Norwegian University of Life Sciences
Faculty of Social Sciences
School of Economics and Business

Master Thesis 2014
30/60 credits

Economic differences after the dissolution of Czechoslovakia - A study of FDI to the Czech Republic and Slovakia
Økonomiske forskjeller etter splittelsen av Tsjekkoslovakia - En studie av UDI til Tsjekkia og Slovakia

Sondre Lund Juklestad

Acknowledgements

I would like to thank The Vienna Institute for International Economic Studies, Austria, for letting me access their FDI and economic indicator databank. Without this access, the study would not had enough data.

I would also like to thank my supervisor Roberto J. Garcia. The feedback he has provided me with during the study has helped me to develop a better thesis.

Finally, a thanks to my Master colleagues which have been good support and sparring partners.

ÅS, September 2014

Sondre Lund Juklestad

Abstract

The Czech Republic and Republic of Slovakia were formed after the dissolution of Czechoslovakia in 1993, after being a communist country since the end of World War II. Capital flows, and especially foreign direct investment (FDI), have contributed to the economic growth and stability to develop themselves into market economies.

This thesis study the development of the Czech Republic and Republic of Slovakia through a theoretical framework which define reasons for why capital moves across borders. This is done to see if the dissolution has resulted in differences in the development of the two countries. The thesis is divided into two time periods; 1993-2003 and 2004- most recent data.

I have created four research questions are identified with purpose to see how the countries have been influenced by FDI, and reasons to why investors chose either the Czech Republic or Slovakia. This was examined using investment risk, looking at how the countries dealt with the financial crisis, and an analysis of how much the production (output), savings and investments have been influenced by FDI. The data are gathered from different institutions and organizations such as OECD and the World Bank.

Through the study it was evident that the Czech Republic experienced a higher economic development in the first period because of the willingness to perform economic reforms in an early stage. Slovakia on the contrary, experienced the economic FDI boost later, as they reformed their economy to become a member of the EU. During the study it has been shown that both countries have succeeded in attracting FDI and develop their knowledge about industry and production to a point where there are small differences between the Czech Republic and Slovakia today. Their gross national income per person is close to equal as of 2012.

Key words: Foreign direct investment, investment risk, saving and investment, production, the Czech Republic, Republic of Slovakia, comparative advantage.

Sammendrag

Tsjekkia og Slovakia ble dannet etter delingen av Tsjekkoslovakia i 1993 etter å ha vært et kommunistisk land siden slutten av andre verdenskrig. Kapitalstrømmer, og i dette tilfellet utenlandske direkteinvesteringer (UDI) har bidratt til at landene får økonomisk vekst, og dermed stabilitet til å utvikle en markedsøkonomi.

Denne oppgaven tar for seg utviklingen til Tsjekkia og Slovakia gjennom et teoretisk rammeverk som definerer grunner til at kapitalstrømmer går på tvers av landegrensene for å se om splittingen av et land gir store forskjeller for hvert av landene. Studiet er delt inn i to forskjellige tidsperioder; 1993-2003 og 2004- i dag.

Fire forskningsspørsmål er identifisert, med hensikt å vise hvordan landene har blitt påvirket av utenlandske direkteinvesteringer, og grunner til at investorer valgte et av de to landene, eller begge. Dette ble undersøkt ved å se på investeringsrisiko, hvordan landene håndterte finanskrisen, en analyse av hvor mye produksjon, sparing og investeringer har blitt påvirket av UDI. Data er hentet fra forskjellige økonomiske institusjoner og organisasjoner som Verdensbanken og OECD.

Gjennom studiet var det tydelig at Tsjekkia klarte seg best rett etter splittelsen hva angår UDI og generell økonomisk utvikling da de hadde en reformvillighet som var større enn hos Slovakia. Slovakia har derimot hatt den største økningen i den andre perioden etter at de reformerte sin økonomi, og fikk drahjelp av prosessen for å bli medlem av EU. Det har vist seg at begge landene har klart å tiltrekke seg UDI for og videre bygge sin kunnskap om industri og produksjon. Det er i dag ikke store forskjeller hva angår økonomisk utvikling, og de har i dag en brutto nasjonalinntekt per person som er så å si identisk.

Nøkkelord: UDI, investeringsrisiko, sparing og investering, produksjon, Tsjekkia og Slovakia, komparative fortrinn.

Table of contents

List of figures

List of tables

1 Introduction

1.1 Capital flows

Capital flows are the collective term for all transactions involving capital of various forms. Measuring the effect of capital flows, as they move between countries, is a means to determining how a country's economy is evolving, or devolving. There are several different types of international capital movements; portfolio flows, foreign direct investment (FDI) and sovereign debt. Portfolio flows involve financial capital, but does not include the ownership or control, of a business entity. It is investment into financial assets such as the purchase of a bond in a Norwegian company or government by a person or company from Sweden. Sovereign debt is a riskier "investment" made by the government, with intentions of increasing the economic growth of the issuing country. The problem with this form of capital movement is that the governments can have problems repaying the debt, particularly when incurring such debt to finance wars rather than infrastructure that can spur business activity. If a problem like this arises, sovereign governments will face difficulties with getting new loans.

"*Foreign direct investment (FDI) refers to a movement of capital that involves ownership and control*" (Appleyard & Field 2014) or as The World Bank defines, FDI is the net inflows of investment to gain a lasting management standing (10 per cent or more of the voting stock) in an enterprise established or operating in a country that's not the same as the origin of the investor.

Durham (2004) refers to two articles by Bekaert and Harvey (1998, 2000), which show that foreign portfolio investment has an effect on economic growth (Durham 2004). However, the effect of direct portfolio investment is not as great as the effect FDI has on economic growth. Durham lists two reasons for this; "*First, FDI exhibits positive externalities through the dissemination of advanced technological and managerial practices through the host country. Second, FDI flows tend to be more stable compared to alternatives*" (Durham 2004, p. 287). FDI has several positive effects on economic growth and macroeconomic stability for transition economies such as productivity gains, technological transfers, the introduction of new processes to the domestic market, managerial skills and know-how, employee training, international production networks, and access to markets (Alfaro et al. 2004). Foreign direct investment constitutes 50 per cent of all capital flows and will be the capital flows which will be used in the thesis.

Capital flow has occurred as a part of globalization over the last centuries. From the period when the Europeans discovered the technologies of other cultures, such as silk, rice, glass blowing and other important methods of innovation. There has been an increase in the capital flows crossing borders, as a part of the increased globalization. The development of different ways of transporting goods and services through ships, airplanes, and especially the revolution of information and communication technologies (ICT) has increased the globalization progress and brought the world closer together. Due to these innovations, countries have been able to focus on developing the products they possess a comparative advantage for. The total world capital inflow (foreign direct investment) was in 1993 mln US $ 223 600. In 2013, the number had increased to mln US $ 1 451 966, which is an increase of 659 % over the last 20 years, and that really shows how much more globalized the world have become the last twenty years (Development 2014).

The dissolution of the Soviet Union on December 21st, 1991 gave birth to 15 new states, each scarce in capital and long divorced from international capital markets. This led to new investment possibilities for companies from the West. Capital scarcity, cheap labor and skilled workers attracted FDI inflows to the former Soviet Union. In addition, the transition to market economy, liberalization of trade, privatization and removal of price controls and abolishing state-purchasing mechanisms created private business opportunities. Democratic changes moved the countries closer to west. Increased capital flows, new regulations, technologies and new forms of business developed a foundation for the modern way of doing business, based on the price mechanism and cost consideration.

1.2 Determining countries to be studied

After the dissolution of the Soviet Union and the break- up of the Council of Mutual Economic Assurance (a trade pact among centrally planned economies), the former member states faced a choice, to be loyal to either Russia, or to integrate with the Europe and the west. This dilemma is still seen today in Ukraine on whether to sign the EU agreement or remain more closely integrated with Russia through a customs union with the former Soviet Republics. Two of the countries that chose to cooperate with the already established EU were the Czech Republic and Slovak Republic. The dissolution of the Soviet Union changed the capital flows in Eastern Europe from an average annual total inflow to Eastern Europe of $1,805 million between 1981 and 1985, to $24,874 million in 1992. In 1996 private flows had reached $34 billion. (The World Bank 2014)

Even before the period of communism, Czechoslovakia's economy was based on industry. Czechoslovakia entered the transition process with a big debt burden, which later was to be in default (Feldstein 1999). The proximity of West Europe made it natural for investment capital, from Germany in particular, to enter and find its way to industrial sectors. The dissolution of Czechoslovakia has led to an increase in standard of living and GDP in both the Czech Republic and the Republic of Slovakia (Central Intelligence Agency 2014). The motivation behind comparing these two countries is that they can give insight in how capital flows behave after dissolving one country into two smaller independent ones. The Republics are also interesting as they were under communism prior to the dissolution and the development from communism to a market economy (transition economies) happened recently, and there are still countries which may face the same challenge in the future. Transition economies are important as they stand for one-third of the world's population (The World Bank 2014).

In the Czech Republic the increase in GDP per capita has been $3,800 USD in 1993 to $18,682 in 2012. In the Slovak Republic there has been an increase from $3,031 in 1993 to $16,847 in 2012 (Central Intelligence Agency 2014).

This thesis is a study of how FDI affects emerging markets in their macroeconomic development and economic growth. I will study the development of capital flows, or more specific FDI and savings during the period after the dissolution of Czechoslovakia, and the period after entering the EU. I will also look at the investment risk to see if this had anything to do with the outcome of the economic development. More specifically; the purpose is to study the differences between these developments for the Czech and Slovakia Republics during two periods. (1): from the break- up until their respective EU memberships, 1993-2004; (2): the period since EU membership 2004-2013. The period of Czechoslovakia serves as the background period from which the two separate countries' economies enter the transition. The state of the macroeconomy should be a factor that determines capital inflows and subsequent development and economic growth. The patterns of development during this period should shape the macroeconomy during the process of integration to the EU. The period after 2004 includes the period during which both were members of the EU and presumably their policy regime and political institutions are more identical. This will allow a study of how the economic have converged or diverged under more similar economic policy conditions. During the last period the effect of the financial crisis is studied, to see if it has led to any significant differences. I will also look at the investment risk in both of the countries to

see if this has had a significant role in the development for investment and savings, as the risk is something each company/state considers before reaching a conclusion. To undertake the analysis, macroeconomic data and information gathered through various statistic organizations such as IMF, Eurostat, OECD, UNCTAD, WIIW and the World Bank will be utilized.

1.3 Research questions

As the theoretical framework for the thesis, the reasons for why capital moves across borders, by Appleyard and Field (2014) will be used. With this framework it is possible to look at the gains from increased capital flows, and see if there has been any difference in the economic structure for the two countries and see if the implications for increased capital flows are better in either the Czech Republic or Slovakia.

The objective for this study is to determine whether there have been any significant differences between the Czech Republic and Slovakia during their transition process which may have given one of the two advantages for a healthier growth. To study this objective I have chosen four different research questions that will view different factors in their economies.

The research intends to answer the following questions:

1. Looking at the savings and investment balance for the Republic of Slovakia and Czech Republic during the periods. Has the savings been influenced or correlated with the same degree as the development of capital flows?
2. In which sectors did foreign capital participate in each country and how did the investments affect industry (production output) and other sectors of the macroeconomy?
3. How was capital flow patterns affected by the financial crisis (2008/2009)? Did the structures of their economic differ such that they were asymmetrically affected by the financial crisis?
4. Did the investment risk for the countries have a big influence in attracting capital flows on their development?

The first thing I will do is to compare the saving and investment rates in the two countries in the given time periods. I should expect to see that investment has been higher than savings since it is an open economy with capital scarcity, as they are an emerging market. This will be

done using IMFs balance of payments to view the current account. Further on I will analyze foreign direct investment total and sector-specific, to see if they have had any impact on the production (output). Comparing the answers of the research questions can give us a view of how successful the transition from communism to market economies has been for the two countries.

1.4 Organization of the thesis

The thesis will be divided into six sections. The first section is the introduction where the objectives and research questions are presented. In the background section, a history of the political and economic reforms is presented for both countries. Section three provides a theoretical foundation of financial and macroeconomic theory related to capital movements across countries. Section four formulates a modeling by which to analyze savings-investment imbalances and the pattern of capital flows that entered the Slovak and Czech Republics since the dissolution of Czechoslovakia. Section five provides a descriptive analysis of the data presented using the modeling framework that is developed and the significance of the results are discussed. Section six summarizes the thesis and provides conclusions, the limitations and suggestions for future research.

2 Background

2.1 Czechoslovakia 1918-1993

During the time of the Austria-Hungary Empire the Czech part of Czechoslovakia was the most developed part of the Austrian side while the Slovak part was the poorest part of the Hungarian side. The traditional Czech industry was concentrated around heavy industry and coal mining, but after the introduction of electricity they gradually changed into iron, steel, heavy machinery and chemical industry (Bičík et al. 2001). When Czechoslovakia was founded in 1918, it made a difference for the Slovakian industry as they got help from their experienced Czech neighbor, and the traditionally agricultural state began their development to an industrial state. During the communist period, the Slovak republic was industrialized, but only in the way that they produced the raw materials. The processing from raw materials to a finished product was placed in the Czech areas.

After the Second World War there were major changes in Czechoslovakia as it underwent the change to socialism. This involved the change from a market economy to a planned economy, and all economic objects were nationalized. The agricultural sector was reorganized with collective farms and the government planned what was to be produced, how much was produced, and how it was to be allocated. The economy was governed by five year plans. Heavy industry was encouraged which led to a strong demand for raw materials. In 1950 the Soviet Union and Czechoslovakia came up with a long-term agreement that would commit Czechoslovakia to produce machinery and equipment that they never had produced before. In 1951 an agreement was made that Czechoslovakia would increase the arms production. This eventually made Czechoslovakia the seventh biggest arms exporter in the world (Myant 1989). The communism influence haltered the development in Czechoslovakian industry, and they could not keep up with the rapid development in the west. Due to the slow development, the consumption of raw materials and energy per unit of production was very high, at the same time as the quality per product decreased. They also suffered a waste of raw materials compared to the more effective technology in the west (Bičík et al. 2001).

The shoe production that had been significant during earlier years, suffered as they could not produce much more than their domestic demand required. The rest that could be exported did not earn foreign exchange because manufactured goods were sold cheap. This together with a sudden stop of investment in the heavy machinery industry led to a recession in 1962-1963 (Myant 1989). Another reason for the recession was a bad economic reform that created

confusion and bottlenecks in the industry, and therefore reduced the technical efficiency. It was also haltered by a decrease in export to China as a result of the Sino-Soviet split[1] which forced a restructuring of industrial export production (Brada 1989).

Another important happening after the Second World War was that the eastern bloc countries established the Council of Mutual Economies Assistance (CMEA) as a counterpart to the West's Organization for European Economic Cooperation (OEEC). The idea behind the CMEA was to promote the intra-regional trade between the East European countries (Pelzman 1977). The Soviet Union used this as a way to get more influence towards the other members of this region, but it was also a way for the developed countries in the East to expand their trade, and a natural step to gain increased integrations. In the 1960s after a decrease in the growth rates, they changed their policy from an extensive to an intensive growth policy to increase at a faster growth rate. Pelzman (1977) shows that the CMEA managed to increase growth. The Russians used this as an advantage and the trade with the Soviet Union became important for Czechoslovakia.

The intra-CMEA-trade was shielded from the market prices in the rest of the world. The Soviet Union gave the CMEA members unfavorable options, where they would sell raw materials and receive cheap energy in exchange for low quality goods that would be sold at a discounted rate on the world market (Garcia et al. 1998).

[1] a worsening of the political and ideological relationship between Soviet and China, 1960-1989.

Table 1: Macroeconomic indicators Czechoslovakia 1970-1990

Indicators (in constant prices)	**1970-80**	**1980-1990**
Average annual change, in %		
GDP (approximation)	4,77	1,5
Gross material product produced	4,84	1,81
Personal consumption	3,22	1,69
Gross fixed investment	5,77	0,89
Consumer price index	1,14	2,17
Average real wages	1,99	-0,09
Total value added		
-Agriculture, hunting, forestry, fishing	7,84	6,52
-Industry	42,88	40,84
-Services	49,27	52,64

Source: Unctad, Sujan (1994)

As we can see from table 1, the economic performance of Czechoslovakia during the 1980s deteriorated from the 1970s. The annual growth rate of GDP dropped from 4,77 per cent to 1,5 per cent, and this pattern can be seen on every indicator in table 1, except from CPI which increased from 1,14 per cent to 2,17 per cent. As we can see from table 2, the average annual growth rate in industrial production decreases from 6,7 per cent measured during ten years (1965-1975), down to 5 per cent in the end of 1970s which confirms the trend seen in table 1.

During the 1970s Czechoslovakia experienced an export deficit of finished goods. The deficit was caused because the import of energy and raw materials no longer could be covered by the export of finished goods. The government laid a plan and aimed for a 10% growth in export to non-socialist countries, however, due to the lack of quality in the finished heavy machinery goods, they ended up not even close. Export to non-socialist countries increased to 30,4 per cent in 1980 from 28,4 per cent in 1975 (Teichova 1988).

Table 2: Rate of growth in % - annual averages of planning periods

Idicator	1965-70	1971-75	1976-80
Idustrial production	6,7	6,7	5,0

Source: Teichova

Czechoslovakia succeeded in increasing exports of some goods, such as glassware, but the major contributor to export was raw materials. Cellulose and wood products experienced impressive growth, but this resulted in a shift towards the export of homogenous raw materials, materials whose quality did not vary, and for which there was little added value

provided. These were products that did not suffer from the low quality of the labor force, and machinery, and could therefore be sold to western markets. Another reason for the export deficit was the fact that the centrally planned economy by the Soviet Union forced Czechoslovakia to produce more components for nuclear power stations and increase its production of fuels, energy and semi-finished metal products. This meant that Czechoslovakia had to import expensive raw materials from western industrial firms (Teichova 1988).

Table 3: Industrial structure of production (value added in %), Czechoslovakia

Industry	1980	1987	1990
Mining and quarrying	7,50	6,30	5,26
Food, beverages,tobacco	7,93	7,15	8,22
Textiles	5,54	5,24	5,18
Wearing apparel	1,36	1,35	1,40
Leather and products	0,47	0,44	0,48
Footwear	1,51	1,29	1,35
Wood products	1,95	1,93	2,31
Furnitures, fixtures	1,06	1,02	1,15
Paper and products	1,97	2,07	2,27
Printing, publishing	0,68	0,68	0,74
Chemical/rubber products	11,69	10,77	11,62
Non-metal products	6,24	5,66	5,92
Iron, Steel, oth, materials	10,48	9,23	9,82
Metal products	3,99	3,94	3,93
Non-electrical machinery	17,39	20,04	17,91
Electrical machinery	4,30	6,30	6,49
Transport equipment	8,45	9,25	8,31
Proffesial goods	0,47	0,46	0,51
Other manufacturing	1,12	1,05	1,15
Electricity, gas, etc.	5,90	5,83	5,98

Source: Šujan (1994)

As seen from table 3, the main contributor to the GDP was in machinery, transport equipment, chemical products, electricity, mining and quarrying. Šujan and Šujanová (1994) claims that this bias towards industry was far more than can be explained by natural conditions, and comparative advantage, but a result of the central planning and the CMEA system (Šujan & Šujanová 1994).

In early 1981 Czechoslovakia made a significant reduction in imports. This together with the increase in export gave them an increasing trade surplus with the non – socialist countries, which again decreased their debt as showed in table 4. It was machinery and raw materials that was the biggest contributor towards the surplus. These two were responsible for 36 per

cent of the change, with agriculture (16 per cent) as the third contributor. During this period they invested money into new machinery.(Myant 1989)

Table 4: Czechoslovakia's economic relations with non-socialist countries in the early 1980s

	Exports	**Imports**	**Balance**	**Net Indebtness**
	Million Kčs			Billion $
1979	19409	21985	-2576	-
1980	24364	24326	38	-
1981	25328	23436	1892	3,0
1982	24961	22010	2951	3,0
1983	26384	21485	4899	2,6
1984	27411	22127	5284	2,1
1985	27579	23251	4328	2,4

Source: Myant 1989. P. 193

2.1.1 Czechoslovakia 1989 – 1993

An important law that was implemented in January 1st 1989 made it possible for foreign companies to be the major owner in domestic Czechoslovak companies, however; by November 1989 only 30 joint ventures were formed, and of those, the majority where in hotel modernization. (Myant 1993).

A second important law that was implemented in January 1990 was the split of the State Bank jurisdiction. The State Bank could no longer lend to enterprises. Two commercial banks were given the task of lending money to enterprises, one in Prague and one in Bratislava. They also established one investment bank that should specialize in long-term loans. The banks were allowed to operate in every part of the country, and were not to follow the plan made by the authorities. The previous state bank was governed by the government, and there was a state-determined plan to which loans would be provided to companies in specified sectors. An own agricultural bank was also established to deal with any financial matters that referred to the agricultural sector.

In table 5 a summary of the changes within the Czechoslovak political and economic system are reported.

Table 5: Reform indicators Czechoslovakia

Indicators	Czechoslovakia
Multiparty elections first held	1990
Investor credit risk	53,7
Economic Freedom Index	MF
General privatization law – first passed	
year passed	1990
progress	fast
Prize liberalization	
year started	1991
year inflation peaked	1991
Gross domestic product (GDP)	
largest annual reduction	1991
first year of growth	1994
Voucher Privatization	
first auction	1992
Second auction	1994
Budget deficit	
First year the deficit ≥ 5% of GDP	1990
deficit as % of GDP	7 %
Convertible currency	1991
Trade liberalization	1991

Source: Garcia, Miljkovic and Gomez, 1998

During the economic reforms of 1990-91, 63 per cent of Czech-, 90 per cent of Slovak cooperative farms and 87 per cent of all state farms suffered losses. (Myant 1993)

As we can see from the table the credit risk was noted as 53, 7 on a scale from 1 to 100. The lower the number is the riskier is the investment. In March 1990 Czechoslovakia was a "safer" place to invest than Poland, another country that went through a reform from communism to market economy. At the same time their economic freedom was rated as MF (mostly freedom). The trade liberalization corresponds to the time when the Council of Mutual Economic Assistance (CMEA) dissolved.

"The economic reform scenario" was a summary of the proposals the government made for the economic reforms in the Parlament October 1990. The most important proposals were (Šujan & Šujanová 1994):

1. The liberalization of a wide range of domestic prices, including those of all tradable goods and non-tradable goods produced under reasonably competitive conditions.

2. The introduction of the crown's "internal" convertibility and the establishment of unified exchange rate responsive to supply and demand.
3. The installation of an adequately financed social net to meet the needs of those individuals becoming unemployed or otherwise suffering losses in income as a result of the adjustment process.
4. The progressive restructuring and privatization of state-owned enterprises.
5. The implementation of a restrictive macroeconomic policy to achieve economic stabilization through fiscal and monetary restraints and appropriate exchange rate, price and wage policies.

The economic framework stated that small businesses could be auctioned or returned to the rightfully owners (from whom assets were confiscated during communist times). Medium-sized, locally owned enterprises could be given to employee shareholders. The reorganization was intended to do away with the monopolies that big state-owned enterprises enjoyed. This was a main goal for the new government. The price system was far behind international standard as Czechoslovakia had huge subsidies in food and transportation prices (increased retail food prices with 25 per cent to eliminate subsidies which amounted for 3 per cent of GDP). Changing it was also a way to get rid of the negative turnover taxes (a tax that is calculated on gross income). Between July and October 1990 the retail prices on gasoline and diesel were doubled as they could no longer buy cheap oil from Soviet. Another section dealt with internal convertibility. Domestic enterprises were allowed to buy foreign currency, while all would be forced to sell their foreign currency earnings. This system would replace the system of the fixed exchange rate of Kčs 17 to $ 1. The old exchange rate made it almost impossible for export to be profitable, as enterprises stocked up on import because they expected devaluation and therefor they prepaid their debt. This was also a means to attract more foreign capital and be included into the trading system used by the rest of the world. On October 15th. 1990 the exchange rate was devalued to Kčs 24 per $ 1.(Aghevli et al. 1992)

The date set for the reforms was 1 January 1991. This eventually led to a shock for the Czechoslovakian economy when the expectation of imminent price increase led to the biggest general panic buying since the end of post-war rationing in 1953. The shock led to a drop in the industrial output for Czechoslovakia and the level of output in the end of 1991 was 34 per cent lower than the level in 1989. The recovery began in 1992 with a growth rate of 25 per

cent in the retail trade during the first 9 months in the Czech part within Czechoslovakia. This brought unemployment in the Czech state within Czechoslovakia to be as low as 2,5 per cent at the end of October. On the contrary, the Slovak state within Czechoslovakia did not enjoy the upturn as much as the Czech state, with growth in the retail trade of just 2 per cent in 1992 and an unemployment rate of 10,4 per cent in October (Myant 1993).

2.2 Breakup of Czechoslovakia 1993 - 2003

After 68 years, the breakup of Czechoslovakia was a fact. The leaders of the two parts of the former state came to an agreement to dissolve after they could not reach an agreement regarding the economic reforms the Czech part intended to conduct. The ultimatum presented by Vaclav Klaus, leader of Civic Democratic Party (ODS), and winner of the election in the Czech state, was either for a strong central government with a unified country that would conduct huge economic reforms, or split the states into two sovereign countries. The winner of the election in the Slovak state, Vladimir Merciar and leader of the Movement for a Democratic Slovakia (HZDS), was a reform skeptic and patriotic leader, who opted for the latter and the two leaders worked together for the peaceful dissolution. The Czech leaders valued a better relationship with the rest of "Europe" more so than keeping the federation with Slovakia. Hilde (1999) concluded that the break-up of Czechoslovakia lay in Czech nationalism instead of the Slovak nationalism (Hilde 1999).

After the breakup, they continued to have a custom union that included the same currency and a common labor market, but that lasted 5 weeks. The problem occurred when the inhabitants and firms in Slovakia transferred funds to Czech commercial banks because all expected a devaluation of the Slovak currency. This led to a massive capital outflows from Slovakia to Czech Republic. In addition, Slovak importers tried to pay back their debt as soon as possible whereas the Czech exporters did the opposite. The State Bank of Czechoslovakia and later The Czech National Bank tried to stimulate the market in Slovakia with credit transfers to Slovakia banks, but this became more and more difficult and the common currency ended (Fidrmuc et al. 1999).

After the fall of the communist party, the question asked was; how fast and in what order should they change to market economy. Their objective was the same as for all reforms; establish a market economy, leading to higher economic efficiency, economic growth, and improving the average standard of living (Åslund 2007). The radical reforms wanted to minimize the extended use of the state apparatus, and focus more on the democratic

government. The state needed strengthening, but in different ways than under the communism rule. The rule of law, registration and defense of private property rights, the fiscal system, central banking, regulation of banking and financial markets, and targeted social support were all functions that needed to be overlooked by the government. All of the reformed countries agreed to these changes, but they did not agree to how it was to be implemented.

2.2.1 The difference in their economic base

As of the economic, both new countries started up with almost similar structure of value added to their respective GDP. In contrast to most of the ex – communist countries which had foreign debt problems after the dissolution of the Soviet Union, Czechoslovakia together with Romania did not have any significant foreign debt. This was because nobody wanted to lend any money to the two most hard-lined communist regimes (Åslund 2007). This proved to be an advantage for both countries, as they started off with a small foreign debt.

The Czech Republic had a better starting position than Slovakia,as they had a lot of tourism to Prague which kept unemployment low. They also inherited a lot of medium sized industries that traded efficiently with their neighboring European Union (EU) markets. These factors helped the Czech Republic during the transition. Slovakia on the other hand inherited a lot of the heavy and arms factories and an unattractive industrial structure of large industries such as steel, armaments, and chemicals which made it hard to get into the more developed EU markets (Koyame-Marsh 2011).

Table 6: Macroindicators, 1993

Indicators	Czech Republic	Slovakia
Population (mln)	10,33	5,33
FDI, net inflows (% of GDP)	1,67	1,23
Gross domestic savings (% of GDP)	26,50	19,59
Unemployment, total (% of total labor force)	4,30	12,20
Current account surplus (level in % of export)	7,5	-13,1
Real interest rate (%)	-5,73	-11,84
Inflation (CPI, %)	20,81	23,29
GDP per capita (US dollars, current prices, PPPs)	11,885	7154
GDP growth (annual %)	0,06	-3,70
Total value added	**100**	**100**
-Agriculture, hunting, forestry, fishing	5,01	6,01
- Industry	37,93	35,30
- Services	57,06	58,69

Source: Unctad, Šujan, OECD

As a result of the stable macroeconomic behavior from Czechoslovakian times, both countries continued with fiscal and monetary prudence. The Czech Republic attained a positive GDP growth from the first year, and achieved an almost balanced budget from the beginning. In the first half of 1993, Czech Republic had a budget surplus of 1,3 per cent of GDP while Slovakia experienced a big deficit of -9 per cent (of GDP) (Koyame-Marsh 2011). Slovakia lost fiscal transfer from the Czech Republic which they had received during the Czechoslovakia period so there could be equality in the economic balances in the economy as a whole. The size of this has not been revealed, but Firdmuc et al. (1999), reports that estimates vary between CSK 13.5 to CSK 25 billion (Fidrmuc et al. 1999, p. 775).

As a summary, the Czech Republic started off with a better economic foundation than Slovakia, and in fact, the best start position of all the CEE countries. They had the highest GDP per capita and savings, a positive current account, low unemployment (21 % in 1993, 10 % in 1994), relatively low inflation (lowest of the CEE countries), a balanced budget and cheap labor so that they still had good competitiveness for Czech products (Šujan & Šujanová 1994).

Slovakia on the other hand began with a high unemployment, a negative current account, somewhat the same inflation as the Czech Republic, (23 % in 1993, 13 % in 1994), lower GDP per capita and lower savings than the Czech Republic as seen in table 6.

2.2.2 Voucher privatization

The way that both the Czech and Slovakia Republics chose to reform their economic, were voucher privatization. I have given a brief introduction to what this form of privatization is to get an understanding of the process. Five years after the fall of communism in Czechoslovakia, more than 80% of the state asset of the Czech Republic had been turned over to private owners. (Hanousek & Kroch 1998). The system that was used to change 1650 big enterprises to private owners, or partly change owners was a voucher privatization program. *"Voucher privatization not only determines market prices and allocates ownership shares of enterprises, but it also establishes the relationships between the publics and these new markets"* (Hanousek & Kroch 1998, p.133). The citizens were given voucher points that they could use to buy shares in designated firms during the auctions held by the government. The privatizations were split into two different auctions, one in 1992 and the second in 1994. The process in Slovakia followed the same speed as in the Czech Republic during 1991-1992, but Slovakia experienced a slowdown after 1992. In the Czech Republic 80% of the property fit for privatization was privatized in 1994, in Slovakia the numbers only showed 37 %. (Miklos 1996).

2.3 Development 1993-2003

Table 7: Selected macroecomic indicators, 1993-2003

Indicator	Czech Republic	Republic of Slovakia
Population 2003 (mln)	10,19	5,37
Inflation CPI, %	7,31	9,69
Unemployment, % of total labor force	6,16	15,10
- Female	7,70	14,80
- Male	5	15,50
Adjusted savings		
Gross national savings (% of GNI)	27,10	23,50
Net national savings (% of GNI)	6,30	2,50
Interest rate, %	2,81	5,81
Foreign direct investment flows, $mln		
- Inward flows	$3 461,0	$1 690,0
- Outward flows	$114,8	$78,2
Trade balance, goods & services ,$mln	$33 878,0	$14 859,0
Trade Balance in services in US $	$6 836,0	$2 379,0
Trade Balance in goods in US $	$27 042,0	$10 994,0
GDP (current US $mln)	62 755.6	28 561.2
GDP per capita, $	6108	5312
GDP growth (Annual %)	2.50	3.49
GDP per sector total, %		
Agriculture, hunting, forestry, fishing	3.84	5.30
Industry	38.10	35.85
Services	58.10	58.86
Population growth, %	-0,1	0,13

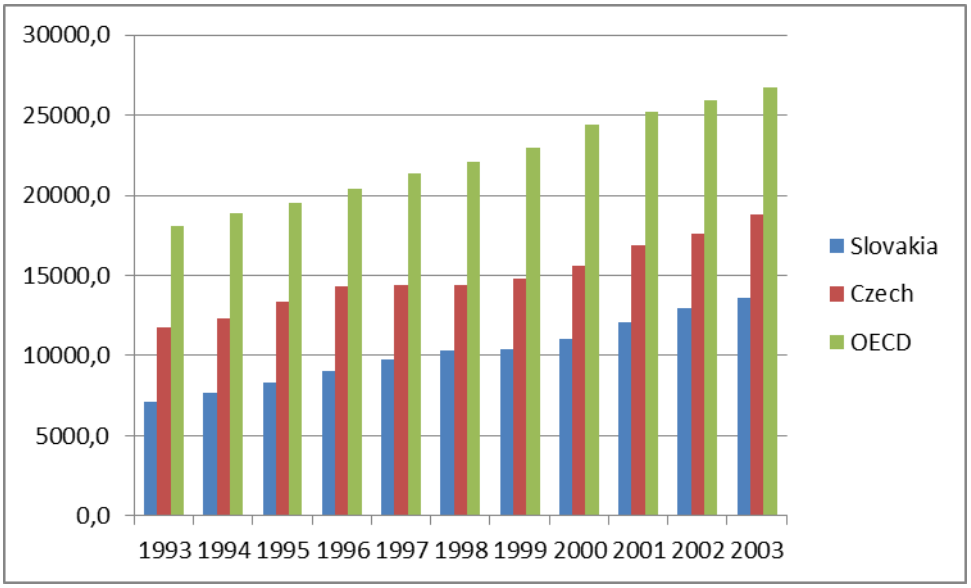
Source: World Bank, Unctad

Table 7 shows annual average of macroeconomic indicators from 1993 to 2003. The geographic position of the Czech Republic was more favorable as it bordered Germany, with whom the Czechs had opened for trade on a large scale. During the years 1993-2013, Germany created 47 661 new jobs in the Czech Republic, and invested $ million 6750 which is by far the biggest foreign contributor to the Czech economy (Invest 2013). This is in consensus with the politics they chose to implement. The Czech Republic sacrifices GDP growth for a macro stability (low inflation, stable currency, low unemployment, and the smallest budget deficit) instead of a pro – growth policy. The inflow to the Czech Republic in 1994 was the highest net inflow of all the CEFTA countries (Myant 1996).

In the late 1990s and the beginning of the 2000s, both Slovakia and the Czech Republic had to restructure their economies for accession to the EU. The second generation reform as stated

above was a mean to fulfill the criteria for Slovakia. The fiscal deficit declined from 8,2 per cent of GDP in 2002 to 2,7 per cent of GDP in 2003. The Governance indicators for both the Czech Republic and Slovakia show that there was an improvement in all of the indicators up to 2003, but in the year they got accepted, the political stability dropped with 0.2 in the Czech Republic and 0.4 points in Slovakia (table 17).This can be explained by uncertainty of the new political situation they entered. Rule of law and corruption are the two indicators that have the lowest score and have been a main issue for the whole East European countries.

Figure 1: GDP per capita Slovakia, Czech Republic and OECD, 1993-2003



Source: OECD factbook

As we can see from figure 1, GDP per capita have been increasing every year since 1993. The slow period of 1997-99 gave a halt in the growth, but still a positive one. As seen from the figure, both countries are far below the average OECD GDP per capita, and even though there has been an increase during the years, they have not been able to come closer to the OECD countries.

The years 1996-1999 represented a difficult period for both the Czech Republic and Slovakia. Czech Republic had a negative GDP growth during these years, while Slovakia managed to have a stable growth of 4 per cent. The reason for why the fall began earlier in the Czech economy was the recession in west export markets, and especially Germany. The recession was followed up with the Asian Regional Crisis (financial crisis which began in Thailand). These two factors forced the Czech Republic to institute new economic reforms to get a grip

of their economy and continue their progress in restructuring their economy. The Slovak economy was not as much affected by the Asian or European crisis, but the Russian crisis in 1998 made the Slovak economy to slow down. The restructuring of the state-owned banks and the implementation of the second generation reform policies made the economy recover around 2001 (Koyame-Marsh 2011).

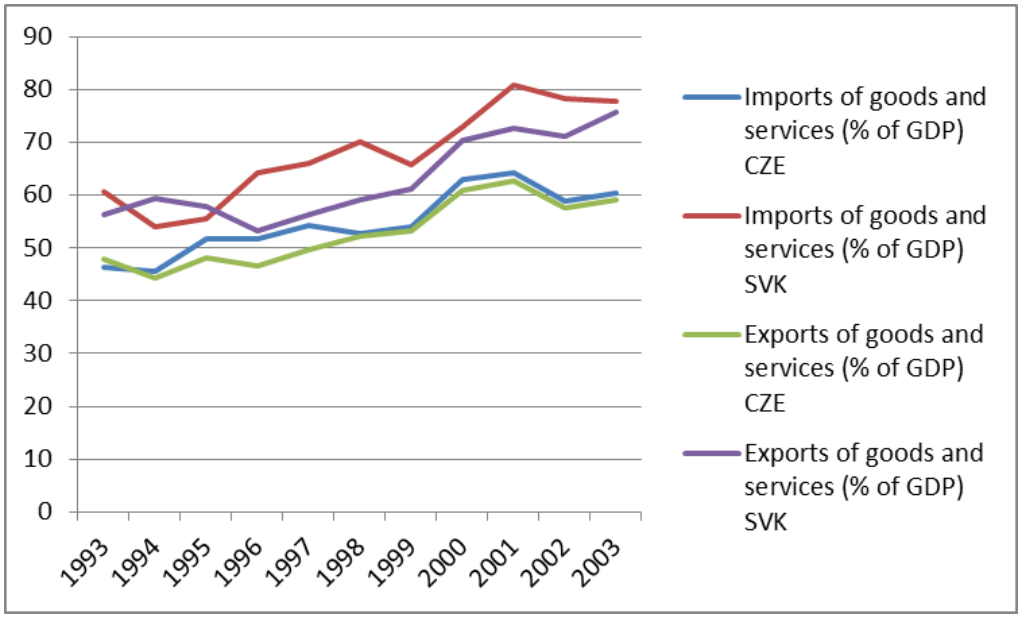
Table 8: Value added to GDP by activity in the Republics of Czech & Slovakia 1995,1999,2003

	Czech Republic			Republic of Slovakia		
Indicator	**1995**	**1999**	**2003**	**1995**	**1999**	**2003**
Agriculture, hunting and forestry, fishing	4,78	3,88	2,94	5,73	4,53	4,48
Industry, including energy	31,05	30,91	30,29	31,05	27,04	28,75
Manufacturing	22,93	25,04	24,59	25,00	20,36	22,71
Construction	7,22	7,63	6,51	5,26	6,86	6,22
Wholesale and retail trade, repairs, hotels and restaurants, transport	22,87	25,27	26,96	25,09	29,01	26,20
Financial intermediation, real estate, renting and business activities	16,78	15,40	15,42	17,01	16,37	17,29
Other services activities	17,30	16,91	17,89	15,85	16,19	17,05

Source: OECD

As we can see from table 8, the sectors that have contributed to the GDP have moved in somewhat the same direction. The similarities of the two countries are clear, as the numbers for each sector are close. However, the numbers shows that Czech Republic are slightly more turned towards manufacturing and industry while Slovakia gets more value added from agriculture, financial intermediation and services.

Figure 2: Export and Import as a % of GDP, 1993-2003



Source: World Bank

As seen from figure 2, the import and export in the Czech Republic have a less share of GDP than in Slovakia. The difference between import and export has been less in Czech than in Slovakia between 1993-2003. The fluctuations in the export-import relationship have been bigger in Slovakia, but as a criterion for joining the EU they had to tighten up their balance of trade deficit.

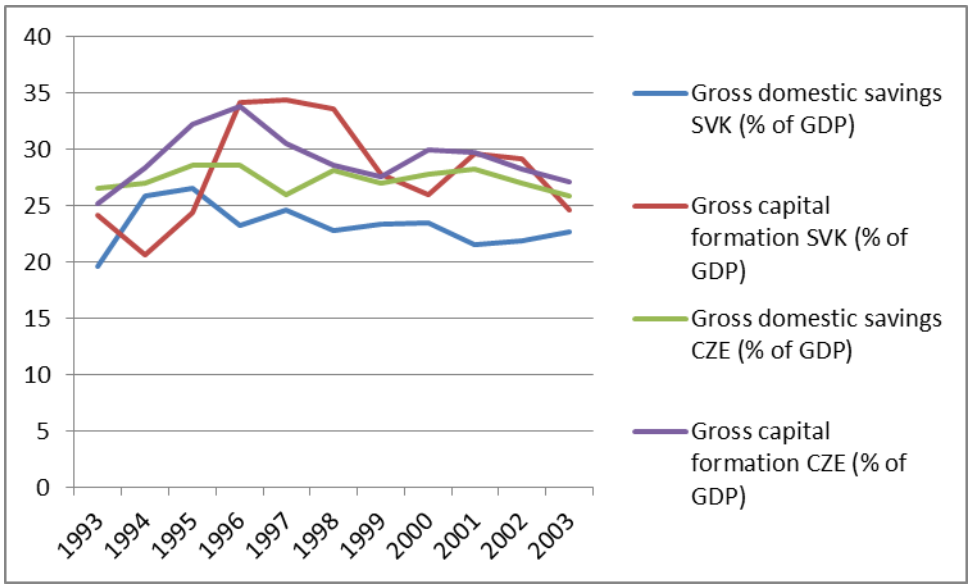
Table 9: Export by country from Slovakia and Czech Republic, 1995, 1999, 2003

Slovakia			Czech Republic		
1995	**1999**	**2003**	**1995**	**1999**	**2003**
CZE 31,2 %	**GER** 30,2 %	**GER** 34,6 %	**GER** 37,4 %	**GER** 41,4 %	**GER** 38,0 %
GER 21,7 %	**CZE** 16,6 %	**CZE** 12,0 %	**SLK** 12,6 %	**SLK** 7,2 %	**SLK** 7,2 %
ITA 6,0 %	**ITA** 9,3 %	**AUS** 7,2 %	**AUS** 6,4 %	**POL** 5,6 %	**AUS** 6,2 %
AUS 5,0 %	**AUS** 5,6 %	**ITA** 5,5 %	**POL** 4,4 %	**AUS** 5,6 %	**UK** 4,8 %
POL 4,4 %	**POL** 5,4 %	**USA** 4,8 %	**ITA** 3,9 %	**FRA** 4,1 %	**POL** 4,7 %
HUN 4,2 %	**FRA** 5,0 %	**POL** 4,8 %	**RUS** 3,0 %	**UK** 3,6 %	**FRA** 4,3 %

Source: Observatory of Economic Complexity

As seen in table 9, export to other markets has followed the same patterns for both countries, with one country as the main contributor. Slovakia is more dependent on export to the Czech Republic than the opposite, but the intra-trade has been decreasing from 1995-2003.

Figure 3: Domestic saving & investment, Czech Republic & Slovakia, 1993-2003



Source: Economy Watch, World Bank

The domestic investments (shown by gross capital formation) have been higher than the domestic saving for most of the time. The domestic investment in Slovakia has fluctuated a lot compared to the investment in the Czech Republic. Savings have somewhat followed the same trend in both countries.

2.3.1 Economic union

Before the Czech Republic and Republic of Slovakia could join the EU they had to meet several requirements. These are called the "Copehagen Criteria" (Commission 1993).

- Stable institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities;
- A functioning market economy and the capacity to cope with competition and market forces in the EU;
- The ability to take on and implement effectively the obligations of membership, including adherence to the aims of political, economic and monetary union.

An economic union is an integration of all other types of economic coalitions. All the economic benefits from Free – trade area, Customs unions and Common market are integrated in an economic Union such as the European Union. The difference is however that in an economic union there has to be a unification of the economic institutions and coordination of economic policy throughout all member countries. (Appleyard & Field 2014). When they also

implement the same currency in some of the member countries, they can also be called a monetary union. An Economic union has removed all tariffs among members, a common external trade policy is established to all nonmembers and all the factor movement restrictions are removed within the union.

There were good incentives for both of the countries to join the EU. The free movement of capital, labor, services and people would give the Czech Republic and Slovakia access to a bigger market than they had before and as countries with a high per cent of their added value to GDP from export, this gave a new opportunity for increased export. European Union is a common market which means that they have removed all tariffs, removed all barriers to factor movement and implemented a common external policy for nonmembers.

2.4 EU membership, 2004- present

Table 10: Value added to GDP by activity in the Republics of Czech & Slovakia 2005,2009,2013

	Czech Republic			Republic of Slovakia		
Indicator	**2005**	**2009**	**2013**	**2005**	**2009**	**2013**
Agriculture, hunting and forestry, fishing	2,75	2,31	2,36	3,63	3,39	2,95
Industry, including energy	31,04	31,19	30,99	29,44	24,54	26,65
Manufacturing	25,25	24,32	24,71	23,34	17,83	21,89
Construction	6,89	6,77	6,28	6,92	9,91	7,56
Wholesale and retail trade, repairs, hotels and restaurants, transport	26,07	25,26	24,49	27,24	26,79	27,27
Financial intermediation, real estate, renting and business activities	15,59	17,78	18,33	16,73	18,04	18,65
Other services activities	17,66	16,69	17,55	16,04	17,33	16,90

Source: OECD

While there in the previous period (1993-2003) was a clear pattern on every movement of the value added to GDP activities, there has been some fluctuations/randomness to the years 2004-2013 as seen in table 10. There has also been a change in which activities that has given most value to the GDP. A reason for the different numbers in contrast from the previous period is the financial crisis. Slovakia had greater differences in their economic framework as seen in table 10, with industry and manufacturing as two big sectors that lost respectively 5 and 5,5 per cent share of the value added to GDP. As we can see, by 2013 the changes in the GDP components have not been fully restored, and it is possible that the restructuring are on permanent basis.

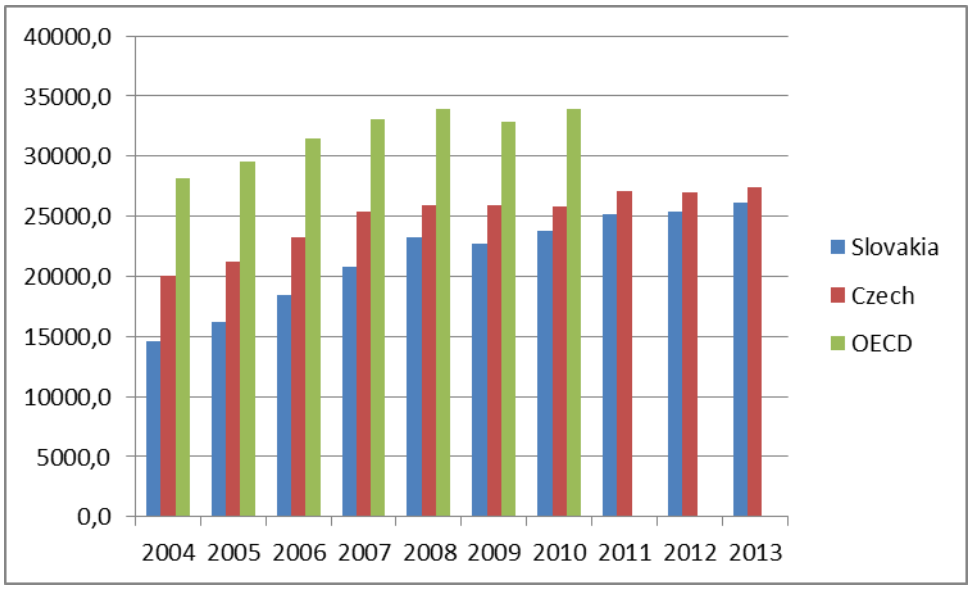
Table 11: New jobs created in Czech Republic 1993-2013

Type of Activity	Number of Projects	Volume of Investment (mln. USD)	New Created Jobs
Manufacturing	1 133	29 142	199 578
Strategic services	621	1 081	38 883
Technological center	728	1 647	16 107
Total	**2 481**	**31 870,00**	**254 568**

Source: Czech invest

Table 11 shows that the amount of new jobs created in manufacturing takes a lot more new employees than strategic services and technological center. The fact that the difference in new projects are so small compared to the jobs created shows that the manufacturing industry are much more dependent on human work than strategic services and technological center. As manufacturing industries in Slovakia are somewhat similar to the industries in the Czech Republic, an assumption is that the relationship labor/industry is the same in Slovakia.

Figure 4: GDP per capita, the Czech Republic, Slovakia



Source: OECD

As we can see from figure 4, the differences in GDP per capita has decreased between the countries, from a difference of US $ 5425 in 2004 to a small difference of US $ 1248 in 2013. The rapid increase of GDP per capita is a good indicator for the well-being of the Slovak economy, which has been the fastest growing country in the OECD between 2004-2010 (OECD, 2014). Even though there has been an increase in the standards of living in both the Czech Republic and Republic of Slovakia, they are still below the average of OECD

countries, with regard to the GDP per capita. They have followed the trends, and pace of the OECD members, but they have not managed to get closer to the average of the OECD organization. In the recent years, the difference has increased a small amount. However; Slovakia has increased their GDP compared to the Czech Republic, and if this trend continues, they will soon catch up. The fact that the GDP capita in Slovakia has increased compared to the Czech Republic show us that the countries are getting more similar. A higher general GDP per capita are consistent with higher developed countries.

After the accession to the EU, it can be argued that Slovakia has gained more than the Czech Republic from the EU membership. The development in GDP growth and trade in the years after 2004 shows that Slovakia has gained the most with an average GDP growth rate (2004-2013) of 4, 15 per cent in comparison with the Czech Republic's 2, 52 per cent.

Table 12: Selected macroeconomic indicators 2004-present

Indicator	Czech Republic	Republic of Slovakia
Population 2004 (mln)	10,20	5,37
Population 2013 (mln)	10,52	5,41
Inflation CPI, %	2,67	3,58
Unemployment, % of total labor force	6,74	13,57
- Female	5,67	12,85
- Male	8,12	14,44
Adjusted savings		
Gross national savings (% of GNI)	25,25	19,40
Net national savings (% of GNI)	6,25	0,63
Interest rate, %	4,60	
Foreign direct investment, $mln		
- Inward flows	$6 773,6	$3 173,3
- Outward flows	$1 281,8	$476,2
Trade balance, goods & services, $mln	$121 631,0	$62 787,0
Trade Balance in services in US $	$17 774,0	$6 071,0
Trade Balance in goods in US $	$103 856,0	$56 716,0
Population growth, %	0,40	0,14
GDP (Current US $ mnl)	178 498	81 085
GDP growth (Annual %)	2,90	4,48
GDP per capita	17 148	15 004
GDP per sector, %		
Agriculture, hunting, forestry, fishing	2,27	3,61
Industry	37, 70	38,19
Services	60,00	58,19

Source: World Bank, UNCTAD

The total trade of goods and services shows that the difference between the Czech Republic and Slovakia are almost the same as it was in 1993-2003. The average trade balances of goods have increased by five times since in the period between 1993-2003 and 2004-2012. After entering the EU in 2004 they have increased their trade balance in goods and services every year, except from 2009 during the financial crisis. Both countries have been successful in keeping their inflation at a low level.

Comparing the average GDP data with those from 1993-2003, it is notable that the specific sectors which contribute to the total GDP has been almost the same. The difference for both countries is that there has been a movement from agriculture towards industry and services, as expected. Like we have seen earlier in the background, the GDP growth rate has been higher in Slovakia than in the Czech Republic during the recent years. The GDP per capita still holds somewhat the same distance as in 1993-2003. However, there has been an increase of almost three times for both countries.

The automobile industry is the most important industry in both the Czech Republic and the Republic of Slovakia and many of the known automobile companies have their production in these countries (Volkswagen, Kia, Peugeot, Citroën in Slovakia, Skoda, Toyota, Peugeot, and Citroën in Czech). The reason for why the industry have grown in per cent of the GDP in Slovakia is the launch of two new productions sites for PSA-Peugeot Citroën and KIA motors in 2007.

In Czech Republic the agricultural industry is minimal (4,46 percent in 1993 and 2,05 percent in 2011). The leading market for export was Germany which bought 31.4 percent of the export. Second is Slovakia with 9.0 percent (The Economist Intelligence Unit 2014). Historically Slovakia has been an agricultural country, but if we look at the latest numbers from The Economist Intelligence Unit, the biggest contributor to the income is actually the same as in the Czech Republic. As with the Czech Republic, Germany is the biggest importer of goods produced in Slovakia with the Czech Republic as number two.

After the financial crisis, the Czech National Bank announced that they would introduce institution of macro prudential policy which is designed to maintain financial stability by mitigate systemic risk (the risk of instability of the financial system) (Bank 2014).

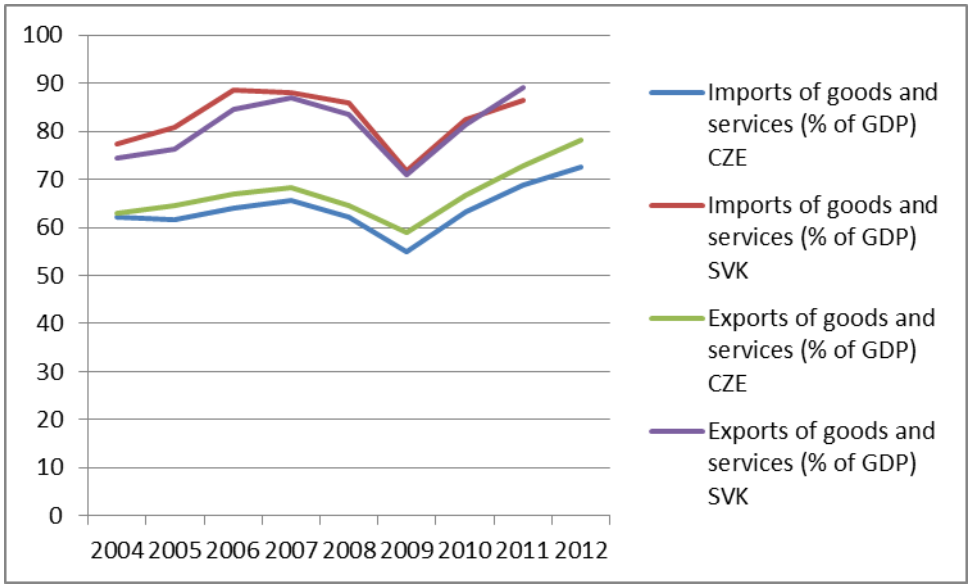
Table 13: Export by country from Slovakia and Czech Republic, 2005, 2009, 2012

Slovakia			Czech Republic		
2005	**2009**	**2012**	**2005**	**2009**	**2012**
GER 25,3 %	**GER** 19,8 %	**GER** 22,0 %	**GER** 31,9 %	**GER** 30,7 %	**GER** 29,7 %
CZE 13,4 %	**CZE** 11,6 %	**CZE** 12,2 %	**SLK** 7,8 %	**SLK** 7,4 %	**SLK** 7,4 %
AUS 7,0 %	**FRA** 7,8 %	**POL** 6,7 %	**FRA** 5,6 %	**FRA** 5,8 %	**POL** 5,3 %
ITA 6,8 %	**POL** 6,5 %	**AUS** 6,1 %	**AUS** 5,3 %	**POL** 5,4 %	**FRA** 5,3 %
POL 6,2 %	**ITA** 6,3 %	**HUN** 5,8 %	**POL** 5,2 %	**UK** 5,0 %	**UK** 5,0 %
HUN 4,7 %	**AUS** 5,8 %	**FRA** 5,5 %	**UK** 5,1 %	**HOL** 4,84 %	**AUS** 4,6 %

Source: Observatory of Economic Complexity

After being a member of the EU, the exports from both countries have been diversified among more countries than the prior period (1993-2003). As a result of this, both countries are less dependent on the trade with Germany, but more dependent on the trade with the EU as a whole. Another country that has prospered after the dissolution of the Soviet Union, Poland, has increased its import of goods from both the Czech Republic and Slovakia. We can see that the intra-trade between the neighbors still is second behind Germany with a stable per cent of the total export.

Figure 5: Export and Import as a % of GDP, 2004-2012

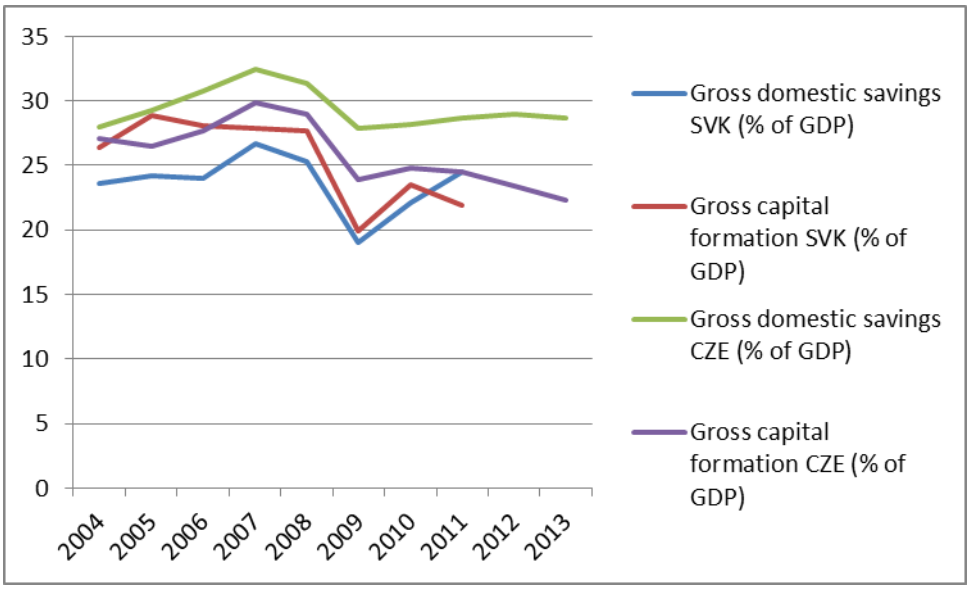


Source: World Bank

As seen from figure 5, export and imports as a percentage of GDP are still higher in Slovakia than in the Czech Republic. Imports and exports have increased their share of the total GDP compared to 1993-2003 (figure 2). This is in compliance with the increased export of goods (such as automobile parts) and a higher GDP per capita, which theoretically gives a higher

import of goods. In 2010 Slovakia finally managed to export more than they imported, as the Czech Republic have done since 2004.

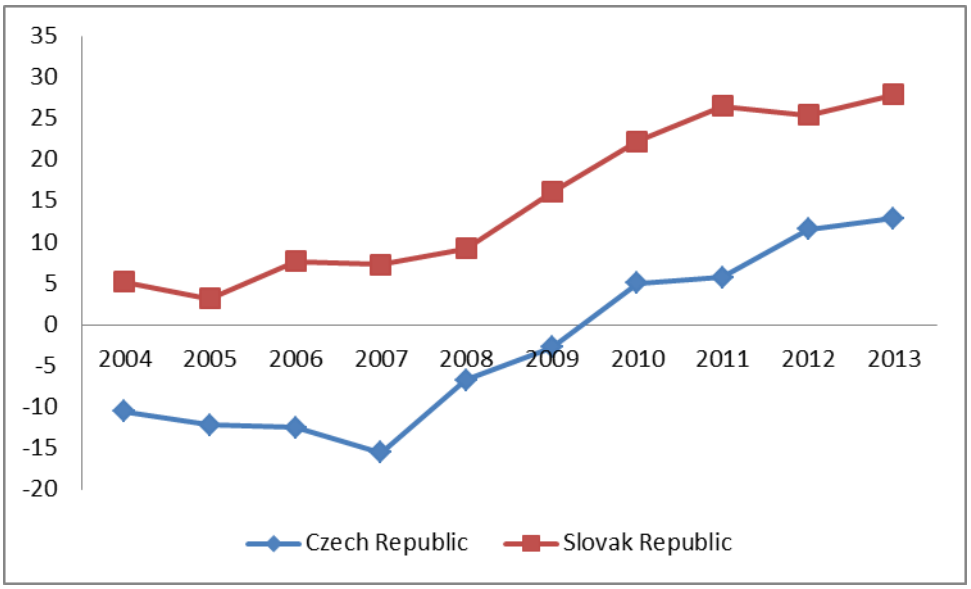
Figure 6: Gross savings and investment, Czech Republic & Slovakia, 2004-2013



Source: World Bank

As seen from figure 6, the domestic investment has been higher than domestic saving in Slovakia all the years prior to 2010. The investment in Czech Republic has been lower than the savings for all the years after 2004 and the differences have increased after 2010. Data for Slovakia after 2011 are still not available.

Figure 7: General government net financial liabilities, Czech Republic and Slovakia, 2004-2013



Source: OECD economic Outlook

Figure 7 show the net financial liabilities in the two countries. Net financial liabilities measure the difference in total liabilities (borrowings, superannuation and outstanding insurance claims) less the liquid financial assets (cash, deposits and investments). The figure shows that the Czech Republic has had a better financial position than Slovakia since 2004, and that the difference has been somewhat the same for the years 2004-2013.

In 2009, Slovakia joined the EMU, and was once again a part of a monetary union. This means that they had to implement the Euro and be under the ruling of a common Central Bank. However, since this happened recently, the dataset available after the entry include too few observations and is biased due to the financial crisis. By looking at the criteria to join the EMU (Maastricht criteria) we get an understanding of how Slovakia's economy has evolved. The accession criteria to join the EMU are as follow:

- Price stability: new members should have a sustainable price performance and an inflation that does not exceed 1,5 per cent points of the three best-performing member-states in terms of price stability a year before the examination.
- Government budgetary position: member states should not have a planned or actual government deficit of more than 3 per cent of their GDP and their government debt should not be more than 60 per cent of their GDP, unless the overvalue of the reference value are temporary or the ratios have declined substantially and continuously.
- Exchange rate: member states should respect the natural fluctuations of the exchange rate mechanism without any severe rigidity in the two years before the examination. The country applying should not devaluate its currency towards any of the member states during the same period.
- Long-term interest rates: member-states should not have had a nominal long-term interest rate that exceeds the interest rates of the three best-performing member states by more than two per cent in a one-year period before the examination.

(Eurostat 2014).

Slovakia accomplished all of these criteria's in April 2008.

3 Theory

The chapter begins with the relationship between saving and investment, before defining capital mobility and the drivers of capital flows. Further on I discuss the relationship between FDI, savings, investment and productivity before looking at Feldstein and Horiokas relationship between saving and investment. Comparative advantage are discussed and defined before looking at investment risk. The chapter ends with a literature review.

3.1 Relationship between saving, investment and the current account

In this thesis I will look at the relationship between investment (I) and saving (S). To get a hold of the relationship between saving and investment it is important to derive both investment and saving from the gross domestic product (GDP). I will use the terms that the IMF use when they derive the Balance of Payments. The equation consists of gross capital formation (I), government consumption (G), household consumption (C) and the trade balance (X – M), where X is the export and M is the import.

$$Y = I + G + C + (X - M) \qquad (3.1)$$

To see the gross national disposable income (GNDY) we have to add the net primary and secondary income from abroad.

$$GNDY = C + G + I + X - M + BPI - BSI \qquad (3.2)$$

Where BSI= Balance of secondary income and BPI = balance on primary income.

The formula for the current account is therefor

$$CAB = X - M + BPI - BSI \qquad (3.3)$$

CAB = Current account balance

The current account balance can also be derived using equation 3.2 and 3.3. The gap between disposable income and expenditure:

$$CAB = GNDY - C - G - I \qquad (3.4)$$

Or seen the other way around:

$$GNDY = C + G + I + CAB \qquad (3.5)$$

We can find gross saving (S) by using the system of income account:

$$S = GNDY - C - G \qquad (3.6)$$

Substituting equation 3.2 in 3.6 we obtain the relationship between saving and investment:

$$S = I + CAB \qquad (3.7)$$

Or rearranged

$$S - I = CAB \qquad (3.8)$$

This shows that the current account balance is the difference between saving and investment. An increase in the investment relative to savings will have the same effect, at least in the short-run, on the current account balance as a decline in savings relative to investment. Equation 3.8 shows that if the government chooses to implement a policy to change the current account, it will affect both savings and investment (International Monetary 2009).

We can look at the relationship between savings, investment and the current account balance from government spending and income by defining savings as

$$Savings_{Total} = Savings_{Private} + Savings_{Government} \qquad (3.9)$$

Government saving is the difference between taxes (T) and spending (G)

$$S_{Government} = T - G \qquad (3.10)$$

If we now look at equation 3.7 and insert equation 3.9 and 3.10 into the left side we get:

$$S_{Private} + (T - G) = I + CAB \qquad (3.11)$$

Or rearranged

$$CAB = (S_{Private} - I) + (G - T) \qquad (3.12)$$

The last equation now compares private savings with investment and the current account balance. With equation 3.12 we now have the connection to the fiscal policy.

3.2 Perfect capital mobility and the effect on saving and investment

For the theoretical explanations in section 3.1 to be valid, there must be some sort of capital mobility. Capital mobility is a way to measure the flow of capital between different economies. In perfect capital mobility there are no currency regulations which means that everyone are free to buy and sell currency and borrow or invest money wherever they want. However, this also means that everyone will choose to invest in the currency that gives the highest return, and lend money in the currency that gives the lowest borrowing cost.

$$\left(\frac{I}{Y}\right) = \alpha + \beta\left(\frac{S}{Y}\right) \qquad (3.9)$$

Equation 3.9 describes the causal link between saving and investment rates, where saving and investment are shown in per cent of total GDP.

Feldstein and Horioka (1980) discuss and prove that there is not something called a perfect capital market, but that there is different variables that affect the movement of capital. Under perfect capital markets the saving rates and the investment rates should be equal. If this is indeed the case, beta (β) has to be as close to zero as possible. Beta is a variable used to explain the world capital mobility. During their tests with the OECD members (21 countries) from 1960-74 they showed that β was far from zero in every country. In the opposite situation where the β is close to one, it would indicate that almost all the incremental savings stay within the country. Feldstein and Horioka found out that the true value of the OECD countries would average below 0.10. This shows that there are other factors that influence the capital market. With perfect capital mobility, an increase in the saving rate in country x would cause an increase in investment rate in all countries. They did however also note that if the β is close to one, this would reflect that domestic saving and domestic investment are both stimulated by a high rate of return; this interpretation is inconsistent with the hypothesis of a world with perfect capital mobility (Feldstein & Horioka 1980). The equation describes the causal link between saving rates and investment rates.

Martin Feldstein argues that when the domestic investment rate is higher than the domestic saving rate, there is a negative net foreign investment, if this happens, there will be a current account deficit.

3.3 Capital flow drivers

For there to be any capital mobility to measure, there must be intensives for institutions/countries to move capital.

Capital flows are reported in the balance of payments. It is important to distinguish between foreign direct investment and foreign portfolio investment when assessing balance of payments. Foreign portfolio investment is capital flows that affect the balance of payments and the exchange rate instant, while FDI are affecting the production and income accumulation. Portfolio flows does not have a significant effect on investment as studied by Bosworth and Collins (1999), FDI on the other hand have a strong and significant effect on

investment. In the balance of payments, capital flows are used to balance otherwise unbalanced budgets and therefor it is possible for governments to increase their spending, and still get a balance of payments surplus. Capital flows are recorded in the financial account and capital account of the balance of payments.

P. Lane and Milesi – Ferretti explains the drivers behind the capital movements in their article "The drivers of globalization" from 2008. The financial cross–border movements in advanced economies has been driven by sectorial trends such as securitization, the rise of hedge funds, and the widespread use of offshore special purpose vehicles by financial and non-financial corporation. Further on they argue that financial innovation in one economy raises demand by other foreign investors in other advanced economies that wish to gain exposure to new asset classes (Lane & Milesi-Ferretti 2008). They also highlight the fact that there is a strong connection between financial globalization and financial innovation because of the arbitraging differences across jurisdiction in asset prices and tax and regulatory systems. Another important factor that has driven the financial globalization in especially Europe is the founding of the European Union. The creation of a single market has integrated the credit and money market across the member states, this is a result of the elimination of credit risk among the member states which increases the substitutability between domestic securities and foreign securities. The single market with a lower transaction cost, opened for a trade market for goods and services, such that the flow of capital increased.

The development of the domestic financial system (banking systems and financial markets) increases the globalization of capital flows. Further, the development of a domestic financial system may encourage domestic residents to seek cross-border asset trade to reach a bigger market. It has been shown that advanced economies often has a higher equity share in foreign assets, and a higher debt share in foreign obligations than emerging economies (Lane & Milesi-Ferretti 2008).

Appleyard and Field (2014) argues that economists does not view the movement of capital across borders any different that they view capital crossing regions of a country, because the capital is moved in expectation of reaching a higher rate of return in a new location compared to the old. They list several hypothesis for why capital move which all have in common that they seek higher rate of return.

a) Firms will invest in countries with rapidly growing markets for their products.

b) It can be said that specialize in manufacturing and services will choose to invest in countries with high per capita income because they have high-income tastes an wants, but, per capita income must not be compared to GDP, because firms in developed markets will invest in developing countries which have a big market size and growth (China), even though they have a low per capita income.
c) Firms can achieve access to mineral and raw materials deposits located in the foreign country, and process the raw materials so that can sell them in the finished form.
d) Tariffs and nontariff barriers. If there are tariffs in the host country that makes it difficult for firms from other markets to sell with profit, a solution would be to get inside the tariff wall and produce from the host country itself.
e) Foreign firms may invest in countries which have low relative wages compared to the home country. The firms might want to move the production of labor intensive work to markets with low relative wages, and keep the technology- or capital-intensive work in the home market.
f) Some firms might want to invest abroad to protect foreign market share. This because competitors are establishing production in the foreign market that will threaten the export market for the first producer.
g) Firms might want to invest abroad to diversify its risk. Just as investors of portfolios choose to diversify their stock to prevent risk, firms can do the same.
h) Foreign firms invest in a host country because the foreign firm possess some form of firm-specific knowledge that enables the foreign firm to outperform the host countries domestic firms and are able to gain profit.

3.4 Foreign direct investment

In this section I have defined FDI and the reasons for why FDI occurs. Further on there is an explanation of the different relationships between FDI, domestic investment and productivity which are important in answering the research questions.

3.4.1 Defining foreign direct investment

"*Foreign direct investment (FDI) refers to a movement of capital that involves ownership and control*"(Appleyard & Field 2014). There have been several studies that confirm a relationship between economic growth and foreign direct investment. Borensztein et al. (1998) have shown the relationship, but also claim that the human capital together with foreign direct investment increases the effect on economic growth. Feldman & Horioka

(1980) argues that foreign direct investment tend to be associated with implementing market strategies, exploiting production knowledge, or overcoming trade restrictions, instead of an undifferentiated pursuit of profit opportunities. This is probably the major reason why individual countries choose to be both importers and exporters of capital. These factors implies that substantial flow of direct investment may exist even if they are not responsive to changes in domestic taxation or relative capital supplies (Feldstein & Horioka 1980).

There are many ways of gaining from foreign direct investment; Appleyard & Field (2014) have listed the most important. It is important to note that there is no evidence that they all will rise by the same amount or that all of them will increase at the same time. There is a higher share of FDI in developing countries because of the high production cost in developed countries. This makes the profit margin in the home market smaller than in developing economies.

- *Increased output:* when there is an increase in the FDI through the country, the new capital can be used to improve the efficiency, labor and other factors that might increase the total output.
- *Increased wages:* even though the incentive for moving capital across borders is cheaper wages, the wage are doomed to increase with increased capital into the country.
- *Increased employment:* This was important in the beginning after the dissolution of Czechoslovakia. The increased capital inflow made new factories, and therefor established new jobs, in all areas.
- *Increased exports:* In these specific countries, the inflow of capital has been invested into the automobile industry. The goal of this investment is to increase the production of automobile parts for delivery in other European countries, and it will there for be an increase of export.
- *Increased tax revenues:* If the host country manages to implement an effective tax, it should be able to increase the investment into developing with the increased income from taxes.
- *Realization of scale economies:* The increased capital makes it possible to invest into new equipment and increases the scales of production to a point where it can achieve reduce in cost because of the scale.

There are two types of FDI investment, "greenfield" and "brownfield" investment. Greenfield investment is the establishing of a new branch in the foreign country while brownfield investment is privatization, consolidation and acquisition.

3.4.2 Relationship between FDI, domestic investment

There are several ways FDI can affect domestic investment. FDI contributes directly to new plants and equipment (what we call "greenfield" FDI). It can also contribute to the environment as spillover effects which may happen between Multinational Corporations. This is a surplus in excess of the improvement of the capital stock through linkages of firms (Mileva 2008). Inbound capital flows such as FDI might improve domestic investment, but it can also raise import. If import increases it can dampen the domestic production and investment. If one firm gains from the increased capital inflow, it can induce a reduction of investment for another firm. It is important to view this as it is a possibility that capital outflows might be induced. In a world with perfectly capital mobility, a capital inflow might have no impact on the level of domestic investment because funds would only move to finance the demand without increasing the demand.

Kose, Prasad, Rogoff and Wei (2006) use the term "collateral benefits" to describe the indirect effects of FDI. For a country to attract FDI they have to restructure their economy to implement healthy macroeconomic policies, improve their institutions and raise their governance. There has also been shown that FDI can improve the technology and management as they transfer knowledge. This might lead to a higher productivity (Kose et al. 2006).

Bosworth and Collins (1999) show that the relationship between FDI and domestic investment is a raise of 81-cent with a one dollar increase of FDI. This support the findings Borenztein et al. (1998) got, that there is a crowding in effect giving a raise in total domestic investment for more than one dollar as net FDI inflow increase with one dollar.

3.4.3 FDI and productivity

FDI have a positive effect on productivity in the way that they transfer ideas and new technology. Caves (1999) stated that countries with the best absorptive capacity are those countries that benefit the most from increased FDI. The indicators that are used to measure absorptive indicators are macroeconomic management, openness to trade, the amount and quality of infrastructure, and the amount of human capital (Caves 1999). In my case with the Czech Republic and Republic of Slovakia, these indicators show that both of the countries are

countries which are able to attract and get a positive effect of FDI (shown in chapter 5, and table 17; governance indicators). Barrel and Pain (1997) finds that FDI also have a positive relationship with productivity in industrialized countries. With a one per cent rise in FDI inflow raises the productivity in U.K with 0, 26 per cent and 0, 27 per cent in Germany. They have also found the same pattern in smaller European countries such as Belgium and Ireland, countries that have a population close to the Czech Republic and Republic of Slovakia (Barrell & Pain 1997).

.

3.5 Comparative advantage/specialization.

David Ricardo's theory regarding comparative advantages explains which tasks a country or a person are relatively better at compared to another person or country. If a country produces a good they have comparative advantage in and import a good where they have a comparative disadvantage, then both countries will gain profit. (Grønn 2008)

Comparative advantages occur in international trade when the relative labor requirements are different between two commodities. (Appleyard & Field 2014). A comparative advantage does not only yield to the advantages of the demography, geographical position or the natural resources a country might have available, but the term does also include the advantage of a good economic policy. Hall and Soskice (2001) write about the comparative capitalism. They study the effect of a good institutional organization which can work as a comparative advantage if it is working correctly (Hall & Soskice 2001) . We know from the background that there was indeed a difference in the specialization of the two countries. The Czech Republic has been, during the history, one of the leading countries in the heavy industry, and with good and skilled labor force for industry. This compared to the labor force in Slovakia should have been a reason for a greater growth after the dissolution. Slovakia has during the history been specializing in the agricultural sector, however; as we saw in the background section there has been a shift to automotive and industrial sector in later years. We should be able to see the changes from the results in chapter five.

3.6 Investment risk

A central source for investment risk is the credit risks given by Moody's, Standard & Poors and Fitch. Standard and Poor's express their opinion on credit rating as *"the agency's opinion about the ability and willingness of an issuer, such as a corporation or state or city government, to meet its financial obligations in full and on time"* (Poor's *2014).* When countries or firms decide where they should invest, the analysis leading up to the decision is important.

When deciding which country to invest in, there are many factors that are taken into account. Macroeconomic-, institutional- and political stability. There has been claimed that the gains from EU membership for transition economies will be derived from increased investment because of reduced domestic risk and increased FDI flows (Bevan & Estrin 2000). The different risk factors can be viewed in the world governance indicators in table 17. Financial risk, such as foreign debt is important for investors choosing where to invest. As the foreign debt rises relative to the borrowing countries GDP, the country's ability to repay its debt decreases at the same time as the financial risk rises (Hayakawa et al. 2013).

Political risk is the risk that the return on the investment can be lost because of low institutional policy. It is logical to believe that the better political structure the country has, the higher is the possibility for FDI. This relationship is analyzed in Hayakawa, Kimura and Lee's (2013) study and proven significant.

Bouchet et al (2003) have listed the specific country risks (table 14) that need to be considered before investing abroad.

Table 14: Sources of risk classification for investing in foreign countries

Sources of risk classification					
Socio-political risk			**Economic risk**		**Natural disaster**
Political	Government Policy	Social	Macroeconomic	Microeconomi	
Democratic or non-democratic change in government	Change in the policy of the local authorities	Social movement intending to influence foreign business or host country	Any macroeconomic risk specific to the host country	Any microeconomic risk specific to the host country	Earthquake and other natural disaster

Source: Bouchet et al (2003)

As a summary Meldrun (2000) explains country risk *"All business transactions involve some degree of risk. When business transactions occur across international borders, they carry additional risk not present in domestic transactions. These additional risks, called country risk, typically include risks arising from a variety of national differences in economic structures, policies, socio-political institutions, geography and currencies"* (Meldrum 2000).

3.7 Literature review

In this section I will review earlier work with relevance to my problems, and will serve as the foundation for the work done in my study. Determinants for FDI are discussed widely by several studies, and cover the determinants used in this study.

Descriptive analysis of Czech Republic and Slovakia

"The complexities of economic transition: Lessons from the Czech Republic and Slovakia" by Rita O. Koyame-Marsh study the impact the transition process between 1989 and 2009 had to the economies of the two countries. The study is focused on the surface of the economy and covers the main macroeconomic indicators. During the article she explains the different factors that have contributed to the development of the economies. The initial condition for both countries, are by her view almost the same in both countries as they used to be a

common country, however, there were differences in their economic structure as the Czech Republic inherited the successful small and medium sized companies that could compete with companies in the EU while Slovakia inherited large industrial companies such as chemicals, steel and armaments that could not compete on the EU market. She concludes that the Czech Republic in 2009 came much better out of the transition process than Slovakia and that the transition process for the Czech Republic is finished. However, at that time (2009), Slovakia was not finished with the transition according to the article (Koyame-Marsh 2011). The article has been a good source, as it covers the policy and history of the transition process, with basic macroeconomic numbers as support.

J.Fidrmuc, Horvath and Fidrmuc (1999) study the stability between the Czech Republic and Slovakia during and after the break-up of the monetary union. They study the economies during 1948-1994 using theory regarding optimum currency area as the background. The results show that when Czechoslovakia existed, the economic integration between the two states was lower than the integration between the states in the US, and the core regions of Germany, and only comparable with the core members of the EMU. This means that Czechoslovakia was more fragile to asymmetric shocks than Germany and the US, which is surprising as the two republics were a part of a single political and monetary union with centralized economic policies. This was also the case for the two countries in the early years of the transition process. They also find that the labor mobility and fiscal transfer between the Czech Republic and Slovakia was inefficient and too little.

The study are relevant for my thesis as I can look at the effect asymmetric shocks had on both of the economies and use the experience from their study when I study the years after the dissolution (Fidrmuc et al. 1999).

There have been many articles and studies of FDI to transition economies, but not many concerns of the Czech Republic and Slovakia. However, Mileva (2008) studies the effect of capital flows on domestic investment for the “new EU member states” (added in 2004) and acceding candidate countries during 1995-2005. She finds that there are no significant results showing a positive spillover effect of FDI in the short-run to the “new EU members”. A reason for this result may be that Multinational Corporations use imported inputs, or that the more efficient foreign firms have replaced formerly non-efficient state-owned firms. However, in the long-run there might be a small “crowding in” effect. The countries in the EU group also have a much higher foreign privatization flow than the other group.

The result in the article says that the relationship between a one dollar increase in FDI are related to 84 cents of additional domestic capital formation in the short run and close to one dollar increase in the long run. This study shows using regressions, how the foreign direct investment has an impact on investment, and it also concludes that the FDI are by far, the capital flow that influence investment most. However, when countries are close to the ending of the transition, the FDI inflows are getting smaller and countries tend to attract foreign loans to improve the capital formation (investment) instead of FDI inflows. The article is relevant as I am going to look at the relationship between FDI and investment with increased capital flows and this study confirms that there have been a relationship between increased capital flows (FDI) and domestic investment (Mileva 2008).

Determinants for FDI in Europe

Janicki and Wunnava (2004) study the determinants for foreign direct investment by analyzing the accession of new member states to the European Union which all was from the Eastern Europe.

As the basis for the analysis the authors use pooled data from the EU-15 countries as the source which FDI originates from. Because of size, Luxemburg and Belgium were combined, resulting in 14 countries as the source. The recipient countries are the nine countries applying for EU membership (Bulgaria, Czech Republic, Slovakia, Slovenia, Hungary, Estonia, Poland, Romania and Ukraine). The variables used in the regression in the study are the quantities of import as a per cent of host country GDP, the log value of GDP of host country, the labor cost of each transitional economy, and the country risk given by The Institutional Investor with a rating going from 0 to 100 measuring the safety of a host country's chance from default.

The determinants identified in the study are openness to trade, market size, labor cost and country risk. Openness to trade measured by the import as a per cent of the GDP is the most significant of all the variables in the study, and is explained by the fact that higher trade integration attracts more investors, especially investors that are export driven. Result showed that market size is important when investing in foreign countries, but not as important as other country attributes, because there is decreasing marginal returns. As expected the results also show that there is a positive relationship between wages and FDI. Lower wages increase FDI. Country risk is also significant with FDI which means that stable financial and

macroeconomic environments are important for FDI. An improvement of one unit in credit risk is equal to an increase of $ 10 315 million in FDI (Janicki & Wunnava 2004).

Jankovic and Yatrakis (2010) studies the effect factors such as trade flows, economic and financial stability and country risk has on the amount of FDI flowing to the Czech Republic and Slovakia. A regression model is used to see the relationship between the variables; current account, consumer prices, exchange rate, long- term lending rate, stock market index and Fitch index of country risk. The study is based on the time period 1995-2006. Both a VAR analysis and Cointegration are used. VAR are used to determine the optimal lag, how long after an event the effects are seen. Johansen Cointegration is used to look at the long-term relationship that might be obscured by short-term movement.

The results for the Czech Republic show that there is a positive relationship between the current account and FDI. When the current account improves, there is a positive increase in FDI for three periods, with a less significant, but positive effect on the fourth period. The same effects are seen with the long-term lending rate. Stock market index a noticeable effect on FDI with one lag, this might indicate substantial co-financing from this source. The country risk variable had a direct effect on stock market index. It also showed that a positive raise in the country risk rate gave a quickly improvement of FDI, but a negative change only halted or made FDI slow down.

The results for Slovakia were different from the Czech Republic. A low R2 indicates that there is diffusion in the ability for the independent variables to explain changes in FDI. There is a small relationship between exchange rate and FDI with a three period lag, which showed that an appreciation of one dollar weakened FDI flows for three periods. Changes in the risk rating have a positive effect on FDI and stock market index, but only in the short-run (one lag-period).

The Cointegration analysis for both Slovakia and the Czech Republic indicated a positive relationship between all the independent variables except CPI. In this analysis the exchange rate had the strongest relationship with FDI. A policy which strengthens the currency implied an increase of FDI flows. Current account also showed a strong relationship, a positive increase in the current account attracted FDI. The stock market index showed a strong effect as a determinant in Slovakia, but not in the Czech Republic (Jankovic & Yatrakis 2011).

Risk

Hayakawa, Kimura and Lee (2011) study the effect country risk have on FDI by dividing country risk to financial risk and political risk. They used a sample of 93 countries (60 is developing) in the period 1985-2007 with data collected from UNCTAD FDI database. Both Czech Republic and Slovakia are used as developed countries in the study. The analysis is based on regression analysis where there are 8 variables included in financial risk, and 12 variables included in political risk. The control variables consist of GDP per capita, growth rate of GDP per capita, total population, growth rate of population, degree of free trade and the stock of FDI.

The results showed that political risk have a highly significant effect on FDI inflows. The financial risk did not have any connection with FDI flows. Countries with a higher degree of free trade also attract more FDI, but countries that have been successful in reducing trade restrictiveness also attract FDI, ceteris paribus. A surprising result from the analysis was that financial risk index entered with negative coefficients in both the level and change. This means that a country with higher financial risk attract more FDI, the authors does not interpret these results and say that reducing the financial risk will only have a minimal effect on attracting FDI. The components of political risk that had the highest effect in attracting FDI were socioeconomic conditions, investment profile, and external conflict, military involvement in politics, law and order, and bureaucracy quality did not appear to have any connection to FDI (Hayakawa et al. 2013).

Theoretic framework

Root and Ahmed (1979) studied the influence on FDI flows to 58 developing countries. The study did include two countries from Europe (Spain and Greece). They came up with six variables which seemed to be most important. Other things being equal, the amount of FDI was greater; 1) the higher the GDP per capita of the host country; 2) the higher the GDP growth rate was in the host country; 3) the greater recipient countries participation in integrative projects such as custom unions and free-trade areas; 4) the higher degree of infrastructure in the recipient country; 5) the greater degree of urbanization in the recipient country; 6) the greater degree of political stability in the host country (Appleyard & Field 2014; Root & Ahmed 1979)

The study are highly relevant for my thesis as both the Czech Republic and Slovakia began the transition as developing countries with a high share of their value added to GDP from the manufacturing sector. Appleyard and Field (2014) use this study as one of their sources for the list mentioned in section 3.3 in the thesis.

Saving, investment and growth

The relationship between saving, investment and output growth are discussed by Claus, Haugh, Scobie and Törnquist (2001) in their study of New Zealand 1972-2000. To investigate the relationship between saving and investment they use the Feldstein-Horioko equation (OLS), VAR analysis, Granger causality test, The Geweke-Meese-Dent test and cross correlations. Their findings suggest that there is not a clear link between saving, investment and output growth in New Zealand; however, they find that higher GDP growth increases savings, which is in consensus with studies of GDP growth and savings (Caroll and Weil (1994), Attansio, Picci and Scorcu (2000)). They conclude that the total savings (foreign and domestic) increases investment and growth, but they do not find any clear link between higher domestic saving and the effects it will have on growth, neither how increased growth will affect domestic savings. They argue that policies to promote domestic savings will unlikely have any effect on growth (Claus et al. 2001).

The determinants of foreign direct investment are widely discussed in the literature review. Determinants that appear in several of the studies are the current account balance, openness to trade, political stability and market size of the host country. Country risk have been discussed and are highly relevant when studying inflows of FDI (Hayakawa et al. 2013; Jankovic & Yatrakis 2011).

4 Method and data

My thesis utilize data for FDI, investment, savings and GDP growth in the Czech Republic and Slovakia to see how the two countries have evolved during the years after the dissolution of Czechoslovakia. The chapter is divided into one section consisting of data identification and sources, while the second section consists of the methodology and the framework of the thesis.

4.1 Data sources

The data used in this thesis is secondary data taken from many different institutions, organizations and articles. The time period which the data is gathered from is mainly 1993-2013. Earlier data from Czechoslovakia are taken from UNCTAD and consist of data from 1970-1991. Myant (1989) and Šujan (1994) have contributed with specific tables and data in the period of Czechoslovakia. The data on FDI, both sector-specific and total are obtained from the Vienna Institute of International Economic Studies and OECD Factbook 2014. Governance indicators are taken from the Worldwide Governance Indicators (2013 Updates). The data regarding saving, investment and other macroeconomic indicators are gathered from the World Bank, UNCTAD, OECD and IMF. Trade data is collected from the World Trade Organization (WTO). Data containing gross savings is taken from The Economic Watch. Country risk data from Standard and Poor's, Fitch and Moody's are collected from KPMG Slovakia, The Czech National Bank and Debt and Liquidity Management Agency Slovakia.

4.2 Methodology

In this study a comparison analysis of the Czech Republic and Slovakia is being conducted. This is done to identify if there has been any significant difference between the two countries after the dissolution of Czechoslovakia, and if the difference were big enough to make the two countries react asymmetrically to the financial crisis.

In chapter three, the reasons for capital flows, and the gains of capital flows are listed. By summarizing the lists from 3.3 and 3.4.1 made by Appleyard and Field (2014), table 15 is created (the indicators are explained in chapter three). This table, with its components will be the theoretic framework used to evaluate how capital flows (FDI) have occurred in Slovakia and the Czech Republic in the two periods 1993-2003 and 2004-latest. It will also be used to see if the right hand side of the table has increased as a reaction to policy steps taken to induce increased inflows. If the policy measures have been successful, we would expect to see the right side indicators (showing gains from increased FDI) increase.

Table 15: Reasons for capital movement and gains from FDI

Reasons for movements of capital	Gains from FDI
Large and rapid growing markets	Increased output
Take advantage of high per capita income or large market size	Increased wages
Access to mineral or raw material	Increased employment
Get away from tariff and nontariff barriers	Increased export
Exploit low wages in host country	Increased tax revenues
Protect foreign market share	Realization of scale economies
Risk diversification	
Comparative advantage	

Source: Appleyard and Field (2014)

By using the reasons to why capital moves across borders as the framework, the research questions will investigate different aspects of the Czech Republic and Slovakia's economy to see if there have been a difference.

Research question one looks at the relationship between investment, savings and FDI inflows. Theory states that the domestic investment should be greater than savings in an economy with major FDI inflows, especially an economy that have had capital scarcity in the early stages of the transition progress. This is because countries will tend to invest more to build up their economy rather than save money, or invest in other countries. I will use IMFs definition of balance of payments as shown in chapter three as the basis to view the relationship between the current account and savings, investments. Analyzing the movement of both investment and savings will show how the economies of the Czech Republic and Slovakia have handled the increased FDI, and the development of the economies during the periods after 1993.

Research question two will be used to see if the FDI flows in certain sectors moved the productions patterns of the countries in the same sectors as the inflows have been sector-specific. This will make it possible to see if the increased FDI have given higher output as stated in table 15. If there is a higher output, there should also be higher export as both countries are heavily dependent on exporting their product.

Research question three will reveal if the differences in the economic structure and production patterns have made the countries react asymmetric to the financial crisis. GDP growth rates, FDI inflows, balance of trade and the theoretical framework will serve as indicators to study the differences. The time period which will be studied in this question will

be 2004- newest available data. Reviewing data from 2004 will reveal the trends after the countries entered the European Union.

Research question four will look at the country risk given by three different firms providing ratings of countries. The Governance indicators will also serve as a foundation for the country risk. The country risk is getting more and more important for investors choosing where to invest, and a reason for why capital cross borders. Standard & Poor's risk table for 1994-2013 will be the basis for the analysis of FDI Inflow and country risk and can be seen in appendix 1,1 and 1,2. The letters are transformed to numbers which makes it possible to make graphs for the development in both FDI inflows and country risk. The numbers are given from 1-12. Since S&P operates with "+" and "–" to show the relative standings within the major rating categories I have given "+" an increase of 0,2 and a "-" a decrease of 0,2 to be able to see the effect of the small adjustments given in the country ratings.

4.2.1 Descriptive analysis

Table 16 gives the descriptive numbers for the different activities used in the result section. As seen from the table, the numbers for the Czech Republic are higher in every activity. The relatively high standard deviations for many of the activities show that there have been fluctuations during the years 1993-2012.

Table 16: Descriptive analysis FDI, Average given in Euro mln, 1993-2012

	Slovakia		**Czech Republic**	
FDI Total & Per sector	**Average**	**SD**	**Average**	**SD**
FDI Total	18822,6	15552,5	53596,5	32274,5
Agriculture	40,6	36,5	99,7	79,0
Mining	191,7	176,5	1141,8	991,0
Manufacturing	6947,0	5174,3	18807,6	9821,2
Electricity[1]	2401,0	2525,3	3963,2	2647,9
Construction	271,8	265,7	865,2	608,5
Wholesale	2130,9	1611,2	5915,7	3019,3
Transport	1075,5	730,2	4358,3	2279,6
Hotel and restaurants	49,1	44,4	330,5	176,1
Financials	3871,0	3363,3	10005,9	7163,5
Real estate	1586,6	1662,7	7407,9	5758,7
Education[2]	0,5	1,3	4,5	5,4
Health	44,7	38,9	81,7	58,8
Others	212,3	324,1	614,7	402,7

Source: WIIW, FDI database

[1] The electricity for Slovakia had an increase of 7588% from 2001 to 2002. From £ mln 12 to £ mln 931.

[2] Data on education in Slovakia are only available for 2009-2011.

4.3 Indicators

I will look at different indicators in the study of investment and savings. Foreign direct investment will be the base for investment, as explained earlier in the thesis and gross savings will be the base for savings. Investment risk will be viewed in context to investment and savings, for the purpose of investigating if this had any significant role in changing the economic development. Most of the indicators are available in the national account for each of the countries. The different indicators will be listed below.

4.3.1 Real GDP growth

The data for real GDP growth is taken from The World Bank, who has gathered the data from the OECD national account data bank. The data is given in annual per cent. The World Bank defines GDP as "*the sum of gross value added by all resident producers in the economy plus any product taxes minus any subsidies not included in the value of the products"*. (The World Bank 2014). The real GDP that is used here is GDP growth minus inflation. The numbers are utilized without making any deductions for depreciations of fabricated assets or depletion of natural resources. GDP growth is used by investors as a good indicator for the health of a country's economy as it shows if an economy is expanding or contracting.

4.3.2 Foreign direct investment

The World Bank defines FDI as the net inflows of investment to gain a lasting management standing (10 per cent or more of the voting stock) in an enterprise established or operating in a country that's not the same as the origin of the investor. I will use the FDI to study the differences between the attractiveness of the two countries and see if the investment from companies outside the country can be an explanation for the economic development. During the analysis I will look at the relationship between FDI and production and FDI to GDP, by looking at the sectors where FDI have been heavily influencing the capital. The data I have used for FDI is taken from WIIW, and is inflow stock. FDI is widely discussed under the theory section of this thesis.

4.3.2.1 FDI by sector

An important indicator for explaining increased output for the economies is FDI per sector as it will show where the inflow of capital has been used. The data is given in mln Euro and to be able to use the data from WIIW I had to transform NACE 1 letters and NACE 2 letter together. NACE 1 data are from 1996-2008 and NACE 2 is from 2009-2012. The two different versions of NACE have specific indicators which measures the different sectors in

the economy. I have also calculated the per cent share of each indicator to the total FDI inflow to see how much each sector has contributed with. As with total FDI, the FDI per sector are measured in stock.

4.3.2.2 FDI by country

FDI by country is the key to see which countries that have invested most in each country. This will, as with FDI by sector, give us an explanation of the differences in the economies. With this indicator it is possible to see which countries that had the incentives to invest into either the Czech Republic or Slovakia, or possibly both. The data are gathered by WIIW.

4.3.3 Saving

The easiest explanation for gross saving in the national account is that it equals the disposable income minus the total consumption. Savings are closely related to investment because the amount of saved capital during a period could instead be used as investment into development or other measures for increased welfare. There are two different reasons for comparing gross savings instead of net savings; 1) it is the gross flow of savings that are free to move from country to country in response to yield differentials; 2) the accounting definition of depreciation is not perfect, especially if there is high inflation and the errors of measurement in the depreciation would cause a spurious correlation between net savings and investments (Feldstein & Horioka 1980). The data is collected form the World Development Indicators databank provided by the World Bank.

4.3.4 Domestic Investment

Domestic investment can be shown by fixed capital formation, as the World Bank recently changed the name from domestic investment to fixed capital formation. Fixed capital formation is defined by the World Bank as outlays in addition to the fixed assets of the economy plus net changes in the level of inventories (The World Bank 2014). The data is taken from the World Development Indicators databank provided by the World Bank.

4.3.5 Current Account

The current account is the difference between a country's savings and investment as shown in chapter three. Current account can also be viewed as the sum of balance of trade, net income from abroad and net current transfers. The current account will be used as a measure to show the difference in the saving and investment. The current account is a part of the balance of payments, and is available from both OECD and the World Bank.

4.3.6 Governance Indicators

The Worldwide Governance indicators are used as a mean to measure governance for specific countries. The indicators are taken from the Governance Indicator published by the World Bank and are the newest ones available, updated 2013 numbers. The indicators are a system which rates each indicators strength in governance from -2,5 (weak) to 2,5 (strong). They are listed in six different categories; Voice and account, Political stability and no violence, Government effectiveness, Regulatory Quality, Rule of law, Control of corruption. I have included the indicators for every year from 1996-2012 in table 17, in order to view how the development in governance indicators has been during the early stages of the transitions up until recent, as members of the EU. The average numbers for the whole period is listed as well to get a better understanding for the differences/similarities.

Table 17: Governance indicators, Czech Republic & Slovakia, 1996-2012

INDICATOR	Country/Territory	WBCode	1996	1997 (estim	1998	1999(estim	2000	2002	20003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
Voice and account	SLOVAK REPUBLIC	SVK	1,00	0,95	0,91	0,79	0,68	0,98	0,97	0,95	0,88	0,93	0,96	1,00	1,02	1,00	0,99	0,93	**0,93**
	CZECH REPUBLIC	Cz	0,63	0,65	0,68	0,74	0,81	0,97	0,92	0,96	0,92	0,92	0,93	0,91	0,86	0,89	0,97	0,96	**0,86**
Political stability	SLOVAK REPUBLIC	SVK	0,81	0,94	1,08	0,83	0,57	0,85	0,91	0,54	0,85	0,76	1,01	1,07	0,88	1,02	0,96	1,06	**0,88**
No violence	CZECH REPUBLIC	Cz	1,04	0,93	0,81	0,53	0,26	0,95	0,85	0,63	0,91	1,01	0,98	1,01	0,88	0,96	1,10	1,04	**0,87**
Government effectivness	SLOVAK REPUBLIC	SVK	0,57	0,56	0,54	0,55	0,57	0,57	0,68	0,91	0,94	0,92	0,74	0,87	0,86	0,83	0,83	0,83	**0,74**
	CZECH REPUBLIC	Cz	0,62	0,62	0,62	0,62	0,62	0,97	0,89	0,91	0,97	1,08	0,90	1,01	0,89	0,91	0,93	0,92	**0,84**
Regulatory Quality	SLOVAK REPUBLIC	SVK	0,52	0,48	0,44	0,49	0,54	0,94	0,96	1,16	1,18	1,14	1,03	1,12	1,06	1,00	1,00	1,03	**0,88**
	CZECH REPUBLIC	Cz	1,02	0,97	0,92	0,82	0,73	1,19	1,18	1,08	1,12	1,11	1,03	1,16	1,33	1,30	1,21	1,06	**1,08**
Rule of Law	SLOVAK REPUBLIC	SVK	0,15	0,17	0,18	0,23	0,29	0,24	0,33	0,50	0,52	0,52	0,45	0,57	0,50	0,53	0,57	0,46	**0,39**
	CZECH REPUBLIC	Cz	0,84	0,84	0,84	0,72	0,60	0,83	0,84	0,74	0,82	0,84	0,86	0,89	0,94	0,93	1,02	1,01	**0,85**
Controll of corruption	SLOVAK REPUBLIC	SVK	0,36	0,30	0,25	0,20	0,15	-0,10	0,31	0,39	0,49	0,40	0,30	0,30	0,23	0,24	0,24	0,07	**0,26**
	CZECH REPUBLIC	Cz	0,65	0,60	0,55	0,31	0,08	0,36	0,44	0,38	0,46	0,30	0,23	0,27	0,33	0,26	0,30	0,23	**0,36**

Source: The World Wide Governance Indicators

4.3.7 Investment risk

To measure the investment risk, the country risk rating from Standard & Poors, Moody's and Fitch is used. The ratings are based on the economic performance of the countries during a period (each quarter), and serve as a tool for investors when they are considering new places to invest. The ratings uses letters from D to AAA where AAA is the highest rating and D means that the chance of default is very high. The country ratings are of interest because firms will try to locate a country which has a high degree of financial security. This is especially interesting in FDI, as the investors have to follow the community's rule of law in a more direct way than just portfolio investments.

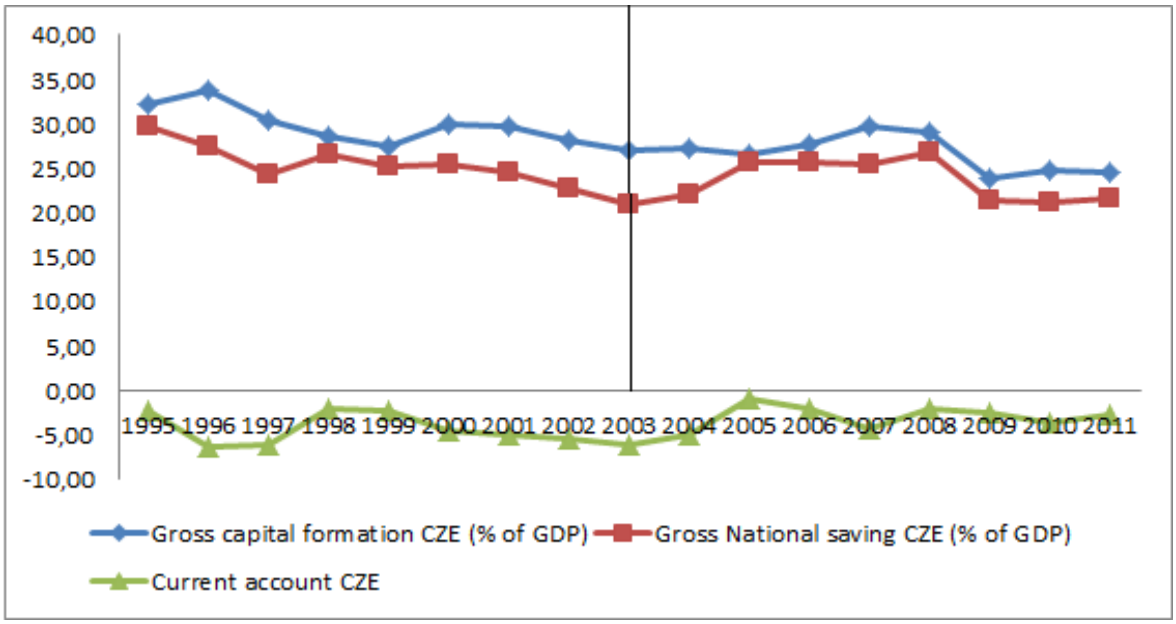
5 Results and findings

This chapter answers the research questions identified in the introduction, as per the theoretical framework. The layout is divided into four parts which represent each research question.

5.1 Research question 1: Savings, investment and capital flows

As explained in chapter three, we should expect a current account deficit from both economies. A high (either positive or negative) current account means that there has been a greater difference between gross savings and investment. A negative current account usually means that there has been a high degree of capital inflows to the countries (explained in section 3.2), as current account deficits usually are funded by FDI.

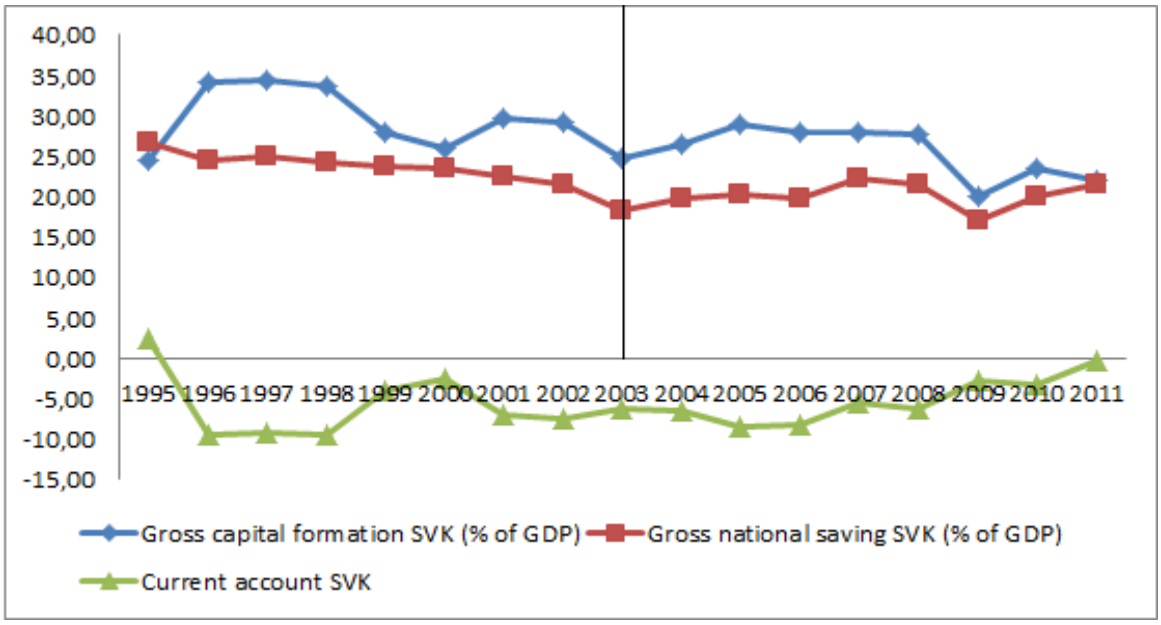
Figure 8: Relationship between savings, investment and current account as a % of GDP, Czech Republic, 1995-2011



Source: World Bank, The Economic Watch

As seen in figure 9 and 10, Slovakia had a high current account deficit throughout a longer time period. The greater the current account deficit is, the bigger is domestic investment. This is in consensus with reasons for why capital crosses borders, where investors seek to invest in countries with growing markets which require further investments to increase production and effectiveness. The Czech Republic generally had a higher rate on both savings and investment.

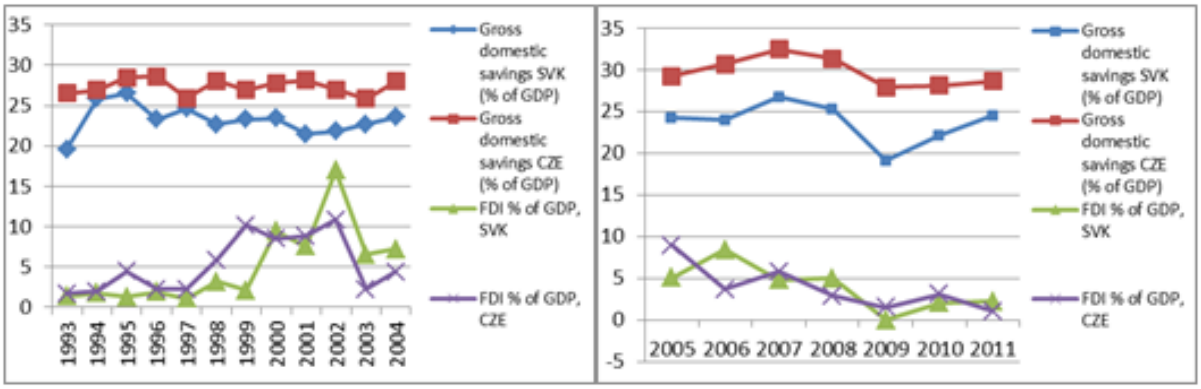
Figure 9: Relationship between savings, investment and current account as a % of GDP, Slovakia, 1995-2011



Source: World Bank, The Economic Watch

An F-test between the domestic saving and foreign direct investment show that there has not been any significant relationship between the variables. The p-value (0.0028) for Slovakia shows that we can discard the question of similarities between the increased FDI and saving. We get equal results if we test the same variables for the Czech Republic (p-value of 0.0063). The results from the F-test are confirmed by the graphs in figure 10 which shows the average growth rates of both gross domestic savings and foreign direct investment in Slovakia and the Czech Republic.

Figure 10: Gross domestic savings and FDI as a % of GDP, Czech Republic & Slovakia, 1993-2011

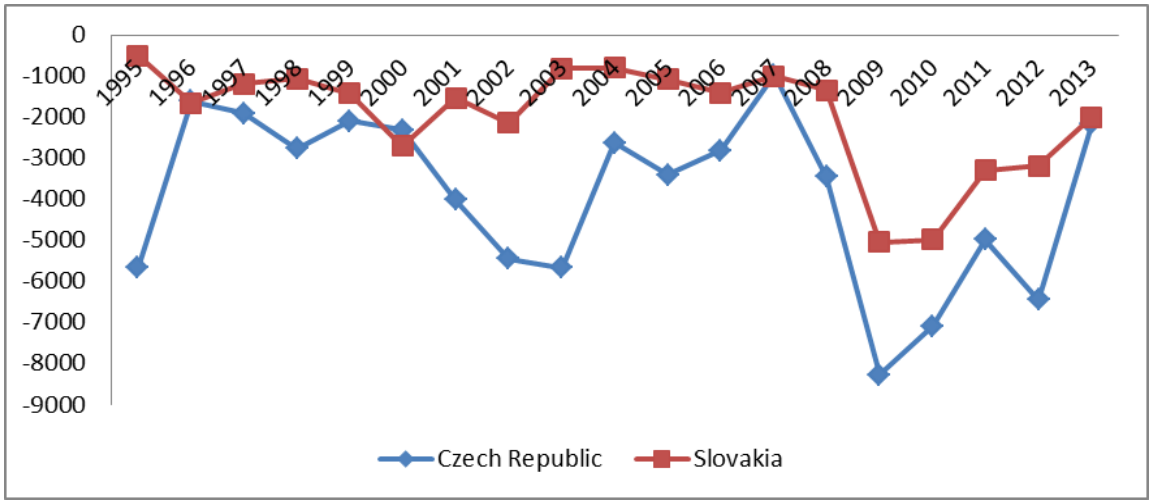


Source: World Bank

This coincides with what the research of Feldstein (1982) found, namely that the current account balance with its financial inflows does not have any significant relationship with the rates of domestic savings. From the trend in figure 9, 10 and 11 we would expect to see a higher degree of inflow as a percent of GDP in Slovakia, as they have a higher current account deficit over time.

Higher savings and investment in the Czech republic may be explained by Bosworth and Collins (1999) as a response to higher consumption in Slovakia than in the Czech Republic (Bosworth et al. 1999). FDI are related to higher investment showing a higher current account gap between savings and investments.

Figure 11: Government deficit/ surplus, Czech Republic & Slovakia, 1995-2013, Million Euros



Source: Eurostat

As seen from figure 12, there has been a government deficit (government revenue less government spending) in both countries, during both periods. The relationship between the government deficit and saving and investment through the current account can be seen in chapter three, equation 3.12.

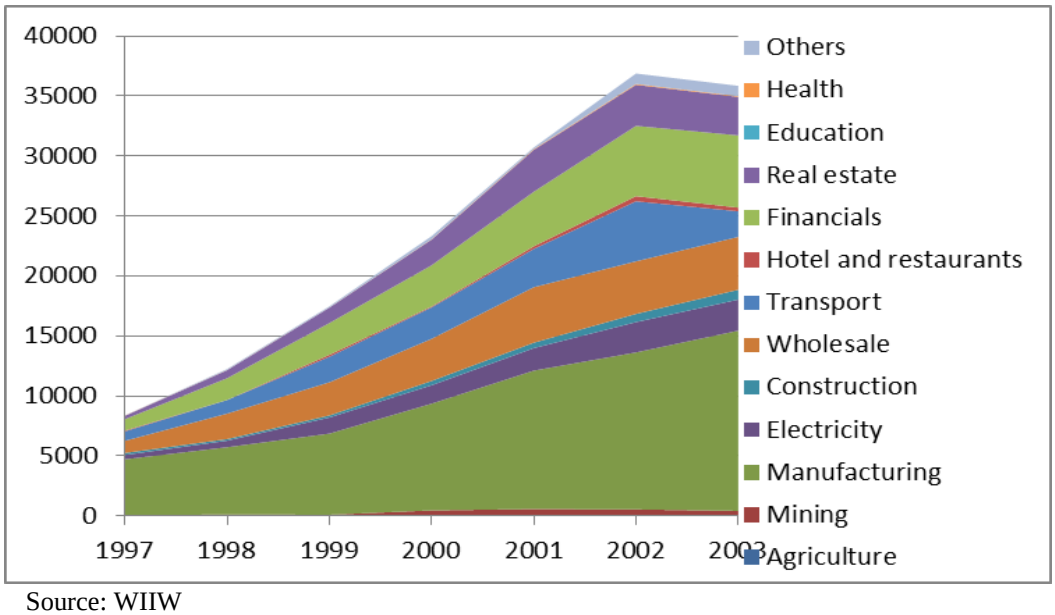
The study by Mileva (2008) concludes that the countries close to the end of the transition will change their inflows from FDI to foreign loans to improve their capital formation. This implication is found, as the FDI inflows as a percentage of GDP has decreased when the countries ended their transition process. Nevertheless, the capital formation were kept on a similar level as before meaning that the capital formation is financed by something other than FDI. At the same time, the total government debt in respectively the Czech Republic and Slovakia has increased from 33 percent and 17,5 % in 2004 to 90 % and 48 % of GDP in

2012 (School 2014) which support Mileva. The inflows of FDI to countries are boosted when they enter the accession process used by the EU. If a country has a good chance of joining, they will achieve higher FDI inflows as EU members will move their production to cheaper labor and strategic locations (Bevan & Estrin 2004). As explained in chapter three, the drivers of capital are closely linked to the benefits of joining the EU. The graphs above indicate that this might have happened in both countries, at the same time, as they entered the accession in the same round. The FDI inflows have become less in the years after 2005.

5.2 Research question 2: Foreign direct investment and productivity

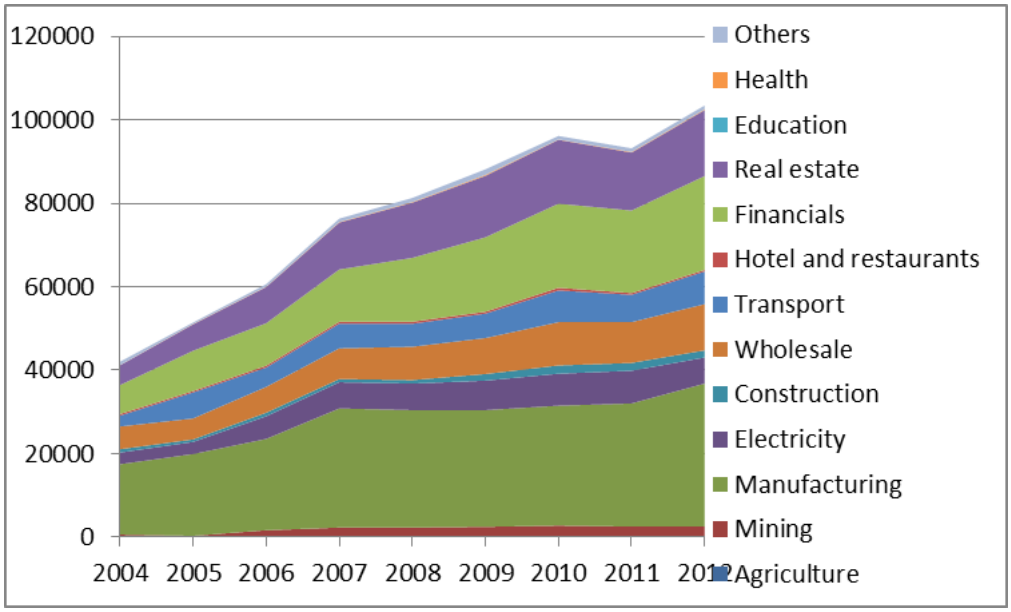
The graphs showing the FDI stock for the Czech Republic and Slovakia during 1997-2012 separated in sub-periods are listed below. As this is FDI stock, increases or decreases each year are showed with the inclination of the graphs. We expect to see a rapid increase in the FDI inflows after both countries entered the accession process to join the EU, as both of these countries met 7 out of 8 of the requirements for capital crossing borders (shown in chapter three and four). The only part which is not fully satisfied is the access to raw materials or minerals (they have raw materials, but it is not crucial for the economies).

Figure 12: FDI stock by activity, Czech Republic 1997-2003



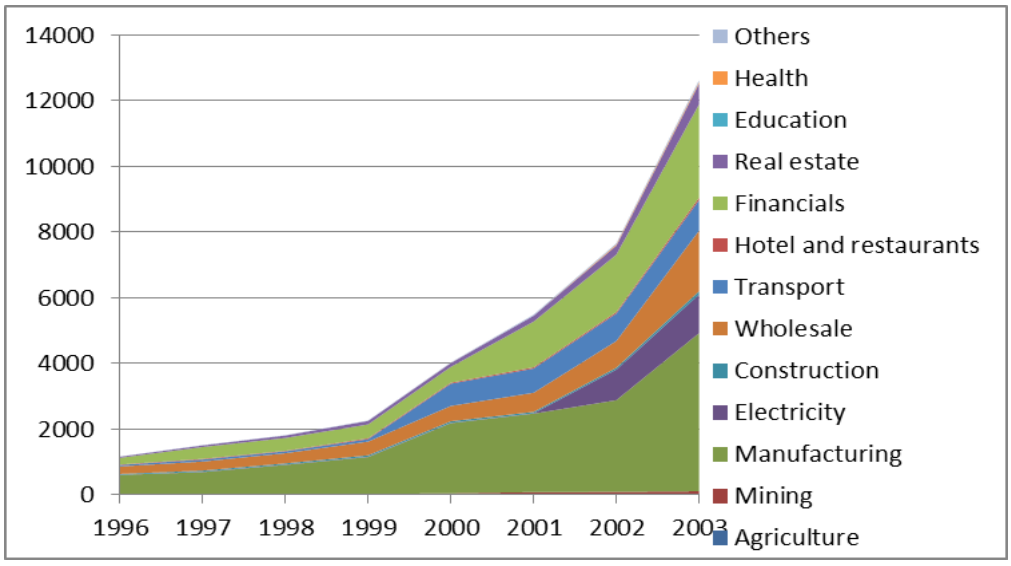
Source: WIIW

Figure 13: FDI stock by activity, Czech Republic 2004-2012



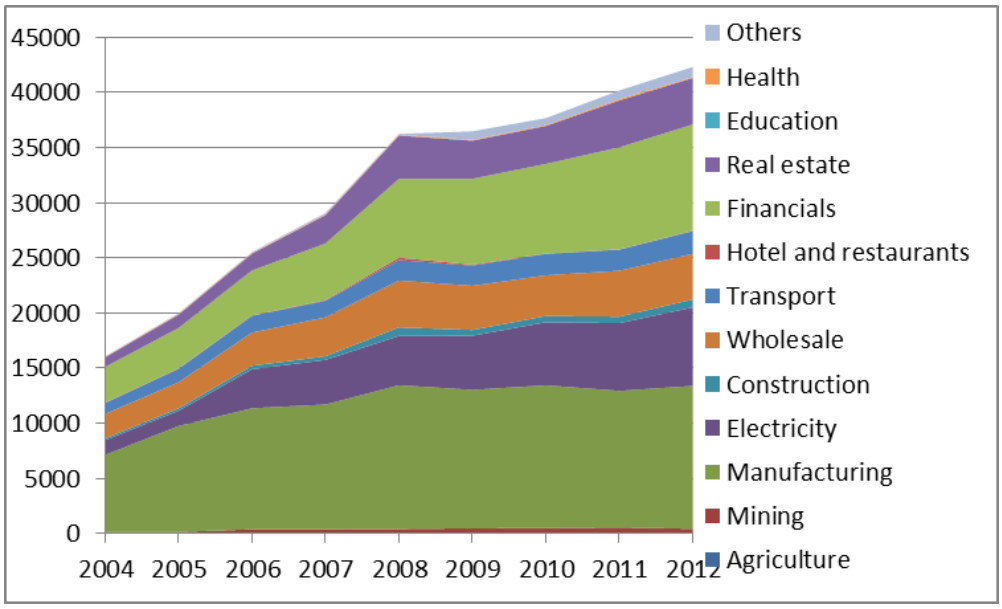
Source: WIIW

Figure 14: FDI stock by activity, Slovakia 1996-2003



Source: WIIW

Figure 15: FDI stock by activity, Slovakia 2004-2012



Source: WIIW

As seen from the figures 13-16, the increase in FDI was rapid after entering the EU accession process. A sharp increase from 1998 was expected due to the possibility of exploiting low wages and the removal of tariff barriers. FDI inflows in manufacturing countries are linked to the consumption of buyers of the goods that are produced. Since both the Czech Republic and Slovakia are big producers of auto industry parts, and electro components, they are exposed to the risk of a decrease when consumption decreases in their exporting countries. As we can see, when the consumption in Europe declined as a result of the financial crisis, the FDI flows declined rapidly. Looking at the graphs, it is evident that the inflows began earlier in the Czech Republic than in Slovakia, which was expected since Slovakia inherited the unattractive industrial structure with large industries (steel, armaments and chemicals) in sectors that could not compete with the industries in EU (Koyame-Marsh 2011).

A reason for the increased FDI flows to Slovakia during the end of 1990s is the opening of new manufacturing sites for the auto industry. As theory states, FDI tends to be preferred rather than long distance trade, as markets overseas tend to be served by local manufacturing sites, instead of exporting (Brenton et al. 1999). Both Czech Republic and Slovakia has gained from their strategic position, as a neighbor to Germany with close distance to many of the most important economic markets for the auto industry. Brenton, Di Mauro et al. also suggest that the reason for why the main contributors of FDI to CEEC are from Europe is because of geographical proximity to other production locations, ease of communication, and cultural affinity rather than just market-driven FDI. 87 per cent of the FDI inflows to Czech

Republic after 2000 are from the EU-28 members. In Slovakia the number is even higher, 89 per cent of the FDI inflows since 2000 are from the EU-28 members (Studies 2014).

Table 18: Growth in FDI stock & Production output, Czech Republic & Slovakia

	Slovakia		**Czech Republic**	
	2000-2003		2000-2003	
Activity	FDI stock	Production output	FDI stock	Prod. output
Mining & Quarring	70 %	-17 %	-2 %	8 %
Manufacturing	125 %	43 %	69 %	15 %
Electricity	11760 %	44 %	69 %	21 %
Construction	117 %	23 %	127 %	24 %
Wholesale	295 %	12 %	26 %	19 %
Transport	37 %	50 %	-19 %	25 %
Hotels, Accomodation	134 %	27 %	323 %	7 %
Real estate	431 %	15 %	49 %	23 %

Source: WIIW, Statistical office of the Slovakia Republic, Czech statistical office

** Production output is not available for years prior to 2000 in Slovakia

From the theoretical framework, the output and export of both countries should increase as the FDI inflows increases. In table 18 the average numbers in per cent are taken for both FDI stock and production value and it shows the connection between FDI inflows and how it relates to the production output. The massive increase in electricity in Slovakia is due to the legislation of energy that was implemented in 2002, allowing free competition of electricity. By the end of 2004, 45 new electricity firms were established (Cár 2007). The mining production has declined and the Czech Republic had a decrease in their FDI stock in these years. Since Prague is one of the most popular travel destinations in East Europe, it is not unexpected that hotels and accommodation increased. Based on the timeframe of the graphs, both the FDI stock and the production output were higher in Slovakia than in the Czech Republic for the first period. The data are however a bit unreliable because of the massive FDI inflows to the Czech Republic in the years 1997-2000 (seen in figure 11). It looks like the focus of FDI inflows moved towards Slovakia in a period around 2000 after beginning to adapt to the Copenhagen criteria.

Table 19: Growth in FDI stock & Production output, Czech Republic & Slovakia

	Slovakia		Czech Republic	
	2004-2011		2004-2011	
Activity	FDI stock	Production output	FDI stock	Prod. output
Mining & Quarring	422 %	40 %	333 %	33 %
Manufacturing	77 %	69 %	75 %	32 %
Electricity	361 %	66 %	180 %	61 %
Construction	238 %	131 %	132 %	31 %
Wholesale	89 %	109 %	80 %	38 %
Transport	92 %	225 %	151 %	36 %
Hotels, Accomodation	-24 %	67 %	4 %	9 %
Real estate	388 %	66 %	193 %	58 %

Source: WIIW, Statistical office of the Slovakia Republic, Czech statistical office

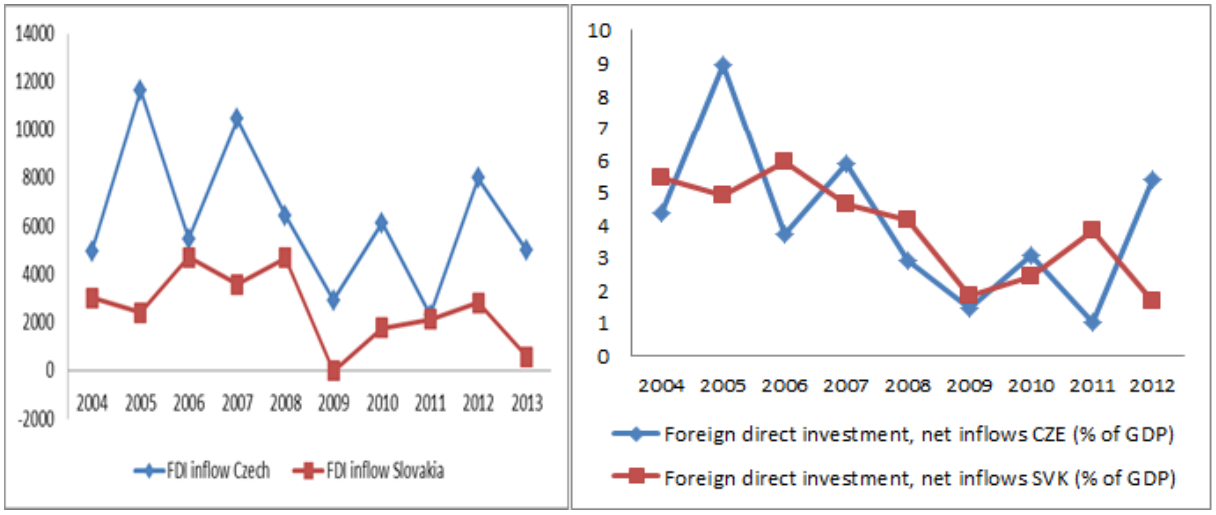
** Data for Slovakia was not available after 2011.

In the years after the EU accession, the countries have become more similar as Slovakia has had a higher economic growth than the Czech Republic. For the years after the EU accession, there has been a slowdown in the average growth of FDI stock, but this time period includes the financial crisis which led to a massive downfall or slowdown in all FDI activities. We thus expect to see the two economies moving closer to each other as they both joined the EU. The relatively low increase in manufacturing stock compared to the output is explained by a halt during the financial crisis, but the increase in output can also be explained by improved technology. This is (as we can see in figures 13-16) the activity with the highest FDI stock of all, in both the countries. FDI to construction in Slovakia has increased as the development in other sectors made investment in construction attractive to foreign firms. The increased construction was a result of improvement and construction of new roads that both countries introduced with a schedule to be finished in 2010. Real estate has had a formidable growth in both countries, thanks to a doubling of real estate prices in the Czech Republic and Slovakia in the years 2000-2008. Both countries give aid to foreign firms buying land, where manufacturing sites aim to attract more FDI. In the Czech Republic they will get the land below the market price if they meet certain requirements. In Slovakia the municipality can help with buying the land without going through a wide range of bureaucracy. A reason for the increased FDI, especially in Slovakia is the high unemployment together with low wages. This indicates that there is a large unused labor force available for potential investors, these are reasons for increased capital flows. The fact that both countries have a comparative advantage in the manufacturing and electricity sector helps to attract more investors. Both countries have subsidies to newly made firms to attract new job possibilities.

5.3 Research question 3: Financial crisis and capital flows

From the financial crisis we would except to see declining capital flows to both countries. Their industries are based on consumption goods, such as electronics and the automotive sector, and a negative effect on consumer's willingness to pay would normally cause a decrease in capital flows to the production countries. Prior to the financial crisis, Slovakia had an increasing economy and was the fastest growing country of the OECD. However, as seen from figure 17, when the financial crisis appeared, it had a major impact on the Slovak economy. The Czech Republic had a more unstable FDI flow. In 2007, the Czech Republic had a peak of FDI with an inflow of more than $ 10,4 billion. Slovakia already experienced a downfall in its inflows from 2006 to 2007. In 2009, both economies achieved decreased FDI inflows as a result of the economic crisis happening the recent year (shown in table 20).

Figure 16: FDI inflow to the Czech Republic & Slovakia, both in % of GDP and absolute numbers 2004-2013



Source: World Bank, OECD Factbook 2014

While there has been a fluctuation in FDI inflows to both the countries before the financial crisis, we can see from figure 17 that the FDI inflows as a percentage of the GDP decreased as early as 2005 for Slovakia and 2007 for the Czech Republic. The pattern is the same for both countries and the implications for this is the same as seen from Mileva's (2008) study (countries in the end of the transition process tends to change inflows from FDI to loans). As the economies increases their export, the inflows have to increase with the same amount to keep up their per cent of GDP.

Table 20: FDI flows, and stock, the Czech Republic & Slovakia, 2008-2009

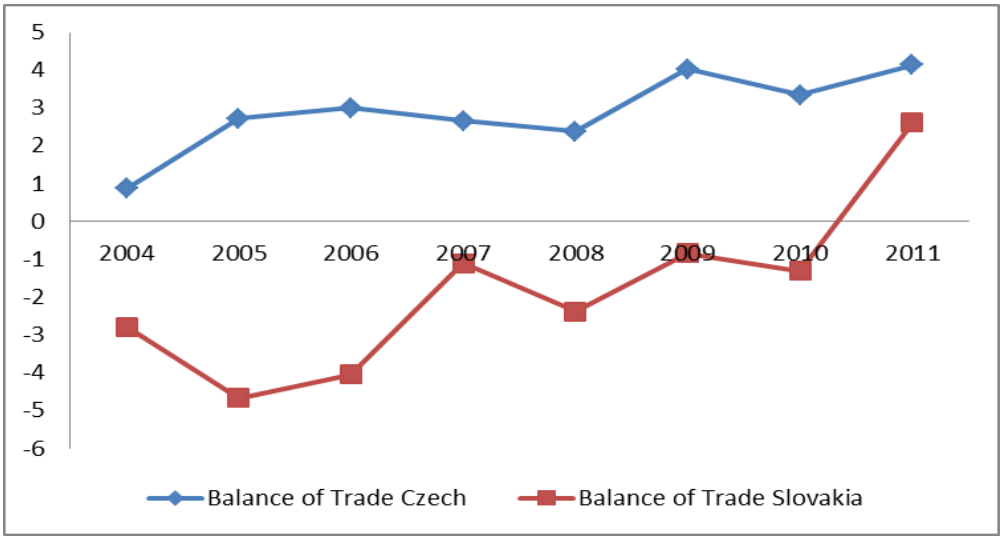
	Slovakia		Czech Republic	
Indicators	**2008**	**2009**	**2008**	**2009**
Inward FDI stocks	51031,9	52541,4	113172,9	125828,8
Outflows of foreign direct investment	529,4	904,6	4321,5	950,1
Inflows of foreign direct investment	4684,7	-6,3	6448,6	2928,8

Source: OECD Factbook

The decreased FDI flows were of greater amount in Slovakia than in the Czech Republic. Much of the reasons for the downfall of capital flows in 2008-2009 was the automotive industry, with a decline of 40% in Czech revenue for the automotive industry and 20.000 lost jobs, counting for nearly 15% of the total employees in the auto industry. As the automotive industry is just as important in Slovakia, the financial crisis had a negative impact on the industry with 6.000 lost jobs which represented a decrease of 8.8 % of total employees.

The economic structure of the countries was somewhat similar, as values added by sectors were close to equal and they both had the same framework for business being members of the EU. While the Czech Republic has a bit more value added by manufacturing and industry including energy, Slovakia has a higher share of value added from agricultural and construction sector. This is seen in table 10 from chapter 2 where the values added by the different sectors are shown. Construction and FDI inflows were boosted in Slovakia in 2007 when PSG Citroën, Peugeot and KIA invested huge into new manufacturing sites. The value added to GDP in Slovakia moved towards wholesale, retail, financial intermediation and other services as the effect from 2008 reached its economy. The Czech Republic on the other hand, managed to keep their value added in the same industries as they had before the crisis.

Figure 17: Balance of Trade, Czech Republic & Slovakia, 2004-2011



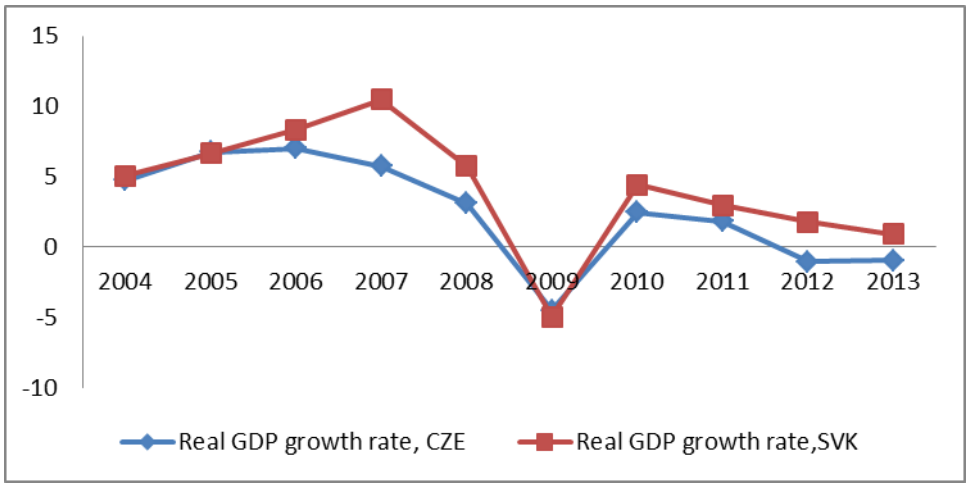
Source: World Bank

As seen in chapter 2, table 13, both countries almost had the same export destinations. They were dependent on the German economy plus the intra-trade (Czech Republic and Slovakia), and as a result of this, the growth rates in their economies and balance of trade reacted in the same way during the financial crisis. From 2008-2009, German GDP growth rate dropped by 6% to -1 %, and they imported less manufacturing goods than earlier years. Even though Germany is number five of the countries who invested FDI to the Czech Republic during the two years, the weakening of the German economy still had a great effect on both. Austria invested most in the Czech Republic in 2008 and 2009, but the decrease from the German inflows was bigger than the gain from Austrian inflows. Both the Czech Republic and Slovakia therefor experienced the same drop as they were heavily dependent on the trade with Germany. The F-test shows that the growth in FDI stock and GDP growth rate is not equal for the two countries. It is significant at the 1 per cent level of significance.

Table 21: FDI by partner. Highest to lowest, 2008-2009

FDI by partner	
Czech	**Slovakia**
Austria	Germany
France	Netherlands
Netherlands	Austria
Switzerland	Czech
Germany	Cyprus

Figure 18: Real GDP growth rate, Czech Republic & Slovakia, 2004-2013



Source: OECD Factbook

The real GDP growth rate in the two economies responded to the financial crisis with almost the same pattern (seen in figure 19), the Czech Republic had already had a decreasing GDP growth rate for four years up until the financial crisis, while the Slovakia experienced a growth as late as in 2007 before the crisis. It is the same pattern as we can see from figure 18 where the trade balance of Slovakia has improved since 2005 (except the recurrence in 2008). The unemployment in both countries from 2008-2010 increased with nearly 3 per cent in Czech Republic and 5,8 per cent in Slovakia. Slovakia has had a high unemployment since the dissolution of Czechoslovakia and the increase to 14,4 per cent of the total labor force is still below the 2001 level which was at 19,3 per cent.

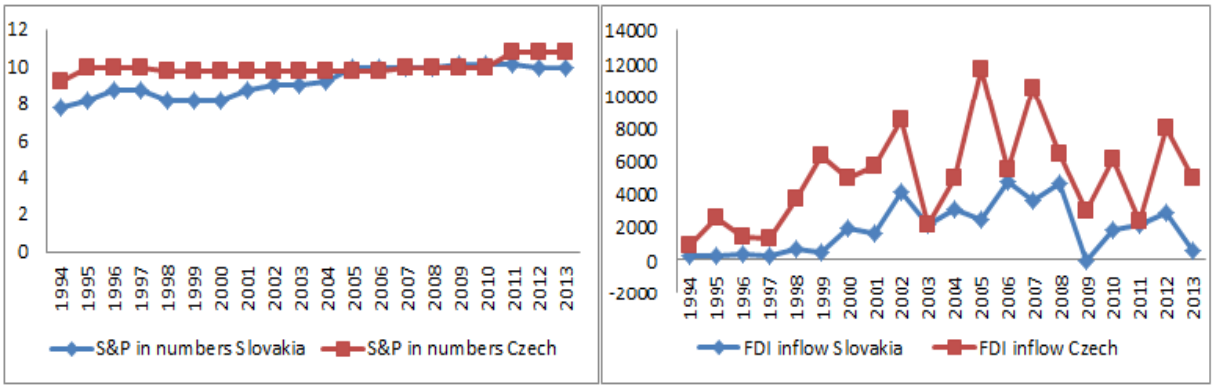
5.4 Investment Risk

As mentioned in the theory section, the political stability and the risk factors have a big role as to where investors choose to direct their capital flows, and this element has become more and more important. The governance indicators can be used as the basis for these analyses together with IMD competitiveness indicators. In table 17, the governance indicators for both the Czech Republic and Slovakia are listed. The different indicators have been similar during the time period from 1996-2012, with the biggest difference beeing rule of law. This indicator explains the quality of the police, contract enforcements, the court, and the likelihood of crime and violence. The weakest of the indicators for both of the countries have been control of corruption. Both indicators fall under the political risk. As mentioned in the literature review, investors does not seem to take the financial risk into account when investing in foreign countries, as Hayakawa, Fukunari and Lee (2013) proved in their article.

The tables in appendix 1,1 and 1,2 show the country ratings from Moody's, Standard & Poors and Fitch. These are the ratings given by the main rating companies, and used by investors as

a guideline for where they should invest. As seen in the figure, using Standard and Poors's country rating, the Czech Republic had a better country rating in the first period; it was not until 2006 that Slovakia achieved the same ratings as the Czech Republic. This can be seen in figure 11, where the inflows to the Czech Republic where higher in percent of GDP before 2006 than in Slovakia. In the second period 2004- present, the country rating has been somewhat equal until 2010 where the Czech Republic improved their country rating. To see if the country risk have had any impact on the total inflows to both of the countries we can look at figure 18.

Figure 19: Comparison of country risk by S&P and FDI inflows for Czech Republic & Slovakia, 1994-2013



Source: Authors calculations based on OECD Factbook 2014, Czech National Bank, KPMG Slovakia, Debt and Liquidity Management Agency Slovakia

It is not easy to see any similarities with the inflows and the country ratings given by Standard & Poor's. The Czech Republic had a steady country risk, but the FDI inflows have fluctuated a lot. It appears that Slovakia had a more stable increase in the FDI inflows, and it has improved after the country rating has increased. This is in consensus with the results of Jankovic and Yatrakis (2010) and Janicki and Wunnava (2004) which both proved a significant relationship between FDI inflows and country risk.

There are several studies (Bouchet et al. 2003) which includes natural disasters as risk factors. The risk factor of natural disasters in Slovakia is very low as industrial sites are not situated close to any particular rivers or mountains, which make floods unlikely. During the history there have only been a few registered earthquakes, but none that have caused any damage. In the Czech Republic there have been a few incidents with floods which have caused damage to the infrastructure, however, natural disaster does not appear to be any reason to differences in the FDI flows.

6 Conclusion

6.1 Conclusion

The main objective of this study, within the framework, was to see if there have been any differences in how capital flows with focus on foreign direct investment, has affected the savings, investments and output, and whether the structures of the economies made the financial crisis easier to cope with. As a means to explore if investors considered other factors besides location, specialization and wages, the study also included investment risk.

6.1.1 Research question 1: Savings, investments and capital flows

As seen in the chapter 5, the investments have been higher than the savings in both the Czech Republic and Slovakia for every year in both periods. This is as expected as the investment in both of the countries has been influenced with FDI during every year. The current account deficit has been driven by increased FDI inflows as a way to "pay" for the deficit. The savings have not been affected by the increased FDI flows and the current account, confirming what was stated by Feldstein (1982); that the current account with its financial inflows does not have any significant effect on the domestic savings. The F-tests from both Slovakia and the Czech Republic showed that there has not been any significance between domestic savings and the increase in FDI as a per cent of GDP. However, the results are thoughtful when we consider the article by Haugh, Scobie and Törnquist (2001). They show that there is a positive relationship between savings and GDP growth. This means that the driver of the savings is the GDP growth and not FDI inflows while the investment are driven by FDI inflows among other drivers.

As seen from the results, the FDI inflows have decreased in the years as the transition process has been completed. This is, as described in the literature review, in consensus with Mileva's (2008) study which claims that countries tend to change their inflows to foreign loans as they get more developed. The point made by Janicki and Wunnava (2004), that market size affect the amount of absolute FDI inflows to a country seems obvious, and is evident between the Czech Republic and Slovakia as well.

The conclusion for this research question is that there have been differences as the Czech Republic gained more in the beginning of the transition, while Slovakia have gained more in the later years, although not enough to say that there has been a significant difference in their economic structure.

6.1.2 Research question 2: Foreign direct investment and production

The FDI stock has improved in almost every sector in both the countries during the periods and as discussed in chapter three this should give increased output and export. The results regarding table 19 are unreliable as commented in chapter five, as the FDI inflows to the Czech Republic was highest in the late 1990s while the investments in Slovakia came around 2000 when their economic reforms took shape. A better legislation, good incentives schemes and low wages have been important factors for increased FDI flows to manufacturing and the service sector. By looking at the comparative advantage the Czech Republic had for ages in the manufacturing sector, it seems like it have gotten competition from the increased experienced of their Slovak neighbors. The wages in Slovakia has been lower for both periods and as explained by Janicki and Wunnava (2004) and Appleyard and Field (2014), the labor cost is important for where to invest.

The positive effect with economic unions is open market, free flow of capital and labor, no transaction or transport costs. With all of those opportunities present, the expected effect of the membership should be increased FDI flows. The inflows increased before the financial crisis, but dropped after as showed in the next paragraph. Due to cheap labor, total services in both the Czech Republic and Slovakia are high during the years after 2004. As expected the overall FDI stock has improved more in Slovakia than in the Czech Republic after 2004. As mentioned above, the cheap labor in Slovakia could be viewed as a comparative advantage compared to the Czech Republic, and together with the economy being in a rapid growth, this would attract more FDI than the Czech Republic, implied by the theoretical framework.

There is no doubt that the FDI flows that have taken place in both countries after 1993 have had an impact on the general macroeconomy. The GDP per capita and as a whole has been skyrocketing the last 15 years, with Slovakia gaining the highest GDP per capita in OECD in the years 2000-2008.

The FDI inflows seems to have had a huge effect on both economies, and by the framework used in this thesis it seems clear that Slovakia has gained most in the recent years with high production output, export and increased FDI. However, the FDI inflows as a per cent of GDP has been close to similar in the two countries during the years, so based on the data and theory, it is difficult to say if one of the two has been better off with the investments.

6.1.3 Research question 3: Financial crisis and capital flows

During the results, it is clear that the economies moved symmetrically up until the financial crisis, both in regards to capital flows, but also in accordance with general basic economics. The republics have had almost the same structure in their economies since the late 90s, when both were deep into the economic transitions. The intra-trade and trade with Germany have been crucial and are probably the reason for why the countries experienced similar difficulties during the financial crisis, as they both are heavily dependent on their exports. The rapid downfall can be interpreted as a result of the downfall in the European economy. Since the economies of both Slovakia and the Czech Republic are highly correlated with the West, the decrease in the FDI inflow is expected. Within theoretical frameworks this will be explained by the large and rapid growing markets. When this halted, the inflows halted as well. As the economies increased in the EU, the FDI inflows to the two countries increased. During the financial crisis Slovakia experienced a negative FDI flow. Negative FDI flows can be interpreted as disinvestment in assets or discharges of liabilities. FDI to the Czech Republic was decreasing even before the financial crisis. However; the fall in FDI was higher in the Czech Republic than in Slovakia, but during a longer time period.

The inflows to the Czech Republic and Slovakia, as listed in table 18, originated from the same group of countries. As they had the same economic structure, and the source-countries struggled as much as the rest of Europe, it is not a surprise that the investment to other countries would be halted during the crisis. As investors invest when it sees profit possibilities, a sudden economic crisis, let to the immediate response to stop investment to countries producing consumer goods. As a conclusion for this research question it can be said that it is difficult, by the theoretical framework used in this thesis to see any significant differences in their response to the financial crisis.

6.1.4 Research question 4: Investment risk

Investment risk has been given more importance in studies of why capital moves across borders including attention from the national institutions in both the Czech Republic and Slovakia. The difference between the investment risks in the two countries has been minimal. If we are to follow the governance indicators that show the political risk, the Czech Republic have scored higher than Slovakia in four out of six indicators. However, the differences are very small (highest rule of law with 0,46 on a scale to 5). The investment risk was less in

Czech Republic during the early transition, as Slovakia halted the development of their economic reform until 1998. The investment ratings showed in appendix 1.2 and 1.3 can be related to the inflows of capital to both countries. As Slovakia attained a big increase in their inflows of FDI at the same time as the ratings increased, it is hard to see that the investment risk have had a big influence on the investors in deciding which country to invest in. In the recent years the accession to the EMU for Slovakia, might increase political and financial stability, however, the signs so far do not indicate any difference after joining. From the perspective of the theoretical framework, the Czech Republic started off with a higher capital inflow together with a higher rating than Slovakia, but in the second period Slovakia had equal ratings and almost the same government indicators. Based on the findings, and especially taking Hayakawa, Kimura and Lee (2011) findings that the political risk is the form of risk that affect capital flows through FDI into account, it is difficult to see that investment risk have had any influence in either Slovakia or Czech Republic.

The overall conclusion for these two countries using the theoretical framework and the research questions is that the Czech Republic started off with a faster economic growth as they reformed their economy earlier than Slovakia. At the end of 1990s Slovakia began their transition, and experienced a massive growth in the years after and up until 2008. Both countries have developed in a different pace, but after joining the EU, they have been quite similar. The Czech Republic was better off in the first period with higher GDP growth, FDI inflows as a per cent of GDP, lower unemployment and a better current account than Slovakia. However at the second period, the differences have become smaller and Slovakia has had a bigger growth than the Czech Republic. These findings support the conclusion from Koyame-Marsh (2011), indicating that the Czech Republic was better off in the early 2000s.

This study supports the findings of Mileva, that the FDI are replaced by foreign loans when the countries are close to finishing the transition process. However, when the Czech Republic was the "winner" of the first period, Slovakia has gained a lot in the last "period". If we look at the whole time period 1993-2013, the conclusion after studying the research question is that they have had their differences, but as a whole they have moved in the same direction, with the same sectors as their main contributor to the economies, and can be viewed as two close economies.

As a finish I will quote the Economist from 1997*: "Between the Czechs and the Slovaks there is no contest – Czechs are much better off"* (Economist 1997). However, as this thesis has

shown, after almost 20 years, this statement does not hold to those proportions anymore, and in the future, the statement might be turned around.

6.2 Limitations

In this study, I am reliable on data gathered from different institutions. I have throughout the study found different numbers for the same indicators from different institutions. Data from Slovakia prior to 1998 has been difficult, and for some data, impossible to find. The IMF states that national account data for Slovakia prior to 1995 are unreliable. With a more comprehensive dataset, time-wise, it would give us a clearer view of how the development has been even before the dissolution of Czechoslovakia. The data regarding the Czech and Slovakia states during Czechoslovakia, with sector specific data has been impossible to find. I have not seen any articles which provide any sector-specific data or basic macroeconomic data within the two states prior to 1990. Such data would be interesting to use to get a wider understanding of the different starting positions for the two economies and a way to see which sectors they have been specializing in from an early stage.

6.3 Suggestion for further study

During my work with this Master thesis I have discovered different methods to study the FDI flows and how the flows affect both the source country and the recipient of the flows. It would be interesting to study the effect and implications for saving and investment using regressions, built on somewhat the same platform as Bosworth and Collins have done in their research paper *"Capital Flows to Developing Economies: Implications for Saving and Investment"*. By doing a wider analysis of the data with advanced regressions it would be possible to give a more detailed analysis of the relationship between savings and investment with respect to FDI.

It would also be interesting to see the effect after Slovakia joined the EMU in 2009. Since it happened four years ago, not enough time has passed to make a conclusion of the effects. This happened right after the financial crisis, so the data for the first years would be disturbed by the crisis.

Bibliography

Aghevli, B. B., Borensztein, E. & Van der Willigen, T. (1992). *Stabilization and structural reform in the Czech and Slovak Federal Republic: first stage*, vol. 92. Washington, D.C.: The Fund. vi, 46 s. : ill. pp.

Alfaro, L., Chanda, A., Kalemli-Ozcan, S. & Sayek, S. (2004). FDI and economic growth: the role of local financial markets. *Journal of international economics*, 64 (1): 89-112.

Appleyard, D. R. & Field, A. J. (2014). *International economics*. New York: McGraw-Hill/Irwin. XXIV, 824 s. : ill. pp.

Bank, Czech National. (2014). Financial stability www.cnb.cz. Available at: https://www.cnb.cz/en/financial_stability/ (accessed: 04.10.2014).

Barrell, R. & Pain, N. (1997). FOREIGN DIRECT INVESTMENT, TECHNOLOGICAL CHANGE, AND ECONOMIC GROWTH WITHIN EUROPE*. *The Economic Journal*, 107 (445): 1770-1786.

Bevan, A. A. & Estrin, S. (2000). The determinants of foreign direct investment in transition economies. *CEPR Discussion Paper No. 2638*

Bevan, A. A. & Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. *Journal of comparative economics*, 32 (4): 775-787.

Bičík, I., Jeleček, L. & Štěpánek, V. t. (2001). Land-use changes and their social driving forces in Czechia in the 19th and 20th centuries. *Land use policy*, 18 (1): 65-73.

Borensztein, E., De Gregorio, J. & Lee, J.-W. (1998). How does foreign direct investment affect economic growth? *Journal of international Economics*, 45 (1): 115-135.

Bosworth, B. P., Collins, S. M. & Reinhart, C. M. (1999). Capital flows to developing economies: implications for saving and investment. *Brookings papers on economic activity*: 143-180.

Bouchet, M. H., Clark, E. & Groslambert, B. (2003). *Country risk assessment: A guide to global investment strategy*: John Wiley & Sons.

Brada, J. C. (1989). Technological Progress and Factor Utilization in Eastern European Economic Growth. *Economica*, 56 (224): 433-448.

Brenton, P., Di Mauro, F. & Lücke, M. (1999). Economic integration and FDI: An empirical analysis of foreign investment in the EU and in Central and Eastern Europe. *Empirica*, 26 (2): 95-121.

Cár, M. (2007). The energy industry and energyprice issues in Slovakia during recent years. *Current Topic*, Volume 15 (5/2007): 7-11.

Caves, R. E. (1999). Spillovers from multinationals in developing countries: the mechanisms at work.

Central Intelligence Agency. (2014). *The World Factbook* Available at: https://www.cia.gov/library/publications/the-world-factbook/ (accessed: 05.04.2014).

Claus, I., Haugh, D., Scobie, G. & Tornquist, J. (2001). Saving and growth in an open economy: New Zealand Treasury.

Commission, E. (1993). *Copenhagen criteria*. In Union, E. (ed.). http://ec.europa.eu/: European Commission. Available at: http://ec.europa.eu/enlargement/policy/conditions-membership/index_en.htm (accessed: 05.08.2014).

Daniel Kaufmann, A. K., Massimo Mastruzzi (2013). *The World Wide Governance Indicators*. www.govindicators.org: The World Bank. Available at: www.govindicators.org (accessed: june - sept, 2014).

Development, United Nations Conference on Trade and. (2014). www.unctad.org: Unctad. Available at: http://unctad.org/en/Pages/Statistics.aspx (accessed: february - june, 2014).

Durham, J. B. (2004). Absorptive capacity and the effects of foreign direct investment and equity foreign portfolio investment on economic growth. *European economic review*, 48 (2): 285-306.

Economist, The. (1997). *And the winner is...* www.economist.com: The Economist. Available at: http://www.economist.com/node/154052 (accessed: 14.08.2014).

Eurostat. (2014). *Statistics Explained* In Eurostat (ed.). eurostat.eu: European Commission Available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Maastricht_criteria# (accessed: 08.08.2014).

Feldstein, M. & Horioka, C. (1980). Domestic saving and international capital flows. *Economic Journal*, 90 (358): 314-329.

Feldstein, M. S. (1999). *International capital flows*, vol. International Capital Flows: University of Chicago Press.

Fidrmuc, J., Horvath, J. & Fidrmuc, J. (1999). The stability of monetary unions: Lessons from the breakup of Czechoslovakia. *Journal of Comparative Economics*, 27 (4): 753-781.

Garcia, R. J., Miljkovic, D. & Gómes, M. I. (1998). *Import prices and hard currency constraints in Eastern Europe : implications for coarse grain imports and production of meat*, vol. 30. Journal of Agricultural and Applied Economics: Southern Agricultural Economics Association.

Grønn, E. (2008). *Anvendt mikroøkonomi*. Oslo: Cappelen akademisk. 664 s. : ill. pp.

Hall, P. A. & Soskice, D. (2001). *Varieties of capitalism: The institutional foundations of comparative advantage*: Oxford University Press.

Hanousek, J. & Kroch, E. A. (1998). The two waves of voucher privatization in the Czech Republic: A model of learning in sequential bidding. *Applied Economics*, 30 (1): 133-143.

Hayakawa, K., Kimura, F. & Lee, H. H. (2013). How does country risk matter for foreign direct investment? *The Developing Economies*, 51 (1): 60-78.

Hilde, P. S. (1999). Slovak nationalism and the break-up of Czechoslovakia. In vol. 51 :1999 :4, pp. S.647-665. Abingdon: Carfax.

International Monetary, F. (2009). *Balance of payments and international investment position manual*. Washington, D.C.: International Monetary Fund. 1 online resource : ill pp.

Invest, C. (2013). *Investment projects mediated by CzechInvest* http://www.czechinvest.org/: Czech Invest.

Janicki, H. P. & Wunnava, P. V. (2004). Determinants of foreign direct investment: empirical evidence from EU accession candidates. *Applied Economics*, 36 (5): 505-509.

Jankovic, E. M. & Yatrakis, P. G. (2011). The Financial Setting for FDI Inflows into The Czech Republic and Slovakia. *International Business Research*, 4 (3): p45.

Kose, M. A., Prasad, E., Rogoff, K. S. & Wei, S.-J. (2006). Financial globalization: a reappraisal: National Bureau of Economic Research.

Koyame-Marsh, R. O. (2011). The complexities of economic transition: Lessons from the Czech Republic and Slovakia. *International Journal of Business and Social Science*, 2 (19): 71-85.

Lane, P. R. & Milesi-Ferretti, G. M. (2008). The drivers of financial globalization. *The American Economic Review*: 327-332.

Meldrum, D. (2000). Country risk and foreign direct investment. *Business Economics*, 35 (1): 33-40.

Miklos, I. (1996). *Privatization in Slovakia during 1991-1995*. M.E.S.A 10. Available at: http://www.internet.sk/mesa10/PRIVAT/GLOB95.HTM#1 (accessed: 21.04.2014).

Mileva, E. (2008). The impact of capital flows on domestic investment in transition economies. *Working paper series No 871/ Februar 2008*.

Myant, M. (1989). *The Czechoslovak economy, 1948-1988: the battle for economic reform*. Cambridge: Cambridge University Press. XII, 316 s. pp.

Myant, M. (1993). *Transforming socialist economies: the case of Poland and Czechoslovakia*. Aldershot: Edward Elgar. xii, 297 s. pp.

Myant, M. (1996). *Successful transformations?: the creation of market economies in Eastern Germany and the Czech Republic*. Cheltenham: Elgar. XIII, 267 s. pp.

OECD. *OECD Factbook 2014*: OECD Publishing.

Pelzman, J. (1977). Trade creation and trade diversion in the Council of Mutual Economic Assistance: 1954-1970. *American Economic Review*, 67 (4): 713-722.

Poor's, S. (2014). *Credit Ratings Definitions & FAQs*. www.standardandpoors.com: Standard & Poors. Available at: http://www.standardandpoors.com/ratings/definitions-and-faqs/en/us (accessed: 28.04.2014).

Root, F. R. & Ahmed, A. A. (1979). Empirical determinants of manufacturing direct foreign investment in developing countries. *Economic Development and Cultural Change*: 751-767.

School, IMD Business. (2014). *World Competitiveness*. www.worldcompetitiveness.com. Available at: www.worldcompetitiveness.com (accessed: May 2014).

Slovakia, D. a. L. M. A. (2014). *Rating of the Slovak Republic*. www.ardal.sk: Debt and Liquidity Management Agency Slovakia. Available at:

https://www.ardal.sk/en/economy/rating-of-the-slovak-republic (accessed: 20.07.2014).

Studies, The Vienna Institue for International Economics (2014). *FDI database*. http://www.wiiw.ac.at/. Available at: http://www.wiiw.ac.at/ (accessed: 17.06.2014-24.06.2014).

Šujan, I. & Šujanová, M. (1994). *The macroeconomic situation in the Czech Republic*: CERGE-EI.

Teichova, A. (1988). *The Czechoslovak economy 1918-1980*. London: Routledge. xxiii, 178 s. : ill. pp.

The Economist Intelligence Unit. (2014). The Economist. Available at: www.eiu.com (accessed: 05.03.2014).

The World Bank. (2014). *Metadata*. www.worldbank.org: The World Bank. Available at: www.worldbank.org (accessed: 04.01.14 - 15.08.14).

Åslund, A. (2007). *How capitalism was built: the transformation of Central and Eastern Europe, Russia, and Central Asia*. Cambridge: Cambridge University Press. xvi, 356 s. : ill. pp.

Appendix

Appendix 1.1 Country risk Slovakia

Country risk Slovakia			
Year	**Standard&Poor's**	**Moody's**	**Fitch**
2013	A stable outlook	A2 stable outlook	A+ stable outlook
2012	A stable outlook	A2 stable outlook	A+ stable outlook
2011	A+ Stable outlook	A1 stable outlook	A+ stable outlook
2010	A+ stable outlook	A1 stable outlook	A+ stable outlook
2009	A+ stable outlook	A1 stable outlook	A+ stable outlook
2008	A positive outlook	A1 positive outlook	A+ stable outlook
2007	A stable outlook	A1 stable outlook	A positive outlook
2006	A stable outlook	A1 stable outlook	A stable outlook
2005	A stable outlook	A2 positive outlook	A- stable outlook
2004	BBB+ positive outlook	A3 positive outlook	A- stable outlook
2003	BBB positive outlook	A3 stable outlook	BBB positive outlook
2002	BBB positive outlook	A3 stable outlook	BBB- positive outlook
2001	BBB- positive outlook	Baa3 stable outlook	BB+ positive outlook
2000	BB+ positive outlook	Ba1 positive outlook	BB+ stable outlook
1999	BB+ stable outlook	Ba1 stable outlook	BB+
1998	BB+ negative outlook	Ba1 negative outlook	BB+

Source: KPMG Slovakia, Debt and Liquidity Management Agency Slovakia.

Appendix 1.2 Country risk Czech Republic

Country risk Czech Republic			
Year	**Standard&Poor's**	**Moody's**	**Fitch**
2013	AA-	A1	A+
2012	AA-	A1	A+
2011	AA-	A1	A+
2010	A	A1	A+
2009	A	A1	A+
2008	A	A1	A+
2007	A	A1	A
2006	A-	A1	A
2005	A-	A1	A
2004	A-	A1	A-
2003	A-	A1	A-
2002	A-	A1	BBB+
2001	A-	Baa1	BBB+
2000	A-	Baa1	BBB+
1999	A-	Baa1	BBB+
1998	A-	Baa1	BBB+
1997	A	Baa1	BBB+
1996	A	Baa1	A-
1995	A	Baa1	A-
1994	BBB+	Baa2	-
1993	BBB	Baa3	-

Source: Czech National Bank.

Norges miljø- og
biovitenskapelige
universitet

Postboks 5003
NO-1432 Ås
67 23 00 00
www.nmbu.no