SOME ASPECTS OF THE LITHUANIAN BANKING SECTOR TRANSFORMATION

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Abstract. The paper deals with changes in Lithuanian banking sector, which occurred during the 1996–2005 period. Authors highlight main driving force – foreign direct investments (FDI) into sector. *Structure-conduct-performance* (SCP) approach for sector transformation analysis has been adapted and applied. Change of a set of indicators incorporated into presented variation SCP is being commented. On that basis authors evaluate transformations of banking sector in terms of number and capital origin of market players, sector expansion, concentration and financial performance efficiency. Assumption about more efficient functioning of foreign banks in less developed countries is being discussed; considerations concerning foreign capital impact, taking into account positive and negative plausible facets presented.

Keywords: banking sector, structure-conduct-performance approach, FDI into banking.

1. Introduction

Role of banking sector in general performance of any economy - developed or under process of development - usually unanimously is perceived as very important one. Approach towards role of banking in any economy is determined by business servicing functions they perform [1]. Despite authors do not argue about importance of banking sector in economy, there is no common agreement about character and direction of relationship between level of banking sector development and pattern of economic growth. Some authors adopt an approach that economic growth and development of financial sector are driven by the same set of factors. Other group of researchers state [2] that banks performing role of financial intermediation stimulate economic growth. Some studies propone that countries with well-developed financial institutions tend to experience more rapid rates of real GDP per capita growth [3, 4].

In presented paper we completely adopt prevailing opinions about importance of well functioning banking sector for economic health. Existence of close relation between banking sector expansion and economic development, not going into discussion what serves as cause, what, respectively, for consequence, is being taken as premise as well. Agreeing about importance of banking sector in presented paper we strive to tackle the issues related to Lithuanian banking sector transformation specifics. First, we strive to detect how Lithuanian banking sector has been transformed in terms of market players and capital structure starting from the1990s, and, secondly, how market structure change impacted on general performance of considered sector.

2. Characteristic features of Lithuanian banking sector transformation

Processes of economy transition to market state were vividly activated several years before Lithuania regained independence. A series of laws were adopted, what in its turn, triggered Lithuanian banking sector transformation. At the end of 1989 banking sector comprised specialized USSR Republican bank subdivisions and 7 local commercial banks. The banking system in Lithuania, as in many other analogous countries, was not stable. Despite subjective and objective difficulties an independent financial, monetary and classical two- level banking systems have been introduced. The first hierarchical level was represented by the Bank of Lithuania and the second level consisted of commercial banks.

Foreign banks have tackled weak banking sector of new independent state and started entering the market. Since 1996 the process has continuously accelerated (Fig 1). Change in number and structure of market players in Lithuanian banking sector is presented below. As data presented above reflect, foreign banks were mostly interested in acquisitions, number of market players remained more or less stable (varied between 12 and 14 within ten year period). As concerns capital structure in terms of its origin situation was rather different. In 1996 foreign banks displayed obvious interest in country's commercial bank shares. In 1999 foreign capital took over 50 % of 5 commercial banks' authorized capital: e.g. "AB Vilniaus bankas", "AB bankas Snoras", and, later, "Lietuvos žemės ūkio bankas" and "Lietuvos taupomasis bankas" were privatized (Fig 2).





It is worth to mention, that Lithuanian banking sector is characterized as the mostly saturated by foreign capital compared to other sectors of economy, what in its turn, can be accepted as indication of the most prospective one in terms of probable return on capital invested.

To generalize, we can draw the following notices. The first, foreign capital crowded out local capital in banking sector of Lithuania. Stubborn and inflexible state owned banking system lacked capital resources and performed inefficiently, which created unmet demand in crediting. Newly opened market of transition country offered new opportunities for experienced foreign investors. The second important notice is that, despite great interest of foreign investors, number of banks remained the same. It means that foreign companies hardly were interested in green field investments – acquisitions and takeovers were main means of entering the market.

In order to take a closer look at banking sector changes we will extend characteristics of this economy sector changes by applying a classical *structure-conduct-performance* approach.

3. Adaptation of STRUCTURE – CONDUCT – PERFORMANCE approach for banking sector analysis

One common of analysis of firms' performance is to take into account structure of industry in which firms operate. A *structure-conduct-performance* (SCP) approach provides a framework, which rather successfully could be applied for analysis of Lithuanian banking sector transformation. The SCP approach suggests starting from the structure of industry being analyzed. Hence, we adopt a premise that firms' conduct, or behavior, is determined by industrial structure. Then, having measured behavior of firms, we can analyze their performance [6].

Before starting to employ SCP method, we need to discuss issues related to its application. The first facet under discussion concerns type of causal relationships between *market structure*, *conduct* and *performance*. According to many authors, there is clear direction of causality from industry structure to conduct and to performance then. Nevertheless, some economists argue that relationships between distinguished characteristics are much more complex, e.g. conduct can affect structure and performance could predetermine conduct, in its turn [6]. As concerns our view on the direction of causality, we assume, that in our specific case conduct was the central determinant of market structure and performance, consequently. The arguments behind approach lie in very sharply expressed change of conduct style of banking system during transition period being analyzed. All possibly used characteristics of conduct, e.g. price behavior, product strategy, innovations, and advertising changed radically. Taking into account that conduct changes were triggered by foreign direct investments (FDI) mainly, in the provided analysis conduct is to be characterized by latter indicator, which, is believed, in result has determined all main components of conduct (as mentioned above, pricing behavior, product strategy, innovation and advertising policies). Now, after discussing direction of causality and choosing indicator reflecting banking sector conduct specifics during transition period in Lithuania, aspects of market structure and performance under elaboration should be indicated.

A brief characteristic of market players' change by number and capital origin is presented in the 1st chapter. That is one of market structure's specific features if to apply SCP approach for economic sector analysis. Theoretically, market structure could be reflected by e.g. following indicators: number of sellers and buyers, product differentiation, barriers to entry, cost structures, vertical integration, conglomerates [6]. In our banking sector transformation research besides number of banks (sellers) we are going to employ the following indicators. Bank capital, expressed in percentage terms, respectively belonging to state and foreign investors, would more vividly reflect distribution of banking facilities among host and foreign capital and add to the picture of market players presented in previous chapter. The next indicator, bank assets in millions Litas, would provide picture of scale of sector expansion and, partly, give at least partial ideas of barriers to entry. The last indicator, which has been chosen to characterize market structure, is market concentration index, calculated for 5 main market players. To perceive scale of transformation all indicators are given for each year of period under elaboration.

A *performance* block in SCP sector analysis could embrace profitability, efficiency, economic growth, full employment and equity indicators [6]. We are going to examine at profit/loss of state owned and foreign banks and change of their return on equity (ROE) and return on assets (ROA).

SCP approach adapted for Lithuanian banking sector transformation analysis is presented in Fig 3.

Below results of developed SCP application are to be presented. Insight and implications of banking sector transformation, as a result of transition to market



Fig 3. SCP approach adapted for Lithuanian banking sector transformation analysis

economy and inflow of foreign capital, are to be considered.

4. Transformations of market structure and performance in Lithuanian banking sector during economic transition

Recall that before a concrete model for considered economic sector analysis was devised, direction of causal relationships had been discussed. In our case we adopted assumption that it was an intensive inflow of foreign capital, which caused changes in market structure and impacted on performance of Lithuanian banking sector simultaneously.

Let us stop on market structure transformations. Change of indicators, which were chosen for market structure characteristics, is presented below (Fig 4).

Juxtaposition of the considered indicators leads to a conclusion that structure of Lithuanian banking sector has changed considerably. If in 1996 domestic banks comprised 75 % of banking capital, in 2005 their share diminished to 14 % and 86 % of banking sector was owned by foreign investors. Domestic bank assets decreased from 4 to 1.3 billion litas, while foreign bank assets increased from 1.4 to 44 billion litas (more than 31 times). It is especially peculiar, that concentration of sector has not changed. In 1996, 5 biggest banks possessed 81 % of market share. In the year 2005 the same 5 banks had 85 % of market share. The main transformation here is that these banks have been taken over, were renamed and increased their assets dramatically.

At first, capital controlled by the state was literally replaced by foreign owned capital. Simultaneously with processes of privatization, which, actually, lead to a series of takeovers of local banks, foreign investors actively increased their assets.

Transformation of banking sector, caused by FDI is being reflected by performance indicators, which add to a whole picture of a change. In order to give evaluation of foreign capital inflow impact on performance of considered economic sector let us recall comprehensive empirical survey of foreign banks entry, which was carried out by Claessens et al [7]. Investigation of relationship between foreign banks entry and the performance of the domestic banking sector in 80 countries has been performed, panel estimations with 7,900 bank observations for 1988–1995 employed. The main result of the study was that foreign banks tend to have higher profits than domestic banks in the developing countries, while in developed countries foreign banks are less profitable than domestic banks.

Hence we can check whether better performance of foreign banks could be accepted as consistent pattern. The common intuition is that foreign banks should display a better performance than domestic banks. Changes of chosen indicators reflect that at the very beginning of operation foreign capital performed much better than local (Fig 5). That notice holds for all measures, e.g. domestic banks experienced losses in 1996, while foreign capital displayed perfect performance in terms of profit estimated both in absolute numbers and return on assets (ROA) and return on equity (ROE). The most peculiar moment here is the transformation of performance efficiency during considered period. Calculations show, that in the year 2005 ROA levelled and is equal to 0.8 %. As concerns ROE, it converged as well and equals to 7.5 % in domestic



Fig 4. Characteristic of market sector transformation in Lithuanian banking sector. Source of initial data: Lithuanian bank

banks and 10.7 % in foreign owned banks. Thus we have very clear evidence about sharp increase of efficiency of local capital achieving the same level of contestability.

Returning to the assumption about higher profitability of foreign banks in developed countries (recall empirical study by *Claessens et al* [7] mentioned above) we can add that the statement can be verified only at the early years of transition. Starting from the estimated year 2002 situation started to change and domestic banks in terms of efficiency started to perform rather similarly like foreign owned banks. Another issue is that before spillovers of FDI took place local capital, actually, was crowded out of the market.

5. Conclusions

1. At the beginning of transition Lithuanian banking sector could be characterized as almost entirely state. Inefficiency, constrained access to crediting resources resulted in high interest rates and unmet demand in crediting resources, which was extremely high in the period of intensive restructuring of transition economy. Opportunity for access to newly opened unsaturated market spurred foreign investors, who started entering Lithuanian banking sector. The processes of foreign capital inflow started approximately in 1996 and have become especially intensive since 1997-1998. As the result, Lithuanian banking sector became the mostly saturated by foreign capital compared to other sectors of economy. Obvi-



Fig 5. Performance of Lithuanian banking sector. Source of initial data: Lithuanian bank

ous interest of foreign capital in banking sector can be accepted as indication that this sector in the eyes of more advanced investor had been seen as one of the most prospective ones in terms of probable return on capital invested. Meanwhile, notably the share of capital owned by foreign investors has been stable for last several years. It is related primarily to the completion of the bank privatization process, which alleviated market access.

2. In order to trace changes in Lithuanian banking sector during transition period (years 1996–2005 were embraced) classical *structure-conduct-per-formance* approach was adapted to analysis of Lithuanian banking sector. A premise about central role of FDI in conduct determination has been

adopted. Sector *structure* and *performance* have been taken as being impacted by inflows of foreign capital. *Structure* has been estimated by a set of following indicators: bank capital structure by its origin, bank assets and concentration, calculated for local and foreign banks. *Performance* in suggested model has been estimated by profit, ROA and ROE indicators.

3. While interpreting trends of indicators included into suggested SCP model, a theoretical assumption about better performance of foreign banks in less developed countries has been tested. Character of chosen indicators' changes suggested the following notices. The first, foreign banks performed much better in the beginning and middle of considered period. Since the year 2003 efficiency of performance in locally and foreign owned banks evened. Convergence of ROA and ROE indicates that assumption about higher profitability of foreign origin banks in less developed country no longer holds for Lithuania. Intuition is that Lithuanian economy's rapid development erased main signs of less developed economies, spillovers generated by FDI already took place and differences in banks' performance disappeared. Greater presence of foreign banks not only enhanced efficiency of the domestic banking system but, as a result of increased competition, caused decrease in foreign banks' overhead costs and profits.

4. In order to provide economic evaluation of banking sector transformation during the last decade, it is necessary to take into account above mentioned almost complete crowding out of local capital. Question remains, what sort of tradeoff there is between growth of sector in terms of assets and efficiency and take away of market from local capital; question about repatriation of profit, which is a typical drawback of heavy presence of foreign capital, remains open as well.

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