



Banking Sector Competition and its Impact on Banks' Risk-Taking and Interest Margins in the CESEE Countries

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Why banking sector competition?

- Competition is considered as an important determinant for the behaviour of the banking sector in the economy.
- Particularly, competition is considered to be highly important for the efficiency and stability of the banking sector.
- The recent crisis has reignited the debate on the economic effects of banking sector competition.
- The research on the effects competition may help regulators shape competition policies.

Why CESEE countries?

- CESEE countries underwent a long transition process, which included also the reforming of the banking sector.
- Competition in the banking sector was introduced during the transition process; hence, it represents a relatively recent development for this region.
- Banking sector competition and its effects on the degree of risk-taking and interest margins in the CESEE countries have been addressed only by few studies.

The main objectives

- Estimation of the degree of banking sector competition in the CEE countries using the Panzar-Rosse approach.
- Estimation of the relationship between banking sector competition and risk-taking.
- Estimation of the relationship between banking sector competition and interest margins.
- Check for consistency between different measures of competition.

Data and Methodology

- The study is mainly based on bank-level yearly data sourced from the BankScope database. Also, country-level data sourced from different sources (e.g. World Bank, EBRD) are used.
- The estimations are conducted on panel data using a variety of methodologies such as General Method of Moments and Fixed Effects Vector Decomposition.

Main findings

Competitive behavior consistent to monopoly.

... market power stronger in the non-EU members

| VARIABLES | I | II | III | IV |
|-------------------------|------------------|------------------|-----------------|-----------------|
| Laglogint_inc_real | 0.699*** | 0.690*** | 0.201*** | |
| logp_funds | 0.208*** | 0.228*** | 0.314*** | 0.364*** |
| logp_labour | -0.234*** | -0.206*** | 0.155*** | 0.154*** |
| logp_physcapital | -0.132*** | -0.157*** | 0.028** | 0.020* |
| loans_ta | 0.09 | 0.08 | 0.421*** | 0.279*** |
| equity_ta | -1.681*** | -1.617*** | 0.365* | 0.580*** |
| prov_loans | -0.392 | -0.209 | -0.496 | -0.203 |
| nonintinc_ta | 1.713* | 1.621** | -0.096 | -0.362 |
| rgdpgrowth | 0.017*** | 0.018*** | 0.009*** | 0.005*** |
| ebrd_bankref1 | -0.05 | -0.029 | -0.080** | -0.014 |
| dv_foreign_domestic_51 | 0.113** | 0.096* | -0.049* | -0.02 |
| dv_foreignorigin | 0.121** | 0.128** | -0.006 | 0.012 |
| logpfunds_dvnoneu | | -0.137** | | |
| logplabour_dvnoneu | | -0.194** | | |
| logpphyscapital_dvnoneu | | 0.092* | | |
| dv_noneu | | -1.751*** | | |
| Laglogtot_inc_real | | | | |
| Laglogintinc_ta | | | | 0.254*** |
| logta | | | 0.815*** | |

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In general, competition appeared to have a negative impact on banks' risk-taking.

... however, in the non-EU members, the impact is positive

| | I | II | III | IV |
|----------------------|----------------|------------------|----------------|------------------|
| VARIABLES | prov_loans | prov_loans | prov_loans | prov_loans |
| h_stat | -0.096* | -0.183*** | | |
| hstat_dvnoneu | | 0.501*** | | |
| lerner_index | | | 0.028** | |
| hhi_dep | | | | -0.002*** |
| Lagonintinc_ta | 0.016 | 0.016 | 0.009 | 0.033 |
| Lagequity_ta | -0.011 | -0.012 | -0.01 | -0.005 |
| Lagnim | -0.076 | -0.078 | -0.072 | -0.124* |
| logta | -0.720*** | -0.772*** | -0.823*** | -0.713*** |
| Laggrowth_loans | 0.004** | 0.003** | 0.003** | 0.003** |
| rgdpgrowth | -0.232*** | -0.235*** | -0.219*** | -0.237*** |
| gdp_percap | 0 | 0 | 0 | 0 |
| cpi_ebrd | -0.006 | -0.005 | -0.021 | 0.04 |
| ebrd_bankref1 | -0.5 | -0.802 | -0.678 | -0.786 |
| dv_foreign | 0.187 | 0.257 | 0.446 | 0.15 |
| propertyrights_hrt | -0.059*** | -0.051** | -0.062** | -0.050** |
| dv_origin | 0.268 | 0.286 | 0.178 | 0.256 |
| logexch_rate | -3.864** | -3.222** | -3.245** | -4.878*** |
| dv_noneu | | -7.195*** | | |

Relationship between competition net interest margins appears negative.

| | I | II | III | IV |
|-------------------------|----------------|---------------|-----------------|----------------|
| VARIABLES | nim | nim | nim | nim |
| Lagnim | 0.628*** | 0.638*** | 0.612*** | 0.647*** |
| h_stat | -0.029* | -0.016 | | |
| hstat_dvnoneu | | -0.069 | | |
| lerner_index | | | 0.012*** | |
| hhi_dep | | | | 0.000** |
| equity_ta | 0.036** | 0.041** | 0.038* | 0.041** |
| nonintinc_ta | -0.108 | -0.142 | -0.1 | -0.112 |
| loggross_loans | 0.190* | 0.190* | 0.170* | 0.214** |
| prov_loans | 0.076 | 0.093 | 0.086 | 0.097** |
| lqdassets_custstfunding | -0.003 | -0.003 | -0.004 | -0.002 |
| nonintexp_ta | 0.132 | 0.12 | 0.136 | 0.171* |
| earningsassets_ta | -0.035*** | -0.035*** | -0.036*** | -0.031*** |
| bankdep_custdep | 0.004 | 0.003 | 0.004 | 0.004 |
| ebrd_bankref1 | -0.005 | 0.093 | 0.239 | 0.211 |
| economic_freedom_hrt | -0.028** | -0.023 | -0.022 | -0.021 |
| rgdpgrowth | 0.048*** | 0.054*** | 0.050*** | 0.058*** |
| gdp_percap | 0.000** | 0.000** | 0 | 0.000* |
| cpi_ebrd | 0.01 | 0.014 | 0.007 | 0.001 |
| dv_foreign | -0.133 | -0.158 | -0.122 | -0.165* |
| dv_origin | -0.013 | 0.01 | 0.015 | 0.005 |
| dv_noneu | | 1.856*** | | |

Thank you for your attention!