THE COMPETITIVE STRUCTURE OF THE BANK INDUSTRY IN THE FACE OF MAJOR MARKET DISTURBANCES: EVIDENCE FROM CROATIA

DOMAGOJ HRUSKA, KATARINA MIHALJEVIC, TOMISLAV BAKOVIC

Ph.D., University of Zegreb
Email: dhruska@net.efzg.hr

Abstract: This paper looks into the dynamics of the competitive structure and strategic positioning of Croatian banks over the ten years period. Croatian financial system is dominantly bank-based which means that banks play a leading role in allocating capital and overseeing the investment decisions, making the bank system a cornerstone of the entire economic matrix of the country. Over the ten years covered by the study, we have witnessed long period of strategic instability in this industry which determinants and consequences are described in the paper. Besides that, our study provides empirical evidence on the determinants of competitiveness in Croatian bank industry as proposed by the Porter's five competitive forces analytical model. Finally, the paper emphasizes the importance of regulatory frame for competitive actions and explains its role in maintained of status quo competitive structure.

Key Words: banking industry, Croatia, industry analysis, competitiveness, Porter's model

I. INTRODUCTION

Industrial analysis is an important segment of overall system of strategicanalysis which aims at shaping an effective business strategy, the one which can overcome current structural difficulties and prepare company for markets of tomorrow. It the paper we approach the problem area of structural analysis of the Croatian banking industry through the optics of the five competitive forces model, developed by Michael Porter. Porter's five forces include the threat of substitute products or services, the threat of current rivals, the threat of new entrants, the bargaining power of suppliers and the bargaining power of customers.

The Croatian financial system is bank-centric, which implies that the banks are the most important financial institutions and also that they represent the most important channel of financing the needs of a real economy. The fact that banks occupy 69.62% (Croatian Bank Association, 2017) of the total assets of the financial system undoubtedly demonstrates their importance for the functioning of the Croatian economy. The paper emphasizes the importance of the structure of the baking industry in a way that it emphasizes the need of special attention for the most important vectors of the model: (1) the importance of regulatory and legal framework for competition of Croatian banking sector – threat of new entrants, (3) potential substitutes of banking products and (3) the importance of active and passive determinants of decision making system in banks - bargaining power of neighboring industries. As a result of these forces the paper also presents the overview of profitability of Croatian banking sector. Finally, the sublimate results of the research draw up conclusions with reference to the future developments of the banking system in the Republic of Croatia.

II. STRUCTURAL APPROACH TO BUSINESS STRATEGY

Structural approach to strategy derives from the domain of industrial economicsbecause it is founded on the part of economic analysis field known as Structure – Conduct -Performance (SCP) paradigm. One of the forerunners of the approach, Edward S. Mason (1939) advocated that the industry structure is a key factor determining the behavior of customers and suppliers, which indirectly affects the profitability, efficiency and innovation of the company. The term *structure*in the model refers to the industry structure measured by factors such as the number of competitors in the industry, the heterogeneity of the product, and the costs of entering and leaving the industry. The term *conduct*refers to specific activities of companies within the industry, including price policy change, product differentiation, secret agreements and exploitation of the market position. Finally, the term *performance* has two meanings: the first is the performance of an individual enterprise, and the second is the performance of the economy as a whole (Barney, 2002).

Given the diversity of the industry, especially in terms of its profit potential, the key task of industrial analysis is the appraisal of the industry's attractiveness. The attractive industry is the one which on average operates with profit margins above the average of the sector or the economy as a whole and where the same or higher level of profitability can be expected in the future. Michael Porter has developed the most well-known framework for analyzing structural features of an industry based on the fact that the profitability of one industry depends on five competitive forces: (1) the strength of industrial rivalry, (2) the threat of a newcomers, (3)

substitutes, (4) negotiating power of customers, and (5) negotiating power of the suppliers (Porter, 1998: 4).

III. OVERVIEW OF THE CROATIAN BANKING SECTOR

The banking sector is of paramount importance for every national economy. It is in direct correlation with the development of the economy because banks are usually major financial agents of the real sector, so the interdependence between the two is direct. Banks' business in Croatia is regulated by the Credit Institutions Act (Croatia Public Papers 159/13, 19/15, 102/15, effective from 30 September 2015).

Today, Croatian banking sector faces slight downturn. The assets of Croatian banks reached the highest amount in 2011 when it amounted to HRK 406.9bn (Croatian Kuna). The year 2011 was "fertile" for bank assets because that year the Kuna exchange rate changed bringing the increase in the amount of assets in foreign currencies and Kuna denominated assets with a currency clause (Koški, 2012, Dumičić, Šošić, 2014). The exchange rate depreciated against the euro by 2% and the Swiss franc and the US dollar 4.5%. (Croatian National Bank (CNB), 2012). In 2016, banks' assets decreased by 1.7%, so the trend of its slight decline continued for the fifth consecutive year. Impairment of assets was strongly influenced by the conversion of loans in Swiss francs to euro loans, exchange rate movements, and the sale of uncollectible receivables and the exit of two banks from the system. The most significant impact on the nominal reduction of gross loans to households (HRK 7.2bn or 6%) had housing loans due to the impact of write-offs in conversion and then almost all other types of loans due to the sale of receivables and regular payments. Given the status of the Republic of Croatia as a full member of the European Union, the share of foreign capital in the banking sector has also increased in Croatia in the observed period. This increased the importance of foreign-owned banks in the Croatian banking sector. For two years this number has been retained at 15 banks.

As far as the ownership structure of the banking sector is concerned, in 2016, as in the first quarter of 2017, the largest share of banks' assets related to foreign-owned banks (89.7%). Compared to the previous year, it marks a drop of 0.6%. On the second place are the state-owned banks with 6.3% stake, the increase of which is visible in relation to the previous years. The smallest share of the market is occupied by the domestic privately owned banks with 4% of total assets. Their share in the previous year fell down to only two banks. In the observed period, the share of foreign owned assets and domestic-owned banks did not change significantly. Most of the largest banks are owned by European Union shareholders. The share of their assets in total assets of all banks at the end of 2016 was 88.7%. Four banks were owned by shareholders from third countries, and the assets of these banks slightly increased from the end of the previous year to 1.0% of total bank assets (CNB, 2017).

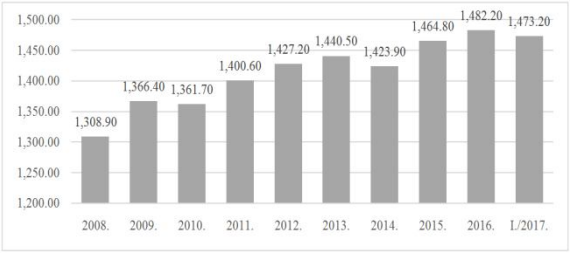
From the position of the structure of banks' liabilities and capital, the largest contribution to the reduction of total liabilities of banks gave rise to a drop in the reserve for conversion, and then further deleveraging abroad. Compared with the end of 2015, liabilities fell by HRK 9.5bn. Kuna or 2.8%. Bank conversion reserves, in accordance with the legal provisions, converted the loan portfolio of Swiss franc residents into euro-denominated loans.

Most of the conversions were made by the end of the first quarter of 2016, so the amount of bookings decreased from the initial $ 6.9bn. HRK at only 118.1m HRK at the end of 2016.

During the ten year period the capital of the banks grew by HRK 4.9bn. Kuna or 9.8%. The magnitude of this impact has reduced the negative movements in equity and revaluation reserves and the payment of dividends from the profit realized in 2015. Share capital decreased by 1.2% in comparison to the end of 2015, due to the reduction of capital in several banks, with the aim of covering operating losses in previous years, and then due to the exit of two banks from the system. During 2016, five small banks went through the process of recapitalization, mostly in cash and, in part, by converting equity instruments to ordinary shares (HNB, 2017).

So far the concentration of the industry is concerned we can look at the Herfindahl-Hirschman's Index (HHI) in the observed ten years period. The Herfindahl-Hirschman's Index is a measure of concentration in an industry, calculated as the sum of the market shares of the largest 50 companies in an industry. Herfindahl-Hirschman's Index (HHI) rose in 2016 in relation to the observed period. The index for given loans grew the most, continuing the ten-year growth trend. By the end of 2016 it was 1,482 and was significantly higher than the remaining indices (Exhibit 1).

Exhibit 1 Herfindahl-Hirschman's Index (HHI) of the Croatian baking sector from 2008.-I./2017.

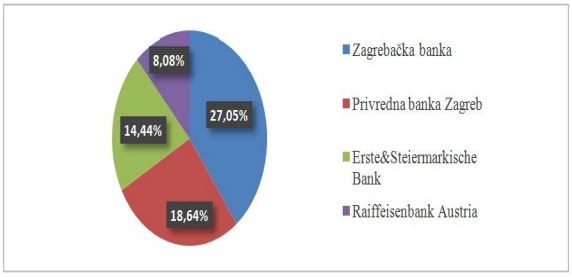


Source: Hrvatskanarodnabanka (Croatian National Bank) (2017), Standardniprezentacijski format III/2017

IV. COMPETITIVE DYNAMICS OF THE CROATIAN BANKING SECTOR

The banking sector in Croatia consists of 26 banks, of which one is a savings bank. In Exhibit 2 represents four largest banks in the banking sector measured by the size of asset. The above emphasizes the concentration of the Croatian banking market. The lowest joint market share of the biggest banks was in 2008, at the time of the financial crisis. To date, it has been steadily growing, and in the last 2016, it has reached the largest share so far. The latest data from the Croatian National Bank is available from the first quarter of 2018, which states that the share of the two largest banks is 45.3%, while the largest four banks account for 68.3% of total bank assets. Given the diversity of business operations and the provision of financial services to the banks mentioned above, there is a great deal of competition with which all banks in the industry are trying to keep pace with, while at the same time maintained their market share.

Exhibit 1 Share of four largest banks in total assets of Croatian banking sector



Source: Hrvatskanarodnabanka (Croatian National Bank) (2017), Standardniprezentacijski format III/2017

4.1. The importance of regulatory and legal framework for competition in Croatian banking sector – diminishing the threat of new entrants

The importance of the regulatory and legal framework was observed from the point of entry of new banks into the market. Strong influx of foreign banks into the Croatian market occurred in the period before the financial crisis due to the extremely low level of interest rates. Another factor that has resulted in increased entry of foreign banks is the entry of Croatia into the European Union. With this move, the door to foreign banks for investment and expansion on the Croatian market opened widely, but the opportunities for the domestic banking sector to expand to the industries in foreign markets opened as well.

The potential new entreats to the industry are faced by high capital requirements that are reflected in securing the prescribed level of capital so that the banks can cover their costs during the crisis and remain solvent. The total amount of capital should be at least 8% of the risk weighted assets. The second part refers to the liquidity claims whose minimum amount must be at the level of 25% of the outflow. If the assets of a bank exceed the value of its regulatory capital it is considered to be affected by the financial leverage. These criteria significantly reduce the competitiveness of newcomers to the Croatian banking market.

4.2. Potential substitutes of banking products

Substitutes are products that have the same or similar characteristics as the primary product, performing the same function, though they may be based on different technology. By the time of the financial crisis, the most widespread financial product was the granting of loans through special kind of securities in developed financial markets known as securitization of assets. As a result of such market developments that ultimately led to the financial crisis the increasing number of loans between unrelated companies emerged. Since the banks at the time had high credit rating criteria, and the population and companies were unable to meet such criteria, they sought the source of funding in these alternative markets. The trend of approving financial loans between related and unrelated companies at favorable rates, as a substitute for classical bank product, therefore rose in significantly in the Croatian market in the observed ten years period.

4.3. Importance of active and passive determinants of decision making system in banks - bargaining power of neighboring industries

The most important financial activities of banks are loans and the collection of cash deposits. Within this framework, the negotiating power of the buyer and the negotiating power of the supplier can be observed from the aspect of the bank's balance positions that is from the position of assets as buyers and the position of the liability as suppliers.

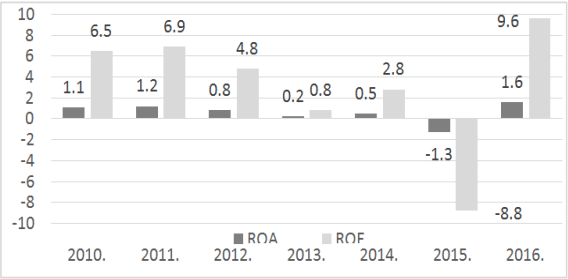
Loans form the *assets* side of the balance sheet of banking institutions and from that perspective their borrowers are actually customers of banks. The main source of income for banks is interest income. In Croatia the largest proportion of approved loans were sold to households, 43.7% and non-financial corporations with a share of 32.3% (CNB, 2017). There are a large number of competitors in the banking market that offer the same kind of financial products with only mild differentiation. Consequently, that boosts the negotiating power of customers. Customers may require banks to offer more favorable lending terms at lower interest rates because the cost of switching to other banks in the industry or non-financial institutions is negligible. On the other hand, taking into account the number of potential buyers of loans in Croatia and the importance of loans for continuation of their business structurally weakens the negotiating power of buyers.

4.4. Overview of profitability of Croatian banking sector

The core business goal of any company is the positive financial result. Banks are operating with borrowed financial assets that need to be repaid depending on maturity, and their liquidity is a key condition for normal business. The banks strive for business model

that optimize security and liquidity with profitability. Profitability is in reciprocal relation to bank liquidity. Assets of banks with a higher liquidity feature yield lower yields, while the same is truth with liabilities of banks with longer maturities. The following chart shows the profitability of average assets and the profitability of average bank capital in Croatia (Exhibit 3).

Exhibit 3Profitability of average assets (ROAA) and the profitability of average bank capital (ROAE) in Croatia 2010-2016



Source: Hrvatskanarodnabanka (Croatian National Bank) (2017), Standardniprezentacijski format III/2017

ROAA and ROAE have reached the highest values since 2008, reaching 1.6% and 9.6% respectively. However, if the effects of the sale of equity holdings are excluded, profitability indicators are lower than in the period before the financial crisis, mainly because of the cost of risk. Although substantially reduced in 2016, the cost of risk continued to rise compared to the period before the financial crisis.

However, the overall liquidity position in the observed period was very favorable. Liquidity indicators showed that banks have significant surpluses to cover liquidity needs during a 30-day stress period. All segments of the model, with the exception of interest income, contributed to improving the results. The impact of lower value adjustments and provisions on conversion and loan loss costs (partly affected by the implementation of the conversion) proved to be crucial for this result (CNB, 2017). Also, one-off revenues, such as sales of equity and non-performing receivables, as well as received dividends, had a large impact on the final result. We can expect that the slow but steady multi-year trend of cost efficiency improvement will be continued in the future.

CONCLUSION

Financial institutions and markets are an important mechanism in the operation of the overall economic and financial system. Banks as the most important financial institutions of the Croatian financial system have a significant role to play in its functioning, but also play a key role in maintaining economic activity and function as a *sine qua non* of economic growth.

This paper analyzes the determinants of business through five forces of industrial structure. The first force, the power of existing competitors, shows the concentration of banking institutions in the Croatia. The analysis shows that there are 26 banks operating in the Croatian banking sector, with the four largest banks accounting for 68.3% of total bank assets in 2017. Even though the share of their property has declined slightly compared to the previous years, significant concentrations are still present. Taking into account banking and non-bank financial institutions performing banking services, it is concluded that the competitive force of threat of substitutions is strong. Further on, the analysis of the force of danger from the entry of newcomers brings us to the fact of liberalization of the banking market in Croatia, in particular because of the accession to the European Union, which additional opens the possibilities for entry of foreign banks from EU Member States into the domestic market. Regarding the regulatory and legislative framework of operations or existing capital requirements in the domestic market, the competitiveness of the banking sector can be labeled as moderate.

Through a thorough analysis and the use of inductive, deductive and compilation methods of the main topic of this paper, it can be concluded that the banking industry in the Republic of Croatia is moderately concentrated, consolidated and attractive for potential future investments.

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