

**RENAISSANCE: ECONOMIC REVIVAL OF CENTRAL AND
EAST EUROPEAN NATIONS**

A

Thesis submitted

In the partial fulfillment of the requirement for the degree of

**MASTER OF ARTS
IN
ECONOMICS
(INTERNATIONAL BUSINESS)**



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June, 2017

CERTIFICATE

This is certify that the thesis entitled “**Renaissance: Economic Revival of Central and East European Nations**” being submitted in partial fulfillment of requirements for the award of degree of **Master of Arts in Economics**, submitted in **the School of Humanities and Social Sciences, Thapar University, Patiala** is a bonafide work carried out under the supervision of **Dr. (Ms.) Ravi Kiran**, Professor & Former Head, School of Humanities and Social Sciences, & Professor In Charge Alumni Relations, Thapar University, Patiala and that no part of this project has been submitted for the award of any other degree.



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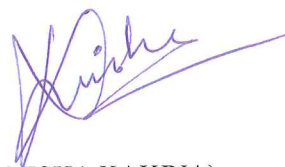
CANDIDATE'S DECLARATION

I hereby declare that the work presented in this thesis entitled, “**Renaissance: Economic Revival of Central and East European Nations**” in partial fulfillment of the requirement for the award of Degree of **Master of Arts in Economics**, submitted in the **School of Humanities and Social Sciences, Thapar University, Patiala**, is an authentic record of my own work carried out under the supervision and guidance of **Dr. (Ms.) Ravi Kiran**, Professor & Former Head, School of Humanities and Social Sciences, & Professor In Charge Alumni Relations, Thapar University, Patiala and refers other researcher's work which are duly listed in the reference section.

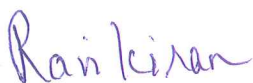
The matter embodied in this thesis has not formed the basis for the award of any other degree of this or any other university.

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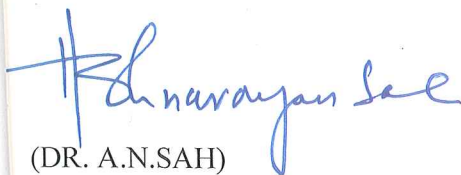
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ABSTRACT

The economic growth rate of selected Central and East Europe (Germany, Hungary, Poland, Croatia, & Slovakia) countries was the high before the great depression of 2007-08. The progress registered by these countries during the tenure between early 1990s till financial crisis was good. Timely implementation of privatization, liberalisation and labour policies strengthened the system and attracted the flow of Foreign Direct Investment which enhanced growth in GDP in selected economies of central and East Europe. These economies struggled to get back to the similar position as they were once after the recession. A few were successful too. To strengthen the economy and increase the annual growth rate (4-5%), remodelling of economic models is the need of the hour. The results highlight that recessionary trends of 2007 had their repercussions on all the selected Central and East European economies. Germany grew at a fast rate compared to others in Gross domestic Product. The results suggest that there is a need to increase the investment levels; expand high value exports and also to augment in FDI inflow. The central and east Europe countries need to build the base for growth levels which includes improvement in infrastructure, fast growing urbanization, regulated policies, encouraging innovation and research and development, investing in high labour skills for succeeding the strategy.

CHAPTER 1

INTRODUCTION

In a short span of time, the economies of Central and East European Countries have been adopting a development path through their transition from central planning to market economy. On the other side the Western European markets had been developed centuries ago. Various reforms are being undertaken for growing. There are divergent opinions in respect of priorities of these economies for enduring the objectives of Central and East Europe countries, yet these are quite similar. This research embarks upon understanding the process of transition of Central and East Europe (CEE) countries by analysing different Gross Domestic Product (GDP); Population; Foreign Direct Investment (FDI); and Net Exports. The countries included in the study are Hungary; Poland; Germany; Bulgaria; Slovakia; and Croatia. The study also analyses the compound annual growth rates (CAGR) taken for the purpose of comparison of these nations. A major portion of the study deals with the multiple regression models to understand the relation of (GDP); Population; Foreign Direct Investment (FDI); and Net Exports with Gross Domestic Product.

This study discusses various impacts of flow of FDI and effect of imports and exports on uplifting of or raising the economy, the role of GDP and population and their relationship which contributes to the economic growth of Central and Eastern Europe countries. The study of these determinants helps in understand the growth transition in Central and East Europe countries.

There is a need to examine whether economic growth is influenced by FDI i.e. how FDI inflows are related with the growth of GDP. Similarly relation of the other variables, viz. population and Net exports with GDP are analysed through multiple regression models. This has been done for understanding the growth aspects of selected CEE economies. This has been observed that reason behind the big transition is due to FDI flows in the central and east Europe countries and also due to changes population and Net exports in the selected CEE nations. Major findings of the analysis are summarized in Chapter 5, Conclusion after highlighting the results in Chapter 4.

Before the recession in 2007, there have been pragmatic shortcomings in the central and east Europe economies that drove their growth strategies. Further, these shortcomings included an unsustainable level of credit borrowings during the period of recession. Through these easy borrowing helped countries like Bulgaria, Romania, and Slovakia from 2000 to 2007. The

impact of the recession came out with such consequences that the percentage of national savings was reduced. The reduced savings had repercussion on investments, decreasing and the level of not only domestic investments, but also reducing investment inflows from other countries. During the period of crisis, those regions that were dependent upon foreign direct investment faced a slowdown in GDP. This study also captures whether these economies recovered after recession. Despite many economies with high flows of FDI, the amount of machinery and technology remains moderate in many sectors of their economy.

Central and East Europe countries were growing at the fastest rate in the world before financial crisis occurred. From the early 1990s until the period of financial crisis, the growth in the Central and East Europe countries was outstanding and there was progress which only a few regions could match. Central and East Europe nations like Germany, Hungary, Poland, Croatia, Slovakia, had performed better in the globalised economy. The industries which were owned by the state got privatized and policies regarding labour were implemented well on time. This helped to strengthen up the system and attract large flow of foreign capital and there was an improvement in productivity through foreign direct investment which further lead to growth in GDP per capita. Although it was the time when the economies like the United States and East Europe were struggling a lot to come back in the same position as they were earlier before the recession started.

The existing economic models need to be modified so that they can be put to better use to augment the annual growth rates to the rates that existed before crisis. The annual growth rate should upgrade by 4-5 percent level. More emphasizes should be given for increasing the domestic savings and investment levels, expanding exports of high value-added and augmenting the inflow of foreign direct investment. The central and east European countries need to focus on improvement in infrastructure, tackle fast growing urbanization, encourage innovation and research and development and invest on developing high labour skills. The strategies need to be more focused and cater to these specified areas.

1.1 Economies

Economy of Hungary:

As per IMF report the Hungarian economy is ranked 57th in the list out of 188 countries in terms of world annual output in billions. There is improvement in rank in the terms of GDP measured by PPP, and it is at 49th rank in the world. It is one of the leading countries in the world in terms of attracting FDI. Hungary also has an edge and is the largest electronic

producer in Eastern and Central Europe. Hungary has registered major growth in the sector of technology, security and research work.

The financial crisis impacted Hungarian economy and it witnessed one of the worst economic conditions in its history during the period of Financial Crisis in 2007-08. Post-2007-08, there were signs of recovery in the economy. This occurred due to decrease in taxes and GDP growth improved after 2011.

Hungary is amongst the countries that are having very low infant mortality rates and has improving life expectancy rapidly. In 2009, it spent a major portion of the GDP on health care services. It is a favourite destination for foreign investors of automobile industry, which constitutes 17%, of the total exports. It enjoys the status of an upper middle-income economy. Trade has been considered as a most important factor of the economy and exports and imports equal 171% percentage of its GDP. High focus on trade and health are the important features of Hungarian economy.

Economy of Poland:

The current Polish economy stands on 6th rank and is considered as the largest economy among the member countries of European Union. It was the only economy in the entire European Union which sustained itself during recession period. It is a liberalized economy.

According to World Bank report, Poland is a high-income economy. It has been ranked 20th in the world in terms of GDP. The prime sector in its economy is the service sector (62.3%), followed by agriculture (35.1%). Trade has played an important part in the development process and exports and imports constitute 96 % percentage of GDP. The major export items are: Plastics, furniture, automobile, electronic goods.

Poland is the founding member of WTO. Since 2010, it has registered itself as the fastest growing economy in the entire Europe as the growth was rapidly increasing in this economy.

Economy of Germany:

The Germany economy is the largest and fastest growing economy in Europe, and also stands at 4th rank in terms of nominal GDP in the world. It is the founding member of Euro Zone and the European Union. It follows a social market economy base system.

In 2016, Germany recorded a high trade surplus in the world and was considered as biggest capital exporter globally and was ranked as third largest exporter of goods and services. In total GDP share, 70% is contributed by the service sector, 29.1% by industry and 0.9% by agriculture. There is predominance of service sector.

Germany is known as one of the world's most powerful and dynamic economies. The strongest parts are business and investment fields. In German economy, trade constitutes 86%

of its GDP. The traditional three-tiered system of banking sector consists of Private, Public and Cooperative banks. A range of services is offered by the well-functional and modern financial sector.

Economy of Bulgaria:

The Bulgarian economy is a free market economy, where private sector is the dominating sector. There is a low reliance on the public sector. Bulgaria enjoys the status of an industrialized upper middle-income economy. There is rapid economic growth in recent years. The GDP of Bulgaria is \$143.1 billion (2016).

Bulgaria has invested a lot to attract the foreign direct investment. During the depression period, it registered a decline in the economy, but overcame that and it recovered quickly and had positive growth levels. However, in the following years, it could not sustain the growth and the GDP levels.

The strongest sectors which boosted its economy are: Energy, mining, agriculture, tourism. Clothing, iron, and steel are its primary industrial exports. Substantial restructuring facilitation has made the Bulgarian economic system more flexible. The public debt level is lowest with declining budget deficits. In Bulgarian economy, enhanced focus is on trade has and exports and imports equal 131% percentage of GDP. Since 2014 the banking sector regained the stability, although nonperforming loans level remains high. More than 70% of total assets are accounted by foreign banks.

Economy of Slovakia:

The Slovakian economy is labelled as the “Tatra Tiger”. In 2004, Slovakia became the member of EU state and adopted the Euro in the beginning of 2009. It is a free market economy having the GDP Rank of 64 in terms of PPP (2012). It obtained the highest growth in GDP among members of OECD in 2007, with the reported level of 14.3%. GDP growth was 2.4% (2014) which further grew to 3.6% in 2015. The GDP of the country measured by purchasing power parity in 2016 is \$159.6 billion.

Recently, Global trade and investment were open in the economy, facilitated by improvements in regulatory efficiency to facilitate its transition to a market-based economy. There has been seen some recent changes including a reduction in the corporate tax rate from 22% to 21%. There is a need for continuous transformation to capitalized system and broadening the production level.

In Slovakian economy, trade is considered as the most important factor which evaluates exports and imports. Trade is 185% percentage of its GDP. There is a strong presence of foreign banks as most state-owned banks have been sold. Capital markets remain relatively

small. Excessive reliance on trade, presence of foreign banks, focus on regulatory efficiency and reduction in the corporate tax are important features of Slovakian economy.

Economy of Croatia:

The Croatian economy is a service-based economy. Services share is 70% of its GDP. It changed to the market-based economy, after the socialism phase ended, and went through worst conditions at the time of independence. Various economic and social opportunities were improved and the economy began to progress and started to grow, although the growth was meagre and not very high.

Industrial sector is a dominating sector with exports of over 1 billion euro. Significant portions of industrial output and exports are accounted by food processing and chemical industry. Industrial sector contributes 27% and agriculture sector contributes only 6% of total economic output. A major contribution is made by industrial sector and the remaining portion is accounted by agriculture, forestry, and fishing.

In Croatian economy, trade constitutes 96.5% of its GDP. There is a relatively well capitalized and stable banking sector. Despite this nonperforming loans still remain a problem.

The neighbouring countries of Croatia are more forward in economic structure policies and entrepreneurial growth development. There have been limited fiscal reforms. There is a volatile political system, with wide prevalence of corruption, and weak property protection rights. Excess reliance on service sector, strong focus on trade, low focus on TRIPS, instable political system are the important features of Croatian economy.

CHAPTER 2

LITERATURE REVIEW

In emerging countries, economists focus to achieve soaring and sustainable economic growth. European economies were in transition phase, shifting from controlled economy to free, liberalised economy, some economies in the phase of transition from socialism to capitalism. In all transition countries, the significant output declined due to the absence of a central planning system, followed by poor allocation of resources into the productive sectors, and in complete reforms at the commence of the transition process.

Though there were similarities in the economic system of these switching countries, however, features of these economies differed in the implementation time of transition. The negative growth trend level and recovery period also differed. The main reasons behind this were different hereditary initial conditions and the speed of reforms.

The progression seen in the countries considerably in structural and stabilization reforms in the initial period of evolution not only improved the decline in output, but also helped in achieving increased growth after 1989 in CEEC. CEEC were first in the process of associating themselves with the European Union (EU). They also practiced enhanced macroeconomic performances than other countries, such as the Former Soviet Union (FSU). The variety of hypothetical models resulted in a variety of variables as prospective growth determinants in the empirical literature.

Barro (1991, 1996) took a study which focused on economic growth determinants in central and East Europe countries. His study basically highlights a negative relationship between economic growth and real GDP, given the level of other variables. He further brings forth the idea of neoclassical growth model, as it supports his study. Moreover, the economic growth is encouraged by the privileged level of schooling and life expectancy, inflation, trade motives and government spending.

Levin and Renelt (1992) took a study based on economic growth issues. From the improved or amplified Solow model, the findings based on study suggested that there is a negative relation between the growth of population and GDP growth levels. There was a positive resonance of investments in fixed and human capital.

Further, the above studies were used in various other research papers for computing GDP growth rates. Various factors influence the economic growth of central and east Europe countries. There have been different samples used in the former studies, time periods and

research methodologies are different. Different studies covering different factors and different aspects are explained. However, the studies do suggest a negative relationship.

Fischer (1996) suggested that those Central and East Europe countries that achieved macroeconomic stability and undertook deeper reforms grew at a fast rate. But the study also found that country-specific things turned out to be extremely significant. There were some differences in cross-country analysis that were not captured by the explanatory variables used in the study.

Havrylyshyn (1998) and Berg (1999) opined that macroeconomic stabilization, structural modification and decline in government expenditures are means to achieving sustainable development in CEECs. These studies also confirm that even though adverse primary circumstances adversely impacted growth, but their consequences were small compared to other factors. While screening some weakness to the model requirement, the results point out the superiority of structural reforms over both primary conditions and macroeconomic variables in clearing up cross-country differences in performances and the period of recovery. De Melo (2002) gives a biased setback of the conclusions of the earlier studies. The major finding is that primary conditions or initial value and various economic policies jointly resolve the large differences in economic performance of the CEECs. The initial conditions lead to explain inflation, but economic liberalization is considered as an important factor shaping differences in growth. Political Restructuring emerges as the most vital determinant of economic liberalization'.

Falcetti (2002) found that the period in 1989-1999 consisted of reforms and focussed on understanding their impact on growth. The policy challenges are changing but, the involvement of economic liberalization and privatization to growth was not yet firm and certain. The results of the study suggest that untimely reforms are not enough by themselves to cause sustainable growth and prosperity.

Radulescu and Barlow (2002) find a vigorous relationship between inflation and growth in CEECs. A considerable lasting effect of liberalization on growth was not found. This brings out the uncertainty on previous pragmatic studies and the lasting benefits from liberalization become oblique. Further, it also brings out the suspicion effect of exchange rate policies and fiscal reforms on growth.

Falcetti (2006) found a positive correlation between development in market-oriented reforms and cumulative growth in European countries. Conversely, in the recent years, some less progressive countries have grown robustly. Darvas (2010) suggested that there existed a

break in the data series, of earlier estimated results by different studies using different models. This showed vivid consequences, as far as the constraint estimates were concerned.

Mateju (2002) suggested social capital as an important capital for Central and East European countries. However, social capital is to be examined cautiously at the individual level, as it relates to the positions of the individual in the social formation and to the amount of political capital one has.

Pahl (2000) also highlighted the importance of social capital in casual networks, but suggested that a different form of it that has some positive results and this was based on “Friendship”. Though he warned, that casual social networks’ in terms of friendship in Russia and China is not necessarily to be welcomed. The particular source on which people can rely on is social capital.

Kolankiewicz (1996) introduced social capital networks into the field. Study of these social capital networks showed some changes in the process and helped to achieve the goals and became successful in the adaptation of different market situations. He concluded that introduction of social capital was necessary which helped the individuals to attain control and changes in CEECs are influenced by it. The success of switching process in CEECs depended upon social capital networks and assets convertibility.

Raiser (2001) discussed the social capital as a cultural occurrence representing the level of civic-mindedness within a society and the trust in public institutions. Although studies highlight that social capital in CEECs is moderate and even there was a decrease in it in comparison to other countries.

Different studies covered different aspects as far as growth of CEECs is concerned. Some focussed on Social capital, many studies focus on savings, and foreign investment. There are a few focusing on trade and exports. There is a need to study the features that influence GDP and hence, the present study is trying to examine the impact of population, net exports and Foreign direct investment on growth. The study also will focus on year in year (YoY) growth rates to examine the impact of recession. Compound annual growth rates for the entire period will also be examined for comparison of selected economies of CEECs.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

In this chapter, the framework and research methodology to be employed are explained. It begins with defining the objectives of research in section 3.1. This is followed by the description of the research variables in section 3.2. Research design and methods are covered in section 3.3

3.1 OBJECTIVES OF THE RESEARCH

The study has been undertaken with the following broad objectives:

Objective 1: To examine the global competitive index of the countries.

Objective 2: To determine the relationship of GDP with population, FDI and Net Exports.

Objective 3: To identify the emerging countries based on the growth rates.

3.2 VARIABLE IN THE STUDY

In this study annual data of central and east Europe countries has been taken from bluenomics. The data have been taken for financial year from 1999-2000 to 2015-16. The data of the variables like GDP, Population, FDI (Foreign direct investment), and Net Exports of selected countries of Central and East Europe have been used for analysing growth.

The major variables used in the study are briefly explained:

GDP:

The gross domestic product (GDP) is one of the major indicators used to estimate the strength of economy of the country. The sum total value of all goods and services produced over a specific period of tenure is represented by gross domestic product. GDP includes all private and public spending, government outlays, investment and Net exports that occur within a defined province. In a broader view, GDP is a broad dimension of a nation's largely economic activity. GDP can be calculated by the formula:

$$\text{GDP} = \text{C} + \text{G} + \text{I} + \text{NX}$$

Where,

C = all private spending or consumer spending

G = the sum of government spending

I = the sum of all country's investment including businesses capital outgoings

NX = Exports – Imports.

Population: The total number of live births per 1000 of a population in a year is called population rate. Population of a country doesn't remain same. It will either increase or

decrease with time. It is also considered as an indicator to measure the development of the country.

Exports:

Export means shipping of the goods and services out of the jurisdiction of a country. An export is a function of international trade whereby goods produced in one country are shipped to another country for future sale or trade.

Imports:

An import is a good brought into a jurisdiction, especially across a national border, from an external source. The party bringing in the good is called an importer. An import in the receiving country is an export from the sending country.

Net Exports is equal to exports minus imports.

FDI (foreign direct investment):

According to IMF definition, “FDI is the category of international investment that reflects the objective of obtaining a lasting interest by a resident entity in one economy in an enterprise resident in another economy”. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the investor on the management of the enterprise. It consists of equity capital, technical and managerial services, capital equipment and intermediate inputs and legal rights to patented or secret products, processes or trademarks.

3.3 RESEARCH DESIGN AND METHODS:

With a view to accomplish the stipulated set of objectives of the study, the growth rate of important variables are being covered by the study and variables are GDP, Population, Net exports, and FDI flows.

As the study relates to time series, it is quite possible to notice different trends. The growth in various years has been analyzed with the help of year on year growth calculated in Excel. The cumulative growth rate has been calculated as under:

Cumulative growth rate= Growth (known_y's, [known_x's],[new_x's],[const]).....(i)

Multiple regression models have been used for predicting the value of variables based on the value of other variables.

The relationship of GDP with variables like (p), (X) and (I) can be represented by an equation of the following form:

GDP = f (POPULATION (p), FDI (I), NET EXPORTS(X)

Y= f (p, X, I).....(ii)

Where $Y = \text{GDP}$

$P = \text{Population}$

$X = \text{Net Exports}$

$I = \text{Foreign Direct Investment}$

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

The purpose of the research is to analyse the performance of the selected countries of Central and East Europe. The data of different variables which affect the countries GDP has been collected and analysed for the time period (1998-2016). The growth rates (YOY) of different countries have been calculated and analysis has also been done with the help of multiple regression technique, to find out the relation of GDP with population, FDI, Net exports.

Various year on year growth rate have been calculated for each country. Further cumulative growth rates have also being calculated of all the variables, viz. GDP, Population, Net exports and FDI.

4.1- PERFORMANCE OF HUNGARY

Hungary: GDP Scenario

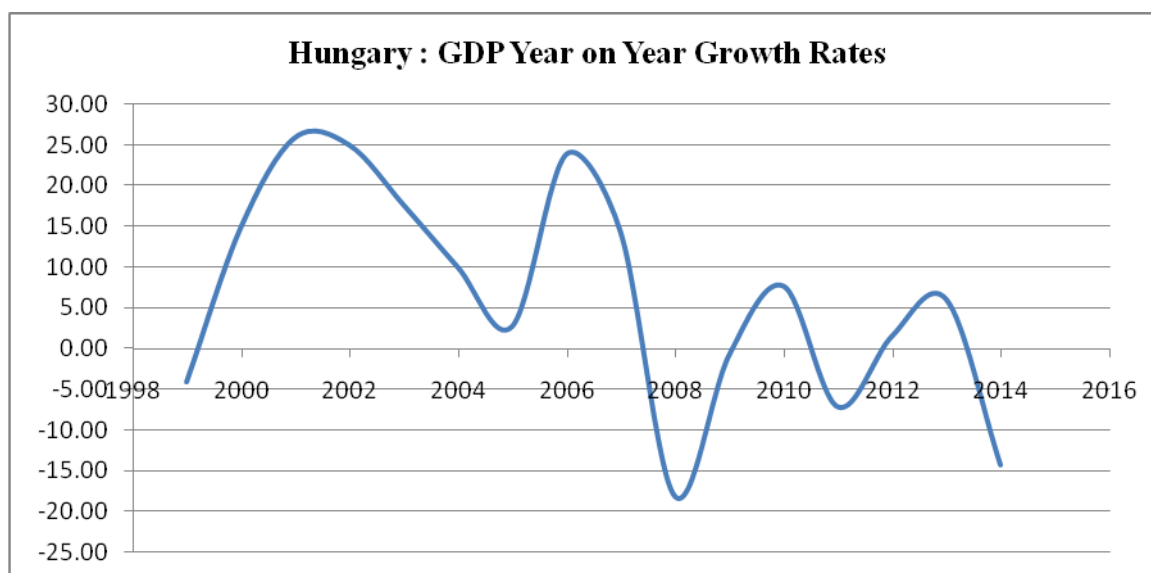


Figure 4.1 a: Hungary GDP Growth Rates

GDP of Hungary as shown in figure 4.1 a increased from 1999 to 2001 and the growth rate was 25.93 in 2001 which is positive, but then it started declining from 2002 to 2005. When the growth rate for year on year is calculated, the growth of the period before recession 2007-08 is more and is positive i.e. 14.29, as compared to the growth of the period during recession 2008-09 i.e. -18.13. The impact of the recession is reflected also on unemployment and consumer sentiment, even higher than the indicators of GDP decline. There was massive increase in unemployment and decline in demand, which lead to further decline in GDP.

Hungary: Population Status

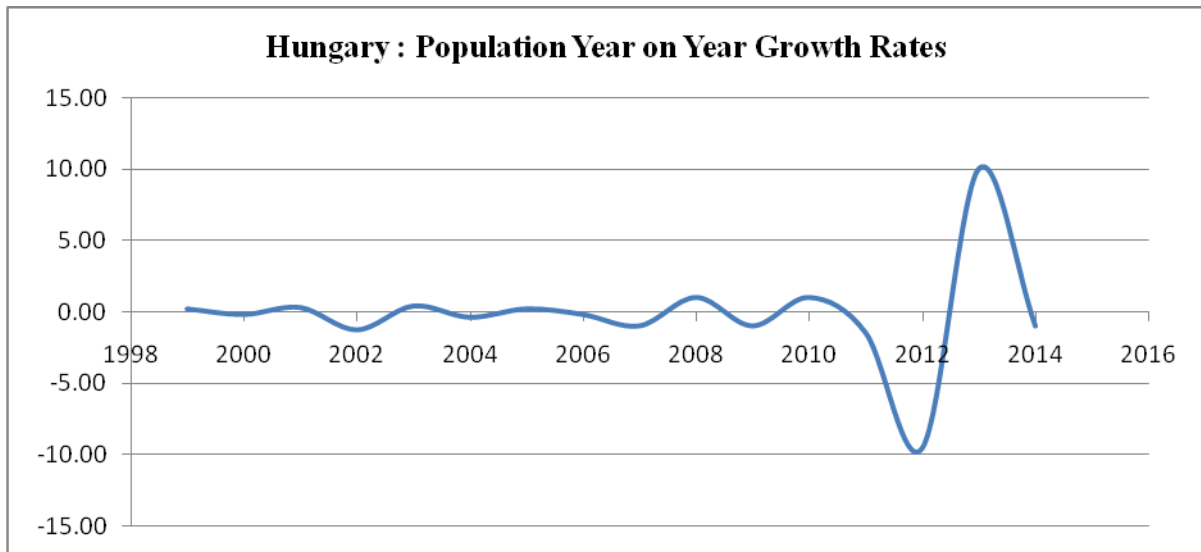


Figure 4.1b Hungary Population Growth Rates

Hungary's population (figure 4.1 b) rate fluctuated from 1999 to 2005-06. There was a massive decline in the population rate in 2012 and it is -9.55. This occurred due to decline in the fertility level among women. Hungarian birth rate was also affected in this period due to changes in the social system. Then the era came with a huge change in the population growth. The population growth increased at an exponential rate in 2013.

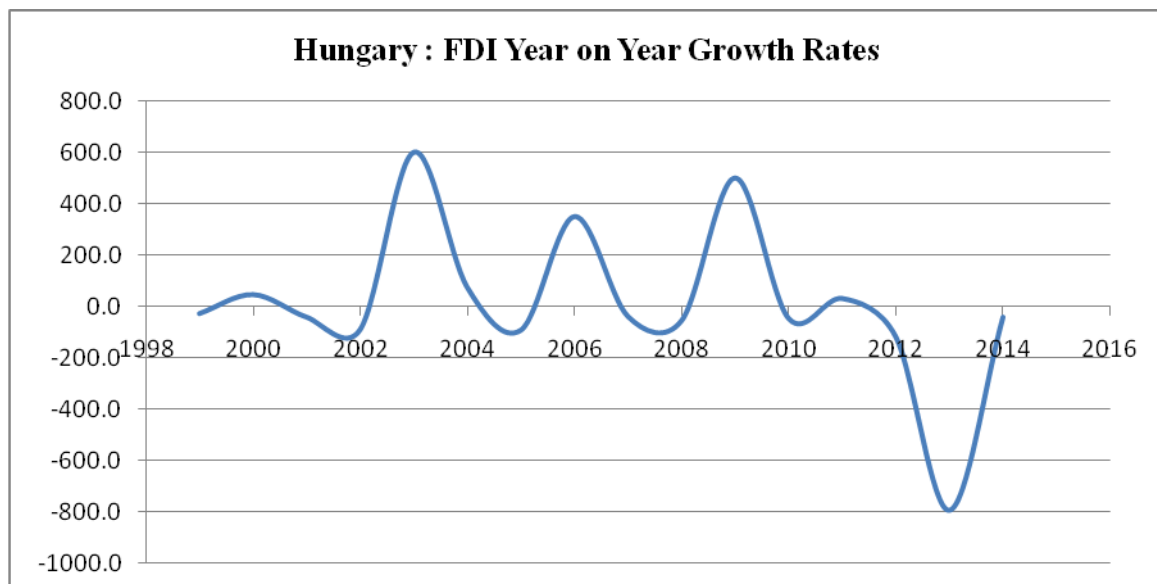


Figure 4.1 c: Hungary FDI Growth Rates

The flow of FDI as depicted in figure 4.1 c in Hungarian economy was highest in 2003 and further it increased and decelerated alternatively and in 2013 there was a massive decline in the inflows due to the financial crisis and slowly it started recovering in 2014. The great

depression phase (2008) has made the country enter into the downturn, which has made its condition worst in economic terms in its history. With decrement in the rate of taxes, there was an improvement in the economic growth and modest 1.7% GDP growth was restored in 2011.

4.2 HUNGARY: RELATION OF GDP WITH POPULATION, FDI AND NET EXPORTS

Regression results for Hungary are given in table 3.3a, 3.3b and 3.3c.

$$GDP = f [POPULATION (p), FDI (I), NET EXPORTS(X)]$$

Table 4.2 a: Model summary Results for Hungary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.708 ^a	.501	.468	.02565	
2	.820 ^b	.672	.625	.02153	1.633
a. Predictors: (Constant), HFDI					
b. Predictors: (Constant), HFDI, H Net Exports					
c. Dependent Variable: HGDP					

As given in Table 4.2 a the proportion of total variation in GDP is explained by variable FDI and Net Exports jointly given by the coefficient of determination which is denoted by R Square. 67.2% of the variation in GDP is explained by FDI and Net Exports jointly. The adjusted R-squared is a customized edition of R-squared that has been adjusted for the number of predictors in the model. In this model adjusted R square is 62.5% which states independent variables FDI and Net exports explains 62.5% variation in GDP. In this model, if only one variable i.e. FDI is taken then adjusted R Square comes out to be 46.8 %. And when along FDI and Net exports are taken, then adjusted R Square increased to be 62.5%.

Table 4.2b: ANOVA Results for Hungary

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.010	1	.010	15.064	.001 ^b
	Residual	.010	15	.001		
	Total	.020	16			
2	Regression	.013	2	.007	14.334	.000 ^c
	Residual	.006	14	.000		
	Total	.020	16			

a. Predictors: (Constant), HFDI
b. Predictors: (Constant), HFDI, H Net Exports
c. Dependent Variable: HGDP

F statistics as shown in table 4.2 b is used when statistical models are compared that have been fitted to a data set, in order to identify the model that best fits to the data which were sampled. If the P value for the F-test of an overall significance test is less than your significance level, we can reject the null-hypothesis and conclude that the model provides a better fit than the intercept-only model. In this model, F-statistics is 14.33 which states that that the model is acceptable.

Table 4.2 c: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.140	.010		13.801	.000
	HFDI	-.001	.000	-.708	-3.881	.001
2	(Constant)	.128	.010		13.509	.000***
	HFDI	-.001	.000	-.495	-2.875	.012*
	H Net exports	.004	.001	.465	2.700	.017*
a. Predictors: (Constant), HFDI						
b. Predictors: (Constant), HFDI, H Net Exports						
c. Dependent Variable: HGDP						

*** p<0.01, ** p<0.05, * p<0.1

Table 4.2c presents the Regression Coefficients. When FDI decreases by 1%, keeping the net exports constant, GDP decreases by .001%. When net exports increase by 1%, GDP increases by .004%, when FDI is kept constant. Further t-test or t statistics shows if the calculated value is greater than the critical value. In this model, T-statistics is 2.875 for HFDI and is 2.700 for net exports. Thus, both the variables are included in the model.

4.3 PERFORMANCE OF BULGARIA

Bulgaria: GDP Status

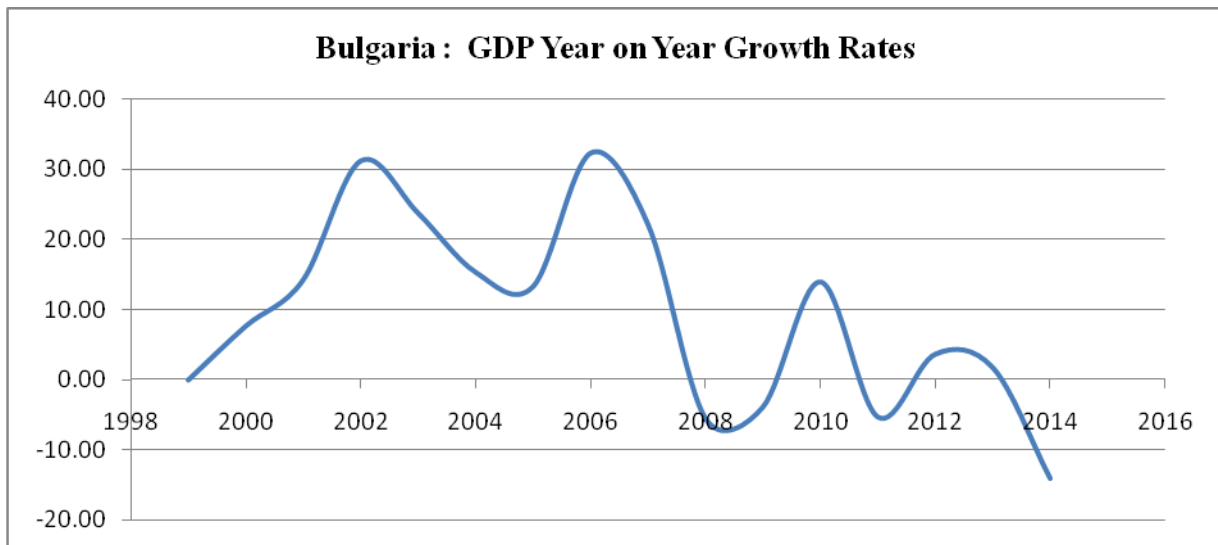


Figure 4.3 a Bulgaria: GDP Status

Status of Bulgarian economy is shown through figure 4.3 a. As a growing economy, Bulgarian GDP continued to increase from 1999 till 2002. During the great depression period, there was a noticeable decline in its economy but the growth rate was restored and it accelerated and was positive in 2009. However, in the following years, the growth continued to be weak and there started a downward spiral trend in 2014.

Bulgaria –Population Scenario

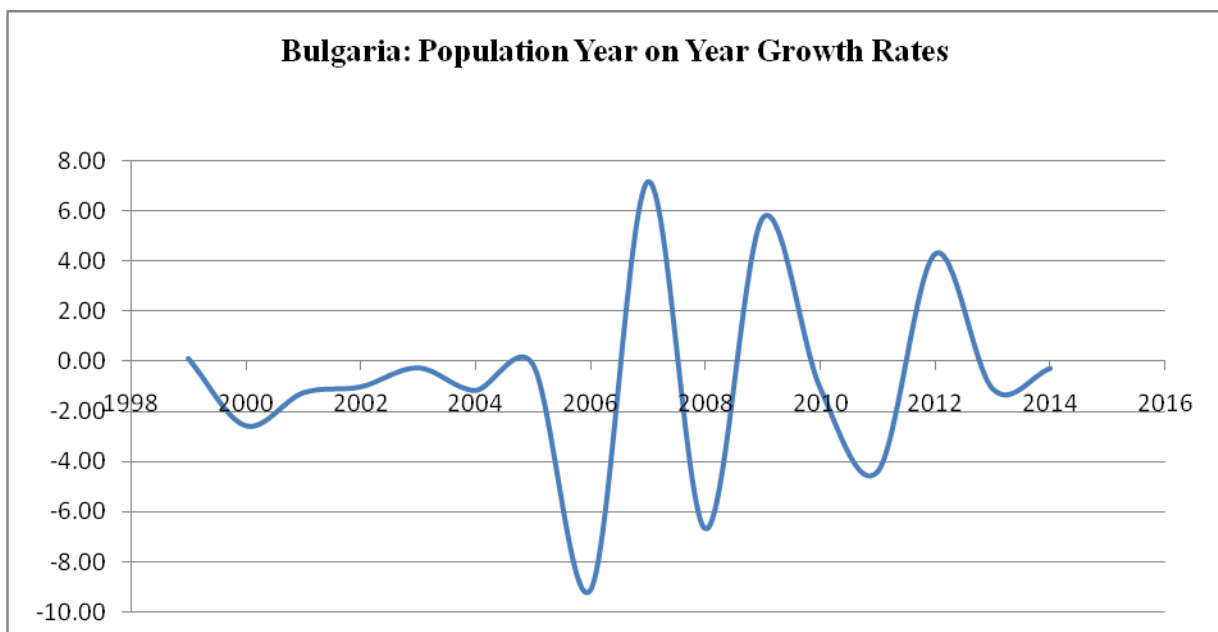


Figure 4.3 b: Bulgaria-Population Year on Year Growth Rates

Figure 4.3 b depicts the Population Year on Year Growth Rates of Bulgaria. Bulgaria has also faced a decline in population due to demographic crisis in 2006-07. This has been endorsed to decline following an economic disintegration in 2000. Because of that Countless people left the country by 2005-06. It faces low fertility rate of 1.432 with a birth rate which is considered as the lowest rate in the world in that period. In 2006 it touched the growth rate - 9.09 and slowly recovered and in 2014 the growth rate is -0.28.

Bulgaria: Net Exports scenario

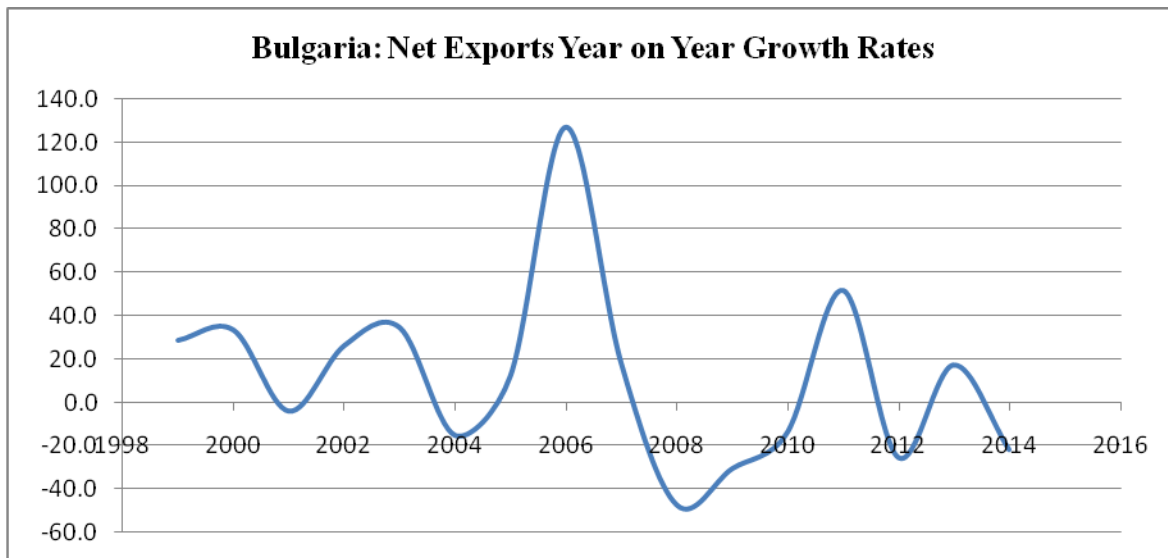


Figure 4.3 c- Bulgaria: Net Exports Year on Year Growth Rates

The net export growth rates of Bulgaria are shown through Figure 4.3 c. The growth rates show an increasing trend from 1999 to 2003-04. After that, there came a boom in net exports of Bulgaria in 2006 with the growth rate of 127 points. During the great depression period, net exports rate down fall to negative values and Bulgaria faced a liquidity crisis. Bulgaria mostly depended upon Russian imports due to which it faced fall down in 2011-12.

Bulgaria: FDI Status

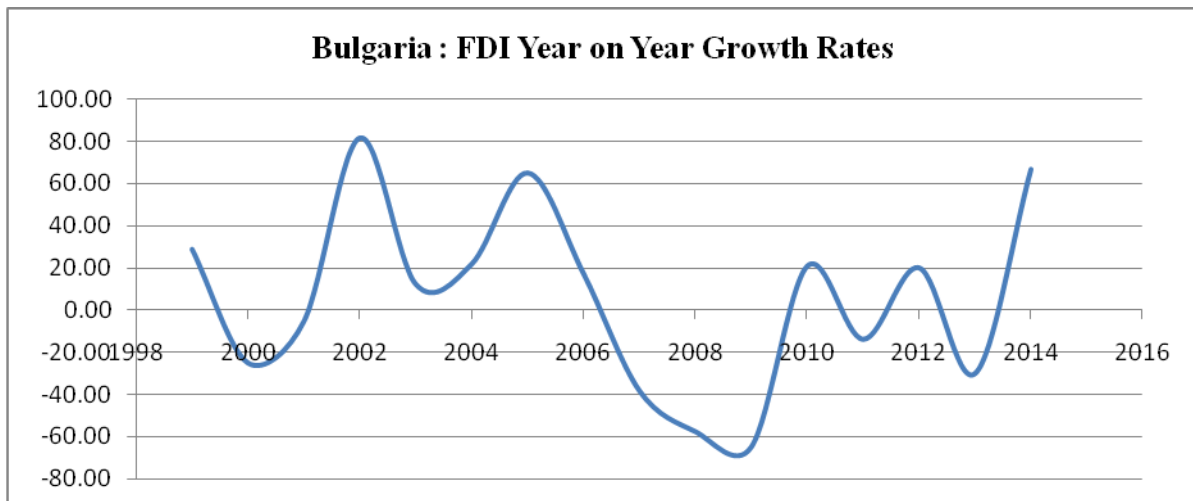


Figure 4.3 d - Bulgaria: FDI Year on Year Growth Rates

Bulgaria (Figure 4.3 d) has done hard work to pull towards the amount of foreign direct investment. During the great depression period, the economy of Bulgaria marked a decline in its economy and the value comes out in negative in 2009 but they restored positive growth levels very quickly in 2010. However, in the following years, the growth continued to be weak and pre-crisis level goes up. The recovery period started again reaches the boom in 2014.

4.4 Relation of Bulgaria GDP with Population, Net Exports and FDI

Regression results for Bulgaria are given in table 4.4 a, 4.4 b and 4.4 c.

Table 4.4 a: Model summary Results for Bulgaria

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.881 ^a	.777	.762		.00933	2.820
a. Predictors: (Constant), B P						
b. Dependent Variable: b GDP						

As given in Table 4.4 a the proportion of total variation in GDP is explained by a variable population which is denoted by R Square. 77.7% of the variation in GDP is explained by population. In this model adjusted R square is 76.2% which states independent variables (population) explains 76.2% variation in the dependent variable (GDP).

Table 4.4 b: ANOVA Results for Bulgaria

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.005	1	.005	52.223	.000 ^b
	Residual	.001	15	.000		
	Total	.006	16			
a. Dependent Variable: b GDP						
b. Predictors: (Constant), B P						

Results of ANOVA are given in Table 4.4 b. If the P value for the F-test of an overall significance test is less than your significance level, you can reject the null-hypothesis and conclude that your model provides a better fit than the intercept-only model. In this model, F-statistics is 52.22 which states that that the model is acceptable and significant.

Table 4.4 c: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.351	.043		8.099	.000
	B P	-.041	.006	-.881	-7.227	.000***
a. Dependent Variable: b GDP						

*** p<0.01, ** p<0.05, * p<0.1

Results for regression coefficients are shown through table 4.4 c. The results indicate that when population decreases by 1%, keeping the other variables constant, GDP decreases by .041%. Further t-test or t statistics shows if the calculated value is greater than the critical value. In this model, T-statistics is 7.22 for the population. Thus, the variable is included in the model.

4.5 PERFORMANCE OF CROATIA

Croatia: GDP status

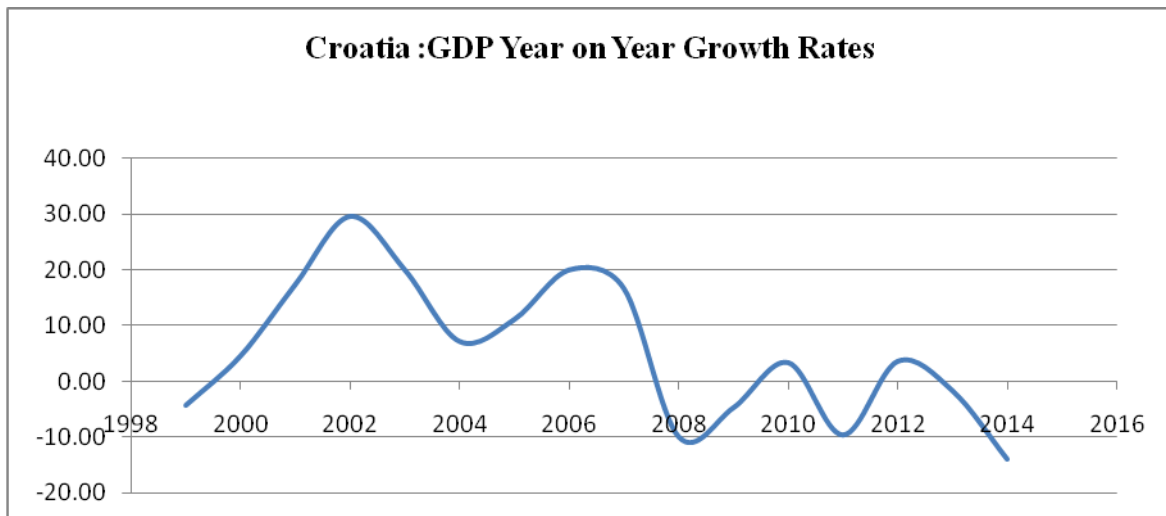


Figure 4.5 a –Croatia GDP year on year growth rates

Figure 4.5 a depicts the GDP year on year growth rates of Croatia. The tertiary sector accounts for 70% in total GDP and Croatian economy is service based economy. After the disintegration of socialism, Croatia went through a process of evolution to a market-based economy, but the economy was in unfavourable circumstances. After the financial crisis of 2007-08, the economy began to improve, there was an increase in GDP on annual basis (4-5%) which resulted in doubling the incomes, as, economic and social opportunities vividly enhanced. Croatia was badly affected by financial crisis during the depression period and showed slow economic growth. In fact it resulted in six years of recessionary trends.

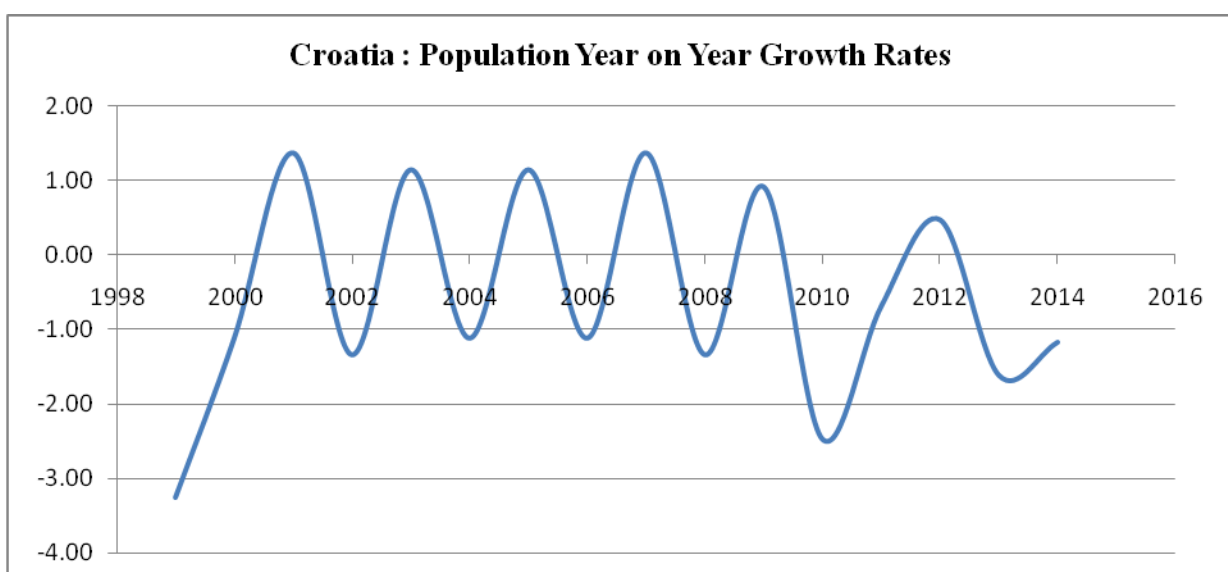


Figure 4.5 b- Croatia: Population Year on Year Growth Rates

Figure 4.5 b showed the Population Year on Year Growth Rates of Croatia. The fluctuations in population growth rates are due to low birth rates. The impact of this was that people started leaving the country and shifting to other countries. In 1999 there was a huge decline in growth rate and after that, it started to become stable. The demographic conditions were badly affected.

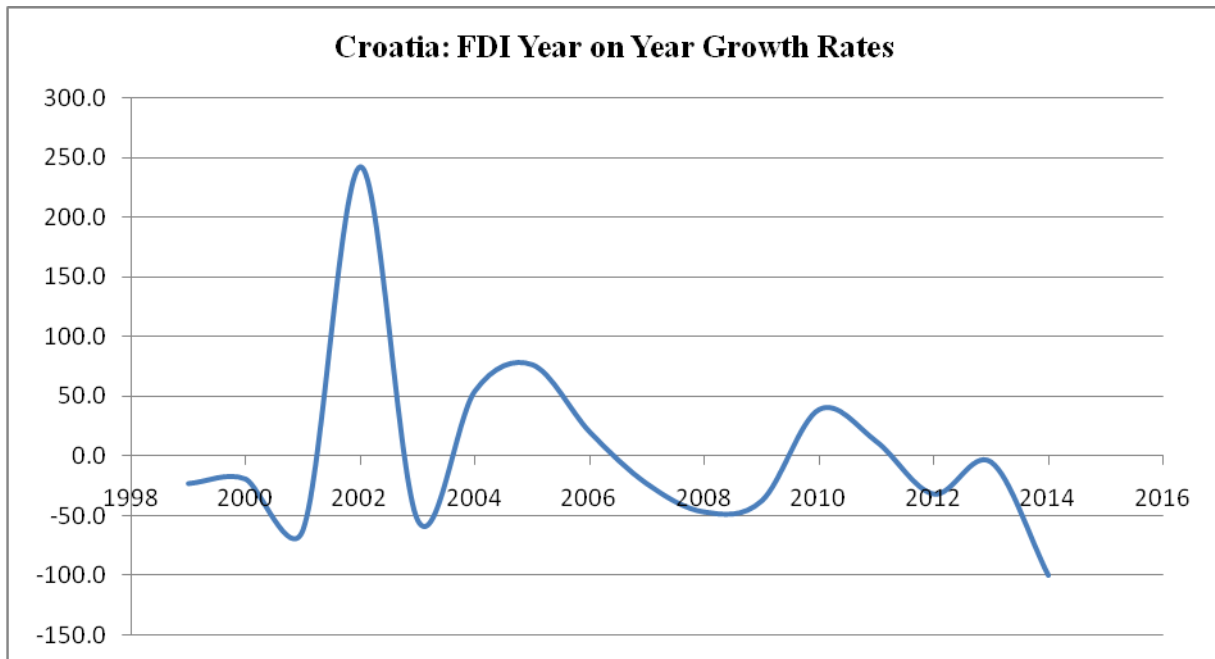


Figure 4.5 c- Croatia: FDI Year on Year Growth Rates

Figure 4.5 c highlights the FDI Year on Year Growth Rates Croatian economy. FDI was attracted by Croatian economy till 2002 and after that it slowly started decreasing. During the recession period of 2007, there was a big down fall in FDI flows which affected the entire economy very badly. Due to the financial crisis, there were fluctuations in the flows of foreign direct investment.

4.6 RELATION OF CROATIA GDP WITH POPULATION, NET EXPORTS AND FDI

Regression results for Croatia are given in table 3.3i, 3.3j and 3.3k.

Table 4.6a: Model summary Results for Croatia

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.518 ^a	.268	.164		.01500	.560
a. Predictors: (Constant), C FDI, C P						
b. Dependent Variable: c GDP						

As given in Table 4.6a the proportion of total variation in GDP is explained by variable FDI and population. Both jointly explain only 26.8% of the variation in GDP. Thus variation in GDP is explained by FDI and population jointly. In this model adjusted R square is 16.4% which states independent variables FDI and population explain 16.4% variation in GDP.

Table 4.6 b: ANOVA Results for Croatia

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.001	2	.001	2.568	.112 ^b
	Residual	.003	14	.000		
	Total	.004	16			
a. Dependent Variable: c GDP						
b. Predictors: (Constant), C FDI, C P						

Table 4,6 b shows the ANOVA Results for Croatia. In this model f statistics is 2.56 and the P value for the F-test of an overall significance test is more than significance level. Hence the model is not acceptable because it is not significant.

Table 4.6c: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.523	.216		2.424	.029
	C P	-.110	.050	-.625	-2.186	.046**
	C FDI	.000	.000	.238	.834	.419
a. Dependent Variable: c GDP						

*** p<0.01, ** p<0.05, * p<0.1

As shown in table 4.6 c, when FDI changes, keeping the population constant, there is no change in GDP. When population decreases by 1%, GDP decreases by 0.11%, when FDI is kept constant. Further t-test or t statistics shows if the calculated value is greater than the critical value. In this model, T-statistics is 0.834 for FDI and is 2.186 for the population. Thus, only population variable is included in the model as FDI is not significant for the model.

4.7 PERFORMANCE OF GERMANY

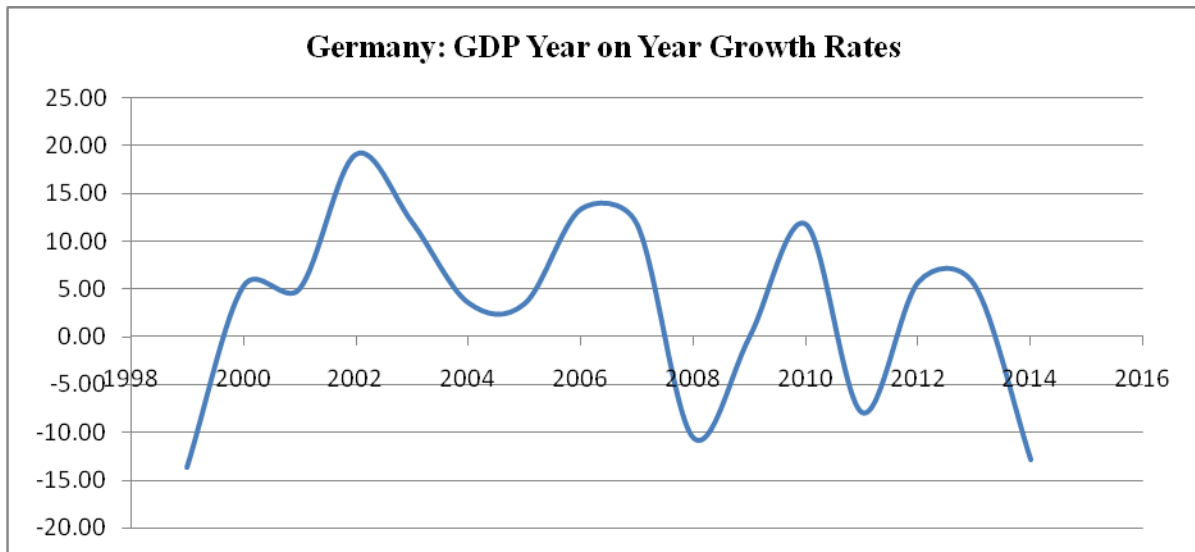


Figure 4.7a- Germany: GDP Year on Year Growth Rates

Figure 4.7a depicts GDP Year on Year Growth Rates of Germany. Being the strongest economy in European nation GDP growth was positive, but in the recession period 2007-08 there was down fall with -10.53 growth rate and then it increased quickly from 2010 and further again suffered downtrend in 2014.

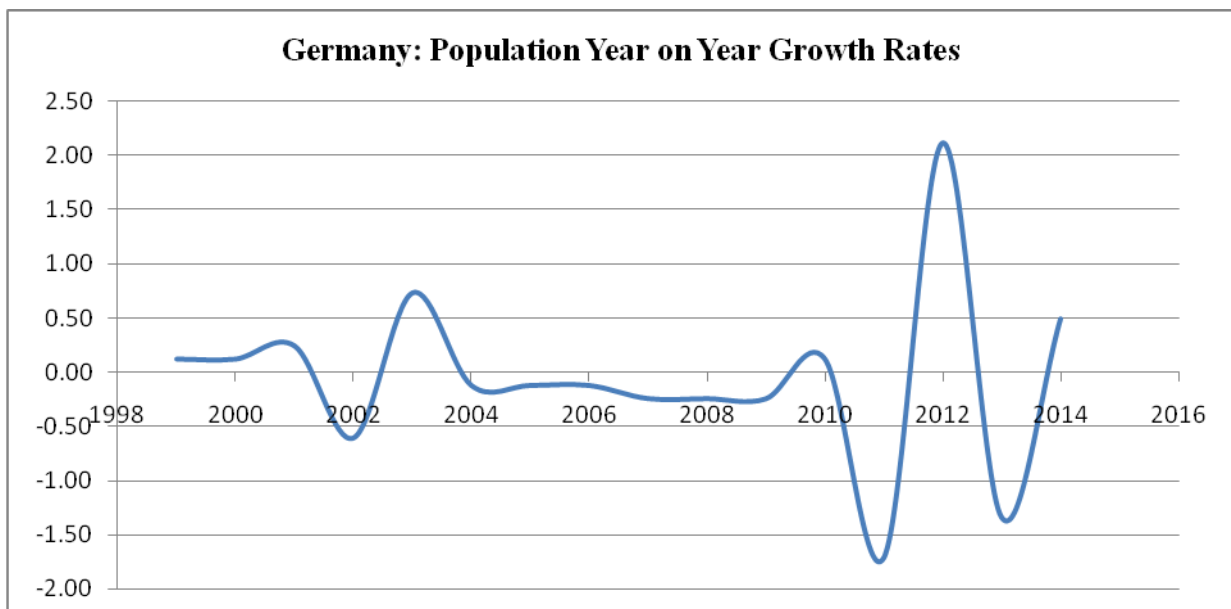


Figure 4.7b- Germany: Population Year on Year Growth Rates

In Germany, people don't prefer to have more children and most people avoid marriages. This is a major cause for the decline in the population of Germany. The population growth rate is low. And there was a deceleration in 2011, when it fell to -1.71. However there was a

upward trend in 2013, again it fell in 2013 and trend reversed in 2014. The highest growth was observed in 2012.

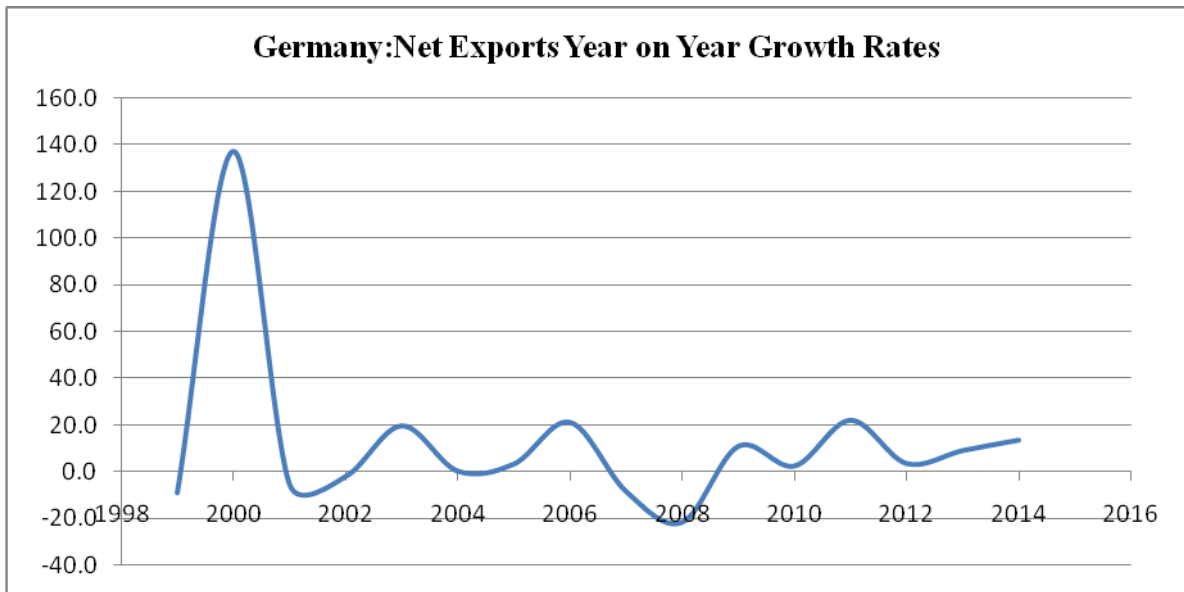


Figure 4.7 c -Germany: Net Exports Year on Year Growth Rates

Germany's net exports (Figure 4.7 d) were in the boom and at peak in 2000. After that there it plunged in one year to -5.5 growth rate. During great depression in 2007-08 net exports fell down to -21.8 growth rate. Further, it accelerated and was positive till 2014.

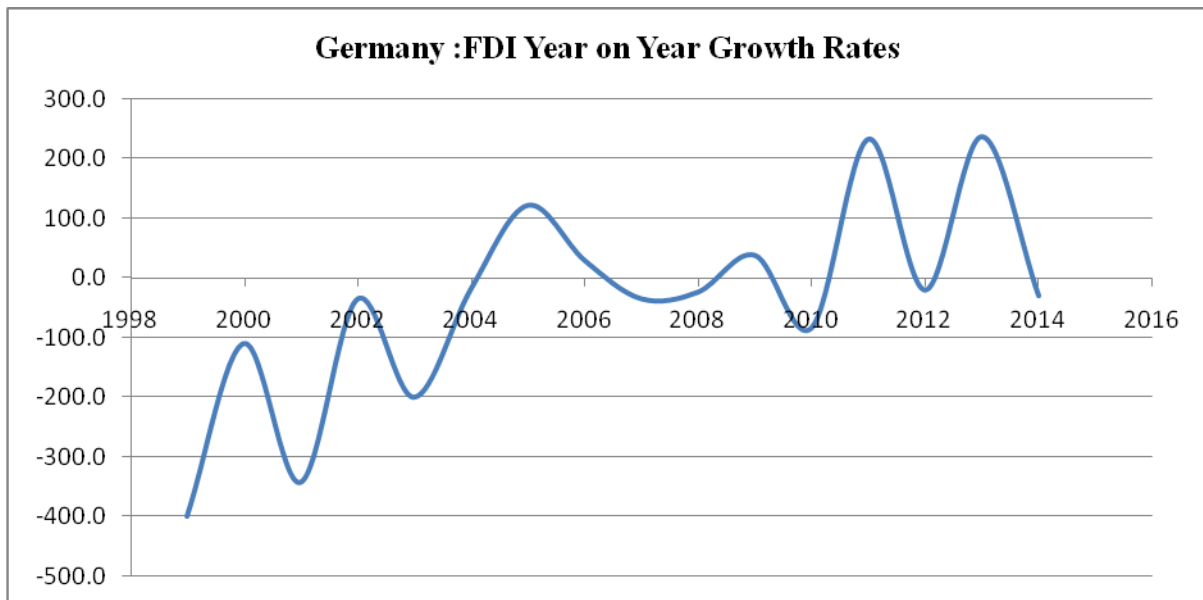


Figure 4.7 d -Germany: FDI Year on Year Growth Rates

Germany is known as one of the world's most influential and vibrant economies. The strongest reason for this is business freedom and investment freedom. Being the leading

manufacturing economy in Europe, Germany is less affected by the pecuniary slump and there are low barriers to foreign investment. There was an impact of negative growth rate since 1999. The recovery period was started from 2003 and till 2013-14. Although there were oscillations, yet it was mostly positive after 2009. 2011 and 2013 were years of high growth.

4.8 Relation of Germany GDP with Population, net exports and FDI

Regression results for Germany are given in table 4.8a, 4.8 b and 4.8c

Table 4.8a: Model summary Results for Germany

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.759 ^a	.576	.547	.45765	.807
a. Predictors: (Constant), G nex					
b. Dependent Variable: G GDP					

As given in Table 4.8 a the proportion of total variation in GDP is explained by net exports only, which are denoted by R Square. 57.6% of the variation in GDP is explained by net exports. In this model adjusted R square is 54.7% which states independent variables (net exports) explains 54.7% variation in the dependent variable (GDP).

Table 4.8 b: ANOVA Results for Germany

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.260	1	4.260	20.338	.000 ^b
	Residual	3.142	15	.209		
	Total	7.401	16			
a. Dependent Variable: G GDP						
b. Predictors: (Constant), G nex						

As shown in Table 4.8b, in this model F-statistics is 20.33 and the p-value for the F-test is significant. Hence the model is acceptable because it is significant.

Table 4.8 c: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.332	.395		3.374	.004**
	G nex	.011	.002	.759	4.510	.000***

a. Dependent Variable: G GDP

*** p<0.01, ** p<0.05, * p<0.1

Results of Regression Coefficients are shown through Figure 4.8 c. When net exports increase by 1%, keeping the other variables constant, GDP increases by .011%. Further t-test or t statistics shows if the calculated value is greater than the critical value, the results are acceptable. In this model, T-statistics is 4.51. Thus, the variable is included in the model.

4.9 PERFORMANCE OF SLOVAKIA



Figure 4.9 a- Slovakia: GDP Year on Year Growth Rates

The Slovakian economy was referred as the Tatra Tiger since GDP grew strongly from 2000 till 2008 and shows growth in 2007. But during recession period in 2008 there was a downfall in the growth rate i.e. -11 and slowly it started recovering. The peak growth rate was observed in 2002.

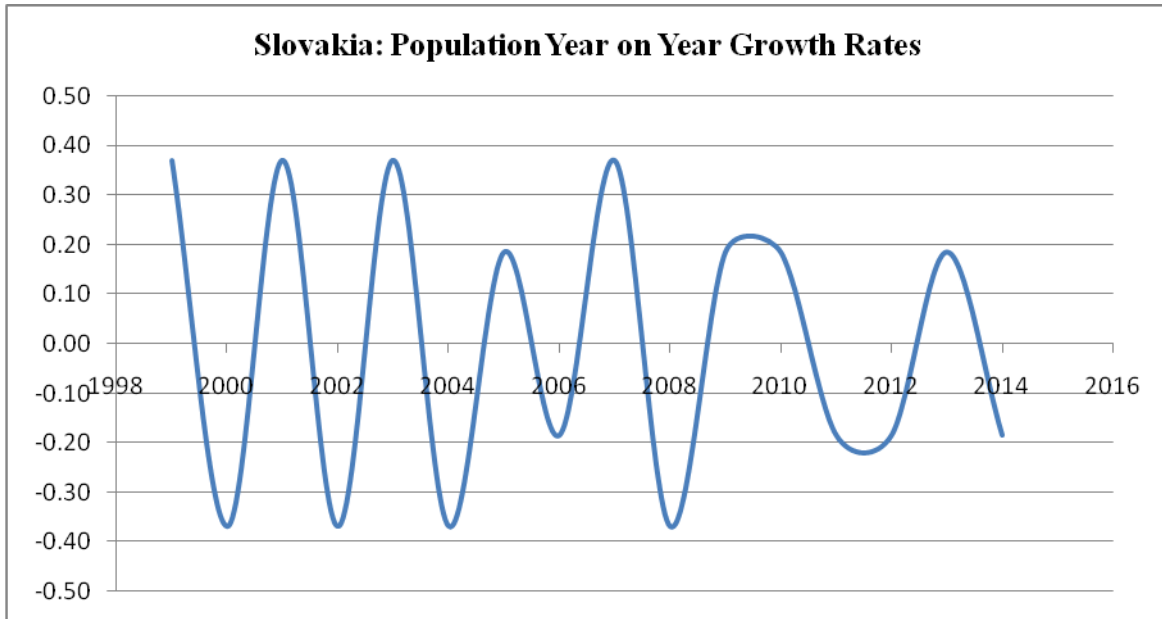


Figure 4.9 b- Slovakia: Population Year on Year Growth Rates

The demographic evolution of Slovakia population throughout 1999-2014 has been very irregular. It is due to people migrating to other countries. Birth rate and death rate also are the major issues. High growth rates were observed in 2001, 2003 and 2007.

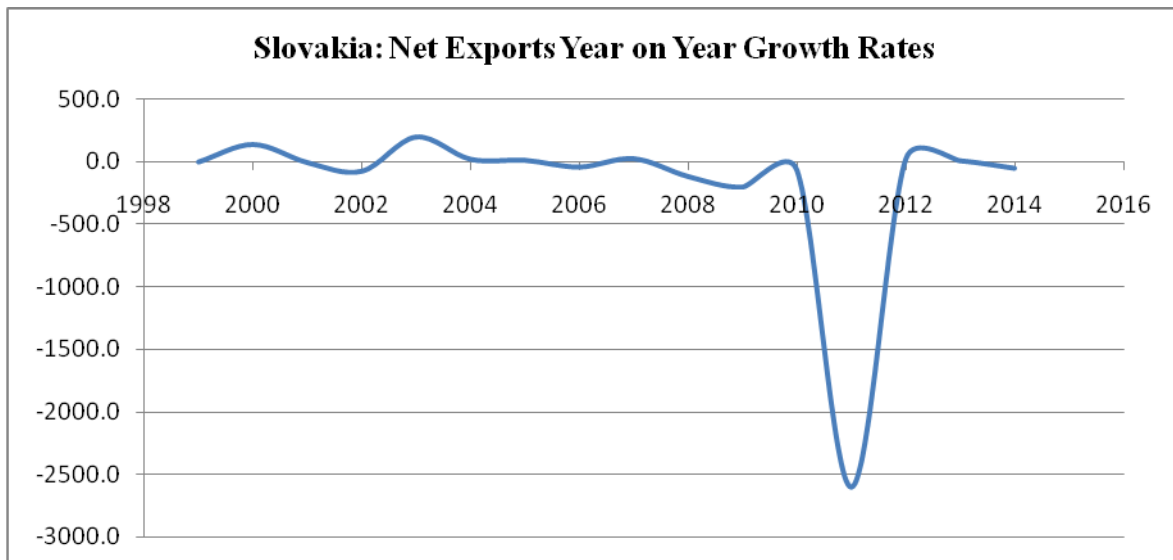


Figure 4.9 c- Slovakia: Net Exports Year on Year Growth Rates

Overall there has been seen growth of net exports (figure 4.9 c) from 2000 to 2007. But the impact of the recession (2007-08) has brought trouble for the Slovakian economy, and lead to a decline in the net exports in 2011-12. There was uptrend in 2013 and it fell again in 2014.

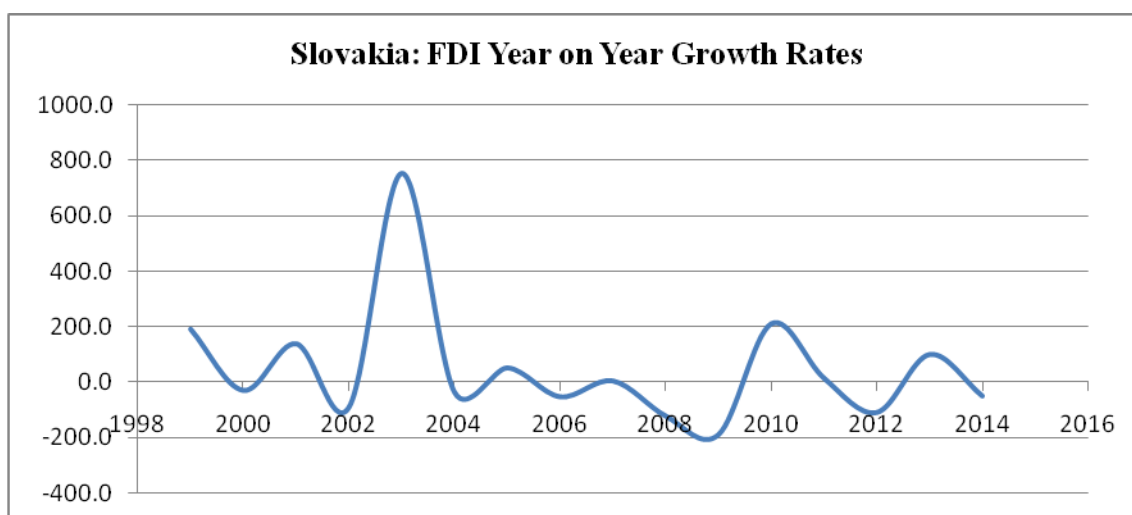


Figure 4.9 d-Slovakia: Net Exports Year on Year Growth Rates

As shown in Figure 4.9d, there is no common transmission or bias in opposition to foreign investment, but state-owned enterprises deform the economy of Slovakia. There is a strong presence of foreign banks and most state-owned banks have been sold. Capital markets remain relatively small. During the recession period, the growth rate fell down in 2008-09 to -11 per cent.

4.10 Relation of Slovakia GDP with Population, Net exports and FDI

Regression results for Slovakia are given in table 4.10 a, 4.10 b and 4.10 c.

Table 4.10 a: Model summary Results for Slovakia

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.583 ^a	.340	.296		.02284	.380
a. Predictors: (Constant), S nex						
b. Dependent Variable: S gdp						

As given in Table 4.10 a, the proportion of total variation in GDP is explained by net exports only. Only 34% of the variation in GDP is explained by net exports. In this model adjusted R square is 29.6% which states independent variables (net exports) explains only 29.6% variation in the dependent variable (GDP).

Table 4.10b: ANOVA Results for Slovakia

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	7.717	.014 ^b
	Residual	.008	15	.001		

	Total	.012	16			
a. Dependent Variable: S gdp						
b. Predictors: (Constant), S nex						

As shown in table 4.10 b, in this model F-statistics is 7.71 and the p-value for the F-test of is significant. Hence the model is acceptable.

Table 4.10 c: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.075	.006		13.251	.000***
	S nex	.008	.003	.583	2.778	.014*

a. Dependent Variable: S gdp

*** p<0.01, ** p<0.05, * p<0.1

Regression Coefficients for Slovakia are given in Figure Table 4.10 c. When net exports increase by 1%, keeping the other variables constant, GDP increases by .008%. Further t-test or t-statistics shows that the calculated value is greater than the critical value. In this model, T-statistics is 2.77. Thus, the variable is included in the model.

4.11: PERFORMANCE OF POLAND

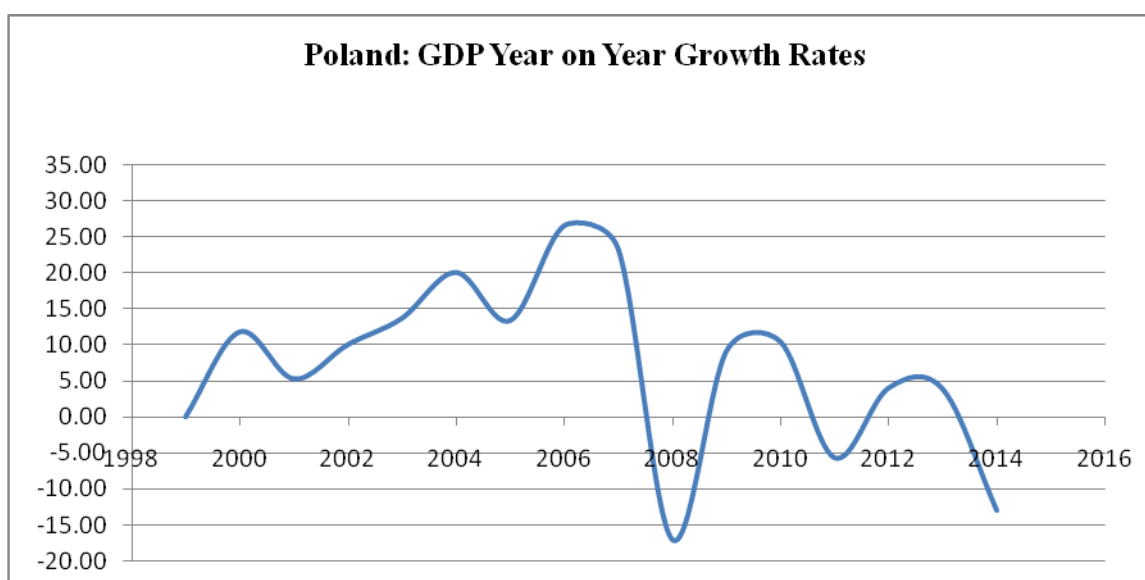


Figure 4.11 a- Poland: GDP Year on Year Growth Rates

Figure 4.11a shows GDP Year on Year Growth Rates of Poland. Poland is considered as a liberalized economy. The impact of recession of 2007-08 was visible on GDP and it decelerated and became negative in 2008. Peak growth rate of 26.47% was observed in 2006. According to World Bank, Poland is acknowledged as the high-income economy. Normally the GDP growth is stable as shown in the table except during recession period.

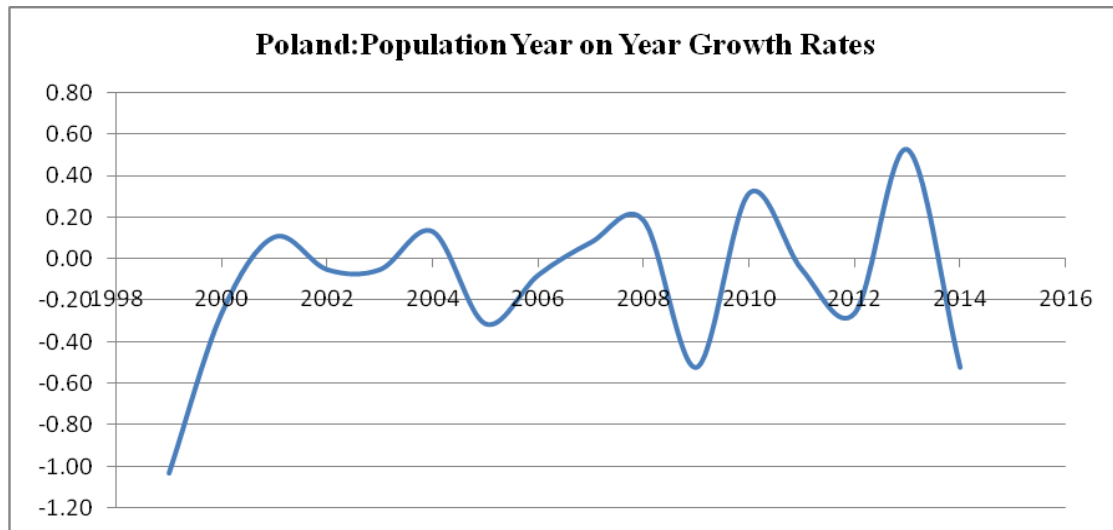


Figure 4.11 b- Poland: Population Year on Year Growth Rates

Figure 4.11 b highlights Poland's Population year on year growth rates. There are fluctuations in the growth of population of Poland during 2000 to 2013. Poland's population decreased due to decline in birth rate and increased due to emigration. A significant number of Poland people have emigrated, since Poland came under the European Union, in search of better work opportunities in other countries primarily to UK, Germany etc.

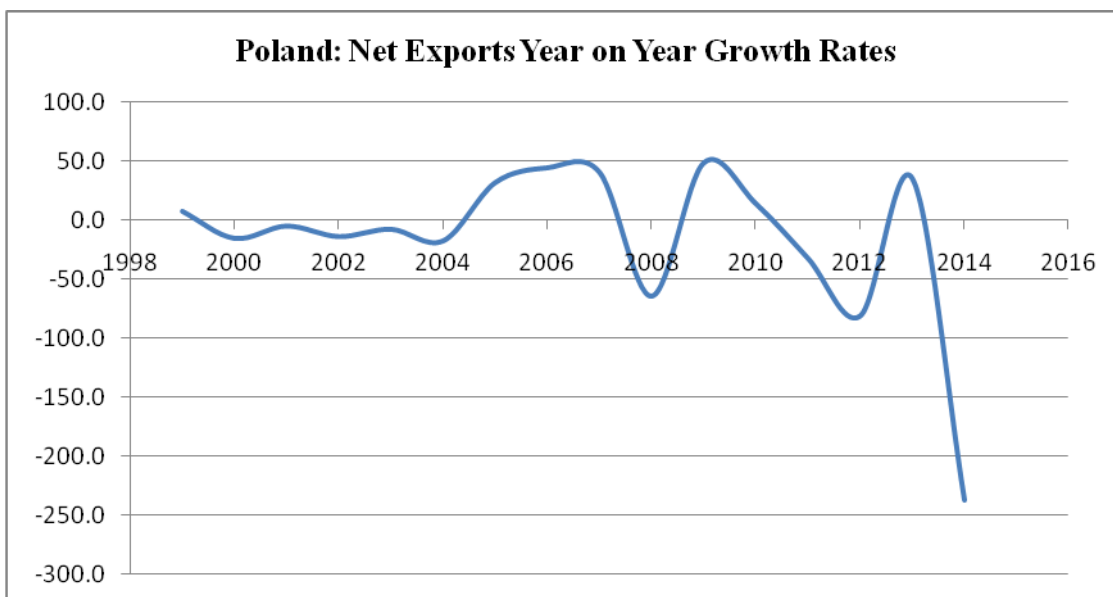


Figure 4.11 c- Poland: Net Exports Year on Year Growth Rates

Rapid growth increase in exports (Figure 4.11 c) indicates good performance of Poland economy. It usually depends upon Germany as it is their biggest importer. The decline in the growth rate was observed in 2008, 2011 and 2014.

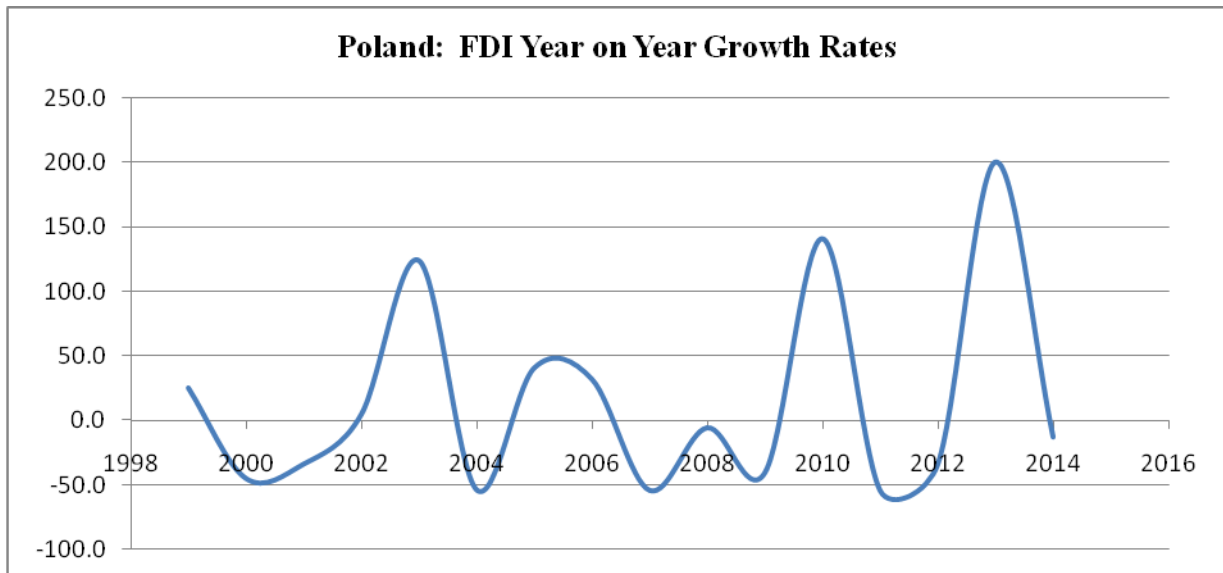


Figure 4.11 d- Poland: FDI Year on Year Growth Rates

FDI flows (Figure 4.11 d) in Poland economy remained attractive since 2000, but there is more fluctuation in the flows of investment after 2005-06. As shown in above graph, in 2014 there was a huge flow of FDI or foreign capital in Poland as several countries with foreign capital entered to Poland for investment, but subsequently it declined again in 2014.

4.12 Relation of Poland GDP with Population, Net Exports and FDI

Regression results for Poland are given in table 4.12 a, 4.12 b and 4.12c.

Table 4.12 a: Model summary Results for Poland

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.662 ^a	.438	.400		.11190	.891
a. Predictors: (Constant), P P						
b. Dependent Variable: P gdp						

As given in Table 4.12 a, the proportion of total variation in GDP is explained by the population only. 43.8% of the variation in GDP is explained by population. In this model adjusted R square is 40% which states independent variables (population) explains 40%

variation in the dependent variable (GDP). Small value of R-Square means its explanatory power is low.

Table 4.12 b: ANOVA Results for Poland

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.146	1	.146	11.680	.004 ^b
	Residual	.188	15	.013		
	Total	.334	16			
a. Dependent Variable: P gdp						
b. Predictors: (Constant), P P						

In this model (Table 4.12 b) F-statistics is 11.68 and the p-value for the F-test is significant. Hence the model is acceptable.

Table 4.12 c: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.035	6.632		3.473	.003**
	P P	-.594	.174	-.662	-3.418	.004**
a. Dependent Variable: P gdp						

*** p<0.01, ** p<0.05, * p<0.1

Results of Regression coefficients are shown through Table 4.12 c. When population decreases by 1%, keeping the other variables constant, GDP decreases by .594%. Further t-test or t-statistics shows that the calculated value is greater than the critical value. In this model, T-statistics is 3.41. Thus, the variable is included in the model.

4.13: COUNTRY WISE COMPARISON OF COMPOUND ANNUAL GROWTH RATES

Table 4.13 Country wise Compound Annual Growth rates of countries

S.NO	Country's Name	GDP - Growth Rate (cumulative)	Population - Growth rate (cumulative)	Net exports- Growth rate (cumulative)	FDI- Growth rate (cumulative)
1.	Hungary	2.16	5.46	--	2.65
2.	Bulgaria	2.59	2.32	4.65	7.35
3.	Croatia	2.51	1.86	--	4.45
4.	Poland	2.68	0.82	5.38	3.70

5.	Germany	2.98	6.51	1.85	9.30
6.	Slovakia	2.42	7.24	6.23	8.14

Table 4.13 a, represents various growth rates of the components taken, viz. GDP, Population, Net Exports, and FDI flows. In case of CAGR of GDP, highest growth rate among all countries is that of Germany i.e. 2.98%. Germany is a big economy and also considered as fast growing economy in the world. Following this Poland has recorded a growth rate of 2.68% which shows that it is also a growing economy. Similarly, Croatia is rated at third place with a growth rate of 2.51%. The lowest growth rate among all countries is that of Hungary i.e. 2.16% which shows in comparison to other economies, Hungary is growing at a slower rate. The same is represented graphically through Figure 4.13 a

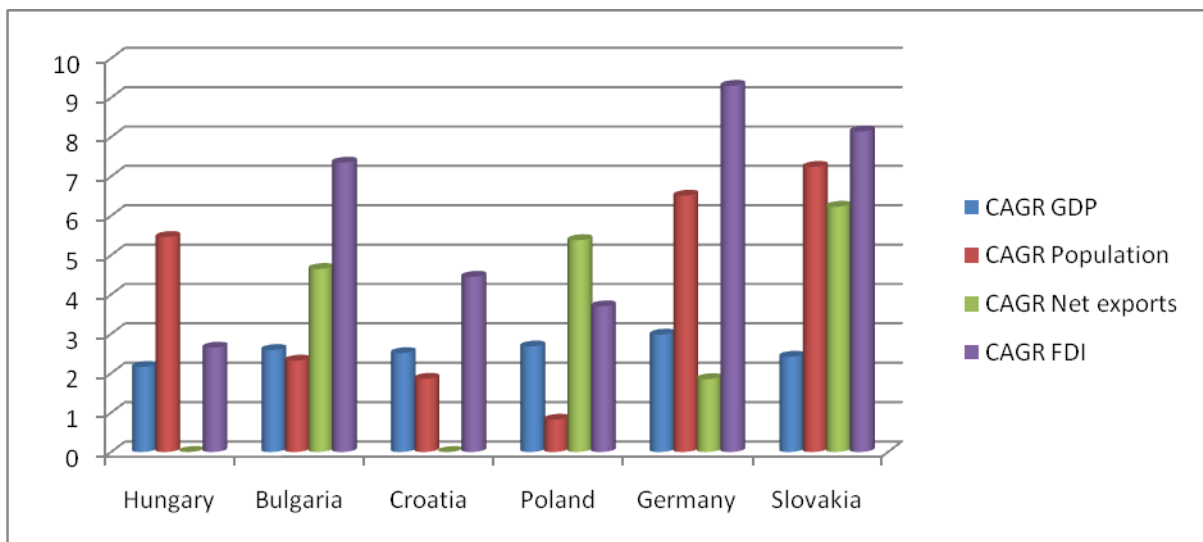


Figure 4.13 a: Country wise CAGR of GDP, Population, Net Exports and FDI

Taking the next component we have population, Poland has the least population growth rate of 0.82%. Since Poland accession to the European Union, people have immigrated to other countries like Germany, UK in search of better job opportunities. Poland is not so developed country in terms of employment, so it becomes hard to live in such a country. Highest population growth is in Slovakia as the birth rate of this country is high and it is also having low death rate. Followed by Germany having growth rate of 6.51% showing a good indicator because the country have more job opportunities and good standard of living and is thus better as compared to other European countries.

Further, the next component for comparison is net exports; Slovakia has been seen a great growth in net exports with 6.23% compared to other countries. Poland comes out to be second growing at s rate of net exports i.e. 5.38%. Germany has the lowest growth rate

among countries i.e. 1.85%. This may be due to more trade deficit instead of trade surplus. Being the strongest economy, Germany still has faced losses more in exports as well as in their imports.

The next component is FDI; the countries that are growing slowly are Hungary, Poland, and Croatia with growth rate 2.65%, 3.7%, and 4.4% respectively. So the flow of foreign investment is less based on the estimation that the returns will be less from these countries. Germany has the highest growth rate i.e. 9.30% among other countries as it is more developed and an advanced nation and foreign investors do not hesitate to invest in the country as more returns are expected.

Thus this Chapter has helped in analysing the growth scenario of selected countries of Europe, viz. Hungary, Bulgaria, Croatia, Poland, Germany and Slovakia. Analysis has been done for GDP, Population, Net Exports and FDI. Year on Year growth rates help in understanding the changes in terms of growth rates and was also done to see impact of recession. The regression analysis was done to understand relation of GDP with Population, FFI and Net Exports. Finally CAGR were calculated for Country wise CAGR of GDP, Population, Net Exports and FDI.

CHAPTER 5

FDI SCENARIO IN SELECTED CENTRAL AND EAST EUROPEAN ECONOMIES

During the last decade, FDI flows in the world have increased tremendously. Developed countries are targeted with most of the FDI inflows (78% in 1999), whereas developing countries are given about fifth of the inflows and only 2% of the world FDI is received by the Eastern and Central European transition countries. The industrial reformation in post-socialist Eastern Europe and the Baltic countries resulted in the necessity of foreign investments in these transition economies. Strong efforts are made to lure FDI investments in Central and Eastern European countries (CEECs). The investment to the transition countries increased due to new emerging markets, low production costs and high rate of profit. Foreign direct investments have been facilitated by the privatization programs initiated by these countries. Currently, many Central and Eastern European transition countries are in the middle of the process of incorporation to the European Union. The FDI flows have been impacted by the economic integration. In the context of European integration, this study aims to illustrate the possible changes in the attractiveness of FDI in the Central and Eastern European transition countries.

5.1 FDI INFLOWS IN THE CENTRAL AND EAST EUROPE COUNTRIES

The position of FDI as a composite of wealth stocks and technology is a growth enhancing element in CEE countries. FDI may initiate technology, managerial knowledge, and skills essential for overhauling companies, as long-lasting capital inflow. A delayed effect of FDI and Exports has a pertinent positive collision on the economic growth of the country. Through an increase in economic context, it stimulates the inward FDI into the CEECs. More FDI inflows are being determined by a resistant and sustainable macroeconomic environment, epitomized by low inflation.

The attractiveness of foreign investment in the CEECs does not get influenced by the pertinent features of infrastructure. The entry of FDI leads to competitive proxies by the alteration made in the labour cost in a prominent way. The prominent motivator of vertical FDI by multinational firms is relatively low unit labour costs. Thus, attractiveness of FDI in CEECs is motivated by low cost of labour.

There are other influences that promote or deter FDI. An exceptional optimistic influence on the flows of FDI is due to openness proxies by the part of exports in GDP. There is an optimistic and statistically main impact on FDI inflows due to the Euro zone business cycle. There will be no advantage for firms from abroad to enter host markets if they are similar to the domestic firms. Location benefits are considerable where the company decides to construct its yields.

To make the predictable gain the input expenditure in host economy should be least than in the source country. There was a big shift in the functioning of FDI due to recession period in the host and home economies. There were changes in characteristics of multinational activities by FDI. The distinguishing reactions of international and local corporations may be justified with production and financial connections. A self-selection propensity can lead to the positive impact of FDI on establishing the functions. The impact of FDI basically depends upon changes in the outside capital.

With the cumulative performance of host-country economies and advances with the happening of the crisis, the impact of FDI diminishes. The boom period in the CEEC nations can be intensified by macro-financial exposures that can be related to FDI. The macroeconomic improvements in the Euro zone and the macroeconomic and financial position of host countries justify the desirability of the CEE economies for FDI.

Through efficiency “Spillovers”, FDI can improve the technical progress in the host economy. By transnational companies, the catching-up procedure in CEE nations has corresponded with significant inflows of FDI. An advantageous investment environment can be created by investment policy that may include some set of laws in the analysis and security of FDI. Horizontal (tariff-jumping) intraregional FDI can be moderated through regional trade agreements (RTAs). Vertically-motivated intraregional FDI may be stimulated by the elimination of intraregional tariffs. Setting judgments for FDI can be influenced by the regulations of origin that help to eliminate the obstacles to internal trade. Fiscal and monetary schemes can be matched by the decision of Regional organizations. The growth of GDP in most CEE countries has been lowered, since the global economic crisis. Important vulnerabilities in the CEE growth policy were revealed by the crisis.

Investment flows on account of insufficient household savings get influenced by external forces that affect in the CEE area. Strong balance sheets and a sophisticated global hostile outsourcing and off shoring industry are possessed by the CEE nations. After the international financial crisis, the FDI in CEE economies dropped significantly. By locating more export support bases around the globe, the CEE economies can enlarge their marketing

endeavours. Reserves of domestic savings can be enhanced for enhancing growth and finance investment.

Further by supportive government schemes, CEE economies have accumulated remarkable productivity gains and enormous inflows of FDI. For FDI to have a relentless positive effect on productivity, nations should focus more on the policies for attracting FDI. In relation to the Euro zone, with the decline in productivity disparity, there is an expansion of the impact of FDI on productivity. The potentially volatile balance of payment flows can be determined by FDI. The evolution in countries can be stretched through shifts in know-how and information related to FDI. The main subject in the policy program in CEE countries is to attract FDI.

In the Balkan Area (a region in Europe), FDI has a more considerable meaning than in the CEE and Baltic economies. Government schemes further enhance, FDI to the Balkan nations. To raise FDI in Western Balkan countries proper intensifying alterations and decrease in unemployment level should be encouraged. In the short term, the return of the considerable amount of FDI is doubtful. The distance between home economy and the host may have been a stupendous driver of FDI. An optimistic impact on FDI is laid by the interests and the reliability of the economy.

5.2 FDI AND ITS CONSEQUENCES IN CEECS

The substantial net FDI inflows can be related to the decrease in the level of restrictions on the investment made in a market and the lack of corruption. The boom period and concurrent inequalities in the CEE economies have been generated by the flow of Portfolio, bank lending, and FDI. The desirability of FDI inflows gets influenced by the macroeconomic conditions in the Euro zone. The entry of FDI flows could be stimulated by host economies from CEE.

FDI can be stimulated by liberalizing trade policies of the host country. The possibility to shift production to economies with inferior labour expenditures is provided by the attainment of corporations situated in EU nations. The inflow of FDI is significant for setting up with inferior labour expenditures due to the happening of the crisis in the host and home economies. External financing establishes the growth of CEE countries.

FDI plays a vital role in the enhancement and structural restitution of the CEE countries. By low production expenditures, the amount of vertical FDI is expanding at the international level. A significant amount of producer-driven networks is established by FDI. During the

crisis, the capital flows and FDI inflows were decreased. CEECs had to change their policies to make these economies an attractive destination for them.

Through both trade and financial routes, FDI inflows are receptive to progress in the Euro zone. The entry of FDI flows could be stimulated for the purpose of supporting growth in CEE economies. An increase of macro-financial exposures was observed due to the huge size of capital flows led. Due to the considerable segment of borrowing in foreign currencies, important vulnerabilities appeared on the bank. The main beneficiary sector was the service sector in consideration to FDI distribution. Inferior input expenditures and production outlays justified FDI in the manufacturing sector.

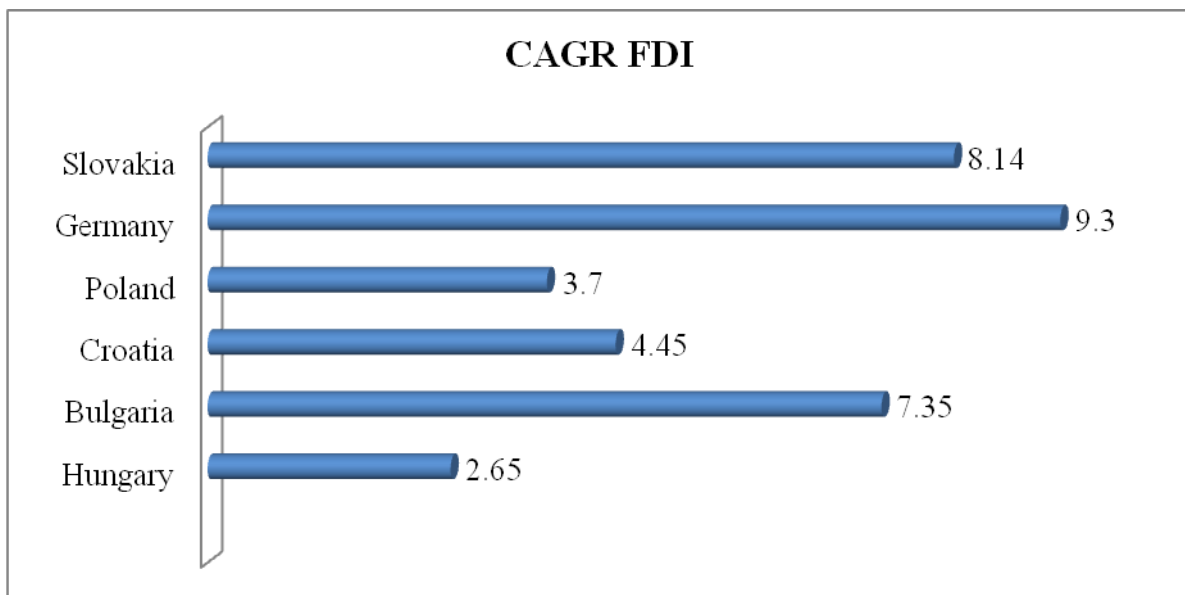


Figure 5.2a Country-wise FDI

As shown in figure 5.2a, FDI flow was highest in Germany. Germany undoubtedly is an advanced economy and has a potential to attract large amounts of FDI. Slovakia also had a high CAGR of 8.14. Bulgaria has a growth rate of 7.35 per cent per annum. Hungary had the lowest CAGR for the entire period. Poland had a CAGR of 3.7 per cent per annum. All these economies also depict that there was impact of recession as shown in Chapter 4.

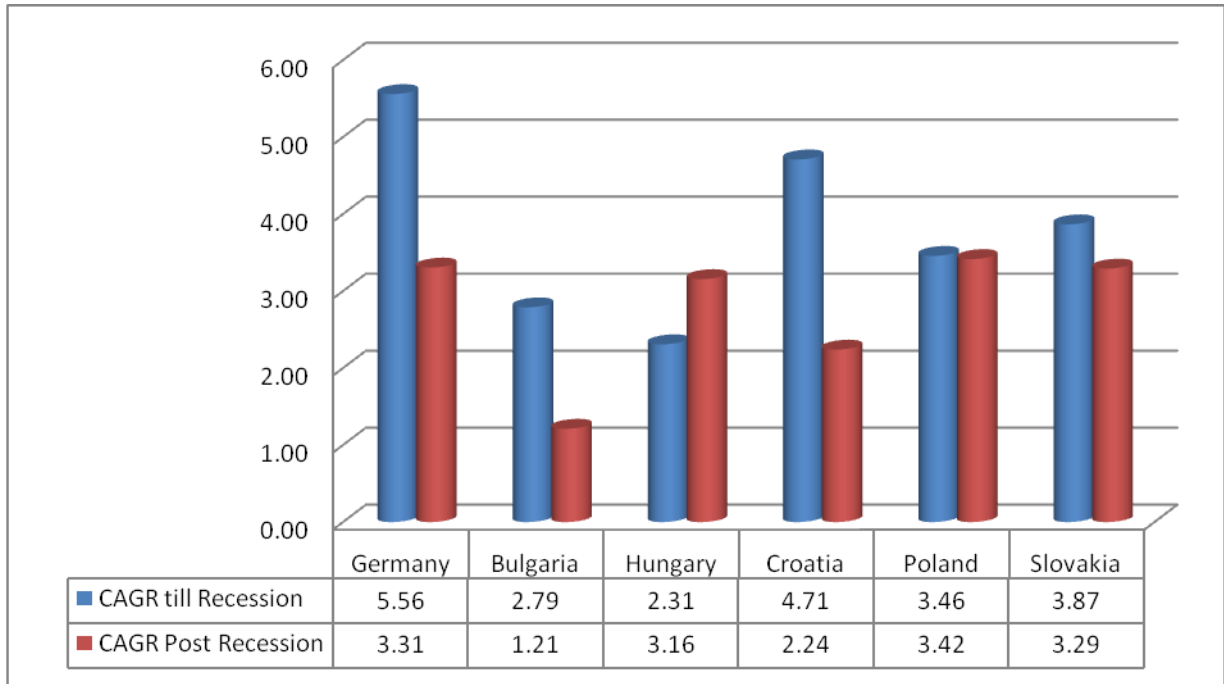


Figure 5.2b Country-wise FDI in period till recession and in post-recession Period

The above Figure 5.2b illustrates the flow of FDI till recession and in post recession period. It is clear that in Germany there was a major flow of FDI with 5.55 growth rate in the period till recession. Croatia was next with growth CAGR of 4.1. In post recession period highest growth rate was recorded by Poland with CAGR of 3.42, followed by Germany with CAGR of 3.31. Hungary was the only economy where Post recession FDI was higher than in earlier period. In most of these countries post recession FDI was lower than previous period. Thus, steps are needed to further boost FDI flows in these countries.

CHAPTER 6

MAJOR FINDINGS AND CONCLUSION

Growth transition in Central and East Europe countries depicts many changes in terms of the parameters undertaken for the present research, viz. GDP, Population, FDI and Net exports. The population growth rate of Central and East Europe countries is not very high and is not increasing at an increasing rate. Due to global recessionary trends faced in 2007, these selected CEEC economies were also affected adversely in terms of GDP, FDI and net exports. The growth rates fell sharply for GDP, FDI and net exports. This Chapter elucidates the broad findings of the study. Section 6.1 presents the Summary and Findings; in Section 6.2 Regression Results are reported; and finally Limitations are presented in section 6.3.

6.1 Summary and Findings

The aim of the research study was to analyse the growth transition, the changes in GDP, Population, FDI and net exports in selected CEECs. An endeavour was made to understand which variables played an important role in the development of the selected countries and also to examine the impact of the recession on these countries.

For analysis, annual data has been used from year 1999-2015, to examine year wise impact on the selected Central and East Europe countries. The growth rates have been calculated for these economies. The economies included are: Germany, Bulgaria, Poland, Croatia, Hungary and Slovakia. An attempt is made to revisit the objectives. The first and third objective of the study was:

Objective 1: To examine the global competitive index of the countries.

Objective 3: To identify the emerging countries based on the growth rates.

This was achieved through Growth rates, both year on year and compound annual Growth rates (CAGRs). Regarding CAGRs for FDI, Germany is having the highest FDI growth i.e. 9.30 in comparison to the other countries, while Hungary is having the least FDI growth rate i.e. 2.65.

Slovakia attained the maximum net exports growth rate 6.23 and Poland's net exports growth rate was 5.38. Germany is the country which is having the least rate i.e. 1.85 net exports growth rate.

The population of the Central and East countries of Europe is not increasing at a high rate. Poland is the country whose population is growing at 0.86 and Slovakia had the maximum population growth rate i.e. 7.24.

In terms of GDP growth rate Germany has maximum growth rate against other countries of Central and East Europe.

The study also used year on year growth rates to study performance across time. Year on year growth rates depict wide variations across countries in terms of GDP, population, FDI and Net Exports. It has been observed that, the growth rate in almost all the included countries declined in 2008-09. But after recession all the countries were somewhat able to handle up the situation. Thus, first and third objective was achieved through year on year growth rates and compound annual growth rates

6.2 Regression Results

For achieving second objective, multiple regression analysis was used. This objective was defined as:

Objective 2: To determine the relationship of GDP with population, FDI and Net Exports.

According to the multiple regression model, Hungary's GDP growth rate is explained by only two variables, viz. FDI and net exports and the population has been excluded from the model.

According to this GDP of Hungary is related with these two variables.

GDP growth rate of Poland is explained by only one variable i.e. population and the other two variables i.e. FDI and Net Exports were excluded from the model. Bulgaria's GDP growth rate is also explained by population.

Germany's GDP growth rate is explained by net exports only. FDI and population, the two other variables were excluded from the model. When net exports growth rate is low then the Germany's GDP growth rate was also low and vice versa. Slovakia GDP growth rate is also explained by Net exports.

GDP growth rates of Croatia are explained by two variables i.e. population and FDI. Thus, GDP is related with population and FDI. The other variable Net export has been excluded from the model.

All regression results reported are significant and the explanatory power ranged from 26.8 percent for Croatia to 77.7 percent for Bulgaria. Thus, this objective was achieved through regression analysis. Thus, there is a variation across different countries in terms of GDP, Population, FDI and Net Exports.

6.3 Limitations of the study and Further Study

Time constraint and Lack of availability of data for a longer period were the major limitations. Data on employment, fertility rate, mortality rates could have added more depth to the analysis. These could be a scope for future research.

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