## UNIVERSITY OF ECONOMICS IN BRATISLAVA

## FACULTY OF NATIONAL ECONOMY

Registration number: 101006/1/2019/36114651035015940

# EVALUATION AND ANALYSIS OF THE RISK AND RETURN PROFILE OF THE BANKING SYSTEM: THE ROLE OF FOREIGN CAPITAL

**Diploma** Thesis

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#### **Diploma** Thesis

Study Program: International Finance

Field of Study: Finance, Banking and Investments

Gestor: Department of Finance

Thesis Supervisor: Širaňová Mária, Ing., M.A. PhD.

Bratislava, 2019

**Bc.** Pokotylo Yuliia

# Acknowledgements

I would like to express my sincere gratitude to my advisor Širaňová Mária, Ing., M.A. PhD. for the continuous support of my research, motivation, and valuable advices. She has provided insightful ideas about the research and excellent guidance through the whole process of the writing of the thesis.

# ABSTRAKT

POKOTYLO, Yuliia: *Zhodnotenie a analýza rizikovosti a profitability bankovného systému: Úloha zahraničného kapitálu.* – Ekonomická univerzita v Bratislave. Národohospodárska fakulta; Katedra financií – Širaňová Mária, Ing., M.A. PhD. – Bratislava: NHF EU, 2019, počet strán 80 s.

Cieľom diplomovej práce je analyzovať úlohu zahraničného kapitálu v bankovom systéme z hľadiska rizikového a výnosového profilu. Práca je rozdelená do troch kapitol. Obsahuje 20 grafov, 4 tabuliek a 8 príloh. Prvá kapitola je venovaná literárnemu prehľadu domácej a zahraničnej literatúry o vplyve zahraničného kapitálu na bankový systém vo vyspelých a rozvojových krajinách. Ďalšia kapitola sa zaoberá cieľmi, metódami a metodikou práce. V záverečnej kapitole sú prezentované prípadové štúdie a zistenia o Ukrajine a o Slovensku. Bližšie približujeme najmä pozadie bankového sektora, empirické zistenia týkajúce sa ziskovosti a nákladovej ziskovosti zahraničných a domácich bankových skupín, diskusií a návrhov na zlepšenie. S prihliadnutím na výsledky práce sme zistili, že zahraničné banky majú v období stabilnej ekonomiky vyššiu efektivitu bankového zisku na Slovensku. Na Ukrajine majú domáce banky vyššiu ziskovosť ako zahraničné banky počas stabilnej ekonomickej situácie. Počas krízy na Slovensku je efektivita zisku domácich bánk nižšia ako zahraničných bánk. Výsledky na Ukrajine sa líšia v závislosti od merania efektívnosti zisku a typu ekonomického šoku (interného alebo externého). Zahraničné banky sú nákladovo efektívnejšie ako domáce banky v oboch skúmaných krajinách. V oboch krajinách takisto zahraničné a domáce banky znižujú úverovú výkonnosť v čase nepriaznivých ekonomických podmienok a recesie.

**Kľúčové slová:** zahraničný kapitál, kapitál, efektívnosť bánk, úverový profil, slovenský bankový sektor, ukrajinský bankový sektor

## ABSTRACT

Pokotylo, Yuliia: *Evaluation and analysis of the risk and return profile of the banking system: the role of foreign capital.* – University of Economics in Bratislava. Faculty of National Economy; Department of Finance. – Thesis Supervisor: - Širaňová Mária, Ing., M.A. PhD. – Bratislava: NHF EU, 2019, number of pages 80.

The aim of the diploma thesis is to analyse the role of foreign capital in the banking system from the perspective of risk and return profile. The work is divided into 3 chapters. It includes 20 graphs, 4 tables and 8 appendixes.

The first chapter is devoted to the examination of the literature review of the impact of foreign capital on the banking system in developed and developing countries. The next chapter is discussing the goals, methods and methodology of the thesis. In the final chapter are presented case studies about Ukraine and Slovakia. In particular, it is presented the background of the banking sector, the empirical findings regarding profit and cost profitability of foreign and domestic banking groups, discussions and suggestions. Taking into account the results of the paper, we have observed that foreign banks have higher bank profit efficiency in Slovakia during a period of a stable economy. In Ukraine, domestic banks have higher profit efficiency than foreign banks during the stable economic situation. During the crisis in Slovakia profit efficiency of domestic banks is lower than foreign banks. In Ukraine, results vary depending on the measurement of the profit efficiency and type of economic shock (internal or external). Foreign banks are more cost-efficient than domestic banks in both countries. And in both countries foreign and domestic banks decrease their credit performance during the time of the adverse economic situations.

**Keywords:** foreign capital, bank efficiency, credit profile, Slovak banking sector, Ukrainian banking sector.

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## Introdution

Nowadays, foreign capital is playing a powerful role in the banking industry in the world. Over the past years, the presence of foreign capital is been expanding in many countries. Foreign-owned banks may have a significant impact on the country's economy with both positive and negative consequences. This topic is of crucial importance, especially in for the countries that have gone through periods of structural reforms aiming at attracting foreign capital in order to build a standard market-oriented banking system.

Foreign capital in banking sector affects a country in various aspects. It can have an impact on the macroeconomic indicators of the state, on the banking profit and cost efficiency, impact on profits and costs of the economy, and credit stability. The advantages and disadvantages of the foreign capital presence depend on different factors, including the type and size of the economy, regulations and the level of development of the country.

The goal of the thesis is to analyse the role of foreign capital in the banking system of Ukraine and Slovakia from the perspective of risk and return profile. Respectively, the objectives of the empirical part of the thesis are:

- description of the current situation in Ukraine and Slovakia with the focus on the economic indicators;
- analysis of the present stage of the banking sector and, the historical implications during the transition period and during the adverse economic situations;
- evaluation of the bank efficiency of both countries through profit, cost and credit performance;
- proposing recommendations for the better development of the banking industry of Ukraine on the example of Slovakia.

# **1** The Current Stage of Examined Issues in Domestic and Foreign Literature

#### 1.1 The Impact of Foreign Capital on the Banking Sector

The role of the foreign capital in the banking system has been expanding fast in the last few decades within the integrated financial market of the European Union (EU). Especially, the impact is visible in Central and Eastern Europe (CEE) region, where sometimes host's country financial institutions can be fragile. On Graph 1 we can observe the increasing trend of the number and share of foreign banks according to the assets owned in the world. The information is based on extensive database that contains a material on the ownership of 5,377 banks in 137 states from 111 home countries around the world for the period from 1995 to 2009. (Claessens and Horen, 2012)

In the paper, we are going to refer to the country where the headquarter of the foreign bank is located as the "home country", while the "host country" denotes the country in which the foreign bank operates through its subsidiary.

The presence of a global international capital market can certainly influence the stability of the host country baking system in two ways: multinational banks can either assist branches in the host country in case of distress or pull out assets and resources away from the country, by that creating possible risks for the banking system of the host country depending on the share of the foreign capital in that particular state. (Navaretti et al., 2010)

In transition economies, a distinct aspect is a high extent of assets owned by foreign banks. The reason of such a tendency can be a motivation of transition economies to open their banking sector to foreign banks in order to assist banks with restructuring, encourage privatization, and bring needed capital to the country. (Navaretti et al., 2010)



Graph 1. Number and share of foreign banks (according to the assets owned) for the period 1995 – 2009

Source – Claessens and Horen (2012). Foreign banks, trends, impact and financial stability. IMF Working Paper No. WP/12/10.

Foreign capital in the banking system is affecting a country in various directions. It can have an impact on the macro indicators of the state, on the banking efficiency (cost and profit efficiency), impact on profits and costs of the economy, and credit stability. The advantages and disadvantages of the banking sector globalization have been frequently discussed in the media, academic conferences, and policy forums. In the next sub-chapters, we are going to enhance this topic with the literature review regarding different implications of the presence of foreign capital in the banking sector of the country.

#### 1.1.1 The effect of the foreign capital on the macro-indicators of the country

There are several assertions, which supports the presence of foreign capital in the banking system of the country. Firstly, the presence of the foreign-owned banks raises the

number of accessible funds to local projects by encouraging inflows of capital. In the second place, foreign capital in the banking system develops the pricing, quality, and accessibility of financial services. It is visible from two perspectives: direct and indirect. Direct perspective – as suppliers of such upgraded financial services, and indirect - through competition with host country banks. Additionally, the presence in the country of the foreign-owned banks is said to enhance the infrastructure of the financial system along with improving financial regulations, accounting and transparency. It also encourages the presence of supporting representatives. For instance, auditor agencies, credit organizations and rating agencies. The presence of the foreign capital in the banking sector may improve the capacity of regulatory administrations to measure and oversee risk effectively. The branches of the foreign-owned banks. Finally, foreign banks might be less vulnerable to political weights and less prone to give a loan to associated parties connected to politicians. These arguments suggest positive economic impacts by foreign-owned banks in the host country. (Levine, 1996; Dages et al., 2000)

In reply to these statements about the positive influence on the banking system and the economy of the state as a whole by the presence of the foreign capital in the country, some argue, that there are also downsides, which should be taken into account. There is a potential risk that the foreign-owned banks could import economic shocks from their home countries. (Peek and Rosengren, 2000). The profound engagement of the foreign-owned banks in the retail and corporate market of the banking sector of the host country is correlated with the high possibility for mobilizing operations cross border. It can create volatility and instability in the countries where the multinational banks operate. (Navaretti et al., 2010)

Some argue that multinational banks choose the most profitable countries or customers and with this leaving out the less competitive local financial institutions to provide services to riskier customers. This could increase the risk borne by the host country's banking sector. Besides, independent of the impact on aggregate credit, these actions by foreign banks can affect the distribution of credit. It can be resulted in redistribution and probable crowding out of certain segments of local borrowers. This may greatly contribute to the increase in income inequality and higher rural-urban gap. (Dages et al., 2000, Berger et al., 2005, Detragiache et al., 2008) Assets and associated risks growth also connected to the presence of the foreign-owned banks in the host market. Some connect it to the lack of adequate knowledge about the host country business environment. (Demirgue and Huizinga, 1999; Laven and Levine, 2009; Fang et al., 2011).

#### 1.1.2 The influence of the foreign capital on the profits and costs of the state

The impact of foreign-owned banks on profits and costs in the host countries are hypothetically far from being obviously certain. There are studies, which argue that the presence of foreign capital in the banking sector of the country may drive higher profitability. This is due to the essence that usually foreign banks are technologically stronger in the comparison to the local banks and the multinational banks most of the times have lower costs of raising funding. Moreover, better technological services can overflow to local banks leading to higher profits for the whole financial industry of the host country. (Demirgue and Huizinga, 1999)

On the other hand, the presence of the foreign-owned banks in the state can raise the competition for local banks and as a result, it will lead to a decrease in the profits for all. (Ghosh, 2016). Another study suggests that in terms of performance, foreign-owned banks are actually usually underperforming the banks of the host country. This is generally the case in the emerging markets and developing states. As a matter of fact, this may be confusing, as foreign banks have usually higher level of innovations and lower expenditures of assets than local banks. Also, it is generally assumed that foreign banks are more profitable than domestic banks. However, it is not always the case. As in developing countries, foreign banks have more conservative portfolios. (Claessens and Horen, 2012)

#### 1.1.3 Connection of the foreign capital to the credit stability

Foreign bank penetration may have both advantages and disadvantages for bank credit stability in developing and developed nations. On the positive side, foreign banks with enough amount of capital and with diversified global asset portfolios might be capable and willing to continue providing the loan to local firms during the economic shocks in the host market. Rather than local banks, which may likely decrease their credit supply. Furthermore, the branches of the foreign banks can in times of adverse economic conditions perform as "safe haven". In this manner, it will decrease the flow of domestic funds outside of the country. (Haas and van Lelyveld, 2004)

A presence of the foreign capital in the banking sector can improve the soundness of available lending to the host country by diversifying funding bases, and subsequently expanding the general supply of domestic credit. (Levine, 1996; Dages et al., 2000) Otherwise, the foreign-owned banks tend to be unpredictable in their lending operations. Because foreign banks have not so strong connections with the host markets and have bigger variety of business opportunities outside of the host country financial market. (Cull and Peria, 2007)

Moreover, it may also be stated that foreign banks may not be willing to keep up their credit supply in the host state, particularly when there is an unfavourable economic environment in the host country. (Haas and van Lelyveld, 2004) Another argument in favour to the above-mentioned statements is that foreign banks will, in fact, lower the stability of bank credit provision by pulling out more quickly from both markets (domestic and host) in the face of the economic crisis in both countries.

Another question which has been circulating in many discussions is "Are foreign banks have stabilizing of destabilizing impact on the host country during the period of crisis?" Navaretti et al. (2010) study comprise the analysis of a large panel of banks in the EU27 states during the period from 2000 till 2008. They conclude that their confirmation of the restricted volatility of aggregate claims during the financial crisis justifies the argument that multinational banks improve financial stability, even in times of systemic financial crisis. The study specifies that foreign banks in comparison to the host banking groups, actively utilize internal capital market in order to disconnect the rate of growth of loans in host state from accessible domestic resources (measured by growth of local deposits). The outcomes of the study demonstrate that the internal capital market is especially viable when banks engage in the activities inside the integrated EU financial market. At the point when the external capital markets are less incorporated, for regulation's reason or on the grounds that they include different monetary standards and currencies, then internal capital markets of foreign-owned banks are working to a very limited degree or even could be inactive. It may apply with no differentiation also to local host country banks.

#### 1.1.4 The impact on profit and cost efficiency of the bank by foreign capital

Another factor, which is connected to foreign capital, is the ownership type. It seems to be a vital determinant of banking efficiency, especially in emerging economies. Various studies have different conclusion regarding this topic. Most empirical papers state that foreign banks have been the most efficient in the banking industry of emerging economies. (Weill, 2003; Hasan and Marton, 2003; Bonin et al., 2005; Dedu and Chitan, 2013).

Doan et al. (2018) analyzed the connection between bank efficiency and income diversification in the period from 2003 till 2012 crosswise over 83 countries. Based on the results of the study they have concluded that the foreign-owned banks were more efficient than local banks in the developing countries after the financial crisis.

Similar results got Pancurova and Lyocsa (2013). They have assessed the effectiveness of 187 banks in the CEE region in the period from 2005 till 2008 utilizing data envelopment analysis. As inputs, they have chosen deposits and costs; and as outputs – credit volume and other assets. Thus they have obtained results that in developed countries financial capitalization and the size of the bank are positively correlated with both profit and cost efficiency. In CEE countries foreign-owned banks are more cost-efficient but at the same time less profit efficient than host country banks. Finally, loans-to-assets ratio showed a positive correlation with profit efficiency, but there is a negative association with cost efficiency.

Usually, the entrance of the foreign-owned bank anticipated to improve the cost efficiency in the host countries. Generally, these banks bring new and better management methods, better skills, training techniques and innovation. Thus, it positively overflows to the host country's banking sector. Accordingly, foreign-owned banks can increase efficiency by encouraging competition on the host country's banking sector and that will put downward weight on overhead costs and thus boost cost efficiency. (Demirguc-Kunt et al., 1998)

In regard to the managerial methods, Claessens et al. (2001) state that the results of the increased foreign bank presence are the improvements in managerial efficiency and the structure of the organization. Also, it is expected that there will be a decrease in the operating costs which affects the cost efficiency of the bank. However, from the profit side of efficiency, the paper states that in developing countries foreign banks have higher profits than host country's banks, but in developed countries it is totally the opposite.

Likewise, another studies argue that with the rise in the foreign bank entry to the markets, managers of local banks may be constrained to focus more on the cost efficiency and perform better. In addition, the presence of foreign owned banks in the country may trigger improved monitoring and supervision on the host country's banks as well. (Berger and Hannan, 1998)

Additionally, Cupic and Siranova (2018) state that the better efficiency of foreign owned banks in transition economies relies on their capability to apply better operational and risk management methods. It also relies upon their capacity to choose the best combination of inputs taking into account their prices. The study, which was made on a sample of Slovak banks, shows that foreign banks are more technically efficient rather than host country's banks. The reason for this could be that foreign owned banks have better management structure.

To sum up the literature review on the topic "How foreign capital affects the host country's banking sector?", here is the revision of the main points:

- 1. The effect on the macro-indicators:
  - increase in the number of available funds for the local projects;
  - rise of the competition, thus the improvement in the services provided, pricing and accessibility;
  - improvement in the infrastructure of the financial system, better regulations,

increased transparency;

- foreign-owned banks are less politically influenced by the host country.
- however, foreign banks may import economic shocks from the home country, with this, it may increase volatility and instability in the banking sector of the host country;
- they usually choose the most lucrative economies to operate in, leaving less competitive countries to provide services to riskier customers;
- lack of adequate knowledge about the business environment of the host's country.
- 2. The effect on the profits and costs of the country:
  - foreign capital leads to higher profitability, as the foreign banks are usually more technologically advanced and they have lower costs for raising the funding;
  - due to competition, it can benefit the whole banking industry in the host country, as local banks will try to keep up the pace of the foreign banks;
  - however, some argue that a increase in the competition will lead to the decrease in the profits for all banks on the market of the host state.
- 3. The effect on credit stability:
  - foreign-owned banks are able to provide loans to host country's consumers during the economic crisis in the host country, while local banks may struggle with the credit stability and will probably decrease the credit supply;
  - however, foreign banks may be unpredictable in their lending decisions and may withdraw fast their capital from the host country during the adverse economic situation, which will have a negative impact on the whole banking sector of the country, as it will lower the credit stability.
- 4. The effect on the banking efficiency:
  - the presence of the foreign capital in the host's country banking sector may

improve the cost efficiency due to the availability of the better managerial techniques, better skills and advanced innovation;

- as a result it will lead to the decrease in the operational costs;
- foreign owned banks are more profit efficient than local banks in the developing countries after the financial crisis due to income diversification.

Taking into account all of the abovementioned points, we see that there are different opinions on the scientific arena regarding the presence of the foreign capital in the banking sector of the country. Furthermore, the benefit from the foreign capital depends on many factors, as what type of economy the host country is, the share of the foreign capital on the country's market, the bank efficiency, the economic situation of the country from where the foreign capital is coming from and many others, which we are going to discuss in the next part.

# **1.2 Other Factors Affecting Performance and Risk Profile of Banking Sector**

#### 1.2.1 Bank Size

After the financial crisis in 2008-2009, there have been numerous discussions about whether the banks' size is a determinant of systematic risk. There are various reasons why these discussions happen now. To start with, exactly the large banks were in the middle of the financial crisis. Next, taking into account Graph 2, we can surely say, that the size of the large banks has been increasing over the past few years. Finally, according to Laeven et al. (2014) large banks usually have less steady funding, lower capital ratios, and more prone to engage in speculative financial activities (Graphs 3-4)<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Assets are in log billions of US Dollars (logassets = 2 corresponds to US 7.4 billion, log assets = 5 to US148 billion). Data are for the year 2011

Graph 2. Banks size and capital ratio in the world



Source – Laeven, Luc A., Ratnovski, Lev, Tong, Hui. Bank Size, Capital, and Systemic Risk: Some International Evidence (2014).





Source – Laeven, Luc A., Ratnovski, Lev, Tong, Hui. Bank Size, Capital, and Systemic Risk: Some International Evidence (2014).

Graph 4. Bank size and bank activities in the world



Source – Laeven, Luc A., Ratnovski, Lev, Tong, Hui. Bank Size, Capital, and Systemic Risk: Some International Evidence (2014).

The mentioned facts are raising many questions that are important for defining competent policy for large banks. Thus, what precisely is the cause of risk in large banks: fickle funding, low capital, risky market-based operations or a blend of the above mentioned?

There are many answers to these questions with various opinions. For instance, the Basel Committee recommends capital-based measures, like an extra surcharge of up to 2.5% capital on large banks (International Monetary Fund, 2010). Furthermore, some suggest outright restrictions on the individual size of banks. However, others warn that such limitations would alter the distribution of banks' resources. As a result, this could harm the efficiency of capital allocation and bringing considerable expenses to the real economy (Aiyar et al., 2013). Instead, some articles suggest to concentrate rather on decreasing the amount of "too-big-to-fail" subsidiaries of the banks through better established goals and conditional capital requirements (Farhi and Tirole, 2012; Stein, 2013).

The view that large and complex banks lead to the systemic risk is supported by few other arguments. As indicated by one argument, stated as unstable banking hypothesis, large banks usually interact with risky trading and are financed with shirt-tern debt. This makes them more exposed to the market failures and liquidity shocks. (Shleifer and Vishny, 2010; Boot and Ratnovski, 2012; Gennaio et al., 2013) However, based on the sample from

European banks, another study suggest that actually small banks are bringing the risk to the banking industry as it may be caused by a commission and fee generating operations. (Lepetit et al., 2008)

Another argument, which is known usually as "too-big-to-fail", states that governmental regulators are hesitant to loosen up regulations on large and complex banks. It is resulting in moral hazard behaviour that encourages banks to engage into risky activities, as they are sure that the government will provide a bailout. (Farhi and Tirole, 2012)

Finally, economists discuss also agency cost hypothesis, which states that large banks that are involved in numerous activities (for instance, combining trading and lending) deteriorate more from unsatisfactory corporate governance and agency problems. In the end, it can lead to systemic risk. (Bolton et al., 2007; Laeven and Levine, 2007). Generally, some state that banks have natural propensity to engage in the risky activities and thus grow in size. In the meantime, regulatory authorities so far did not enough to avoid the growing systemic risk, instead focusing on micro prudential regulation. Accordingly, large banks contribute to the sharing of numerous other risk factors that other arguments and statements have recognized as being substantial drivers of systemic risk. It includes activity diversity, high leverage and interconnectedness. (Laeven et al., 2016)

As a matter of fact, Laeven et al. (2016) shows a significant variation in the crosssection of systemic risk of large banks in the period of financial crisis. The study is comprising a broad sample of countries, more specifically- 412 deposit-taking institutions from 56 countries around the world. The research concludes that there is a strong evidence that systemic risk rise with the banks size. The authors found out that a one standard deviation increase in total assets rise the addition of the bank to systemic risk approximately by onethird its standard deviation, which is an essential impact. Another statement was made in the study is that the systemic risk is lower in better-capitalized banks.

#### 1.2.2 Bank Structure

Some other studies are also focusing on the suggestion that bank structure, precisely bank activities, bank ownership and funding contribute to the regulation and supervision of the banking risk. A few previous debates imply that bank structure matters a lot for bank behaviour. Likewise, based on a sample of around 1,000 banks in 133 non-industrial nations De Nicoló and Loukoianova (2007) presume that there are vast discrepancies in the risk profiles of banks relying on their ownership. As was already stated before, foreign banks engage more in the risky activities than their host country's rivals. Some propose that public and mutual banks have profit and cost advantages over their financial competitors in the private sector. (Altunbas et al., 2001). The discoveries of Demirgüc-Kunt and Huizinga (2010) demonstrate that a venture into non-interest income-generating bank operations raise the rate of return on assets (ROA), while wholesale funding decreases the ROA. Thus, if bank structure have an impact on the bank behaviour, the actual effect of bank supervision and regulation may vary across countries.

However, does stricter supervision and regulations mean higher efficiency of the banking industry and better financial stability? In spite of the fact that it is generally believed that stricter bank supervision and regulation will improve the flexibility of the financial sector, empirical proof on the relationship between banking regulation and financial stability is varied. For example, Demirgüc-Kunt and Detragiache (2011) did not manage to discover a meaningful connection between nations' compliance with the Core Principles for Effective Bank Supervision as issued by the Basel Committee on Banking Supervision (BCPs) and banking risk as estimated by the Z-score. Instead, utilizing measures of bank supervision and regulation based on a World Bank study, Klomp and de Haan (2012) argue that regulation and supervision do not have much impact on low-risk banks, yet have a profoundly notable impact on high-risk banks.

# 1.2.3 Bank Efficiency Differences in the State-Owned and Privately-Owned Banks

It is also essential to compare the empirical studies regarding the bank efficiency of privately owned banks and state-owned banks. For instance, some argue that in Eastern Europe state-owned banks generally have been less efficient rather privately owned banks (Bonin et al., 2005; Fries and Taci, 2005; Grigorian and Manole, 2006).

Some studies also clearly state the reason for such inefficiency in the state owned

banks. First of all, under the state ownership arises the agent-principle problem. At the point when there is segregation among ownership and management controls, managers as agents may seek after their own advantages as opposed to acting in the best interests of owners as principals. This may result in negative impacts on bank performance. Furthermore, the free-rider issue becomes more common. Basically, state ownership implies that all citizens of the country are co-owners who in reality have no power and incentive to impact and supervise the management of state banks, leaving governments as the main viable representative. (Huibers, 2005) In any case, governments, have numerous and sometimes conflicting goals. Finally, soft-budget constraints faced by state banks may instigate moral hazard issues resulting in poor performance. State banks act as government operators to fund state-owned enterprises based on political inclination as opposed to business considerations. At the point when banks are in difficulties, they anticipate assistance from governments. That is why managers of state banks have minimal motivations to minimize costs or maximize profit. There are also other reasons that clarify the low performance of state banks. They include the mentioned statement of "too-big-to-fail", lack of supervision and regulation. (Megginson, 2005)

In developing and transition economies governments have become more aware of the disadvantages of state ownership and prioritise bank privatization on their policy agenda. It is viewed as a definitive method to improve bank efficiency by developing stable governance structure to solve agent-principal issues more effectively. In the meantime, privatized banks face stricter capital requirements and bank managers are motivated to improve bank efficiency to satisfy existing shareholders and attract potential investors. Thus, empirical evidence suggests that after privatization bank efficiency is improving. (Berger et al., 2005)

#### 1.2.3 Specifics of the Empirical Evidence From Ukraine

Taking into account the current state of the economic development, history of transition economy, political issues and sovereignty problems of Ukraine, it would be beneficial to gather literature review on the researched topic of the paper from the Ukrainian studies. As it may differ from the opinions of researches whose works we have examined before in the paper.

There have been many studies regarding Ukrainian banking system and specifically the role of foreign capital in it. Ukrainian authors similarly as other international authors specify the positive impacts of the presence of the foreign capital on the domestic market. Podchesova and Sydorenko (2012) states in the period of economic growth banks with foreign capital positively influenced a number of indicators: increased capitalization of the Ukrainian banking system, growth of lending rates and improvement of the quality of banking services. This, in turn, contributed to the faster development and growth of certain sectors of the national economy: first of all, trade, construction and engineering.

Ivasiv and Kornyliuk (2011) argued that during the crisis of 2008 - 2009, foreign banks ensured the financial stability of the banking system of Ukraine due to the preservation of the inflow of scarce capital and credit funds. There was no significant outflow of capital from the banking system of Ukraine abroad during that period. In the period of the financial crisis, the population was more trusting banks with foreign capital, which is evidenced by the lower level of outflow of deposits from them compared to other domestic commercial banks. Consequently, foreign banks appeared to be more resistant to banking panic and restrained its spread to the entire banking system of Ukraine.

The level of trust in banks with foreign capital in Ukraine is higher than that of domestic banking institutions and the banking system in Ukraine as a whole. This is evidenced by the steady growth in the volume of assets and the share of foreign capital in the Ukrainian financial market. Also the quality of assets, liabilities, and the structure of the capital of banks belonging to foreign financial groups is better than that of state-owned and private Ukrainian banks. Foreign banks are less threatening the stability of the Ukrainian banking sector in terms of the quality of assets and liabilities than Ukrainian local banks. (Mynenko, 2017; Kulyniak, 2018)

According to the various research, the entry of reliable foreign banks to the banking sector of Ukraine has positive impact on the Ukrainian market of banking services. Among the positive factors scientists state:

- the formation of a competitive banking environment;
- increasing the efficiency of the banking system;

- attraction of additional financial resources;
- increase of the aggregate capital of the banking system;
- introduction of modern risk management systems, the newest technologies for customer service and high standards of quality of provision of banking services;
- achieving a high level of diversification of financial services;
- increasing the transparency of banks' activities for investors, consumers and partners. (Fedirko, 2012)

However, Mynenko (2017) states various risks with the increased presence of foreign capital in the banking system of Ukraine. Inspite of a number of positive consequences of the presence of foreign banks, they nevertheless cause a number of specific risks for the national banking system: the threat of a partial loss of control by the National Bank of Ukraine, the lack of commitment of foreign banks to lend to long-term projects due to the instability of the political situation in the country, the likelihood of a sharp outflow of capital as a result of economic and political shocks, lobbying for the interests of global multinational companies.

Another negative consequences of the presence of foreign capital are the strengthening of the structural risks of "dependent development": the risk of bankruptcy of the parent bank; aggravation of social, economic and political risks; strengthening foreign control over the banking system of the host country; weakening the positions of the underdeveloped banking system of the country; differences in banking regulation systems create problems in the process of controlling the activities of foreign banks; destabilization in the world financial system can negatively influence the work of the domestic banking system, reduce public confidence in banks in general; loss of independence in the conduct of monetary policy. (Lynenko and Renhevych, 2011; Lomachynska, 2011; Osadchyi, 2013)

The study of the banking system of Ukraine generally showed the positive effect of foreign bank capital on the dynamics of foreign direct investment in the domestic economy, but consumer credit has had a negative impact on investment activity, primarily due to foreign capital. Consequently, in modern conditions, it is important to maintain optimal proportions regarding the rates of lending to business entities and consumer lending. At the same time, the growth of the number of banks with foreign capital positively influences the dynamics of

capitalization and the stability of the banking system of Ukraine as a whole. (Bychkova et al., 2016) Therefore, in regulation, more attention should be paid to banks, which raise the level of concentration of capital from one country, monitor the growth rates of the aggregate share of bank capital under the control of individual states, as well as their integration associations. (Ivasiv and Kornyliuk, 2011)

To summarize, there are numerous factors affecting the performance and the risk profile of the banking industry in the country. The most influential factors, which should be taken into account are:

- 1) Bank size:
  - large banks may lead to systemic risk. As large banks are usually involved in risky trading;
  - "too-big-to-fail" banks are sure that government will provide a bailout and governmental regulators are hesitant to loosen up restrictions on complex banks;
  - large banks usually deteriorate more from unsatisfactory corporate governance and agency problems, which can lead to systemic risk;
  - however, another studies argue that actually small banks are bringing the risk to the banking industry as it may be caused by a commission and fee generating operations.
- 2) Bank structure:
  - bank activities, bank ownership and funding contribute to the bank behavior and risk profile;
  - does stricter supervision and regulation decrease the risk in the banking sector? Empirical data states that regulation do not have much impact on low-risk banks, but have a notable impact on high-risk banks.
- 3) Differences of bank efficiency in the state-owned and private-owned banks:
  - some suggest that state-owned banks generally have been less efficient rather privately owned banks due to agent-principle problem and free-rider issue;

- managers of state banks have low motivations to minimize costs or maximize profit;
- empirical evidence suggests that after privatization bank efficiency (profit and cost) is improving.
- 4) Specifics in the performance and risk profile of banks in Ukraine:
  - in the period of economic growth foreign banks positively influence a growth of lending rates and improvement of the quality of banking services. And it contributes to the faster development and growth of certain sectors of the economy;
  - during the financial crisis of 2008-2009 foreign banks ensured the financial stability of the banking system of Ukraine due to the preservation of the inflow of scarce capital and credit funds;
  - the level of trust in foreign banks in Ukraine is higher than in local Ukrainian banks due to various political and economic reasons;
  - however, some literature states the negative sides of foreign capital presence, as lack of commitment of foreign banks to lend to long-term projects due to the instability of the political situation in the country; the risk of bankruptcy of the parent bank and loss of independence in the conduct of monetary policy.

### 2 Goals And Methodology

The goal of the thesis is to analyse the role of foreign capital in the banking system of Ukraine and Slovakia from the perspective of risk and return profile. Respectively, the objectives of the empirical part of the thesis are:

- description of the current situation in Ukraine and Slovakia with the focus on the economic indicators;
- analysis of the present stage of the banking sector and, the historical implications during the transition period and during the adverse economic situations;
- evaluation of the bank efficiency of both countries through profit, cost and credit performance;
- proposing recommendations for the better development of the banking industry of Ukraine on the example of Slovakia.

Taking into consideration the literature review, we are proposing the following hypotheses:

<u>*Hypothesis 1:*</u> Foreign banks are more efficient from the point of view of profit and cost efficiency than Ukrainian and Slovak banks during the period 2007 - 2017.

<u>Hypothesis 2:</u> Foreign-owned banks decrease their credit performance in times of economic distress in Ukraine and Slovakia during the period 2007 - 2017.

Following this, we are going to test these two hypotheses. During the process of the research were utilized general logic methods with the information: comparison and analysis, induction and deduction, classification and grouping. The research is focused on the local applicable results for Ukraine and other emerging economies, especially with the Post-Soviet history.

Based on the subject, partial aims of the thesis and hypotheses, the methodology of the paper is:

- examine the significance of the foreign capital presence in the banking sector of the country;
- 2) specify the advantages and disadvantages of the foreign capital in the banking industry;
- 3) determine factors affecting the risk and return profile of the banks;
- evaluate the development of the banking system of the country since the transition period with the focus on the periods during the economic crisis;
- analyze and examine the bank efficiency of both countries from the profit side, cost side and credit performance;
- 6) based on the positive example of Slovak banking sector and the presence of the foreign capital in it, propose the recommendations for Ukraine in regard of the development of the banking industry with foreign capital.

The interpretation and confirmation of the authenticity of the information presented in the thesis had required the elaboration of the large amount of domestic and foreign literature, scientific papers, conference proceedings, international and national statistic databases.

We have collected our data from the financial statements published by the commercial banks and national banks of Ukraine and Slovakia. Most of the data has been presented by banks accordingly to the International Financial Reporting Standards (IFRS) on the consolidated basis. The rest of the information has been gathered from non-consolidated financial statements, which has been presented publicly with the accordance of the domestic accounting principles. The data gaps are only in the Sberbank and Privatbanka for the years 2006 - 2007.

Our dataset includes the major players in the banking sector for both countries. In Ukraine we have chosen top 5 biggest local banks and top 5 biggest banks which are in the ownership (partial or total) of the foreign bank. Comprised together these 10 banks own 78% from all total assets of the banking sector in Ukraine. In the list of the domestic banks are included: Pivat bank, Oschadbank, Ukreximbank, Ukrgasbank and PUMB. In the list of foreign-owned banks are included: Raiffeisen Bank Aval, Sberbank, Ukrsotsbank, Alfa Bank and Ukrsibbank.

In Slovakia we have chosen 6 banks with the biggest asset share on the Slovak market.

As foreign banks we have chosen Slovenska Sporitelna, VUB Banka, Tatra Banka. And as local banks we have chosen Postova Banka, Prima Banka and Privat Banka.

Postova banka is viewed as private local commercial bank despite the fact that the headquarters of its proprietor registered abroad. The owner of the bank since 2013 has been J&T Finance Group, which has been initially Slovak investment group. Prima Banka and Privat Banka, as of now owned by international investment group Penta Investments, Ltd. Its central offices are registered in Cyprus. These two banks are also considered as Slovak local banks as at first Penta Investments, Ltd. operated in Slovakia and only later started its activities in Czech Republic and Poland. (Cupic and Siranova, 2018)

For our thesis we have decided to choose Ukraine and Slovakia due to various similarities in the countries. First of all, both states have post-soviet legacy and similar mentality. Then, Ukraine and Slovakia are neighbours and have geographical proximity. Finally, both states have been influenced by the financial crises. Slovakia has managed to get over the negative consequences and be on the positive development track. Ukraine has suffered two crises over the past 10 years, and in 2017 has started to show the positive outcome of the economic activites as well. Thus, based on the example of Slovakia, we might derive policy implications for the Ukrainian banking sector.

The profit efficiency of the banks we have estimated using the profitability efficiency ratios such as return on assets (ROA) and return on equity (ROE). ROA gives us an understanding how efficiently the bank is using its assets to create profit. The formula for the identification of the ROA is net income divided by total assets (average assets in a given period). The general rule is that the higher ROA the better it is for the bank, because the bank is earning more money on less investment. ROE measures the ability of a bank to generate profit from shareholder's investments and it indicates how the banks's management is effective at utilizing equity financing. It is also important to notice the difference between ROA and ROE - ROA takes into account liabilities while ROE does not include it. The cost efficiency of the banks we have evaluated with the ratio of personnel costs to total costs. It shows us if foreign banks, which tend to be more efficient than banks of the host country, are investing more into their management and personnel. The credit performance of the banks we have analysed with the indicator of loans provided over the tracked period of time.

Sources of data used are: The National Bank of Ukraine (NBU), State Statistics Service of Ukraine, National Bank of Slovakia (NBS), Ministry of Finance of the Slovak Republic, separate banks consolidated financial statements or annual reports, Legislation of Ukraine, World Bank.

#### **3** Results and Discussion

#### 3.1 Case of Ukraine

#### 3.1.1 Macroeconomic Indicators of Ukraine

Ukraine has a market economy and according to the World Bank is considered as a lower middle income country. The economy of the Ukraine based on a multi-sectoral industry, agriculture and services. Among the previous republics of the Soviet Union, Ukraine acquired one of the best set of resources based on the location. Prior to the independence, the economy of the Ukraine was presenting an important part in the economy of the Soviet Union.

Currently, increasing domestic demand, driven by surging household consumption in the middle of the tightening labour market conditions and rising remittances, initiated the development. Nevertheless, solid domestic demand dynamics were partially counterbalanced by a decrease in exports because of the climate related factors.

In the meantime, on 21 December, 2018, Moody's upgraded Ukraine's sovereign credit rating score from Caa1 to Caa2 with a steady outlook. The rating agency stated that the recent confirmed USD 3.9 billion financing agreement with the International Monetary Fund (IMF) was the key driver for the upgrade, while referring to the Ukraine's improved external strength, the possibility of restored access to capital markets, and its progress with the anti-corruption reforms. (Moody's, 2018)

From 2000 until 2008, Ukraine's economy was expanding despite the political issues in the country. The economy contracted almost by 15% in 2009, among the worst performances in the world. In 2013 Ukraine's economy again fell into the crisis as a result of Russia's extension of Crimea, military conflicts in the east of the country, and trade war with Russia. These all factors have resulted in a 17% decrease in GDP, inflation at almost 60%, and decrease of the foreign currency reserves. With a loss of a majour portion of Ukraine's heavy industry in Donbas, Ukraine's economy shrunk by 6.6% in 2014 and by 9.8% in 2015. Yet the Ukrainian economy came back to low positive growth in 2016 and 2017, achieving 2.3% and 2.0%, respectively. As of 2017 the unemployment rate of Ukraine has reached 9.5% following

2016 with 9.3%. Howerver, this number is showing only officially registered workers. While in Ukraine there is large number of unregistered employees.

It likewise diverted trade activities towards the EU following the execution of a bileteral Deep and Comprehensive Free Trade Agreement, displacing Russia as Ukraine's biggest trading partner. Currently, Ukraine is trying to make a progress in reforms, which are designed to make the country prosperous, democratic, and transparent. However, more improvemenst are required. Especially in the areas of fighting corruption, developing capital markets, and improving business conditions to attract foreign investments, and privatizing state-owned enterprises.

#### 3.1.2 The Historical Implications of the Banking System of Ukraine

Initially the functioning of the banking system of Ukraine was adopted with the Law "On Banks and Banking Activity" in 1991 after Ukraine has gained its independency from the USSR. Of course, the activities of commercial banking institutions on the territory of Ukraine have been active even earlier, just under different legislation.<sup>2</sup>

Vovchak (2008) selects five stages of establishment and development of the banking system of Ukraine during the transition period:

- 1988 1990: creation of a prototype of a banking system of Ukraine within the banking system of the USSR;
- 1991 1992: adoption of the Law of Ukraine "On Banks and Banking" on March 20, 1991, under which the Ukrainian banking system was built in accordance with the principle of two-tier banking that has proven itself well in countries with a market economy;
- 1992 1993: a significant number of small commercial banks were established, providing short-term loans for trade and intermediary activities, and capable of receiving profits on the inflationary processes in the economy;

<sup>&</sup>lt;sup>2</sup> Information from the official web-site of Legislation of Ukraine

- 4) 1994 1996: the National Bank of Ukraine (NBU) has established common principles for the activities of commercial banks. During this time, foreign capital has entered on the market of Ukraine and it have been established 14 representative offices of foreign banks. Total number of banks in 1995 was already 230 and it has been on this level for the next 2 years;
- 5) 1997 1998: the progress made in the financial sphere by monetary methods in the previous years was not supported by the stabilization of the production, structural reforms and was accompanied by the accumulation of significant problems both at the micro and macro level. Government actions were focused on the maximization of external and internal short-term borrowing instead of implementing a policy of balancing public spending within real budget revenues. All this has caused the financial and economic crisis in Ukraine in 1998. Due to the significant devaluation of the national currency, the aggregate capital of Ukrainian banks decreased by an average of 30-35%.

At the time of the establishment of the banking system of Ukraine and during the transition period, the main objective of the strategic development of the Ukrainian banking system was to create a reliable, efficient and profitable banking system that would meet the requirements and needs of the clients and investors and be resistant to the economic shocks. (Vovchak et al., 2008)

In general, the banking system of Ukraine is quite young, but it has already managed to survive four serious crises: 1998, 2004, 2008 - 2009 and 2013 - 2014. Political and economic instability of the domestic economy, military actions in the East of Ukraine, inconsistency of financial policy of the government of the country negatively affect the level of public confidence in the banking system, which leads to a decrease in the financial performance of Ukrainian banks against the background of strengthening the role of banks with foreign capital. However, if we analyze the statistics for a relatively longer period, then we can agree with the statement that the level of trust of entrepreneurs and the population to the domestic banking system in general has recently been gradually increasing. (Kulytsky, 2018)

Furthermore, in order to ensure the stability of the banking system and protect the interests of depositors, there is a system of banking supervision ensured by the NBU. Overall,

the National Bank's supervisory bodies have various mechanisms for monitoring the functioning of the banking system of the country and identifying risks in the activities of banking institutions (i.e. rating by the CAMELS system or identification of indicators for early response). (Ruschyshyn and Kostak, 2018)

As of today, according to the Article 4 of the Law of Ukraine "On Banks and Banking Activity" banking system of Ukraine consists of the NBU, domestic commercial banks and branches of foreign banks that are created and operate in the country.

#### 3.1.3 Current Structure of the Ukrainian Banking System

The characteristic feature of the current stage of development of the Ukrainian banking system is the improvement of the efficiency indexes. In particular, it is reported that in January - July 2018 total revenues of commercial banks of Ukraine were 108.9 billion UAH (3.06% of GDP 2018). The expenses of the same commercial banks of Ukraine for 2018 decreased to 99.1 billion UAH (2.78% of GDP 2018). As a result, in the first half of 2018, Ukrainian commercial banks generally received a total profit of 9.7 billion (0.27% of GDP 2018). (Kulytsky, 2018)

Next, we analyse the current structure of the Ukrainian banking system according to the following factors: size of the banking sector, capital and funding risks, concentration and competition on the market, the evaluation of the state and private banks, the examination of the foreign and local Ukrainian banks.

*a)* Size of the banking sector

According to the NBU as of October 31, 2018, 79 banks were operating on the market. Total assets of the banks have increased by 5.1% to 1,949 billion UAH mainly due to changes in the Ukrainian hryvnia exchange rate and the lending growth. (NBU, 2018) As of January 1, 2017, 96 banking institutions were licensed by the National Bank of Ukraine (including 38 banks with foreign capital, including 17 with 100% foreign capital). Since the beginning of 2016, the number of functioning banking institutions has decreased by 21 (in particular, 3 banks with foreign capital). The number of banks with 100% foreign capital has not changed.

As of January 1, 2018, 86 banks were licensed by the National Bank of Ukraine (including 38 banks with foreign capital, including 18 with 100% foreign capital). As we see, in Ukraine there is a tendency to reduce the number of banking institutions of domestic owners, and banks with foreign capital show very slight changes in the number. (Kulyniak, 2018)

In the past ten years from 2008 till 2018 there have been a decrease in the financial institutions for 96 units. Most of the bank liquidations happened due to the insolvency of the banking institutions or inability of the banks to fulfil the requirements of the National Bank of Ukraine. In the third quarter of 2018, state and foreign banks have also optimized their network. The total number of branches was reduced by 368 to 8,760 units. "Oschadbank" (state bank) became the leader of the optimization - 236 branches in three months. The number of branches of private banks increased by 12. (NBU, 2018)

The analysis of the statistical data of the National Bank testifies that in the period from 2010 to the first half of 2018, the aggregate total assets of commercial banks in Ukraine in nominal terms increased by 1.7 times. At the same time, the net assets of the domestic banking sector increased only by 1.38 times. As we see, the growth rate of net assets of the banking sector of Ukraine, especially in foreign currency, in the marked period was significantly lower than the growth rate of total assets. And this is quite natural, since the indicators presented in general reflect the significant changes in the work of commercial banks as financial intermediaries in the processes of functioning and development of the Ukrainian economy. (Kulytsky, 2018)

#### b) Capital and funding risks

Risks in the financial system can be divided into cyclic and structural. Macroprudential policy tools can also be divided on this basis. The cyclical tools are designed to change over time, reacting to changes, for example, financial instability. On the other hand, structural tools should be implemented once and for all to create a secure and stable long-term financial environment.

Bank capital is the basis for ensuring financial stability and stability of the financial system. The greater the capital of banks, the less likely the financial crises and less are their devastating force. However, higher capital requirements may also be associated with short-

term losses. A rapid increase in capital requirements may lead to a reduction in lending, which, in turn, can have a negative short-term impact on output and economic activity. These short-term losses can be reduced by giving banks enough time to adapt to new requirements. For example, more stringent requirements can be announced in advance and (or) implemented gradually. This will give banks more time to raise capital by retaining earnings or issuing equity instruments. (Dadashova et al., 2018)

As a result of two serious financial crises in 2008 - 2009 and 2013 - 2014, the NBU made an important step towards strengthening the banking sector by amending the Law "On the National Bank of Ukraine". Among other things, NBU has being responsible for the development and implementation of macroprudential policies, one of the key instruments of which is capital requirements.<sup>3</sup>

In accordance with part one of Article 31 of the Law "On Banks and Banking Activity", the minimum amount of the authorized capital of a bank at the time of its registration can not be less than 500 million Ukrainian hryvnias, at the same time such a norm came into force only on July 4, 2014. Previously, many banks were created with a smaller statutory fund. Therefore, the National Bank has obliged commercial banks to gradually increase the statutory fund up to 500 million UAH until July 11, 2024. Currently, the number of banks with the authorized capital of minimum 500 million UAH is only 24.6% of the total number of Ukrainian banks, and the number of banks with a capital of less than 500 million UAH makes up 75.6%. (Ruschyshyn and Kostak, 2018) Thus, we can assume that in the future there will be a reduction of the number of operating banks that are not able to comply with such regulatory requiremenets, because the difference between the two groups of the banks is three times bigger.

Also in 2015, the National Bank of Ukraine announced its intention to gradually introduce new capital requirements in accordance with the European Basel III requirements. In addition to the new capital adequacy ratios, these requirements include capital conservation buffers, counter-cyclical and system-wide importance. The NBU plans to increase the size of the buffer for four years, starting in 2020, by 0.625 percentage points annually. In 2023, when the buffer is fully implemented, it will reach 2.5%. (Dadashova et al., 2018)

<sup>&</sup>lt;sup>3</sup> Information from the official web-site of Legislation of Ukraine
#### *c) Profitability of the market of the banking services in Ukraine*

The political and economic crisis that began at the end of 2013 has worsened the financial position of banks. Both individual banks and the whole banking system of Ukraine today operate in difficult conditions with high risks. As a result of the crisis on the financial and stock markets, commercial banks have to work in a context of a sharp drop in funding due to a significant outflow of client funds, limited access to international capital markets, falling share prices, and lower volumes of financial support that the Ukrainian subsidiary banks were provided with foreign mother banks. (Ruschyshyn and Kostak, 2018)

The analysis of financial results of commercial banks in Ukraine over the past five years has shown that the incomes of Ukrainian banks grew by 9,251 million UAH, while expenditures amounted to 37,159 million UAH. The excess of income expenses led to loss-making activity, which in turn affected the negative values of return on assets and return on equity. (NBU, 2018)

The biggest value in the structure of bank assets is traditionally occupied by interest income on active operations. As of 2018, the share of interest income has decreased since 2017 from 79.4% to 69.6%, and the share of commission income has increased from 12.9% to 20.8%. This is explained by the fact that, in the absence of an effective lending activity, banks are trying to increase the volume and list of provided banking services in order to increase the level of commission income against the background of a decrease in revenues from credit operations. (Fatyuha, 2018)

#### *d)* Concentration and competition of the banking groups

It should also be noted that, in general, the above-mentioned events of 2014 - 2018 led to an increase in the concentration of banking activity in Ukraine. Moreover, according to experts of the NBU, in 2018 the degree of concentration of the banking sector has not changed at all: the 20 largest banks account for 90.7% of net assets of the total assets of all commercial banks of the country. In addition, the banking market is dominated by state-owned banks.

Their share in the net assets of the domestic banking system and deposits of the population in all banks is 55.1% and 63.5% respectively. (NBU, 2018)

In parallel with the intensification of concentration in the banking market of Ukraine, a similar process is taking place - the consolidation of the banking system. Consolidation processes, depending on individual stress levels of banks and decisions of top management of financial institutions and regulators can take place in the forms of exit from the market of insolvent financial institutions, activation of mergers and acquisitions, and uneven organic increase of assets among banks. (Rashkovan and Kornyliuk, 2015)

The situation with the largest domestic commercial bank in the past – Privat Bank - has a significant impact on the development of the entire banking system in Ukraine. On December 18, 2016, the Cabinet of Ministers of Ukraine approved the decision to enter the state in the capital of Privat Bank. According to this decision, the state, in the person of the Ministry of Finance of Ukraine, became the owner of 100% of shares, while PrivatBank was capitalized at the amount of 116.8 billion UAH (3.92% of GDP 2017) on July 3, 2017. In general, a recent situation that is qualitatively new to the domestic banking system is a byproduct of the increased control by the state on the development of the banking system in the face of a severe financial and economic crisis. (Kulytsky, 2018) The main arguments of the government and the NBU in favor of nationalization and further support of Privat Bank are that the bank is the largest in Ukraine and its problems can seriously damage the financial sector of Ukraine as a whole. At the same time, Privat Bank has more than 20 million customers (almost half of the population of Ukraine), including depositors, who may suffer in the event of the bankruptcy of this large bank. (Ruschyshyn and Kostak, 2018)

#### e) Privately owned and state-owned banks

The state's participation in bank capital is steadily growing over the years. This is evidenced by an analysis of the structure of the authorized capital of Ukrainian banks with state and private ownership forms. If during the financial crisis of 2008- 2009 the participation of the state in the total capital of the banking system of Ukraine was insignificant and amounted to an average of 6.08% (1999-2007), then in the post-crisis period the tendency changed and the state share began to increase rapidly. Thus, in 2009, this indicator has

doubled and amounted to 16.75%, and in 2011 it already made 22.68%. The share of the state in the total authorized capital of banks of Ukraine during 2009 - 2014 has increased by 6 times, from 5,47% (as of January 1, 2008) to 33,125% (as of January 1, 2012), followed by a slight decrease to 31,4 as of the beginning of 2014. Such a rapid increase in the share of state capital was dictated, first of all, by the need to support the financial stability of the banking sector. (Prymostka, 2014)

After the crisis of 2013 – 2014, casued by internal issues of Ukraine, there has been a tendency of distrust to the Ukrainian banks, especially to the state banks. The banking sector of Ukraine faces a serious problem from 2014, which threatens its liquidity and the normal functioning of the entire financial system - a massive outflow of deposits. During the 2014 - 2015, Ukrainian banks lost 15.6 billion UAH from deposits in the national currency (3.9% of all deposits). (Chernychko et al., 2017)

## f) Evaluation of the foreign banks presence in Ukraine

In accordance with the requirements of Article 2 of the Law of Ukraine "On Banks and Banking", a bank with foreign capital is a bank in which the share of capital belongs to at least one non-resident exceeds 10%. According to the current legislation of our country, to open a subsidiary of foreign bank, it is necessary to invest 10 million EUR.<sup>4</sup>

However, it should be noted that official data does not always reflect the real picture of the presence of foreign capital. If there are several foreign natural or legal persons, each of which owns a share of less than 10%, such a bank is not considered a foreign bank, although the total share of foreign owners is higher than the "benchmark". In addition, the bank, whose founders are legal entities registered by foreigners in Ukraine, is also considered to be domestic. Experts estimate that real foreign capital, based on the position of its owners, is considerably larger than the official share of total capital of Ukrainian banks. (Astapova, 2015)

Among the indicators of economic security defined by the "Methodological recommendations for calculating the level of economic security of Ukraine" which is

<sup>&</sup>lt;sup>4</sup> Information from the official web-site of Legislation of Ukraine

approved by the Ministry of Economic Development and Trade of Ukraine, there is an indicator "The share of foreign capital in the authorized capital of banks", the optimal value of which should be 20 - 25%. The values in the range 26-30% are considered satisfactory, 31 - 35% - unsatisfactory, 36 - 40% - dangerous, 41 - 60% - critical, which leads to the loss of control over the banking system by the state. According to the NBU, the share of foreign capital in banks' capital grew from 2014 (56% in the first half of 2017 compared with 34% as of 2014), exceeding the threshold of 40% in 2017. (Kulyniak, 2018)

As of January 1, 2018, the number of banking institutions the capital of which belongs to the European Union countries was 23 (including 11 banks with 100% foreign capital). The country of origin of foreign capital 7 banking institutions was the Russian Federation (including 3 banks with 100% Russian foreign capital), 8 banking institutions - capital of other countries, namely: Altbank (Belarus), Bank Familly (British Virgin Islands), Industrial Bank (Israel), Sky Bank (Kazakhstan), BTA Bank (Kazakhstan), Citibank (USA), Credit Europe Bank (Turkey), Kreditvest Bank. Consequently, banks with the participation of the capital of the European Union make up a significant share in the structure (60.5%). The share of banks with Russian capital - 18.4%. (Kulyniak, 2018)

It is important to note that there is prognosed a further reduction of the share of banks of foreign banking groups as a result of the withdrawal of banking institutions with Russian capital from the Ukrainian market. In 2017 the NBU proposed to impose sanctions on Ukrainian banks with Russian state capital to implement the decision of the National Security and Defense Council of Ukraine. The application of such sanctions involves the prohibition of any financial transactions of these banks in favor of related persons, in particular, parent structures. (Kulyniak, 2018)

## 3.1.4 Analysis of the Rrisk and Return Profile of the Selected Banks in Ukraine

As of 2017, there were 84 banks operating on the Ukrainian market in total. 10 years ago on the market of the banking services were more than double of the current amount of banks in Ukraine. However, since the the crisis of 2013 - 2014, the amount of banks steadily

have been decreasing due to the introduction of stricter regulations by the government and due to the insolvency of numerous domestic banks in Ukraine (Graph 5).



Graph 5 – Amount of Banks in Ukraine for the period 2007 - 2017

Source: National Bank of Ukraine, own processing

In the thesis we have chosen the top 10 biggest banks with foreign and domestic Ukrainian capital. The criteria for such a differentiation was the share in the amount of total assets of the whole banking sector of Ukraine. Thus, as domestic Ukrainian banks we have chosen:

- Privat Bank state-owned since 2016, before this year the bank was privately owned;
- Oschadbank state-owned bank;
- Ukreximbank state-owned bank;
- Ukrgasbank state-onwed bank;
- The First Ukrainian International Bank (PUMB) privately owned bank.

As foreign banks with the biggest share of the banking sector in Ukraine, we have considered:

- Raiffeisen Bank Aval biggest shareholder is Austrian Raiffeisen Bank International AG with the headquarters in Vienna, Austria;
- Sberbank 100% shareholder Sberbank Russia with the headquarters in Moscow, Russia;
- Ukrsotsbank shareholder UniCredit S.p.A with the headquarters in Rome, Italy;
- Alfa Bank biggest shareholder is Alfa Bank with the headquarters in Moscow, Russia;
- Ukrsibbank biggest shareholder is BNP Paribas S.A. with the headquarters in Paris, France.

Taling into account Graph 6, we can definitely say that the biggest share on the market of banking services is taking Privat Bank with owning 26% of total assets of all banks on the market as of 2017. It is definitely a large share to be owned by one bank. Furthermore, as now Privat Bank is state-owned, it means that there are more than a half (around 58%) of all assets owned by state banks in Ukraine. The biggest privately-owned bank is PUMB and it owns 3% of all total assets of the banking sector in Ukraine. The leader in the foreign bank's group is Raiffeisen Bank Aval which have around 4% of all assets and Sberbank which has almost the same amount.



Graph 6 – The Share of the Biggest Banks in Ukraine According to the Total Assets owned as of 2017

Source: National Bank of Ukraine, own processing

## a) Bank profit efficiency - ROA

In order to evaluate the bank profit efficiency of the selected banks, we have calculated such efficiency measures as ROA and ROE. Both measures have been calculated as a weighted average from the period observed for domestic and foreign banking groups for the better precision of the results. For the individual results of the ROA and ROE, the measures have been calculated based on a simple average. The results of ROA is showing how effective bank is able to manage its assets to generate profits. On the Graph 7 we observe the results of the calculated ROA for the selected domestic group of banks for Ukraine for the period 2007 - 2017. On the left axis are presented values for Oschadbank, Ukreximbank and PUMB. On the right axis are shown results of ROA for Privat Bank and Ukrgasbank. Generally speaking, it is considered that ROA higher than 1% is an indicator a "good" profitability of the bank. But the most important with the ROA and ROE – is that these ratios should be compared to other

banks in order to understand the situation on the market of banking services or it should be tracked and compared within one bank over a period of time.

Now, from the Graph 7 we see that the most stable trend of ROA and one of the highest values of ROA had Privat Bank. However, since 2012 it started slightly decrease and in 2016 it has experienced a huge drop in the ROA and it reached -68.04%, but already in 2017 it started the recovery (-6.80%). The reason for such a drop is that in 2016 Privat Bank has suffered a huge loss of 164,471,701 thousand UAH of net income (-762% decrease from 2015). Ukraine has explained such a move with the reason that Privat Bank has so much power to influence the Ukrainian banking sector, as almost 20 million citizens have there their accounts (approximately half of the population of Ukraine). The main position of the country's leadership is that they saw many systemic problems in the bank, which were accumulating over the years. Also government states that 97% of loans which bank have issued in the previous years were issued to the companies associated with the shareholders of the bank, leading to the loss of the capital. The preparation of the nationalisation of the bank has started in 2013, that might be the cause of the decrease in ROA. Now, the general reason, why banks have negative ROA is that the bank probably has negative net income. That means that the bank could be losing money, or it could be buying up assets that will generate profits in the future.

Another two state-owned banks, Oschadbank and Ukreximbank, have similar trends in the values of ROA over the years from 2007 till 2017. We see that both banks had ROA higher than 1% before the financial crisis of 2008 - 2009, which show us that the banks were profitable, but after the crisis the value fo ROA started to go down due to lower net income. Ukreximbank felt the crisis stronger than Oschadbank. Still the values were positive until the crisis of 2013 - 2014 which led to the sharp decrease in the ROA for both banks (Oschadbank -8.54%, Ukreximbank -10.57%). Since 2015 both banks have started fast recovery and as of 2017 they have positive ROA indexes, but still not higher than 1%.



Graph 7 – ROA of the 5 Biggest Domestic Banks in Ukraine for the Period 2007 - 2017

Source: National Bank of Ukraine, financial statements of banks, own processing

Ukragasbank before the financial crisis had very good indicators of ROA above 2%, then it got affected by the loss of net income, but already in 2010 it came back to positive ROA value of 0.08%. However, in 2011 the ROA reached more than -20%. Currently, there is an investigation ongoing within the bank, as it has been accused of money-laundering during 2010. In the next years the ratio of profitability has increased to the optimal level and then it got affected by the crisis of 2013 - 2014. But already in 2015 the bank has reached positive value of ROA. The situation with the provtely owned bank PUMB is pretty straight-forward. The ROA has been negative during the periods of crisis, but in between it maintains almost all the time the ROA higher than 1% and as of 2017 PUMB has 1.58% of ROA, which is an indicator that bank is able effectively generate profits from its assets.

In general, we can say that almost all of the observed banks got indluenced by two economic crisis over the period of 2007 - 2017. The financial crisis of 2013 - 2014, which we consider as internal crisis, affected Ukrainian banks more than external crisis of 2008 - 2009. Furthermore, the most stable bank to the economic shocks from the observed range was Privat Bank until it was taken into ownership by the state.

On the Graph 8 is demonstarted the ROA values for the selected foreign group of banks in Ukraine over the period 2007 - 2017. On the left axis are presented values for Raiffeisen Bank Aval, Alfa Bank and Ukrsibbank. On the right axis are shown results of ROA for Sberbank and Ukrsotsbank. We definitely see that all of the banks have been affected by the financial crisis, more of them have been influenced more by the crisis of 2008 - 2009, rather then internal crisis of Ukraine of 2013 - 2014, besides Alfa Bank and Ukrsotsbank. The biggest negative impact from the financial crisis got Ukrsibbank, it is visible from the graph that the ROA has been largely decreasing after the crisis. The steadiest indicator of ROA has Ukrsotsbank until the internal crisis of Ukraine and then changing in the ownership structre in 2016. Since 2016 the Ownership of Ukrsotsbank was shifted from Unicredit Bank to the owners of Russian Alfa Bank. Moreover, there are speculations that Alfa Banka and Urksotsbank will be joint into one bank in the near future. The best indicator of ROA as of 2017 comparing to the whole group is showing Raiffeisen Bank Aval, which has 6.61%.

In Table 1 are presented weighted averages of ROA for the domestic and foreign groups of selected banks in Ukraine over the period from 2007 till 2017. Taking into account this information, we are able to compare the profit effectiveness of the observed banks to their groups, which gives us more understanding of the situation. First of all, it is important to mention that in the group of domestic private banks from 2007 till 2015 are included Privat Bank and PUMB, and for the years 2016 and 2017 it is only PUMB, as Privat Bank become state-owned bank. Also in the sample in 2007 is excluded ROA of Sberbank, as this bank has started to operate in Ukraine since 2007, thus the financial data was not available for this bank at that period.



Graph 8 – ROA of the 5 Biggest Foreign Banks in Ukraine for the Period 2007 - 2017

Source: National Bank of Ukraine, financial statements of banks, own processing

From the Table 1, we see that before the financial crisis the best indicator has privately owned banks (in 2007 - 2.84%). The lowest negative ratio during the crisis in 2009 had state banks, but foreign banks needed more time for the recovery. It might be explained by the confirmation form the theory, that when there is a crisis in the country or region of the mother company (or bank), the headquarters focus firstly on the most lucrative markets, where they have ususally the biggest profit and where they see the best potential for the growth, and then they will deal with the issues and support branches in other countries. Again before the internal crisis of Ukraine, the most profitable were domestic banks to the comparison with foreign banks. However, the biggest impact of the second crisis felt domestic state banks, then foreign group of banks and the least – privately owned banks. It is quite understandable from the data which we have observed before on the Graph 7 – that Privat Bank has a huge impact on the banking sector and was the most stable bank in regard to the bank profitability during the crisis. As of 2017 the least profit efficient are the state-owned banks, which owns the biggest share on the market of the banking services in Ukraine and foreign banks are more profitable right now than domestic banks. We are not taking into account the value of

weighted average for privately owned banks for 2016 and 2017, as due to nationalization of Privat Bank, this indicator shows the results only of 1 bank – PUMB.

Years	Foreign	Domestic	
		State	Private
2007	1.11%	1.73%	2.84%
2008	1.17%	1.22%	1.53%
2009	-1.76%	-2.51%	0.33%
2010	-2.74%	0.36%	1.37%
2011	-1.60%	-2.05%	1.09%
2012	0.39%	1.01%	0.95%
2013	0.80%	0.91%	1.03%
2014	-2.85%	-8.47%	0.33%
2015	-5.92%	-8.24%	-0.52%
2016	-3.60%	-0.08%	0.89%
2017	1.04%	0.21%	1.58%

 Table 1 – ROA Measured as Weighted Average of Selected Banking Groups in Ukraine

 for the period 2007 - 2017

Source: National Bank of Ukraine, financial statements of banks, own processing

## *b)* Bank profit efficiency – ROE

Return on equity is a similar measure of bank efficiency as return on assets, it is just measuring the amount of bank's income that is returned as shareholder's equity. ROE is a very effective metric for solid indication of earnings performance. Similarly as with ROA, average returns on equity is not appropriate to use for cross-industry company comparisons, that's why we are evaluating this indicator within banking groups. As a general evaluation, most analysts consider an ROE higher than 10% to be favorable for purposes of investment. A higher return on equity indicates that a company is effectively using the contributions of equity investors to generate additional profits and return the profits to investors at an attractive level.

On the Graph 9 the values of ROE expressed as a percentage on the left axis for banks Oschadbank and PUMB, and on the right axis are presented values of ROE for Privat Bank, Ukreximbank and Ukrgasbank. We observe similarity in the trends of Oschadbank and PUMB. Both banks had positive ROE before the financial crisis, even thouth the values are lower than over optimum 10% of ROE. In the longer run, it is visible that PUMB has higher ROE than Oschadbank, but only PUMB has reached an optimal level of return of ewuity in 2017 (17.62%). On the contrary, Oschadbank has been more stable during the financial external crisis of 2008 - 2009, but got a huge negative impact during the internal crisis in the next years. The reason for that might be that Oschadbank is a state-owned bank and that is why it got affected on such a large scale.



Graph 9 - ROE of the 5 Biggest Domestic Banks in Ukraine for the Period 2007 - 2017

Source: National Bank of Ukraine, financial statements of banks, own processing

The negative ROE not always tells us that the bank is not profitable. If the bank has had a history of losing money and has incurred debt in order to finance continuing business operations, then liabilities will often exceed assets, resulting in negative stockholder equity. If negative stockholder equity is negative, then dividing a positive profit by the negative figure will result in a negative ROE. This can be misleading because one would typically think that a

negative financial ratio indicated a loss. In fact, ROE will also be negative if the bank loses money and has positive stockholder equity. Yet between these two negative ROE situations, having positive profits and negative stockholder equity is more indicative of a potential future rebound than having negative profits and positive stockholder equity. However, in our observations only PUMB in 2015 has negative equity, all other negative values in ROE are due to the loss of the net income.

From the Graph 10 we can conclude that Privat Bank and Ukreximbank have similar trends in ROE. Ukreximbank has been affected by the internal economic downturn in 2013 – 2014 more than Privat Bank, but then in 2016 Privat Bank beared huge losses due to nationalization. It is also important to note, that Ukrgasbank has been influenced by external financial crisis more than by the internal crisis of Ukraine.

On the next Graph 13 are presented ROE percentages for the foreign group of banks. On the left axis are presented values for Raiffeisen Bank Aval and Ukrsibbank and on the right axis are Sberbank, Ukrsotsbank and Alfa Bank.



Graph 10 – ROE of the 5 Biggest Foreign Banks in Ukraine for the Period 2007 - 2017

Source: National Bank of Ukraine, financial statements of banks, own processing

Raiffeisen Bank Aval was the only bank from over observation group to have a ROE above 10% at the beginning of the analysed period (13.93%). Ukrsibbank over the period of 10 years had similar tendency in the value changes of ROE together with Raiffeisen Bank Aval. Only Ukrsibbank has been more affected by the external financial crisis in 2008 – 2009 that during the Ukrainian recession in the later years. In 2016 there have been changes in the ownership structure of Ukrsibbank – European Bank for Reconstruction and Development has increased its ownership share to the 40%. As of 2017, both Raiffeisen Bank Aval and Ukrsibbank have very positive return on equity (42.61% and 30.33% respectively). which shows us am efficient ability of the banks to turn shareholder's equity to the profit.

Ukrsotsbank and Alfa Bank also have similar trends in their development of ROE values. Both banks were more affected by the internal crisis in Ukraine rather than external world financial crisis. Ukrsotsbank had optimal ROE indicators only during 2007 – 2008 and Alfa Bank as of 2017 has 16.51% of ROE. Taking into account that there might be a possible joint of two banks, we think that the growth of ROE indicator might slow down. As of 2017 Ukrsotsbank has still negative ROE due to the loss in net income. The situation with Sberbank is quite interesting, we obseve understandable negative ROE during both periods of crisis, but it is surprising that in 2016 ROE of Sberbank reached 168.87%. Taking into account that this bank is under sanctions not only from Ukrainian government, but also from EU and USA since 2015 Sberbank and all of the subsidiaries are under sanctions. Another interesting detail is that in 2017 was finalized a sell of the subsidiary of the Sberbank – VS Bank, where Sberbank had 99.92% of the ownership, to the Ukrainian bisnessman Sergiy Tihipko, who owns another bank – Universal Bank.

Taking into account the information presented in the Table 2, we see that all of the banking groups has performed high in 2007. The most profit efficient is domestic state group in Ukraine. During the world financial crisis the lowest indicators were in foreign group and also they had longer time to recover. Before the reccession of Ukrainian economy in 2013 – 2014, private domestic group has performed the best regarding ROE indicator. But during the Ukrainian crisis state domestic group has suffered the most from all observed elements. We can definitely notice the huge drop in ROE in 2016 for the state banks – the effect of the nationalization of Privat Bank. As of 2017 the most profit efficient banks are form the foreign group, as during this year in the private domestic group we have only the value of PUMB.

Years	Foreign	Domestic	
		State	Private
2007	10.84%	16.59%	26.13%
2008	11.17%	7.36%	13.48%
2009	-15.40%	0.72%	3.72%
2010	-20.81%	1.51%	11.64%
2011	-5.45%	-9.41%	9.54%
2012	2.71%	5.03%	8.34%
2013	5.48%	4.66%	9.77%
2014	-22.01%	-49.82%	3.08%
2015	-47.90%	33.90%	-4.13%
2016	-21.06%	-260.51%	9.51%
2017	14.99%	-40.47%	17.62%

Table 2 – ROE Measured as Weighted Average of Selected Banking Groups in Ukrainefor the period 2007 - 2017

Source: National Bank of Ukraine, financial statements of banks, own processing

## c) Bank cost efficiency

Another importan indicator of the bank efficiency is the cost efficiency. In the reasearch we have decided to use the ratio of the presonnel expences to total expences. The main idea behind this decsion was that we would like to compare how much different banking groups (foreign and domestic) are spending on their employees. Then, as stated in our Hypotheses 1, we assumed that foreign banks might be more profit and cost efficient than domestic banks. In this case this ratio would explain us one of the reasons of such a difference. As if foreign banks will be more efficient then domestic banks, and if foreign banks will invest more into their employees - that could be a clear indicator of the bank efficiency. However, due to the inconsistency and lack of the data, it was not possible to collect the exact numbers for the personnel expences. That is why we have substituted it with the adminitrational and operational expences, which include personnel expences (salaries), office equipment, rent and other operational costs.

The results of the domestic group of banks shows us that during the financial crisis, more specifically in 2009, all of the banks have decreased the amount of administration and opeartional expences, besides Privat Bank which was slightly increasing those expences. In the period of internal crisis in Ukraine there was again a decrease in the percentage of operational expences. In 2016 Privat Bank had only 6% used for the investment into their personnel and other opeartional costs, but in 2017 it has the highest value form all observed elements - almost 55% (Graph 1).

Graph 11 – Cost Ratio of the 5 Biggest Domestic Banks in Ukraine for the Period 2007 -



Source: National Bank of Ukraine, financial statements of banks, own processing

The observed foreign banks have more similar tendency in theadminitrative and operational expenditures than domestic banks (Graph 12). All of the banks shrinked their operational costs during both financial crisises. The reason for this might be that banks had to fire some of the employees and decrease substantially its operational costs. Nevertheless, in between the recessions we observe that foreign banks nvest into their employees and

opeartional functions substantially, it creates more than 50% of all of their expences. As of 2017 Raiffeisen Bank spends the highest amount from all their expenditures for their operational costs – around 85%.

Graph 12 – Cost Ratio of the 5 Biggest Foreign Banks in Ukraine for the Period 2007 - 2017



Source: National Bank of Ukraine, financial statements of banks, own processing

### d) Credit performance

In order ro evaluate the creit performance of the foreign and domestic banks in Ukraine, we have chosen the indicator of loans provided over the observed period of time. In the Graph 13 it is shown the growth rate of the loans provided. On the left axis are demonstarted the growth rates values for Privat Bank, Ukrgasbank and PUMB. And on the left axis are shown the values for Oschadbank and Ukreximbank. Since 2008 there are similar characteristics in the development of the growth rate of the loans provided of Privat Bank, Ukrgasbank and PUMB. The growth rate decreased for all banks during the world crisis of 2008 – 2009 and since then it started to increase and fluctuate. The Ukrainian economic downturn of 2013 - 2014 did not seem to have a lot of impact on the growth rate of lending,

but after nationalization of Privat Bank it has decreased substantially. Ukreximbank had a major increase in the lending during 2008 and since then together with Oschadbank, both banks have steady fluctuations. As of 2017 the highest growth rate has Ukrgasbank (65.33%) and the lowest growth rate has Privat Bank (-29.51%)





Source: National Bank of Ukraine, financial statements of banks, own processing

Similarly, on the Graph 14 we can observe the growth rate of the loans provided by the foreign group of banks. On the left axis are demonstarted values for Raiffaisen Bank Aval, Sberbank, Ukrsotsbank and Ukrsibbank. And on the left axis are presnted the values of growth rates for Alfa Bank. The growth rate of loans provided for Sberbank is starting from 2009, as the bank started its operations on the Ukrainian market since 2007. Taking nto account the results of our research and the theoretical background, we can surely say that theory has been confirmed on the practice. During the financial distress in the world foreign banks have strated to shrink their lending opeartion on the Ukrainian market. It is valuable to notice, that even after the crisis the tendency has been saved by the forign banks and the growth rate was still

negatove in many cases. Then duirng the internal crisis, foreign banks actually have started to support Ukrainian economy and the growth rate of the lending has been increased. A bit different situation is with the Sberbank. The growth rate of loans provided was pretty high over the period 2009 - 2015 with some fluctuations and affects of the Ukrainian financial crisis. Then after 2014 the growth rate started to decrease sharply and as of 2017 is on the level of -16.05%. The highest growth rate of lending has Raiffaisen Bank Aval (34.96%) as of 2017 and the lowest has Ukrsotsbank (-23.16%).

Graph 14 – Growth Rate of Loans Provided by the 5 Biggest Foreign Banks in Ukraine for the Period 2007 - 2017



Source: National Bank of Ukraine, financial statements of banks, own processing

## 3.2 Case of Slovakia

## 3.2.1 Macroeconomic Indicators of Slovakia

With a population of 5.4 million, the Slovak Republic has a small, open economy driven mainly by automobile and electronics exports, which account for more than 80% of

GDP. Slovakia has been a regional Foreign Direct Investment (FDI) champion for quite a long while, appealing because of a generally low-cost yet skilled labour force, and a good geographic area in the middle of Central Europe. The unemployment rate has been decreased to historical lows in 2017, and rising wages fueled increased consumption. These all played a huge role in 2017 GDP growth (Graph 15). An favourable viewpoint for the Eurozone recommends continued strong growth prospects for Slovakia for the following couple of years, in spite of the fact that inflation is also expected to increase.

As of 2017, the biggest share of GDP is considered to be taken by services (55.9% as share of GDP), industry (31% of GDP), taxes (9.8% of GDP) and agriculture (3.3% of GDP). Over the past 10 years the GDP of Slovakia was showing positive results. There has been a decrease in a GDP growth in 2009 due to the world financial crisis, since then the value has been fluctuating around 2 - 4 % of annual GDP growth. As of 2017, GDP growth rate of Slovakia is 3.4%.







The unemployment rate reached its peak over the couse of the past 10 years during the financial crisis and it was around 14%. As of 2017, the unemployment rate of Slovakia was 8.13%. The inflation rate started to increase after the financial crisis of the 2008 – 2009 and in 2011 it has reached the annual rate of 4%. Currently inflation rate of Slovakia is around 1.5% (Graph 16).





Source: Ministry of Foreign and European Affairs of the Slovak Republic. Basic macroeconomic indicators of the Slovak Republic (SK). Economic overview 2017 (July, 2018)

# 3.2.2 The Historical Implications of the Banking System Development in Slovakia

On January 1, 1990, a two-tier banking system was established when the Štátna banka československá (ŠBČS) separated from existing banks and began to act as a central bank. However, its legal status was only treated in the Act on the ŠBČS in 1992. Act No.158 / 1989 on banks and savings banks prepared the ground for the creation of new banks with the names Investičná banka, Československá obchodní banka, Česká štátna sporiteľňa, Slovenská štátna sporiteľňa, Živnostenská banka, Komerční banka and Všeobecná úverová banka. Komerční banka and Všeobecná úverová banka were created from the ŠBČS branches, others by simple transformation from the existing banks. Banks remained in state ownership, which did not prepared them well for this future challenges, especially in terms of market economy principles.

This period during the reign of Vaclav Klaus, this is also known and referred as tightening period. It did make a stage for a new emerging Act on Banks (1992), which allowed

the partial privatization and entry of foreign banks and the above mentioned Act on SBCS. This law talked about central bank competencies, responsibilities, monetary policy instruments, and its relationship with the government and other commercial banks. The law did not foresee the division of central banks after the split between Slovak Republic and Czech Republic.

Once the Slovak republic started to be independent country after the smooth separation from Czech Republic, The National Bank of Slovakia Act came into force. The next three-year period is characterized by an uncontrolled, especially quantitative, expansion of Slovak banking, with the share of foreign investors reaching about 50% by year 1997. During this period, a small and large privatization took place, causing many bankruptcies of the business, which did borrowed money from such banks.

These uncontrolled events did lead to the emergence of new banks, spill-overs of capital as well as the bankruptcy of business all over the country. Taking into account also the irresponsibility of banks in lending (corruption, lack of know-how) low-interest or otherwise disadvantageous loans from the heritage of socialism resulting into non-performing loans in total value of 112 billions of Slovak crowns (SK). The fact is that a substantial part of the banking sector was still owned by the state, caused the astronomical sum to be gradually transferred to the shoulders of the stated owned Konsolidačná banka, and hence the taxpayers of Slovak Republic. This process of gradual recovery of the banking sector was called restructuring.

The abnormal nature of the economic environment was also characterized by a situation where bank deposits often had the interest rate at 15% and loans at over 20% p.a. The gradual recovery of the banking sector was initiated by Dzurinda's government (1998). This fact led to a rapid decline in interest rates. Nevertheless, there were some banks, which did seize to exist and collapsed e.g. Agrobanka (2000), Dopravná banka (2000) and finally the non-transparent Devín banka (2001, well-kwon for its money laundering activities). Investičná a rozvojová banka also did got into trouble and possible collapse was reversed by the stimulus of National Bank of Slovakia in total amount reaching up to 27.5 billions of Slovak crowns (SK).

Low interest rates on bank deposits were used by non-bank entities that offered fraudulent interest rates to citizens in spread of 30 to 40% p.a. It was obviously a scam, the so-called Ponzi scheme. The most famous non-banker institutions were Horizont Slovakia and BMG Invest. They started their activities in 1997 and worked until 2002. During these 5 years they collected deposits from retail clients at a huge amount of up to 62.78 billions Slovak crowns (SK). However, they did pay back to their customers of only 53 billions Slovak crowns (SK) in interest, which means that almost 10 billions Slovak crowns (SK) remained not compensated. Due to these illegal activities around 170 000 people were affected and some of them have not seen their money back until today. Non-bank entities remained operating in the market until now, but much more tighter regulation and supervision is deployed compared to the past. This helps to prevent the probability of such event repeating again close to zero. In 01.05.2004, Slovakia became part of the European Union, succeeding the adopation of Euro as an official currency on 01.01.2009. (Kohút, 2002)

## 3.2.3 Current Structure of the Slovak Banking Sector

## a) Size of the banking sector and presence of foreign capital

Foreign bank entities are intensifying their capital involvement share in most of banks in Slovak Republic. While at the end of 1998, according to National Bank of Slovakia (NBS) statistics, domestic capital excluding foreign capital in commercial banks accounted for about 63%, at the end of 2001 it was only about 38%. The main reason for this significant increase of foreign capital was the privatization of the Slovak banking sector at the end of the 1990s and the beginning of the millennium. This trend did continue even later on, resulting into the shrinkage of share of domestic investors and capital even more. In the end of 2010, domestic capital was just over 9% and at the end of last year (2018) it was just slightly over 5%.

Total amount of domestic credit institutions is 27. From this figure, eight of them have registered at least some share of domestic equity capital (although alone two banking entities, ČSOB stavebná sporiteľňa and the Slovenská záručná a rozvojová banka, they both operate with a 100% share of domestic capital equity). However, the ČSOB group as a whole belongs to the KBC Group.

There are few problems constrained to these statistics. First of all, it deals only with the own equity, which is a relatively small part of the total capital of banks. In addition, the share between own equity and total capital ratio differs from bank to bank. The second problem is that banks that are Slovak are also owned by legal entities whose headquarters are abroad. This applies, for example, to the financial group Penta Investments, which is a shareholder in Slovakia in Prima banka and in Privatbanka. In the case of these two banks, it is the owner of Penta Investments Limited, which is based in Cyprus and island Jersey. Therefore this equity share is registered as foreign one, even though the factual owners are ultimately citizen of Slovak republic and Czech Republic.

#### b) Financial Position of the Slovak Banking Sector

The banking sector aggregate net profit has increased in 2017 by 8.1% year on year. Nearly all banks reported a profit for 2017. The banking sector in the recent years has maintained moderately stable profitability level. Its profit for 2017 just slightly (by 2%) surpassed the average for the 2013 - 2016. It is essential to maintain this pattern during the time of interest margin compression. This is the factor that had the biggest negative effect on the financial sector in 2017. Regardless strong growth in retail loans, banks' net interest income continued to declinie. Yet, in comparison to 2016, when net income fell by 5.3% year on year, its decrease moderated in 2017, to 2.8%.

In the respect to the above-mentioned there are several facts which should be noted:

- the rate of decline in interest income from housing loans eased significantly, from 14.1% in 2016 to 8.4% in 2017. In addition, improvements in the second half of 2017 suggest that the decrease in this income will continue to moderate;

- the continuing decrease in the cost rate of retail funds has a similar pace to that seen in previous years;

- interest income from consumer loans, which is the main driver of the net interst icmome growth untile 2016, has stopped in 2017. And in December of the same year, it even declined by 1.1%. Despite this, these loans continued to account strong development in 2017. (NBS, 2017)

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#### c) Privatization of Slovak banks by foreign investment capital

The privatization of the largest Slovak bank, Slovenská sporiteľňa, took place in April 2001. It was finalized when the majority share of equity was transferred from state ownership to Austrian based bank Erste Bank, with its headquarters in Vienna. The second major privatization was the privatization of Všeobecná úverová banka, today's VUB Bank, which was completed in November 2001. The state majority ownership share was transferred into the hands of the Italian bank IntesaBci, currently Intesa Sanpaolo with headquarters in Turin, Italy. During this time period another state owned bank did change the majority shareholder. Investičná rozvojová banka was successfully sold to the Hungarian OTP bank, with headquarters in Budapest. Later on, smaller domestic banks, such as Istrobanka, Poštová banka and Banka Slovakia, were also privatized.

Most of the bank analytics argue that the privatization of Slovak banks with foreign capital was necessary step for the better capitalization and health of the entire Slovak banking sector. Banks were in poor shape in terms of capital adequacy. Therefore it was necessary to restructure and recover them, write off bad debts and add fresh foreign capital to secure higher effectiveness and proper capital allocation. The fact that it was truly excellent decision was put into assessment promptly, when the financial crisis between years 2008 and 2009 did strike and not a single Slovak bank was in need of any type state aid.

We can assume, it is essential that the one of the largest domestic banks in the Slovak republic are owned by strong European banking groups, thanks to which the banking sector is a healthy pillar of the entire national economy. By contrast, we should not forget how banks, and especially their capital adequacy and overall financial health looked like in 1998. At that time, the banks were state-owned and served primarily to transfer political favor and money to selected business groups. This often involved high degree of domestic or foreign money laundering. After the successful privatization cycle, even small and medium-sized entrepreneurs and business have come to the sustainable and available financing of their housing or investments through domestic loans.

## 3.2.4 Analysis of the Risk and Return Profile of the Selected Banking Groups in Slovakia

In order to evaluate the banking sector of the Slovak Republic, we have chosen top 6 biggest banks according to the total assets. The list of observated banks include the following foreign banks:

- Slovenska Sporitelna the biggest shareholder is Erste Group with the headquaters in Vienna, Austria;
- VUB Banka the biggest shareholder is a banking group Intesa Sanpaolo with the headquaters in Turin, Italy;
- Tatra Banka the biggest shareholder is Raiffeisen CEE Region Holding GmbH with the headquaters in Vienna, Austria.

As domastic banks we have evaluated the following financial institutions:

- Postova Banka is viewed as private local commercial bank despite the fact that the headquaters of its proprietor registered abroad;
- Prima Banka owned by international investment group Penta Investments Ltd company which is widely operating on the Slovak market for many years;
- Privat Banka also owned by international investment group Penta Investments Ltd.

Next, we have examined the conolidated financial statements of the banks in order to define the profitability ratios (ROA and ROE), weighted averages of teh banking groups (foreign and domestic), bank cost efficiency (ratio between administrative, operational costs and total expenditure) and credit performance (through the loans provided).

## a) Bank profit efficiency – ROA

On the Grpah 17 are presented the ROA values for the 6 observed banks in Slovakia. On the left axis we can obsorve the values for Slovenska Sporitelna, VUB Banka, Tatra Banka, Postova Banka and Privat Banka. And on the left axis are presented the results for Prima Banka. We observe that all of the evaluated banks have positive ROA, besides Prima Banka over the years of the financial crisis 2008 - 2009, 2011 - 2013. Over the whole period of the research 2007 - 2017 Prima Banka had always ROA lower than 1%, which indicates the low level of the effectiveness of the management of the bank to turn its own assets into profit. The indicator of ROA of the rest of the banks has decreased during the world financial crisis, but it did not go below zero. Since the 2011 the ROA of all of the banks besides Prima Banka has been decreasing. Over the examined period of 2007 - 2017 from the foreign group of examined banks, VUB Banka is the only bank which had always the ROA indicator higher than 1%. Slovenska Sporitelna and Tatra Banka also had almost always ROA ratio higher than 1%, besides 2009. From the domestic group of banks, the best indicators of ROA is showing Postova Banka. It had ROA lower than 1% in 2008 and 2011.



Graph 17 – ROA of the Biggest Banks in Slovakia for the Period 2007 - 2017

Source: financial statements of banks, own processing

From the Table 3, we may conclude that during the times of the stable economic situation in Slovakia foreign banks are more profit efficient than domestic banks. And during the crisis domestic Slovak banks also have been affected more than foreign banks. In 2008 we see that ROA for domestic Slovak banks is -1.90%.

Table 3 – ROA Measured as Weighted Average of Selected Banking Groups in Slovakiafor the period 2007 – 2017

Years	Foreign	Domestic
2007	1.47%	1.15%
2008	1.42%	-1.90%
2009	0.82%	0.35%
2010	1.30%	1.16%
2011	1.64%	0.001%
2012	1.30%	1.08%
2013	1.29%	1.11%
2014	1.32%	0.73%
2015	1.30%	0.94%
2016	1.27%	0.99%
2017	1.10%	0.90%

Source: financial statements of banks, own processing

### b) Bank profit efficiency - ROE

On the Graph 18 on the left axis are presnted the values of ROE for Slovenska Sporitelna, VUB Banka, Tatra Banka, Postova Banka and Privatbanka. On the right axis is demontrated ROE for Pima Banka. Again, similary as was the situation with the ROA indicator, Prima Banka is the only banks from our observatiosn which have negative ROE during the years of the world financial crisis and 2011 - 2013. However, here from the detailed data we have found out that this has been caused by negative numbers in the equity, which does not mean always that the bank is not profitable. As a matter of fact, after 2013 we see the steady increase in the ROE indicator for Prima Bank, which means that the bank has an indication of a potential future rebound. as for other banks, in 2008 – 2009 all of the observed bank's ROE has been decreased, but still the value was positive. Then over the years after the crisis Postova Banka had very huge fluctuations in the indicator of ROE. From the foreign group of banks Slovenska Sporitelna over the period of 2007 – 2017 had always ROE higher than the optimal level of 10%, besides 2009. VUB Banka also had optimal level of ROE besides 2012 and Tatra Banka had pretty high indicators of ROE besides 2012-2013. From the domestic group of banks, the numbers are lower then in comparison to the foreign banks.



Graph 18 - ROE of the Biggest Banks in Slovakia for the Period 2007 - 2017

Source: financial statements of banks, own processing

After the comaprison and evaluation of the weighted averages of ROE of both domestic and foreign groups of banks in Slovakia, we can conclude that in general, foreign banks are more efficient in regard to ROE indicator of the period of stable economic situation on the domestic market and abroad. During the financial recessions, domestic banks get affected more negatively than foreign banks (Table 4).

Table 4 – ROE Measured as Weighted Average of Selected Banking Groups in Slovakia for the period 2007 – 2017

Years	Foreign	Domestic
2007	19.66%	16.90%
2008	20.29%	-31.62%
2009	11.16%	5.97%
2010	15.12%	21.15%
2011	17.29%	-0.40%
2012	12.16%	12.62%
2013	11.53%	11.60%
2014	11.94%	6.93%
2015	12.12%	8.38%
2016	12.29%	8.55%
2017	11.27%	7.76%

Source: financial statements of banks, own processing

## c) Bank cost efficiency

The cost efficiency of the selected banks is presented as a percentage ratio of administrative, operation exenditures over total expenses for the analysed period 2007 - 2017 in Grpah 19. We obseve, that in general banks have similar tendency in increasing the cost ratio. There has been a slight decline in cost expenditure for personnel purposes of all banks, besides Prima Banka, which had a sharp decline in their administrative cost expenses during the world financial crisis. However, after 2008, the ratio has been increasing for all banks. Currently, all of the banks have administrative expenditure over 60% of their total costs. The biggest percentage of operational cost has Slovenska Sporitelna (77% as of 2017) and the lowest has Privatbanka (64% as of 2017).



Graph 19 – Cost Ratio of the Biggest Banks in Slovakia for the Period 2007 - 2017

Source: financial statements of banks, own processing

## *d)* Credit performance

The credit performance for the observed banks in Slovakia is presented in the Graph 20 as a frowth rate percentage of loans provided for the period 2007 – 2017. On the left axis are demonstrated values for Slovenska Sporitelna, Tatra Banka and Privatbanka and on the left axis are presented values for VUB Banka, Postova Banka and Prima Banka. During the world financial crisis the growth rate of lending operations has been increased subsctantially for all banks, besides VUB Banka, which had a negative growth rate of -49.08% in 2008. Since then VUB Banka had a positive growth in the loans provided. Slovenska Sporitelna and Tatra Banka had negative growth rate in loans provided in 2009 as an outcome from the financial crisis and after there was a substantial growth in the lending operations. To conclude, foreign woned banks shrinked their growth rates in the loans provided during the priod of crisis, but after they have increased it steadily in order to support the economy from the recession. Domestic banks also had a general decrease in the loans provided in the period of crisis.

Graph 20 – Growth Rate of Loans Provided by the Biggest Banks in Slovakia for the Period 2007 - 2017



Source: financial statements of banks, own processing

## **3.3 Discussion**

The research of the thesis has been conducted in order to analyse the role of the foreign capital in the banking sector of Ukraine and Slovakia from the perspective of risk and return profile, cost efficiency and credit provisioning. Part of the research included also the comparison of the results to the theoretical backgrounds and the comparison of Ukraine to the Slovakia, which is in our case is represented as a better example from the point of view of banking efficiency.

Thus, in the beginning, as a part of our objectives, we have described the current situation of both economies, from what we might tell that Ukraine is still recovering from the financial crisis of 2013 - 2014 caused by the internal political and military issues with Russia.

Also, slow development of the economy in recent years is affected by the nationalization in 2016 of the biggest bank in Ukraine (according to total assets) – Privat Bank. Slovakia currently has a high level of economic development and even though in the following years the economy might slow down, according to the Slovak government, Slovakia is able to manage it in a proper and effective way.

Since the transition period of Ukrainian economy and banking system in late 1990s, Ukraine has suffered 2 major economic crises: first - in 2008 - 2009 as a crisis with external causes and second - in 2013 - 2014 as a crisis with internal causes. Additionally, the huge impact had nationalization of Privat Bank in 2016, which resulted in large loss of net income for the whole banking sector of Ukraine. Slovak banking industry has been affected by the adoption of Euro in 2008 and by the world financial crisis of 2008 - 2009, since then the banking industry has a positive growth in the development.

In our empirical research, our goal was to prove or disapprove 2 hypotheses:

<u>*Hypothesis 1:*</u> Foreign banks are more efficient from the point of view of profit and cost efficiency than domestic Ukrainian and Slovak banks during the period 2007 - 2017.

<u>Hypothesis 2:</u> Foreign-owned banks decrease their credit performance in times of economic distress in Ukraine and Slovakia during the period 2007 - 2017.

In order to achieve this goal, we have decided to conclude an analysis and evaluation of the following metrics:

- bank profit efficiency in the form of ROA and ROE measures, in order to see how well banks are able to turn their assets into profit and to generate profit from the shareholder's equity;
- bank profit efficiency as weighted average in order to examine the more precise profit efficiency indicators for the foreign and domestic group of banks;
- bank cost efficiency in the form of cost ratio between the operational expenditures and total expenses of the bank. The general idea behind this ratio was to analyse if foreign banks invest more into their employees, equipment, technologies and other administrative operations;

 credit performance – in the form of growth rate of the loans provided, in order to see the increase of decrease in the lending operations during the adverse economic situation in the countries.

As a sample, we have decided to choose for Ukraine 10 top biggest banks – 5 with the domestic capital and 5 with foreign capital. All together they represent the bigger part of the share of the whole banking sector in Ukraine (according to the total assets). From the sample of domestic banks from the years 2007 - 2015 we had 3 banks state-owned and 2 banks privately owned. After nationalization of Privat Bank in 2016, our sample contained for the years 2016 - 2017, 4 state owned banks and 1 privately owned bank. From this we may conclude that in Ukraine, state has a huge impact on the banking industry, as it owns a large share on the market of the banking services. From foreign group of banks, 2 banks have biggest shareholders from Russia, which means that they own together 7% of all banking sector (according to the total assets) and since 2016 this number is growing.

For Slovakia we have chosen 6 biggest banks according to their market share (of total assets). As currently, on the paper, the biggest banks in Slovakia all having foreign capital, based on scientific papers and arguments, we have decided to consider Postova Banka, Prima Banka and Privat Banka as domestic banks. Postova banka is viewed as private local commercial bank despite the fact that the headquaters of its proprietor registered abroad. Prima Banka and Privat Banka, as of now owned by international investment group Penta Investments which is largely operating in Slovakia.

The results of our research is that in Ukraine during the economic stability in the country domestic banks are more profit efficient in regard of ROA and ROE indicators. It may be affected by the share of Privat Bank in the whole banking sector and its optimal profitability ratios before nationalization and due to the excessive presence of state ownership in Ukrainian banks, where the government may regulate banking sector from inside of the industry. While in Slovakia, foreign banks are more profit efficient during the stable economic activities. Also during the adverse economic situation in the country, foreign banks are more stable in regard of profit efficiency than domestic banks. In case of Ukraine, the results differ as here we have to differentiate between the external economic shocks and internal economic shocks. Thus, during the world financial crisis and internal Ukrainian crisis, foreign banks

were more profit effective in regard to the ROA indicator. However, domestic banks have tendency to recover faster. And in regard to the ROE indicator, during the crisis of 2008 – 2009 domestic banks have been more profit efficient and during the internal crisis of 2013 – 2014 foreign banks have been more profit efficient.

In regard to the cost efficiency, in Ukraine domestic and foreign banks decrease their operational costs during the periods of crisis. The only difference which is visible in observed data is that foreign banks have a clear trend – during crisis they shrink their operational costs and during stable economy they increase it. However, in case of domestic banks in Ukraine it is quite difficult to undertsand the trend as banks have different fluctuating trends in this matter. In case of Slovakia both domestic and foreign banks decrease their operational expenditures during the financial crisis. As of credit performance, in Ukraine foreign and domestic groups of banks reduce the lending activities during the adverse economic situations in the country. Similar results we got in Slovakia, both groups of evaluated banks have a tendency to reduce their loans provided.

To conclude, we can partially prove the Hypothesis 1, because it is true only in case of Slovakia, but for Ukraine the results may vary due to many other factors which are affecting the final conclusions. In case of Hypothesis 2 - we able to prove it on the example of both countries Ukraine and Slovakia.

## 3.4 Suggestions

Based on the outcome of the thesis, we saw that results are different for Ukraine and Slovakia in case of the bank profit efficiency. Domestic banks in Ukraine are more profit efficient than foreign banks, when in Slovakia foreign banks have higher indicators of profit efficiency than domestic banks. This may be caused by the differences in the type of economies. Slovakia is open small economy, is a member of the EU and have adopted euro currency since 2009. These factors bring a lot of benefits and stability to the economy of Slovakia as a whole and banking system in particular. Also, foreign banks in Slovakia own major share of the banking sector according to the total assets division, while the state
presence is minimal. This might explain our results for Slovakia, which confirm the theory regarding the the bank profit efficiency of the foreign and domestic banks.

From another side, Ukraine is more closed economy in comparison to Slovakia. Until recently, Ukraine was mostly trading with Commonwealth of Independent States (CIS) region and the biggest trade partner was Russia. Only few years ago, Ukrainian main trade destination started to be EU. Ukraine is mostly focused on the internal production in agriculture, metallurgy and machinery. In past 10 years Ukraine has suffered two economic crises, which had huge impact on the whole economy of the country. However, already in 2017 economic growth of Ukraine started to increase.

The biggest difference from Slovakia in regard to the banking sector, is that domestic state banks own more than a half of the banking sector in Ukraine according to the total assets. This factor explains us that government has a huge impact and participation in the Ukrainian banking industry. On the example of Privat Bank, the biggest bank in Ukraine according to the total assets, we saw that at the point when the bank has become very influential and almost half of the population of Ukraine had there accounts, government decided to nationalize it. Currently, the profit efficiency ratios for this bank are very low in comparison to the previous years, when the bank was private. However, the bank has been nationalised in 2016, thus it might be still early to judge the low profitability number of this bank. As of foreign banks in Ukraine, the biggest presence has Russian foreign capital. This might influence the final results of the banking sector of Ukraine.

Taking into account above-mentioned, there are following suggestions:

- on the example of Slovakia, we saw that in the Slovak banking sector there is a rage presence of the foreign capital. Thus, Ukraine should attract more foreign capital to the banking sector from the member-states of EU and other developed countries;

- to increase the level of privatization of the state banks, in order to decrease the governmental influence on the banking sector of Ukraine from the inside of the industry;

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- with the expanded presence of the European foreign capital and lower amount of state banks the trust to the Ukraine banking system should be raised;

- currently, the business environment in Ukraine is considered very hostile. Thus, it should be improved in order to attract more foreign investments to the banking sector and to the whole economy. In particular, the bureaucracy level should be easen and regulations should be favourable towards the "healthy" development of the banking sector;

- Ukraine should be implementing appropriate reforms and improve its banking regulations in order to improve the cooperation with EU and work toward the accession of the EU. Because, as we saw on the example of the Slovakia, such a move has various positive economic, financial and social benefits;

- National Bank of Ukraine should continue the plan of increasing capital buffers according to the recommendations of European Basel requirements.

The topic of the foreign capital influence on the banking sector of the country is very substantial. Thus, the further research of this topic is recommended. In the thesis we have used a sample of the biggest banks of Ukraine and Slovakia. In the future researches could be evaluated all of the banks from both countries. This could show more precise situation of the banking sector of both countries. Furthermore, as the number of banks in Ukraine is higher than number of banks in Slovakia, for the future analyses could be chosen the comparison of the banking sector of Ukraine and Slovakia together with the Czech Republic. Taking into account Soviet history of Ukraine, another comparison could be made between Ukraine and Baltic states, as Estonia, Latvia and Lithuania.

## Conclusion

Foreign capital in banking sector affects a country in various aspects. It can have an impact on the macroeconomic indicators of the state, on the banking profit and cost efficiency, impact on profits and costs of the economy, and credit stability. The advantages and disadvantages of the foreign capital presence depends on different factors, including the type and size of the economy, regulations and the level of development of the country.

The research of the thesis has been conducted in order to analyse the role of the foreign capital in the banking sector of Ukraine and Slovakia from the perspective of risk and return profile, cost efficiency and credit provisioning. Part of the research included also the comparison of the results to the theoretical backgrounds and the comparison of Ukraine to the Slovakia, which is in our case is represented as a better example from the point of view of banking efficiency.

Based on the outcome of the thesis, we saw that results are different for Ukraine and Slovakia in case of the bank profit efficiency. Domestic banks in Ukraine are more profit efficient than foreign banks, when in Slovakia foreign banks have higher indicators of profit efficiency than domestic banks. This may be caused by the differences in the type of economies.

In regard to the cost efficiency, in Ukraine domestic and foreign banks decrease their operational costs during the periods of crisis. In case of Slovakia both domestic and foreign banks decrease their operational expenditures during the financial crisis. As of credit performance, in Ukraine foreign and domestic groups of banks reduce the lending activities during the adverse economic situations in the country. Similar results we got in Slovakia, both groups of evaluated banks have a tendency to reduce their loans provided.

Taking into account the results of the thesis, our recommendations to Ukraine is that on the example of the Slovakia it would be beneficial to decrease the amount of state-owned banks and provide the positive business environment for the attraction of the foreign capital to the banking sector of Ukraine. Ukraine should be focusing on the European Basel recommendations and regulate the capital adequacy ratios of the banking sector of Ukraine.

## Resume

Cieľom diplomovej práce je analyzovať úlohu zahraničného kapitálu v bankovom systéme Ukrajiny a Slovenska z hľadiska rizikového a výnosového profilu. Parciálne ciele empirickej časti diplomovej práce sú:

- popis súčasnej situácie na Ukrajine a na Slovensku so zameraním na ekonomické ukazovatele;

 analýza súčasného stavu bankového sektora a historické dôsledky počas prechodného obdobia a v čase recesií a nepriaznivého ekonomického vývoja;

 hodnotenie efektívnosti bánk oboch krajín prostredníctvom ukazovateľov zisku, nákladov a úverovej výkonnosti;

návrh odporúčaní na zlepšenie vývoja bankového sektora Ukrajiny na príklade
Slovenskej republiky.

Autorka tejto diplomovej práce si zadefinovala nasledujúce hypotézy:

Hypotéza 1: Banky s majoritným podielom zahraničného kapitálu sú efektívnejšie z hľadiska ziskovosti a nákladovej efektívnosti ako ukrajinské a slovenské banky v období rokov 2007 - 2017.

Hypotéza 2: Banky v zahraničnom vlastníctve znižujú svoju úverovú výkonnosť v časoch hospodárskej tiesne na Ukrajine a na Slovensku v období rokov 2007 - 2017.

Interpretácia a potvrdenie pravosti informácií prezentovaných v diplomovej práci si vyžadovalo naštudovanie veľkého množstva domácej a zahraničnej literatúry, vedeckých prác, zborníkov z konferencií, medzinárodných a národných štatistických databáz.

Údaje sme zozbierali z účtovných závierok zverejnených komerčnými bankami a národnými bankami Ukrajiny a Slovenska. Väčšina údajov bola prezentovaná bankami podľa Medzinárodných štandardov finančného výkazníctva (IFRS) na konsolidovanom základe. Zvyšok informácií bol získaný z nekonsolidovanej účtovnej závierky, ktorá bola verejne prezentovaná v súlade s účtovnými štandardmi.

Výskumná časť diplomovej práce bola vykonaná s cieľom analyzovať úlohu zahraničného kapitálu v bankovom sektore Ukrajiny a Slovenska z hľadiska profilu rizika a

návratnosti. Súčasťou prieskumu bolo aj porovnanie výsledkov s teoretickými východiskami a porovnanie Ukrajiny so Slovenskom, ktoré je v našom prípade reprezentované ako lepší príklad z hľadiska bankovej efektívnosti.

Na začiatku sme ako časť našich cieľov opísali súčasnú situáciu oboch ekonomík, z čoho môžeme usúdiť, že Ukrajina sa stále zotavuje z finančnej krízy 2013 - 2014 spôsobenej vnútornými politickými a vojenskými otázkami s Ruskom. Aj pomalý ekonomický vývoj v posledných rokoch je ovplyvnený vyvlastnením a znárodnením najväčšej ukrajinskej banky v roku 2016 (podľa výšky celkových aktív) - Privat Bank. Slovensko má v súčasnosti vysokú úroveň ekonomického rozvoja (rast HDP) a aj keď sa ekonomika v nasledujúcich rokoch môže spomaliť, podľa odhadov viacerých expertov, Slovensko je schopné udržať si zdravo fungujúci bankový trh.

Od prechodného obdobia ukrajinského hospodárstva a bankového systému na konci 90. rokov 20. storočia Ukrajina utrpela 2 veľké hospodárske krízy: najprv - v rokoch 2008 -2009 ako kríza s vonkajšími príčinami a druhá - v roku 2013 - 2014 ako kríza s vnútornými príčinami. Okrem toho, obrovský vplyv malo znárodnenie Privat Bank v roku 2016, čo malo za následok veľké straty čistého príjmu pre celý bankový sektor Ukrajiny.

Slovenský bankový sektor bol ovplyvnený prijatím eura v roku 2009 a svetovou finančnou krízou v rokoch 2008 - 2009, odvtedy má bankový sektor pozitívny rastový vývoj.

V našom empirickom výskume bolo naším cieľom dokázať alebo odmietnuť 2 hypotézy:

Hypotéza 1: Zahraničné banky sú v období rokov 2007 - 2017 efektívnejšie z hľadiska ziskovosti a nákladovej efektívnosti ako domáce ukrajinské a slovenské banky.

Hypotéza 2: Banky v zahraničnom vlastníctve znižujú svoju úverovú výkonnosť v časoch hospodárskeho poklesu na Ukrajine a na Slovensku v období rokov 2007 - 2017.

Na dosiahnutie tohto ciel'a sme sa rozhodli analyzovať a vyhodnotiť nasledujúce ukazovatele:

 efektívnosť zisku bánk - vo forme ukazovateľov ROA a ROE, s cieľom zistiť, do akej miery sú banky schopné premeniť svoj majetok na zisk a vytvárať zisk z vlastného imania;  efektívnosť bankového zisku ako vážený priemer - s cieľom preskúmať presnejšie ukazovatele efektívnosti zisku pre zahraničnú a domácu skupinu bánk;

 efektívnosť nákladov bánk - vo forme nákladového pomeru medzi prevádzkovými výdavkami a celkovými nákladmi banky. Všeobecnou myšlienkou tohto pomeru bolo analyzovať, či zahraničné banky viac investujú do svojich zamestnancov, vybavenia, technológií a iných administratívnych operácií ako domáce banky;

• úverová výkonnosť - vo forme tempa rastu poskytnutých úverov, s cieľom vidieť nárast poklesu úverových operácií počas nepriaznivej ekonomickej situácie v oboch krajinách.

Ako vzorku sme sa rozhodli vybrať pre Ukrajinu 10 najväčších bánk (podľa celkovej výšky aktív) - 5 s domácim kapitálom a 5 so zahraničným kapitálom. Týchto 10 vybraných bánk reprezentuje majoritný podiel na ukrajinskom trhu (podľa celkových aktív). V zastúpení domácich bánk z rokov 2007 - 2015 sme mali 3 banky vo vlastníctve štátu a 2 banky v súkromnom vlastníctve. Po znárodnení Privat Bank v roku 2016 naša vzorka obsahovala počas rokov 2016 - 2017, 4 štátne banky a 1 súkromnú banku. Z toho môžeme usúdiť, že na Ukrajine má štát obrovský vplyv na bankový sektor, keďže vlastní veľký (majoritný) podiel na trhu bankových služieb.

Zo zahraničnej skupiny bánk majú 2 banky najväčších akcionárov z Ruska, čo znamená, že vlastnia spolu 7% celého bankového sektora (podľa celkových aktív) a od roku 2016 sa tento podiel postupne zvyšuje.

Pre Slovensko sme vybrali 6 najväčších bánk podľa ich trhového podielu (celkových aktív). Ako sme už uviedli, drvivá väčšina bánk na Slovensku má majoritný podiel zahraničného kapitálu. Za tohto predpokladu sme sa rozhodli zaradiť do vzorky nasledujúce 3 banky, ktoré budeme považovať za domáce (Poštová banka, Prima banka a Privatbanka). Poštová banka je považovaná za súkromnú domácu banku aj napriek tomu, že daňový domicil jej majiteľov je registrovaný v zahraničí. Prima banka a Privatbanka v súčasnosti vo vlastníctve medzinárodnej investičnej skupiny Penta Investments Ltd., avšak táto spoločnosť pôsobí prevažne na Slovensku (preto ich môžeme považovať za domáce banky pre potreby tejto diplomovej práce).

Výsledkom nášho výskumu je, že na Ukrajine počas ekonomickej stability v krajine boli domáce banky efektívnejšie z hľadiska ROA a ROE ukazovateľov. To môže byť ovplyvnené podielom Privat Banky a jej vysokým podielom na domácom bankovom trhu. V porovnaní so Slovenskom sú slovenské banky so zahraničným kapitálom pri stabilných ekonomických podmienkach efektívnejšie. Aj v nepriaznivej ekonomickej situácii v krajine sú zahraničné banky stabilnejšie z hľadiska efektívnosti zisku ako tuzemské banky. V prípade Ukrajiny sa výsledky líšia, pretože tu musíme rozlišovať medzi internými ekonomickými udalosťami a externými.

Počas svetovej finančnej krízy a vnútro politickej ukrajinskej krízy, zahraničné banky boli ziskovo viac efektívne, podľa ukazovateľa ROA. Domáce banky však majú tendenciu rýchlejšie spomaľovať svoj rast, hlavne počas neistoty a nepriaznivých ekonomických podmienok.

Pri detailnejšom pozorovaní ukazovateľa ROE, počas krízy v rokoch 2008 - 2009 boli domáce banky efektívnejšie a počas vnútro politickej krízy 2013 - 2014 boli zahraničné banky efektívnejšie.

Pokiaľ ide o nákladovú efektívnosť, na Ukrajine domáce a zahraničné banky znižujú svoje prevádzkové náklady počas obdobia recesií. Jediný rozdiel, ktorý je viditeľný v pozorovaných údajoch je, že zahraničné banky majú jasný trend - počas krízy zmenšujú svoje prevádzkové náklady a počas stabilnej ekonomickej situácie ich zvyšujú. Avšak, v prípade domácich bánk na Ukrajine je pomerne ťažké odhadnúť tento trend, hlavne kvôli vysokej fluktuácii nákladov. V prípade Slovenska znižujú domáce aj zahraničné banky počas finančnej krízy svoje prevádzkové výdavky. Pri pohľade na úverovú výkonnosť, na Ukrajine zahraničné a domáce bankové skupiny znížili úverové aktivity v nepriaznivých ekonomických podmienkach na domácom trhu. Podobné výsledky sme zaznamenali aj na Slovensku, obe skupiny hodnotených bánk majú tendenciu znižovať poskytnuté úvery v časoch nestability a ekonomickej recesie.

Na záver môžeme čiastočne potvrdiť hypotézu 1, pretože to platí len v prípade Slovenska, ale pre Ukrajinu sa výsledky môžu líšiť v dôsledku mnohých ďalších faktorov, ktoré ovplyvňujú konečné závery.

V prípade hypotézy 2 sme to dokázali na príklade oboch krajín Ukrajiny a Slovenska je pravosť a preto ju môžeme považovať za potvrdenú.

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## Appendixes

Bank's Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Privat Bank	3.41%	1.89%	1.26%	1.37%	1.10%	0.97%	0.97%	0.36%	0.09%	-68.04%	-6.80%
Oschadbank	1.34%	0.79%	1.18%	0.77%	0.80%	0.71%	0.72%	-7.39%	-8.54%	0.25%	0.22%
Ukreximbank	2.12%	1.62%	0.04%	0.08%	0.12%	0.20%	0.22%	-8.90%	-10.57%	-0.63%	0.41%
Ukrgasbank	1.36%	1.63%	-32.84%	0.08%	-22.59%	5.62%	4.47%	-12.50%	0.83%	0.61%	0.94%
PUMB	0.55%	0.08%	-4.26%	1.33%	1.01%	0.86%	1.45%	0.16%	-4.80%	0.89%	1.58%
Raiffeisen Bank Aval	1.63%	0.96%	-3.38%	0.00%	0.06%	0.07%	1.60%	-3.03%	-2.93%	7.13%	6.61%
Sberbank	0.00%	2.10%	0.18%	-18.22%	1.91%	1.87%	1.84%	0.26%	-12.84%	9.96%	0.24%
Ukrsotsbank	1.49%	1.96%	0.27%	0.07%	0.04%	0.02%	0.03%	-5.83%	-6.29%	-32.30%	-7.65%
Alfa Bank	0.41%	0.67%	-1.14%	0.00%	0.06%	0.14%	0.05%	-2.26%	-6.72%	-10.07%	1.23%
Ukrisbbank	0.45%	0.92%	-2.44%	-6.80%	-9.42%	0.22%	0.10%	-3.45%	0.07%	-2.24%	3.00%

Appendix A – ROA Indicators for the Banks in Ukraine for the Period 2007 – 2017

Bank's Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Privat Bank	35.36%	19.02%	11.38%	12.37%	9.96%	8.75%	9.70%	3.48%	0.86%	-857.24%	-134.05%
Oschadbank	10.39%	3.46%	4.35%	2.79%	3.10%	3.16%	3.52%	-39.65%	-81.58%	4.02%	2.37%
Ukreximbank	22.76%	17.60%	0.27%	0.36%	0.50%	0.90%	1.11%	-62.02%	-271.54%	-87.48%	8.10%
Ukrgasbank	14.28%	17.15%	-570.34%	0.97%	-150.73%	33.25%	24.04%	-91.95%	8.86%	6.03%	11.49%
РИМВ	3.44%	0.46%	-26.19%	8.59%	7.79%	6.58%	10.04%	1.15%	-41.51%	9.51%	17.62%
Raiffeisen Bank	13.93%	8.33%	-31.67%	0.01%	0.47%	0.53%	10.75%	-20.43%	-23.18%	46.76%	42.61%
Aval											
Sberbank	0.00%	9.46%	0.95%	-135.59%	15.49%	15.43%	16.93%	2.85%	-205.08%	168.87%	2.99%
Ukrsotsbank	14.15%	18.92%	2.26%	0.46%	0.23%	0.11%	0.13%	-35.72%	-32.29%	-134.03%	-56.46%
Alfa Bank	4.29%	6.50%	-11.26%	0.03%	0.49%	0.89%	0.32%	-19.30%	-86.66%	-137.98%	16.51%
Ukrisbbank	5.40%	10.82%	-25.45%	-64.47%	-121.72%	3.35%	0.93%	-39.28%	1.27%	-33.65%	30.33%

Appendix B – ROE Indicators for the Banks in Ukraine for the Period 2007 – 2017

Bank's Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Privat Bank	33.37%	41.42%	46.61%	48.37%	44.94%	53.23%	64.17%	71.31%	52.37%	6.07%	53.86%
Oschadbank	59.46%	75.17%	45.73%	43.30%	48.06%	53.99%	55.13%	24.50%	19.84%	25.22%	29.64%
Ukreximbank	23.67%	42.61%	25.21%	20.66%	24.05%	28.58%	29.15%	9.57%	10.40%	8.55%	14.66%
Ukrgasbank	28.25%	61.39%	10.36%	44.93%	16.58%	52.89%	44.96%	19.20%	43.87%	30.12%	25.95%
PUMB	23.17%	34.24%	23.98%	56.06%	53.85%	65.48%	45.17%	30.99%	25.08%	28.40%	43.70%
Raiffeisen Bank Aval	34.45%	48.15%	32.69%	51.10%	56.38%	65.74%	63.23%	42.93%	40.37%	61.38%	84.71%
Sberbank		26.16%	38.08%	14.57%	71.58%	72.49%	69.83%	32.74%	15.48%	20.76%	29.13%
Ukrsotsbank	29.35%	46.03%	30.27%	35.98%	40.91%	52.87%	64.78%	47.57%	52.74%	17.12%	36.23%
Alfa Bank	23.32%	27.65%	40.78%	38.10%	57.39%	76.13%	57.72%	29.33%	37.17%	28.91%	59.04%
Ukrisbbank	27.33%	49.10%	30.11%	34.27%	66.03%	71.07%	83.15%	53.18%	43.64%	36.18%	63.92%

Appendix C – The Ratio Between the Operational Expenses and Total Expenses of the Banks in Ukraine for the Period 2007 – 2017

Bank's Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Privat Bank	44.94%	74.58%	3.03%	35.82%	20.68%	-7.48%	25.34%	13.18%	10.21%	-69.25%	-29.51%
Oschadbank	98.89%	293.53%	27.86%	0.40%	31.40%	-13.00%	0.70%	34.39%	-5.17%	0.77%	12.55%
Ukreximbank	-83.92%	1603.60%	26.03%	7.84%	1.26%	-23.37%	4.58%	23.23%	5.65%	6.16%	15.67%
Ukrgasbank	124.61%	90.47%	5.20%	8.20%	53.82%	-46.49%	18.24%	-2.17%	39.80%	45.07%	65.33%
PUMB	144.70%	79.71%	-12.02%	0.44%	44.60%	-13.68%	17.05%	29.83%	1.76%	-5.83%	2.99%
Raiffeisen Bank Aval	71.40%	46.91%	-10.97%	-10.00%	-2.57%	-38.98%	3.74%	9.83%	-14.93%	10.82%	34.96%
Sberbank	0.00%	0.00%	28.42%	85.28%	71.21%	31.08%	28.69%	45.46%	19.45%	-10.48%	-16.05%
Ukrsotsbank	90.41%	80.80%	-7.17%	-7.60%	-0.59%	-36.41%	15.56%	18.69%	12.04%	-46.08%	-23.16%
Alfa Bank	138.21%	141.73%	-9.71%	-9.51%	2.15%	-26.44%	17.53%	26.60%	7.24%	-6.68%	10.12%
Ukrisbbank	69.08%	63.71%	-10.19%	-14.52%	-39.61%	-34.49%	-4.62%	2.08%	40.62%	-1.34%	7.46%

Appendix D - The Annual Growth Rate of the Loans Provided by Banks in Ukraine for the Period 2007 – 2017

Bank's Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenská sporiteľňa	1.38%	1.26%	0.25%	1.33%	1.74%	1.63%	1.58%	1.48%	1.38%	1.49%	1.05%
VUB Banka	1.55%	1.63%	1.34%	1.46%	1.62%	1.07%	1.19%	1.25%	1.35%	1.18%	1.21%
Tatra banka	1.49%	1.39%	0.97%	1.06%	1.55%	1.14%	1.05%	1.20%	1.15%	1.12%	1.04%
Poštová Banka	2.05%	0.72%	1.29%	2.40%	0.18%	2.04%	1.88%	1.04%	1.30%	1.17%	1.12%
Prima Banka	0.66%	-3.76%	-0.51%	0.03%	-0.52%	-0.43%	-0.29%	0.03%	0.25%	0.50%	0.52%
Privatbanka		1.05%	0.68%	0.70%	0.65%	0.65%	0.67%	0.76%	0.84%	1.50%	1.48%

Appendix E – ROA Indicators for the Banks in Slovakia for the Period 2007 – 2017

Bank's Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenská	19.63%	18.53%	3.85%	17.55%	19.80%	16.81%	14.85%	14.05%	13.04%	13.84%	10.58%
sporiteľňa											
VUB Banka	19.02%	21.47%	15.52%	14.81%	16.39%	9.82%	10.00%	10.38%	11.20%	10.44%	11.15%
Tatra banka	20.48%	20.93%	12.90%	12.39%	15.78%	9.80%	9.36%	11.41%	12.09%	12.66%	12.52%
Poštová Banka	17.30%	7.34%	15.89%	30.53%	1.81%	17.37%	15.73%	8.13%	9.30%	8.16%	7.66%
Prima Banka	16.31%	-102.37%	-15.74%	1.07%	-14.48%	-9.82%	-6.11%	0.45%	3.87%	7.47%	6.65%
Privatbanka		16.01%	10.07%	10.23%	10.29%	10.67%	9.60%	9.32%	9.22%	14.28%	12.91%

Appendix F - ROE Indicators for the Banks in Slovakia for the Period 2007 – 2017

Bank's Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenská sporiteľňa	48.94%	44.70%	45.68%	49.37%	54.27%	56.89%	61.12%	73.70%	74.53%	73.47%	76.66%
VUB Banka	46.36%	44.39%	46.08%	50.14%	49.68%	46.79%	52.49%	55.42%	57.64%	62.49%	64.53%
Tatra banka	54.82%	48.34%	52.82%	63.03%	66.38%	55.66%	63.17%	67.14%	66.54%	72.28%	72.79%
Poštová Banka	70.30%	65.44%	62.98%	55.57%	45.00%	43.94%	43.33%	42.89%	46.63%	57.77%	71.00%
Prima Banka	34.12%	14.23%	33.96%	44.78%	43.89%	44.37%	41.74%	69.06%	70.53%	77.00%	75.98%
Privatbanka		34.40%	45.03%	43.06%	38.90%	41.26%	44.14%	45.48%	51.66%	59.57%	63.63%

Appendix G - The Ratio Between the Operational Expenses and Total Expenses of the Banks in Slovakia for the Period 2007 – 2017

Bank's Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenská sporiteľňa	-3.90%	32.95%	-13.96%	1.11%	-0.24%	0.98%	2.85%	8.85%	14.79%	9.00%	15.06%
VUB Banka	23.55%	-49.08%	3.46%	9.79%	12.88%	3.58%	0.63%	9.35%	10.18%	17.53%	11.89%
Tatra banka	39.52%	28.07%	-15.76%	-3.84%	3.59%	-0.30%	3.42%	10.58%	11.14%	5.19%	12.04%
Poštová Banka	15.04%	71.24%	34.95%	34.80%	21.31%	24.17%	8.39%	22.20%	-5.82%	-4.55%	8.40%
Prima Banka	1.75%	58.37%	-7.85%	14.13%	-33.40%	-7.51%	2.59%	7.90%	16.80%	4.49%	69.87%
Privatbanka			20.96%	5.40%	20.94%	8.46%	-14.07%	1.75%	18.21%	16.30%	18.43%

Appendix H - The Annual Growth Rate of the Loans Provided by Banks in Slovakia for the Period 2007 – 2017