**Does Banking System Transparency Stimulate Bank Competition? Cross-Country Evidence[[1]](#footnote-1)**

PRELIMINARY, DO NOT CITE

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**Abstract:** There seems to be a consensus among regulators and scholars that in order to improve the functioning of a banking system and to stimulate bank competition, it is necessary to raise the level of bank information transparency. However, empirical studies that examine determinants of competition in a financial sector, the effect of competition on financial stability or the relationship between transparency and bank stability, leave aside the link between transparency and competition. The aim of this paper is to fill the gap in the literature with this respect. To test the hypothesis that greater bank information disclosure is associated with lower market power and lower concentration in the banking system, we use country-level data covering 213 countries all over the world. The period under consideration includes the years 2001, 2005 and 2010, which correspond to the years of the World Bank's Banking Regulation and Supervision Survey rounds. Our findings contradict the regulators’ predictions: higher transparency does not result into reduction of market power, lowering, however, the concentration level.

**JEL Classification**: G21, G01, P2.

**Keywords**: Banking system, transparency, competition, concentration.

1. **Introduction**

Competition plays an important role for the efficient functioning of a market. It fosters innovation activity, leads to lower prices, better product quality, less moral hazard by market participants and etc. Competition in the banking sector, in addition, could lead to the increased financial stability. Even though some papers confirm the *competition-fragility* hypothesis[[4]](#footnote-4) (cf. [Berger et al., 2009], [OECD, 2010]), most empirical studies ([Boyd, De Nicolo, 2005]; [Schaeck et al, 2009]; [Allen et al, 2011]; [Schaeck, Cihak, 2013]) provide evidence in favor of the positive link between competition and financial stability (*competition-stability hypothesis*).

It is generally assumed that in order to increase the level of competition and, thus, the efficiency in the banking system, greater information transparency should be put into practice. For example, the Basel Committee on Bank Supervision explicitly emphasizes the necessity of enhancing disclosure of bank risk-taking and capital adequacy information, as declares the Pillar 3 of Basel II.

While some studies show that greater disclosure of information could be beneficial in order to tighten oligopoly (as opposed to monopoly, cf. [Bikker, Spierdijk, 2009]), improves social welfare (cf. [Cordella, Yeyati, 2002]) and increases the positive effect of bank competition on decreasing the lending corruption (cf. [Barth et al., 2009]), quite a few theoretical papers demonstrate the opposite effect. Specifically, Moreno and Takalo [2012] show that there is an optimal level of transparency after which the total welfare (which is the creditors ex-ante expected payoffs in their model) starts to decrease. Higher transparency may lower the willingness of creditors to roll over their funds (if they get a negative information signal) and, therefore, banks have to compensate this by raising their risk-taking appetite. In [Landier, Thesmar, 2011], in turn, it is argued that higher transparency reduces social welfare due to the fact that complex financial information could be analyzed mainly by some advanced agents. This leads to the creation of asymmetric information in the market which, as a result, could become illiquid and even collapse. Moreover, financial institutions could manipulate disclosures, therefore, creating inefficiencies in the market. Or some shadow systems (such as shadow banking) could appear in order to avoid excessive disclosure requirements. Furthermore, as it is shown in [Chen, Hasan, 2005], an increase in the level of transparency in the banking system could lead to the higher probability of bank runs. The idea is that depositors tend to extrapolate information about other banks on their own bank (the spillover effect). And the authors demonstrate that under some assumptions (such as that mangers of banks do not control the time of the information release) in a situation when banks’ returns are highly correlated the effect of higher transparency could be the increased probability of banks runs and, thus, the reduction in depositors’ welfare. Importantly, this effect could be lowered by introducing a deposit insurance scheme.

There are several studies that examine determinants of competition in the financial sector. For example, Claessens and Laeven [2004] find that competition is affected by bank concentration, activity restrictions and foreign ownership. In [Bikker et al., 2007], in turn, the significant determinants include the real GDP growth rate, investment climate (economic freedom indices), banking regulation (economic freedom regulation index) and the history of the countries’ economic systems (for example, socialist legal history). Despite the fact that numerous possible determinants of competition have been examined, such an important factor as banking system transparency has been left out of consideration.

The aim of this paper is, therefore, to fill the gap in the literature with respect to the link between information disclosure and bank competition. The hypothesis tested in our study is that higher transparency is associated with greater competition in the banking system. We also examine the interconnection between information transparency and market concentration, thus, contributing to the strand of the literature that studies the link between competition and concentration in the financial system.

 We use the data covering 213 countries from all over the world. The period under consideration includes the years 2001, 2005 and 2010. The data is taken from the World Bank databases and the World Bank Banking Regulation and Supervision Surveys (which limit us to the mentioned years).

Our results confirm the existence of the link between competition and transparency, as well as between concentration and transparency. However, this link is contrary to the expectations. Higher information transparency is associated with lower bank competition (higher country-level Lerner index) and at the same time with lower bank concentration. This result indirectly confirms the fact that concentration does not reflect the level of competition in a market.

The paper is organized as follows. In the next section we present our methodology. Data are described in section 3. Section 4 presents the major findings. Section 5 concludes.

1. **Methodology**

In order to examine the link between the level of competition and concentration and the level of information disclosure in a banking system, we use the following econometric model:



Dependent variables (*Yit*) include the average banking sector Lerner index as a proxy for the level of *bank competition* in the country and the share of three largest banks’ assets in total banking system assets as a proxy for the level of *bank concentration*.

The Lerner index is a standard measure of market power in the banking system. The idea behind it is to compare prices of output (*P*) and marginal costs (*C*). The index is expressed as the following [Lerner, 1934]:



In application to the banking system, it is calculated following the methodology proposed in [Demirgüç-Kunt, Martínez Pería, 2010] and implemented by the World Bank. Price is proxied by the ratio of total bank revenues to total bank assets, while marginal costs are calculated by taking the derivative from the translog cost function with respect to the output (which is represented, within this framework, by total bank assets). Higher Lerner index means higher market power.

Explanatory variables include two proxies for market transparency (*Transpit*) and a set of control variables (*zit*). The transparency proxies are constructed following the approaches proposed in [Semenova, 2012] (*transparency index*) and [Barth et al., 2002] (*private monitoring index*) using the data from the World bank Banking Regulation and Supervision Survey.

The transparency index is based on the survey questions related to bank disclosure and transparency:

* *Are off-balance sheet items disclosed to the public?*
* *Must banks disclose their risk management procedures to the public?*
* *Are bank directors legally liable if information disclosed is erroneous or misleading?*

A positive answer for each question receives 1 point and a negative one receives 0 points. The maximum level of the index is, therefore, equal to 3 (minimum is 0).

The private monitoring index is based on the same survey questions. It is less focused on the disclosure practices and does not take into account the directors’ liability – and that’s why we use it for the robustness check. It includes the following aspects:

* *The need of an outside licensed audit*
* *Percent of 10 biggest banks rated by international rating agencies (1 – if 100%, 0 – if less than 100%)*
* *Requirement to prepare consolidated accounts for accounting purposes*
* *No explicit deposit insurance scheme*
* *Requirement to include accrued or unpaid interest or principal on nonperforming loans into financial statements and to produce consolidated financial statements.*

To capture cross-country macroeconomic and banking system differences we introduce a number of control variables. All these variables could possibly influence the level of bank competition and concentration. Most of them, indeed, have been found to be important determinants of competition in other studies (cf. [Claessens, Laeven, 2004], [Bikker et al., 2007]). Specifically, we include a proxy for the institutional environment expressed as the sum of the Worldwide Governance Indicators. Better quality of institutions in a country should stimulate competition in a financial system. The indicators reflect six dimensions of the governance:

* Voice and Accountability
* Political Stability and Absence of Violence/Terrorism
* Government Effectiveness
* Regulatory Quality
* Rule of Law
* Control of Corruption

As an alternative, we consider two other variables: Financial freedom index and Freedom from corruption index. The former one reflects the degree of the government control in the system, while the latter one is a proxy for the level of corruption in the country. The government control is also captured by the ratio of state-owned banks’ assets over system total assets which we include as an additional control variable.

In some studies it was found that competition could be impeded by the higher entry barriers. Therefore, we include a proxy for entry restrictions expressed as the share of bank licenses denied in total number of licenses applied for. This indicator should negatively influence the level of bank competition and at the same time positively affect the level of bank concentration.

The share of foreign-owned banks’ assets in system total assets is taken as an explanatory variable in order to reflect the openness of the system to the foreign competition.

We also control for the size of a banking system (using the ratio of total banking system deposits over country’s GDP); for the existence of deposit insurance scheme using the corresponding dummy variable; for the degree of the economic development (employing GDP per capita, the growth rate of the real GDP and the inflation rate expressed as the average consumer price index).

We estimate the model using the panel data random effect model. The choice among pooled OLS, fixed effect and random effect models is based on a set of appropriate tests (the Hausman test, the Breusch-Pagan test and the test for differing group intercepts).

1. **Data**

We use different sources of country-level data in our analysis. Indicators of bank competition, bank concentration, banking system size, GDP per capita and Worldwide Governance Indicators are taken from the World Bank Indicators database. Transparency index and Private monitoring index are constructed based on the questions from The Bank Regulation and Supervision Survey published by the World Bank. The same survey is used in order to assess the entry restrictions, the share of state-owned and foreign-owned banks as well as the presence of the deposit insurance scheme. Financial freedom and Freedom from corruption indices are taken from the Heritage Foundation database.

The Bank Regulation and Supervision Survey covers only the years 2001, 2003 and 2010. Therefore, we limit our period by these years. Countries under consideration include 213 developed and developing economies all over the world. The panel is unbalanced.

The descriptive statistics of the variables are presented in Table 1 below.

**Table 1. Descriptive statistics**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | Variable description | Observations | Mean | Std. Dev. | Min | Max |
| bc3 | The share of the largest 3 banks’ assets in system total assets | 439 | 71.207 | 20.217 | 23.062 | 100.000 |
| ler | Lerner Index | 354 | 0.259 | 0.116 | -0.183 | 0.695 |
| tran | Transparency Index | 423 | 2.182 | 0.828 | 0.000 | 3.000 |
| tranb | Private monitoring index | 423 | 2.818 | 0.950 | 1.000 | 5.000 |
| bd | The share of banking system total deposits in GDP | 495 | 49.440 | 46.144 | 2.791 | 333.857 |
| g\_GDP | The growth rate of real GDP | 572 | 4.218 | 5.000 | -14.790 | 63.380 |
| ccp | Average consumer price index (annual percentage change) | 520 | 7.528 | 23.422 | -40.078 | 359.937 |
| iq | Composite index of institutional quality | 580 | -0.228 | 5.607 | -13.990 | 11.630 |
| ent\_int | Entry barriers (the share of bank licenses that were denied in the total number of licenses that have been applied for) | 271 | 17.994 | 31.787 | 0.000 | 100.000 |
| dep | Dummy variable for deposit insurance scheme (1 corresponds to the existence of the scheme, o – otherwise) | 423 | 0.577 | 0.495 | 0.000 | 1.000 |
| st\_int | The share of state-owned banks’ assets in system total assets | 368 | 14.805 | 19.998 | 0.000 | 96.000 |
| for\_int | The share of foreign-owned banks’ assets in system total assets | 359 | 43.716 | 33.728 | 0.000 | 100.000 |
| gdpc | GDP per capita | 576 | 10706.000 | 17769.990 | 92.015 | 151128.100 |
| ci | Freedom from corruption index | 465 | 40.841 | 22.481 | 10.000 | 100.000 |
| ff | Financial freedom index | 465 | 50.086 | 20.479 | 10.000 | 90.000 |

1. **Results**

The results of the estimations for concentration and competition are presented in Tables 2 and 3 respectively. Interestingly, our findings contradict the common view of policy-makers that greater information disclosure is [undoubtedly](http://lingvo-online.ru/en/Search/Translate/GlossaryItemExtraInfo?text=%d0%b1%d0%b5%d1%81%d1%81%d0%bf%d0%be%d1%80%d0%bd%d0%be&translation=undoubtedly&srcLang=ru&destLang=en) necessary for better functioning of the financial system. The results rather support some theoretical illustrations that excess information disclosure could even deteriorate the social welfare.

The higher level of information transparency is associated with the lower level of bank competition and, at the same time, with the lower level of bank concentration. This is evidenced by the significant positive effect of the transparency variable on the Lerner index and by the negative effect of this variable on the bank concentration indicator, correspondingly. These results are stable for different model specifications.

At the same time, as expected, the higher quality of institutions (whether expressed as the sum of the Worldwide Governance Indicators or as the freedom from corruption index) has the opposite (positive) link with respect to bank competition. However, it also corresponds to the greater share of the largest 3 banks’ assets in total system assets.

Countries where the deposit insurance scheme has been introduced are characterised by lower levels of bank concentration. Moreover, in countries with worse macroeconomic environment the degree of bank concentration is higher. This is confirmed by the fact that inflation is positively linked with the share of the largest 3 banks’ assets in total system assets.

**Table 2. Transparency Index and Concentration (robust s.e. in brackets)**

|  |  |
| --- | --- |
| VARIABLE | Y = bc3 |
| tran | -3.730\* | -3.789\* | -4.504\* | -4.577\*\* | -4.355\*\* | -4.419\*\* | -4.112\*\* | -4.213\*\* |
|   | (2.177)  | (2.120)  | (2.307)  | (2.217)  | (2.016)  | (1.960)  | (1.965)  | (1.942)  |
| bd | -0.062 | -0.080 | -0.062 | -0.072 | -0.064 | -0.075 | -0.066 | -0.079 |
|   | (0.056)  | (0.063)  | (0.057)  | (0.063)  | (0.047)  | (0.051)  | (0.047)  | (0.051)  |
| g\_GDP | 0.181 |   | 0.218 |   | 0.137 |   | 0.174 |   |
|   | (0.338)  |   | (0.337)  |   | (0.334)  |   | (0.328)  |   |
| ccp | 0.268\*\*\* | 0.250\*\*\* | 0.320\*\* | 0.305\*\* | 0.283\*\* | 0.269\*\* | 0.331\*\*\* | 0.305\*\* |
|   | (0.092)  | (0.089)  | (0.126)  | (0.123)  | (0.116)  | (0.114)  | (0.125)  | (0.121)  |
| iq | 1.039\*\* | 0.760 |   |   |   |   | 1.387\*\*\* | 1.116\*\* |
|   | (0.450)  | (0.507)  |   |   |   |   | (0.398)  | (0.434)  |
| ent\_int | 0.010 | 0.008 | 0.022 | 0.018 | 0.028 | 0.027 | 0.023 | 0.022 |
|   | (0.043)  | (0.040)  | (0.045)  | (0.041)  | (0.040)  | (0.037)  | (0.039)  | (0.036)  |
| dep | -7.339\*\* | -7.546\*\* | -7.318\*\* | -7.449\*\* | -6.762\*\* | -6.754\*\* | -6.918\*\* | -6.820\*\* |
|   | (3.519)  | (3.483)  | (3.402)  | (3.400)  | (2.935)  | (2.960)  | (3.082)  | (3.104)  |
| st\_int | -0.088 | -0.091 | -0.100 | -0.101 |   |   |   |   |
|   | (0.081)  | (0.079)  | (0.081)  | (0.080)  |   |   |   |   |
| for\_int | 0.015 | 0.019 | 0.043 | 0.044 |   |   |   |   |
|   | (0.054)  | (0.055)  | (0.056)  | (0.057)  |   |   |   |   |
| t1 | 0.164 | 0.918 | -0.063 | 0.062 | -1.114 | -0.623 | -1.528 | -0.778 |
|   | (2.871)  | (3.267)  | (2.916)  | (3.217)  | (2.380)  | (2.595)  | (2.367)  | (2.619)  |
| t5 | 3.033 | 3.685 | 4.204\* | 4.602\* | 2.075 | 2.531 | 1.340 | 2.058 |
|   | (2.440)  | (2.434)  | (2.497)  | (2.437)  | (2.282)  | (2.272)  | (2.226)  | (2.239)  |
| gdpc |   | 0.000 |   | 0.000 |   | 0.000 |   | 0.000 |
|   |   | (0.000) |   | (0.000) |   | (0.000) |   | (0.000) |
| ci |   |   | 0.302\*\*\* | 0.271\*\*\* | 0.306\*\*\* | 0.263\*\*\* |   |   |
|   |   |   | (0.095)  | (0.103)  | (0.086)  | (0.097)  |   |   |
| ff |   |   |   |   | -0.029 | -0.029 | -0.043 | -0.040 |
|   |   |   |   |   | (0.088)  | (0.088)  | (0.089)  | (0.090)  |
| Constant | 84.020\*\*\* | 84.320\*\*\* | 71.360\*\*\* | 73.780\*\*\* | 73.910\*\*\* | 75.940\*\*\* | 86.710\*\*\* | 86.800\*\*\* |
|   | (7.335)  | (7.172)  | (7.546)  | (7.368)  | (6.896)  | (6.451)  | (7.004)  | (6.537)  |
| r2\_w | 0.148 | 0.149 | 0.100 | 0.101 | 0.081 | 0.090 | 0.095 | 0.102 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 3. Transparency Index and Competition (robust s.e. in brackets)**

|  |  |
| --- | --- |
| VARIABLE | Y = ler |
| tran | 0.027\* | 0.027\* | 0.029\* | 0.031\*\* | 0.029\*\* | 0.032\*\* | 0.028\*\* | 0.030\*\* |
|   | (0.015)  | (0.015)  | (0.015)  | (0.014)  | (0.013)  | (0.013)  | (0.014)  | (0.014)  |
| bd | 0.000 | 0.000\* | 0.000\* | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|   | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| g\_GDP | 0.002 |   | 0.002 |   | 0.003 |   | 0.003 |   |
|   | (0.003)  |   | (0.002)  |   | (0.002)  |   | (0.002)  |   |
| ccp | 0.000 | 0.000 | -0.001 | -0.001 | 0.000 | -0.001 | 0.000 | -0.001 |
|   | (0.001)  | (0.001)  | (0.001)  | (0.001)  | (0.001)  | (0.001)  | (0.001)  | (0.001)  |
| iq | -0.005\* | -0.005 |   |   |   |   | -0.006\* | -0.008\*\* |
|   | (0.003)  | (0.003)  |   |   |   |   | (0.003)  | (0.003)  |
| ent\_int | 0.000 | 0.000 | -0.000\* | -0.000\*\* | -0.000\* | -0.000\*\*\* | -0.000\* | -0.000\*\* |
|   | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| dep | -0.014 | -0.015 | -0.011 | -0.014 | -0.027 | -0.027 | -0.026 | -0.027 |
|   | (0.024)  | (0.025)  | (0.024)  | (0.025)  | (0.025)  | (0.023)  | (0.025)  | (0.023)  |
| st\_int | 0.000 | 0.000 | 0.000 | 0.000 |   |   |   |   |
|   | (0.001)  | (0.001)  | (0.001)  | (0.001)  |   |   |   |   |
| for\_int | 0.000 | 0.000 | 0.000 | 0.000 |   |   |   |   |
|   | (0.000) | (0.000) | (0.000) | (0.000) |   |   |   |   |
| t1 | -0.024 | -0.030 | -0.020 | -0.017 | -0.032\*\* | -0.025\* | -0.030\*\* | -0.025 |
|   | (0.017)  | (0.019)  | (0.016)  | (0.019)  | (0.013)  | (0.015)  | (0.014)  | (0.015)  |
| t5 | 0.036\* | 0.037\* | 0.038\*\* | 0.040\*\* | 0.033\* | 0.040\*\* | 0.036\*\* | 0.043\*\* |
|   | (0.020)  | (0.019)  | (0.019)  | (0.018)  | (0.017)  | (0.016)  | (0.018)  | (0.018)  |
| gdpc |   | 0.000 |   | 0.000 |   | 0.000 |   | 0.000 |
|   |   | (0.000) |   | (0.000) |   | (0.000) |   | (0.000) |
| ci |   |   | -0.002\*\* | -0.002\*\* | -0.001\* | -0.002\*\* |   |   |
|   |   |   | (0.001)  | (0.001)  | (0.001)  | (0.001)  |   |   |
| ff |   |   |   |   | 0.000 | 0.000 | 0.000 | 0.000 |
|   |   |   |   |   | (0.001)  | (0.001)  | (0.001)  | (0.001)  |
| Constant | 0.159\*\*\* | 0.175\*\*\* | 0.237\*\*\* | 0.256\*\*\* | 0.235\*\*\* | 0.270\*\*\* | 0.182\*\*\* | 0.192\*\*\* |
|   | (0.058)  | (0.052)  | (0.064)  | (0.056)  | (0.040)  | (0.040)  | (0.043)  | (0.046)  |
| r2\_w | 0.224 | 0.225 | 0.280 | 0.300 | 0.302 | 0.306 | 0.260 | 0.251 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The robustness check (see Tables 4 and 5) confirms our findings with regard to the positive link between bank concentration and information disclosure. The relation between bank competition and the alternative transparency index is unclear. This is probably due to the different nature of the index. It rather captures the monitoring activity from private investors than directly the level of information disclosure.

Our results also indirectly demonstrate that competition and concentration are two different characteristics of the market. The market could be highly concentrated and yet remain rather competitive.

**Table 4. Private Monitoring Index and Concentration, robustness check (robust s.e. in brackets)**

|  |  |
| --- | --- |
| VARIABLE | Y = bc3 |
| tranb | -4.842\*\*\* | -4.752\*\*\* | -5.099\*\*\* | -5.082\*\*\* | -4.510\*\*\* | -4.441\*\*\* | -4.682\*\*\* | -4.514\*\*\* |
|  | (1.547)  | (1.528)  | (1.566)  | (1.558)  | (1.447)  | (1.468)  | (1.441)  | (1.451)  |
| bd | -0.074 | -0.089 | -0.071 | -0.080 | -0.067 | -0.078 | -0.072 | -0.082\* |
|  | (0.055)  | (0.060)  | (0.056)  | (0.060)  | (0.047)  | (0.050)  | (0.047)  | (0.050)  |
| g\_GDP | 0.211 |  | 0.251 |  | 0.144 |  | 0.186 |  |
|  | (0.324)  |  | (0.329)  |  | (0.338)  |  | (0.330)  |  |
| ccp | 0.256\*\*\* | 0.236\*\*\* | 0.301\*\*\* | 0.281\*\*\* | 0.250\*\* | 0.233\*\* | 0.309\*\*\* | 0.277\*\*\* |
|  | (0.090)  | (0.086)  | (0.106)  | (0.105)  | (0.100)  | (0.099)  | (0.109)  | (0.107)  |
| iq | 1.241\*\*\* | 0.968\* |  |  |  |  | 1.509\*\*\* | 1.226\*\*\* |
|  | (0.457)  | (0.546)  |  |  |  |  | (0.379)  | (0.452)  |
| ent\_int | 0.016 | 0.015 | 0.025 | 0.023 | 0.027 | 0.028 | 0.024 | 0.024 |
|  | (0.041)  | (0.038)  | (0.042)  | (0.039)  | (0.038)  | (0.035)  | (0.038)  | (0.035)  |
| st\_int | -0.041 | -0.046 | -0.048 | -0.049 |  |  |  |  |
|  | (0.084)  | (0.082)  | (0.082)  | (0.082)  |  |  |  |  |
| for\_int | 0.015 | 0.021 | 0.044 | 0.045 |  |  |  |  |
|  | (0.054)  | (0.056)  | (0.057)  | (0.057)  |  |  |  |  |
| t1 | 0.157 | 0.981 | 0.268 | 0.509 | -0.126 | 0.492 | -0.846 | 0.036 |
|  | (3.337)  | (3.794)  | (3.332)  | (3.696)  | (2.625)  | (2.961)  | (2.646)  | (3.020)  |
| t5 | 2.232 | 3.058 | 3.623 | 4.193 | 2.440 | 3.026 | 1.483 | 2.377 |
|  | (2.936)  | (2.880)  | (2.905)  | (2.781)  | (2.522)  | (2.493)  | (2.524)  | (2.519)  |
| gdpc |  | 0.000 |  | 0.000 |  | 0.000 |  | 0.000 |
|  |  | (0.000) |  | (0.000) |  | (0.000) |  | (0.000) |
| ci |  |  | 0.328\*\*\* | 0.295\*\* | 0.314\*\*\* | 0.268\*\*\* |  |  |
|  |  |  | (0.093)  | (0.116)  | (0.079)  | (0.101)  |  |  |
| ff |  |  |  |  | -0.077 | -0.076 | -0.094 | -0.089 |
|  |  |  |  |  | (0.091)  | (0.091)  | (0.093)  | (0.094)  |
| Constant | 84.190\*\*\* | 84.050\*\*\* | 69.100\*\*\* | 71.390\*\*\* | 74.670\*\*\* | 76.370\*\*\* | 89.040\*\*\* | 88.350\*\*\* |
|  | (7.654)  | (7.860)  | (7.872)  | (7.245)  | (6.983)  | (6.181)  | (6.933)  | (6.691)  |
| r2\_w | 0.121 | 0.117 | 0.073 | 0.071 | 0.061 | 0.066 | 0.078 | 0.080 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 5. Private Monitoring Index and Competition, robustness check (robust s.e. in brackets)**

|  |  |
| --- | --- |
| VARIABLE | Y = ler |
| tranb | -0.001 | -0.001 | 0.001 | 0.001 | -0.008 | -0.007 | -0.008 | -0.008 |
|  | (0.009)  | (0.009)  | (0.009)  | (0.009)  | (0.009)  | (0.009)  | (0.010)  | (0.009)  |
| bd | 0.000 | 0.000\* | 0.000\* | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| g\_GDP | 0.002 |  | 0.002 |  | 0.003 |  | 0.003 |  |
|  | (0.002)  |  | (0.002)  |  | (0.002)  |  | (0.002)  |  |
| ccp | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | (0.001)  | (0.001)  | (0.001)  | (0.001)  | (0.001)  | (0.001)  | (0.001)  | (0.001)  |
| iq | -0.004 | -0.003 |  |  |  |  | -0.004 | -0.006\* |
|  | (0.003)  | (0.003)  |  |  |  |  | (0.003)  | (0.003)  |
| ent\_int | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -0.000\* | 0.000 | -0.000\* |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| st\_int | 0.000 | 0.000 | 0.000 | 0.000 |  |  |  |  |
|  | (0.001)  | (0.001)  | (0.001)  | (0.001)  |  |  |  |  |
| for\_int | 0.000 | 0.000 | 0.000 | 0.000 |  |  |  |  |
|  | (0.000) | (0.000) | (0.000) | (0.000) |  |  |  |  |
| t1 | -0.037\*\* | -0.046\*\* | -0.032\*\* | -0.035\* | -0.047\*\*\* | -0.044\*\*\* | -0.046\*\*\* | -0.043\*\*\* |
|  | (0.017)  | (0.019)  | (0.016)  | (0.018)  | (0.013)  | (0.015)  | (0.013)  | (0.015)  |
| t5 | 0.027 | 0.026 | 0.030\* | 0.031\* | 0.021 | 0.026\* | 0.024 | 0.029\* |
|  | (0.019)  | (0.018)  | (0.018)  | (0.016)  | (0.015)  | (0.014)  | (0.016)  | (0.015)  |
| gdpc |  | 0.000 |  | 0.000 |  | 0.000 |  | 0.000 |
|  |  | (0.000) |  | (0.000) |  | (0.000) |  | (0.000) |
| ci |  |  | -0.002\*\* | -0.002\* | -0.001 | -0.002 |  |  |
|  |  |  | (0.001)  | (0.001)  | (0.001)  | (0.001)  |  |  |
| ff |  |  |  |  | 0.000 | 0.000 | 0.000 | 0.000 |
|  |  |  |  |  | (0.001)  | (0.001)  | (0.001)  | (0.001)  |
| Constant | 0.224\*\*\* | 0.242\*\*\* | 0.292\*\*\* | 0.307\*\*\* | 0.291\*\*\* | 0.329\*\*\* | 0.253\*\*\* | 0.270\*\*\* |
|  | (0.042)  | (0.038)  | (0.052)  | (0.047)  | (0.044)  | (0.045)  | (0.052)  | (0.053)  |
| r2\_w | 0.206 | 0.199 | 0.258 | 0.262 | 0.287 | 0.284 | 0.255 | 0.240 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

1. **Conclusions**

There is an implicit assumption among policy-makers that one of the main impediments to the efficient and stable functioning of the financial system is the lack of sufficient information disclosure by market participants. Therefore, several policy initiatives have been proposed in order to raise the level of information transparency in the market. However, the consequences of such policies are not unambiguous. There are quite a few theoretical studies showing the negative effect of greater transparency on the social welfare and as well as on the stability in the financial system.

Competition is generally considered as a necessary prerequisite for the efficient and stable financial system. Quite many studies have been conducted in order to find the determinants of competition so that to work out the appropriate regulatory policies. However, an important possible determinant – information disclosure - has been left aside. Therefore, this paper tries to fill this gap in the literature.

We carry out the cross-country analysis covering 213 countries during the years 2001, 2003 and 2010. Our hypothesis states that there exists a positive link between bank competition and bank information disclosure. We also examine the link between bank concentration and information transparency.

Our results confirm the existence of the link between competition and transparency, as well as between concentration and transparency. However, our findings contradict the regulators’ predictions: higher level of banking system transparency is associated with lower bank competition (higher country-level Lerner index) and, at the same time, with lower bank concentration. This result indirectly confirms the fact that concentration does not reflect the level of competition in a market. Thus higher transparency does not result into reduction of the market power, lowering, however, the concentration level.

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1. The study was implemented in the framework of the Basic Research Program of the Higher School of Economics in 2013 [↑](#footnote-ref-1)
2. National Research University Higher School of Economics, Moscow, iandrievskaya@hse.ru [↑](#footnote-ref-2)
3. National Research University Higher School of Economics, Moscow, msemenova@hse.ru [↑](#footnote-ref-3)
4. The hypothesis states that greater competition leads to instability in a financial market. This could happen due to the fact that in competitive environment banks try to increase their earnings taking more risks, which ultimately could destroy the well-functioning of the whole financial system. [↑](#footnote-ref-4)