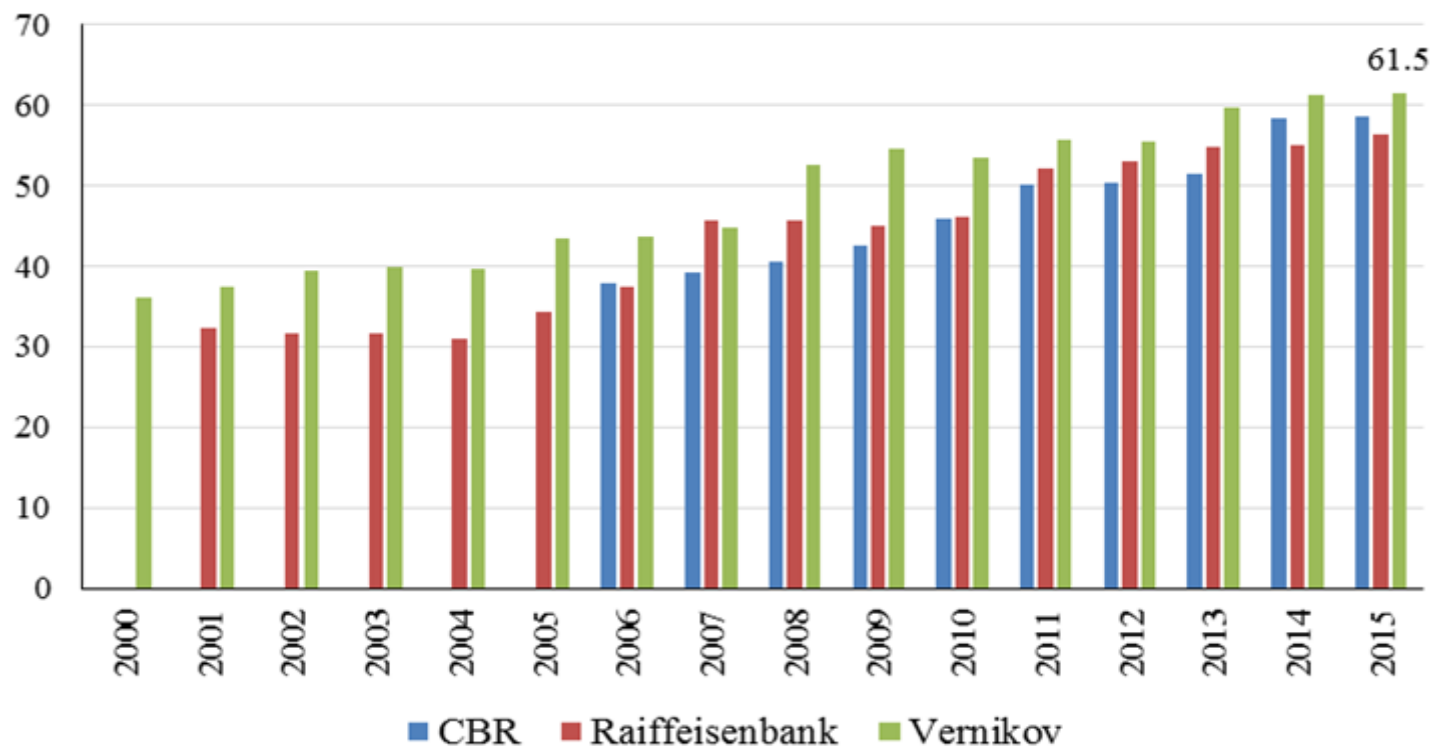
The size of the public sector in banking: A deviation from the norm or the norm itself?

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based on: [Vernikov \(2007; 2009; 2015; 2016\)](#)

Market share of state-controlled banks in Russia: Alternative estimates

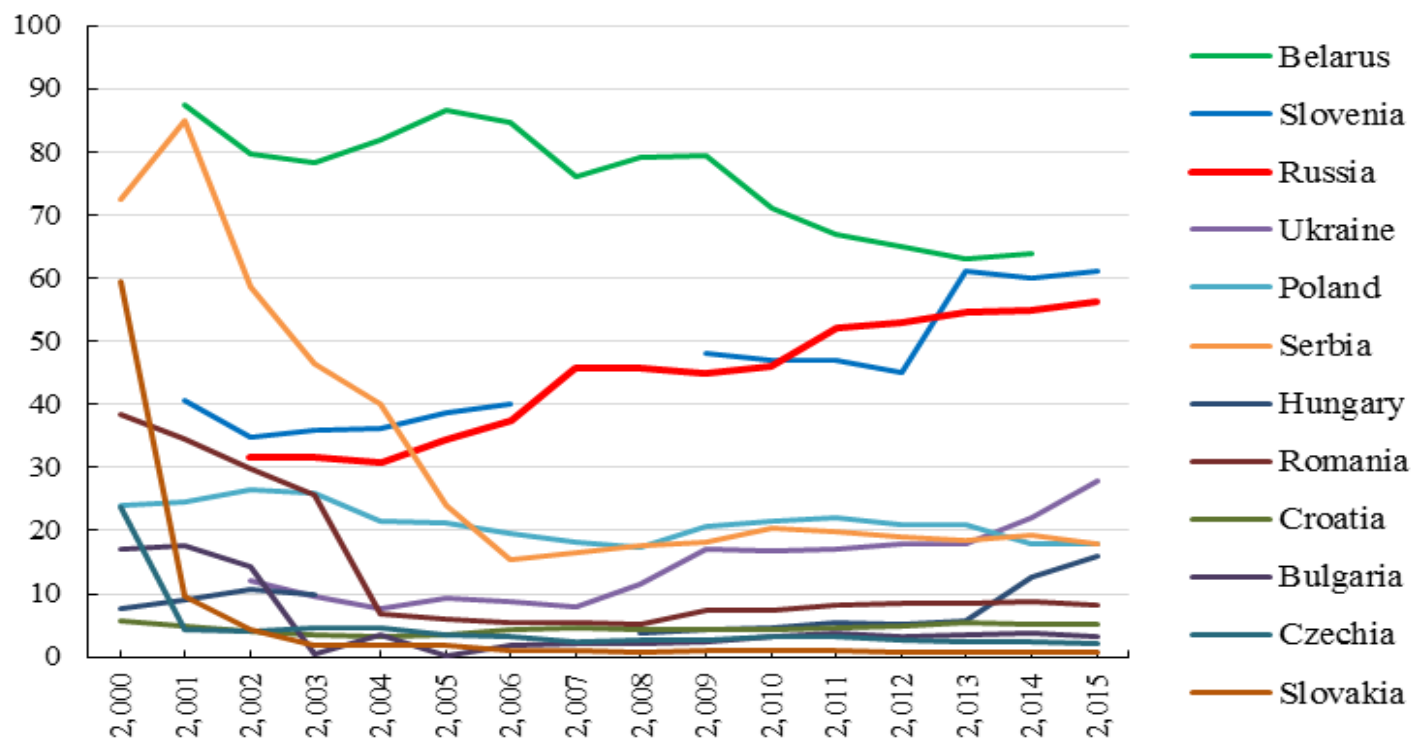
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% of total banking assets, at year-end

The share of state-controlled banks in European emerging markets

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% of total banking assets, at year-end

Source: [Raiffeisenbank Research](#), respective years

Research implications (1)

- ❑ Conventional methods fail to reveal the true size of the public sector in the Russian banking industry.
- ❑ It is not accidental that the share of state banks has grown since 1998:
 - ❑ Followed a disorderly withdrawal of the State in 1990s
 - ❑ An element of the anti-crisis policy
 - ❑ In line with Russia's traditions ([Andryushin, 1998](#); [Urazova, 2015](#); [Kirdina, 2015](#))
 - ❑ The heterogeneity of state-controlled banks requires further breakdown into subgroups, e.g.:
 - ❑ core state banks (Sberbank, VTB, Rosselkhozbank)
 - ❑ other state banks

The helping hand or the grabbing hand?

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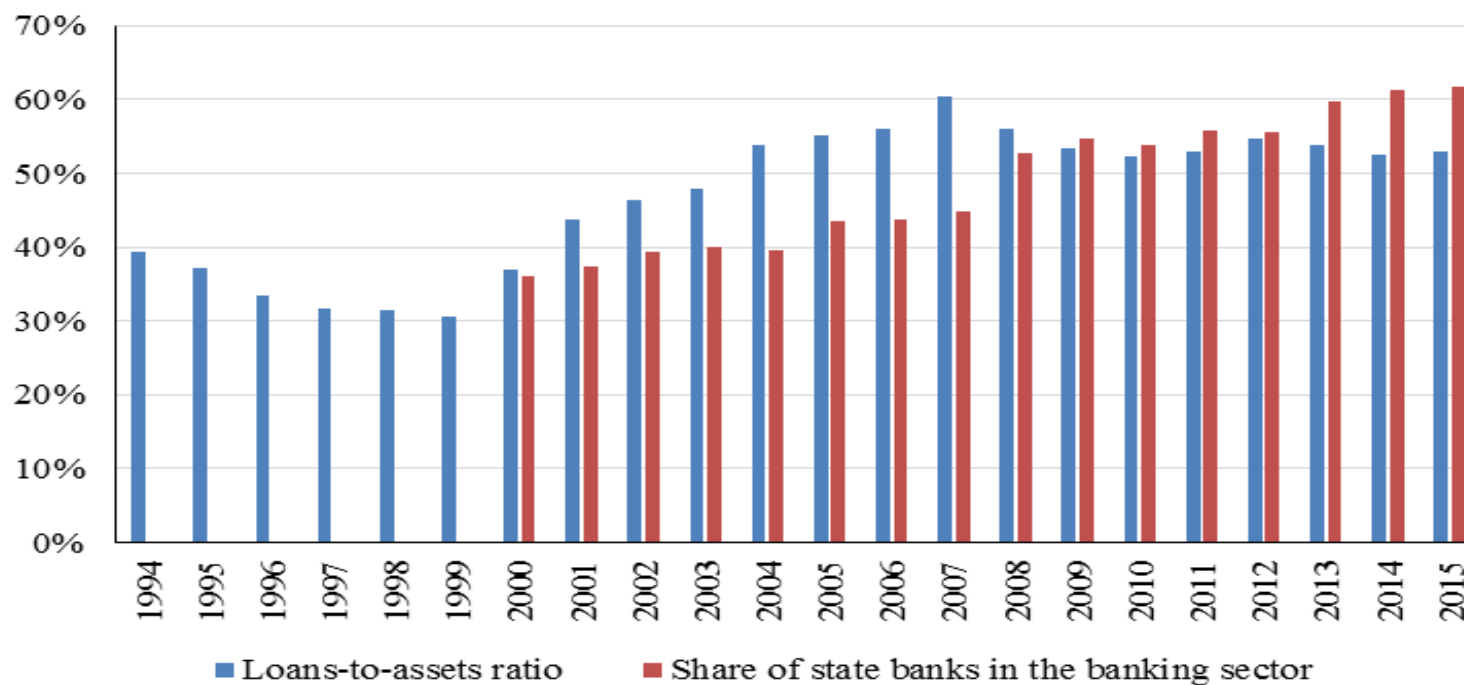
based on:

- Мамонov М, Vernikov А. Долгосрочное банковское кредитование: какие банки им занимаются и почему? //ЭКО. 2016. № 9. С.135-150. [Long-term bank lending in Russia: Who and why?]

State withdrawal from banking led to a decline in lending

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Market share of state banks and the loans-to-assets ratio



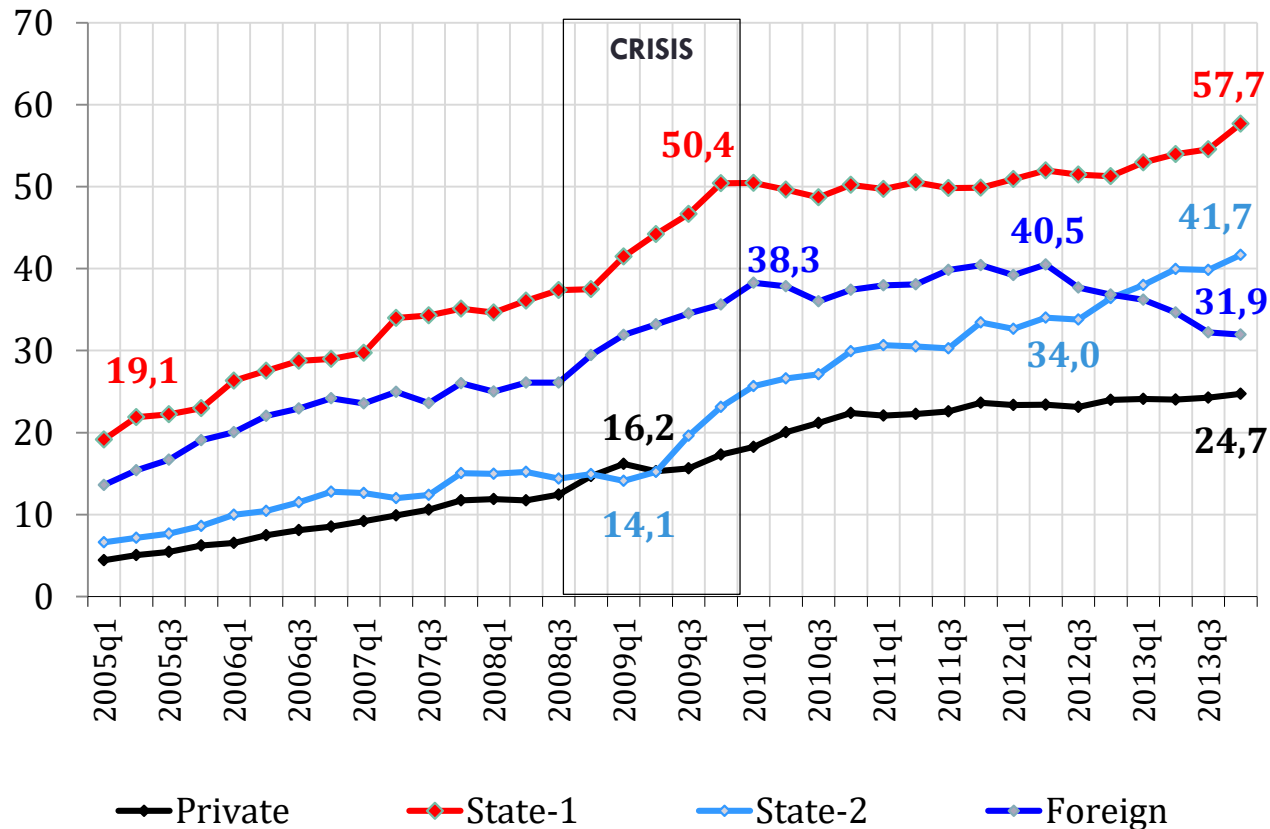
How does the form of ownership impact bank long-term lending behavior?

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- ❑ Country case: Russia
- ❑ Long-term loans: those with maturity of 3 years or more
- ❑ Bank-level data: from the Bank of Russia web-site (www.cbr.ru)
- ❑ Time period: Q1 2005 – Q4 2013 (40 quarters)
- ❑ Number of banks (depending on the quarter):
 - ❑ in original sample: 705-1024;
 - ❑ in adjusted sample: 650-997
- ❑ Number of observations: from 20 000 to 29 000, depending on the quarter
- ❑ 4 bank groups:
 - ❑ State-1 (core state-controlled banks: Sberbank, VTB, Rosselkhozbank)
 - ❑ State-2 (other state-controlled banks: between 37 and 54 banks)
 - ❑ Private
 - ❑ Foreign (foreign bank subsidiaries, i.e. banks controlled by foreign strategic investors).

The share of longer term loans (over 3 years) in total loans to non-financial enterprises, %

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Does business cycle matter?

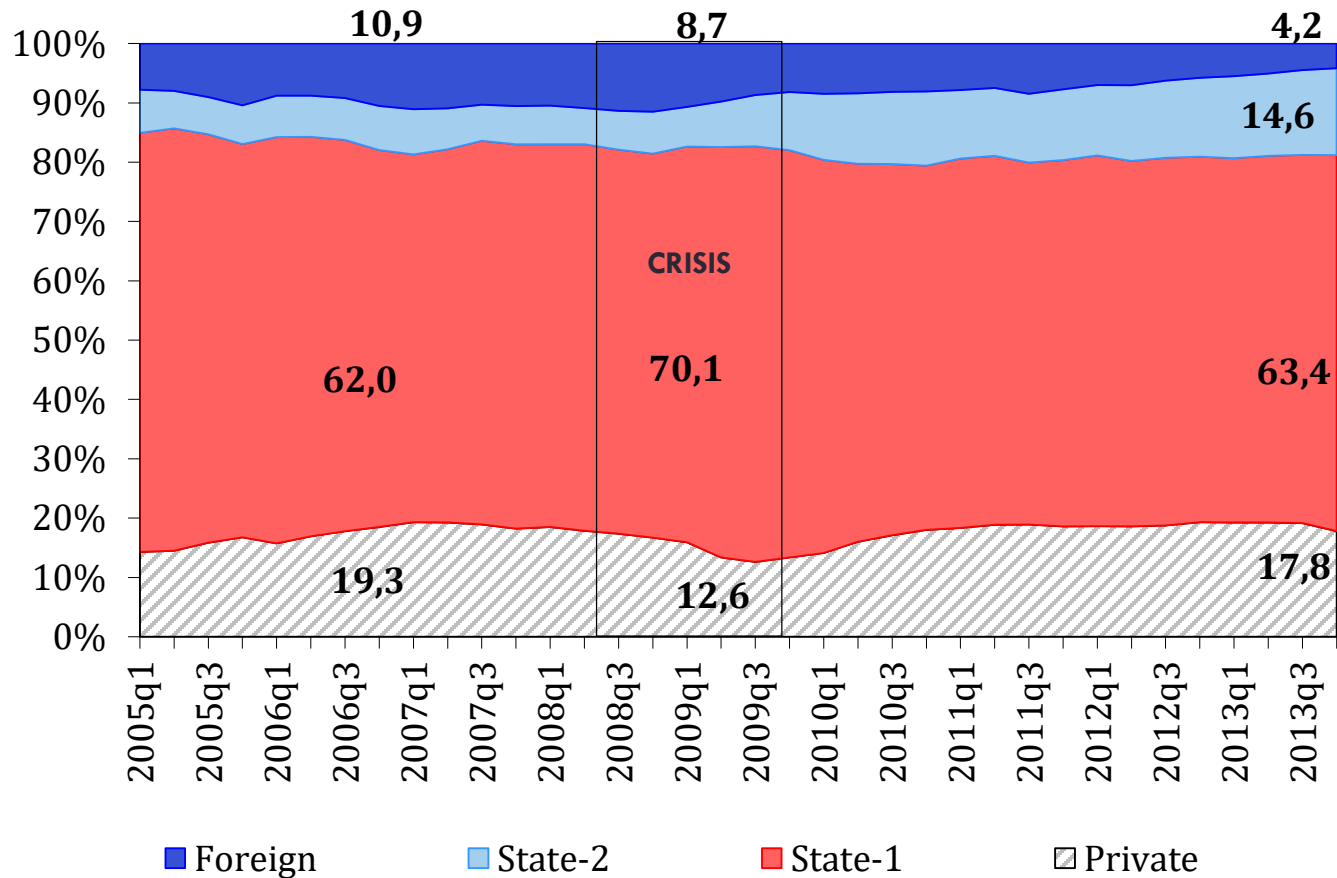
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Share of loans to firms with maturity of more than 3 years in total assets with respect to the business cycle phase (as average during sub-periods)

Bank group	The crisis of 2008-2009		
	Before	During	After
State-1	18.9	21.5	21.9
State-2	4.9	4.8	7.3
Foreign	8.3	8.8	9.1
Private	3.4	4.1	5.4

Who contributed to longer-term bank lending in Russia

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Empirical design

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$$\left(\frac{LNS\ 3Y}{TA} \right)_{it} = \alpha + \beta_1 \cdot State_1 + \beta_2 \cdot State_2 + \beta_3 \cdot Foreign + \\ + \sum_{j=1}^J \gamma_j \cdot BSF_{j,it} + \sum_{m=1}^M \xi_m \cdot QUAR_{m,t} + \varepsilon_{it}$$

where $LNS\ 3Y / TA$ – the share of bank i loans to firms with maturity of more than 3 years in total assets;

State1, State2 and Foreign – dummies for the core state-controlled, the rest of state controlled and foreign banks, respectively. Private banks are the referent group;

BSF – bank-specific controls, namely:

- ❑ Lerner index in the corporate loan market;
- ❑ Reserve assets ratio;
- ❑ Bank size (assets);
- ❑ The share of term deposits in total funds;
- ❑ Overdue loans ratio (as a proxy for loan quality)

QUAR – dummies for quarters (2005 Q1, 2005 Q2, ... , 2013 Q4)

In the baseline regressions, we use 2-Step GMM estimator (instruments are the first lags of all BSFs; that is, we have exact identification)

Empirical findings

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- ❑ The coefficient before State-1 is 9.0 (significant at a 1% level). On average, State-1 banks have a 9% higher share of long-term loans than private banks do.
- ❑ The coefficient before Foreign is 1.8 (significant at a 1% level).
- ❑ The coefficient before State-2 is 0.6 (significant at a 1% level).
- ❑ Lower price of funds, more market power, bigger size, higher capital buffer, less risky lending strategy, and more diversified funds (relied not only on term deposits) benefit longer-term lending to non-financial firms in Russia over the 2005-2013 period

Robustness check

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The baseline regression is re-estimated with:

- ❑ a new version of dependent variable (share of loans, rather than total assets);
- ❑ additional BSFs: bank age, currency structure of loans, etc.
- ❑ cross-products of bank size and (1) loan quality, (2) bank runs, (3) bank age, (4) deposits-to-funds ratio, etc., to catch bank-level heterogeneity in the relationship between long-term loans and BSFs.

Our main outcomes remain qualitatively unchanged.

Research implications (2)

- ❑ Ownership form does matter (as opposed to the findings of [Chernykh, Theodossiou, 2011](#))
- ❑ State banks make a relatively greater contribution to long-term lending than privately-owned banks, regardless of the business cycle. Other things being equal, State-1 extended more long-term loans than other Russian banks in 2005-2013. It proves the 'helping hand' theory.
- ❑ The lending policy of State-2 banks is similar to that of private banks. State 2 banks must be analyzed separately from State 1.

Are public banks condemned to inefficiency?

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- ❑ Based on: [Mamonov M, Vernikov A \(2015\)](#)
- ❑ “Conventional wisdom”:
 - ❑ Foreign-owned banks are always the best performers
 - ❑ State-owned banks lag behind in terms of efficiency
- ❑ Warnings to the contrary ([Golovan, Karminsky, Peresetsky, 2008](#); [Karas, Schoors, Weill, 2010](#))
 - ❑ *«OECD takes the position that state-owned enterprises can be operated as efficiently as private firms»* (OECD)

Objective

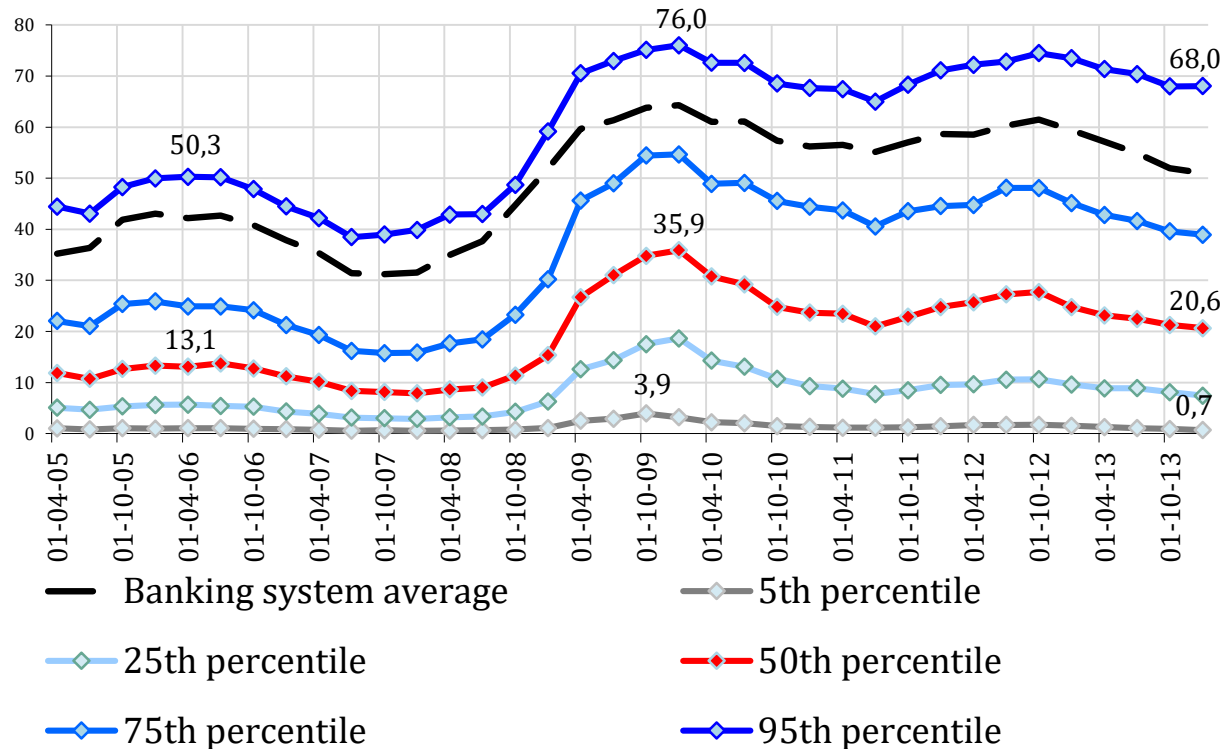
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- ❑ To re-estimate comparative cost efficiency via SFA
- ❑ Control for *Revals*
- ❑ Explain empirically what drives the change *within* each group of banks (State 1, State 2, privately owned banks and foreign-controlled banks)
- ❑ 2-step approach for basic estimations. 1-step estimation for robustness checks
- ❑ Bank-level cost efficiency estimated via SFA under production approach. Translog cost function with 3 input prices (funds, personnel, physical capital), 3 outputs (commercial loans, deposits, fee & commission), and 1 netput (equity capital).
- ❑ Aggregate bank-level SFA-scores into group-level.
- ❑ Explain group rankings changes in terms of SFA-scores in a static panel framework

Revaluations: Why it is important to neutralize their impact

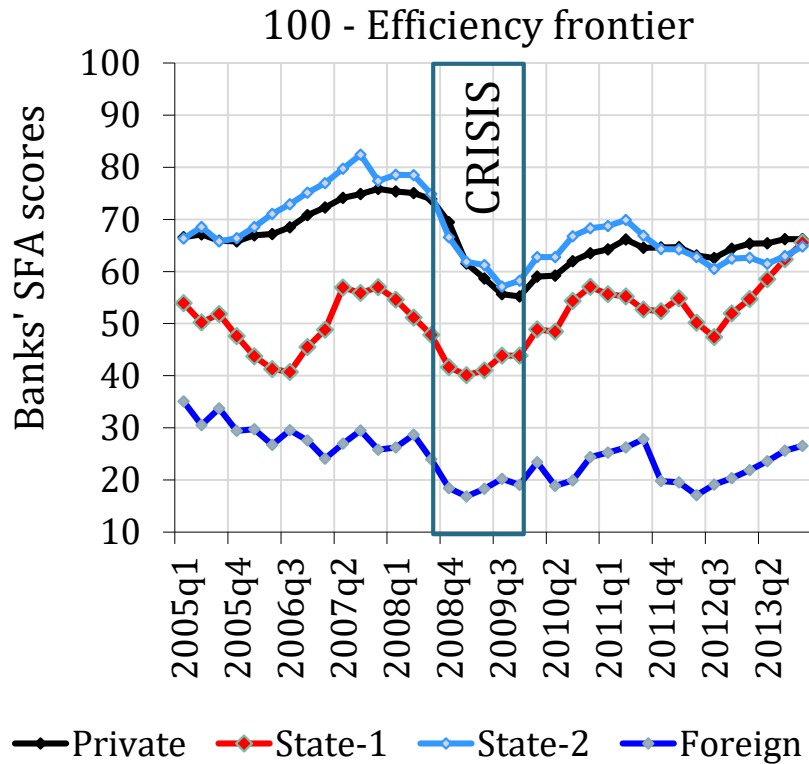
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The effects of *Revals* are unevenly distributed among banks at each point of observations, so they do matter for the estimation results

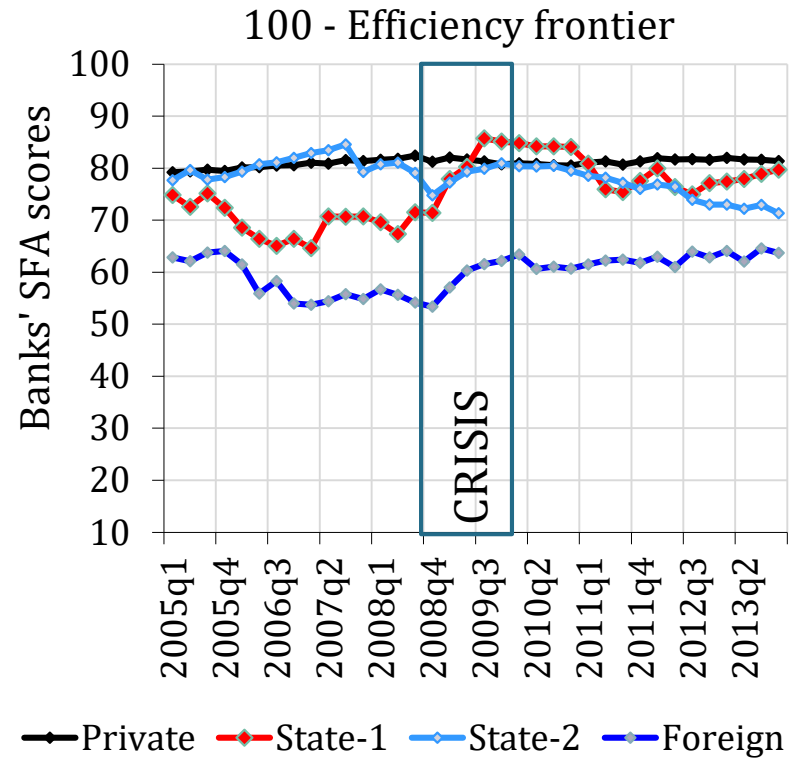


Negative *Revals* as percentage of total costs

Group-level cost efficiency



alt=1: Revals kept



alt=2: Revals dropped

Group-level SFA scores (arithmetic averages within each group)

Empirical findings

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- ❑ Having controlled for *Revals* in SFA-scores estimations, we find that, on average:
 - ❑ efficiency scores become higher and less volatile across the board;
 - ❑ the spreads between different types of banks in terms of efficiency shrink;
 - ❑ foreign subsidiaries appear to be the least efficient market participants;
 - ❑ during financial turmoil the efficiency of banks grows as compared to normal circumstances;
- ❑ Core state banks are more efficient than other state banks in the post-crisis period and nearly as efficient as domestic private banks.
- ❑ GMM and Tobit estimations within production approach and intermediation approach demonstrate that:
 - ❑ the core state banks tend to be the most efficient group in case they hold larger equity capital and decrease loans-to-assets ratio (pursue non-interest income);
 - ❑ conversely, foreign subsidiary banks can outperform other groups in terms of cost efficiency only when they substantially increase lending

Robustness check

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We check the robustness of the findings by re-estimating

- ❑ Translog cost function and respective SFA scores
 - ❑ within the intermediation approach instead of the production approach;
 - ❑ by adding more outputs (securities, foreign assets);
 - ❑ by estimating total costs rather than operating costs as a dependent variable.
- ❑ Empirical dependences of group rankings on risk preferences or assets composition within
 - ❑ The production approach and Instrumental Variables (IV) Tobit estimation technique rather than GMM procedure to account for the censored nature of SFA scores (i.e. lower and upper bounds, 0 and 100, respectively);
 - ❑ The intermediation approach and 2-step GMM procedure;
 - ❑ The intermediation approach and IV Tobit estimation technique.

Our main outcomes remain qualitatively unchanged.

Research implications (3)

- It is essential to remove negative revaluation proceeds from total costs when performing SFA of cost efficiency of banks in Russia because it changes efficiency rankings. Our method is potentially applicable to other dollarized emerging markets.
- State banks are not necessarily the least efficient players, nor are foreign banks the most efficient ones. [Karas, Schoors and Weill \(2010\)](#) were right, whereas the mainstream view holders were not.
- During financial crises the cost efficiency of Russian bank grew, which is logical, albeit contrary to previous empirical studies.

Policy implications

- Core state banks make a key contribution to long-term lending, especially during financial turmoil. Their eventual privatization would choke the inflow of investment resources where and when those are most needed;
- If core state banks are not condemned to inefficiency, then efforts must be put to improve their efficiency and not just to get rid of them;
- The number of non-core state banks might be excessive, and they do not pursue public policy objectives to the same extent. They are natural candidates for merger or privatization.

Policy implications (2)

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- Deposit insurance system requires a re-design, to account for the particular role of state banks in Russia
 - ▣ Deposit insurance did not improve financial intermediation in Russia (Chernykh, Cole, JBF 2011; Karas, Pyle, Schoors, JMCB 2013);
 - ▣ A redundant double state guarantee to depositors of state-owned banks;
 - ▣ Recent initiatives to adjust the deposit insurance system do not address the root of the problem. Funds will not become cheaper this way.
 - ▣ Proposed solution: ...
 - ▣ China might be repeating Russia's mistake with deposit insurance.

Literature

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THANK YOU !

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