UNIVERSITY COLLEGE LONDON

SCHOOL OF SLAVONIC AND EAST EUROPEAN STUDIES

CHARLES UNIVERSITY

FACULTY OF SOCIAL SCIENCES

Department of Russian and East European Studies

MASTER THESIS

2022

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SCHOOL OF SLAVONIC AND EAST EUROPEAN STUDIES

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ANALYSIS OF THE PATTERN OF US FDI INFLOW INTO CEE REGION

AND

A STUDY ON THE IMPACT OF US FDI ON THE PRIVATE CONSUMTPION EXPENDITURE OF CZECH REPUBLIC.

Master thesis

Prague,2022

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Academic Year: 2021/2022

BIBILIOGRAPHIC NOTE:

JOHN, ERIN. D *Analysis of the Pattern of US FDI Inflow into CEE region and a Study on the Impact of the US FDI on the Private Consumption Expenditure of Czech Republic* 61 p. Mater thesis. University College London, School of Slavonic and East European Studies Charles University, Faculty of Social Sciences, Department of Russian and East European Studies, Supervisor Mgr. Petr Jeřábek.

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1. The author hereby declares that he compiled this thesis independently, using only the listed resources and literature.

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3. The author hereby declares that the thesis has not been used to obtain a different or the same degree.

Prague 02/05/2022 Erin Deena John

ACKNOWLEDGEMENTS

I would like to take this opportunity and thank all the people who have supported me in the process of writing the thesis. I would firstly thank my parents for their unconditional love and unwavering strength through the course of my entire Masters Programme. I would like to thank my IMESS coordinator Dr. Jiří Vykoukal for his guidance throughout the second year of the programme. I would also like to thank my supervisor Mgr. Petr Jeřábek for his time and valuable insight on every word of the thesis. His guidance has been tremendous in completing the thesis on time. Last but not the least I extend my gratitude to all my professors and friends.

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Introduction

Foreign Direct Investment globally has been valued at 1.65 trillion dollars in 2021 (UNCTAD report 2021). The value in itself reveals the importance that Foreign Direct investment plays in the economy of the world. The definition of FDI according to (IMF)and (OECD) is that it is a direct investment that is made by enterprises/investors that is a resident of one country to entities in another (foreign) economy. Since centuries before, trade between two or more countries is a norm. The most prime example of foreign trade can be observed in the Indian Spice trade that attracted the Western Empires to the East. Trade of goods and services can be placed under a completely different category when compared to the direct investment made today. In direct investments there is a specific degree of involvement that is done by the investor. The trade between nations in the past familiarised the whole world with each other, the Foreign Direct Investments today has paved way for a global village. An wholistic understanding of how an economy works can be achieved only if the third main actor of foreign investments are taken into account. Today no economy survives in isolation, with the influx of FDI the impact of global markets and situations on any economy is significant. It must be however noted that Foreign Portfolio Investments also play a major role in tying the fabric of globalization but there is a monumental difference in both these kinds of investment. FDI fundamentally shifts the lay of the land unlike FPI. In economics the branch that studies FDI is International Economics but the impact FDI has on the economy, the people and the individual institutions is analysed across the branches of macroeconomics, industrial economics, financial economics etc.

The following study will focus on certain (specifically picked) macroeconomic variables. The theme of FDI will however be the undercurrent of the entire text. The subject needs to be explained on a massive scale so that the study does justice to the phenomena of FDI that has taken over the world. The Report published by UNCTAD in 2021 explained in detail the values of FDI that can be seen throughout. The largest host country in 2021 was the United States and the value of the FDI was 323 billion dollars. A host country is the one that receives the FDI inflow from the foreign country. When US is labelled as the largest host country, it technically means that it is the most desirable country for the rest of the world to invest in. The other major host regions that receive high amounts of inflow include the European Union and China. In the continent of Asia the ASEAN countries are the largest region of FDI inflow. The FDI that each of these regions receive are much less when compared to what they did in the pre-pandemic era. In the Middle East, Saudi Arabia and in the African Continent,

South Africa has been the major hotspots for FDI inflow. In the case of the biggest investor United States takes that position as well (Statista 2021). China follows the rank in the second position and the United Kingdom and Japan are the next in the rank. The initial assumption is that FDI inflow is beneficial for the host country and the FDI outflow is beneficial for the companies that invest. Hence, in order to understand the economic environment of a country FDI inflow is a better indicator. Therefore, for the sole purposes of getting a complete view of the impact of FDI, this study focuses only on the FDI inflow into the CEE region. This approach of the study has created a different trajectory for the analysis as well. Macroeconomic concepts that encompass the entire nation stands out throughout the study. The research is thus divided into two important parts. As the topic suggests, there will be an analysis of the determinants that attract US FDI inflow into the CEE region and the second part includes a study to prove the impact FDI inflow has had on the private consumption of Czech Republic. Czech Republic is a part of the CEE region and is the only country that is taken for the purposes of the Case study. The Central and Eastern European countries comprises of around 18 countries that a re geographically located in the central and east of Europe. The countries are categorized as a group as they share a common historic root. All of the CEE countries belonged to the Eastern Bloc of the Soviet union before 1991 (ILO 2019). They have had to go through similar circumstances while under the Soviet rule and while trying to transition out of the Soviet rule. These countries as of today is an integral part of Europe and contribute to the entire region by means of economy, society and culture. CEE countries are first of a kind transition economies (OECD) and this is said so because of the massive efforts that the countries had to take in order to transition from a socialist economy to capitalist/market economies. The transition happened after the fall of the Soviet Union and the control of Moscow on these states did not remain anymore. Along with the economic change, the countries went through massive political changes as well. The region and conglomerate that is the closest to CEE is the European Union. The EU is the most strategic partner that CEE has as a neighbour. Efforts made by the CEE countries to join EU is clearly evident. As of today there are 11 CEE countries which are a part of the European Union (UK Gov.uk) and they namely are Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland , Romania. Slovakia and Slovenia. Except for Croatia, the other ten countries are used for the purposes of the study. EU members were preferred for the study as it is mentioned in an OECD Report that the CEE countries that joined EU have completed their transition process. The reason Croatia was not made a part of the study was because the data available on the country is quite less. In the case of the other countries, the FDI inflow

into each one of them from US is studied intricately and the components of the research encompass the transition of the economies and their current state.

Once the determinants that affect the US FDI Inflow into CEE countries are analysed, the second objective of the research is to study the impact this very same FDI inflow has had on the Private consumption expenditure of Czech Republic. The private consumption expenditure is defined as that expenditure which is spent on goods and services of all categories for satisfying an individual/households needs (Eurostat 2020). Hence, the private consumption expenditure is an indicator of the standard of living that is possessed by a group of people. The quality of a citizens life is assessed by their way of lifestyle, and this can be used to understand compositions of savings and spending in an economy as well. The nature of a region as to whether it's a one with a consumerist culture or not. All of that said the reason this study is looking into the impact is to know whether this huge phenomena of FDI is actually making a difference in the lives of the people. Having a high level of consumption is a good start to ensuring a better life. The contribution made by the Private consumption also affects the GDP of the economy to a significant level as aggregate demand in the economy has a large share of private final consumption. In the case of CEE countries, along with transition of the economic structures, there has been significant growth in the private consumption as well. Earlier on there were no choices available for the consumers of CEE economies, however after the fall of the Soviet Union and the further opening up of the economy there is a wide variety of choices to choose from. Naturally a rationale consumer presented with umpteen number of choices will spend more. Thus, the transition of the economy and the transition of the social structure go hand in hand in the case of CEE countries and this will be further explored in the research. Thus, the research will start with a literature review that will cover the previous studies that have been undertaken with the main subjects as FDI and Private consumption. The next chapter will explain the hypothesis that the research establishes and the methodology that the research will follow in order to prove the hypothesis. The third chapter will be the most important chapter and will include the analysis of all the variables that the research aims to study. The final chapter will be that of Conclusion and the Recommendations that the researcher makes in light of the analysis done and proved. Throughout the study there will be the structure of dual objectives which will be explained hand in hand. This duality of the study will give FDI inflow in US a thorough overview.

CHAPTER 1

LITERATURE REVIEW

As the research focuses on two major topics the literature review is majorly categorized into two sections. The first part will concentrate on the Foreign Direct Investment into CEE countries and its various dimensions and the second part will concentrate on change in the pattern of Consumption Expenditure within the Czech Republic. Under the umbrella of these two major topics other components will also be looked into.

1.1 FDI into CEE countries.

K Carstensen, F Toubal (2004) in their paper brings out the determinants of FDI into CEE countries while their transition period into a market economy. The integration of CEE countries into the European Union and the rapid transitioning of these economies has significantly led to the increase in FDI flow from around the world and mainly from superpowers such as the US. The paper highlights both the economic as well as traditional determinants of the FDI into these countries. In this case Market Potential and Trade Costs are categorized as Traditional determinants. The paper is Panel Data analysis that is distinct from its previous references. Thus the insight is valuable to give a background into the study the following paper aims to conduct. Lansbury et al., 1996, Holland and Pain, 1998 in their paper also followed a similar approach into understanding the inflow of FDI into the transition economies. However one major factor the paper pointed out was the role of Labour costs of the CEE countries which also majorly contributes towards the attraction of investment. Horstmann and Markusen (1992), Brainard (1993) in their paper gives an illustration from the point of view of the multinationals that invest in these countries. According to the paper the Multinational Companies produce the products in these countries and serve the local markets with this very production thus eliminating the costs associated with the customs and duties that entail the export of commodities across the international border. Robert.E.Lipsey (2006) in his paper has conducted a Panel Data Analysis into the inward FDI into CEE countries after the 1990s. The paper has identified the major foreign investors into the CEE countries are Germany and US. These investments are mostly seen in the motor vehicle industry and is hugely labour intensive. Higher productivity within the CEE countries have been noticed after the inward flow of investment. The indigenous business community has also managed to prosper through the intervention of the MNCs. Balance -of-payments is the most common used measure when it comes to understanding the influence of inward FDI on host countries. Different economists argue that this method is not reliable as it

does not rightfully address the essence of the real activity that actually takes place. This unreliability is worsened when trade openness is associated as a determinant of FDI. The theories of FDI bring about the effect investment has on the production and employment in the host country. A note must also be made in order to distinguish the impact this has on indigenous firms and affiliates. The spill over of impacts onto local firms are more evident than the impact it has on the latter. Roland (2000) gave a detailed account on the transition economies during the 1990s. The topics that did not cover the study of transition of CEE countries before that time period was carefully covered in this study. Transition of these economies has been that from a socialist economy to successful Capitalist Economies. The paper further goes onto explain that the academic community has always taken the capitalist institutions in the developed and the developing economies for granted. A more intrinsic study into these institutions will give a broader and more fundamental understanding of the transition economies according to the author. The author creates emphasis on the new and improved economic thinking that has come into play through the transition economics. There has been shift from price theory and contract theory to the channels of political economy and social economics. Large scale change on an institutional level is the main character in transition economies and the nuanced transition economics. In economies that transition there will always be a momentum of reform, this momentum sets trajectory for institutions to evolve, the momentum which could also get lost over time and thus trap a country within non-working institutions. In such situations transition economies in CEE countries have manged to establish strong and foundational institutions in the period

In a paper (Claudiu Tiberiu Albulescu (UPT), Daniel Goyeau (CRIEF) study the integration of the CEE region with the rest of the EU on the commercial front. The time period before the Global financial crisis the efforts for the integration had gained much strength however after that the speed seems to be slightly slowing down. Theories presented in the paper suggest that the FDI amongst both the groups of countries have a huge role to play in the commercial integration. The countries that are taken as part of the CEE region are Slovak Republic, Hungary, Poland and Czech Republic. The methodology used in the paper is quite similar to the kind of methodology that the this research hopes to achieve. Apart from the FDI in the nations, the bilateral trade between them is also studied. Thus, each of the countries are matched with a panel data gravitational model which includes the variables of foreign investment and trade. From the side of the EU, three major trade partners are included in the discussion. The period between 2000-2013 is taken into consideration of the study and the analysis includes Fixed effects models and Random effects models which is used to

explain the nexus in FDI. The results of the paper has a different take to it considering the assumptions that the researchers had. The significant results brought out the reality that it was the outward FDI that actually influences the CEE region and not the inward FDI. The outward FDI that the CEE countries make are mostly aimed in the direction of their neighbouring countries and this is what sustains the CEE countries. A paper by (Andreea PAUL, Ana Cristina POPOVICI, Cantemir Adrian CĂLIN) quiet strategically brings out a model for the FDI inflow into the CEE countries. The model looks into four major aspects of a country namely the development of infrastructure, the institutions of public service, the labour market and the tax system. Using these four aspects the country in the CEE region with the most game for foreign investment attraction is identified. The years of 2007 and 2010 are taken and the methodology used is the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS). The study brings out results which suggest that Estonia is the country that attracts the most amount of foreign investment in the region in the years of 2007 and 2010. The conclusion of the paper is that state and governments play a major role in attracting FDI into a nation.

1.2 US FDI Outflow

Koncz and Yorgason, 2005, p. 45 made a report on the US FDI outflow and was able to deduce an approximate number representing the investment position of the country. The report revealed that US during 2004 had an investment position of three abroad and specifically in the EU region. The parameters of the exact industry composition of the investments were not revealed however. Carkovic and Levine (2005) conducted an intricate analysis on data and variables that specifically points out the relationship between FDI and the economic growth. The analysis was a panel data quantitative analysis and it was proven that FDI does not influence the economic growth of a country to the extent that it is thought to. The main reason that led to this conclusion is because the study did not take into account special tax breaks and subsidies that is responsible for a healthy foreign Investment into the country. However the results did not support the view that there is a positive impact from FDI on the economic growth of a country. In the study the growth variant was independent of common determinants of growth. Melitz (2005) had a different take on the results that were achieved, claiming that if the study did not include the control variables of trade openness then the other determinants would depict a positive relationship with the FDI. Melitz noted that the policy of country determines its very own trade and investment and vertical FDI can

be termed as trade. Therefore by including trade openness, the relationship between trade, investment and growth becomes non-existent.

Konovalova Y.A. (2018) in the article published in 2018 has detailed the economic links between USA and the European Union. The understanding of this relationship is important in order to trace it and narrow down to the relationship between USA and CEE countries. The Article concluded with a rather different economic concept known as "economic anamorphisms". This phenomenon explains the weight that is contributed by each nation which is present in this equation. In this situation it is critical to understand that there exists on one side a country which is economically superior in terms of development and on the other side is a group of countries that have come together in an economic integration. In an anamorphisms it is highly likely that there is an overestimation or an underestimation of the parties involved in this bilateral relationship. Thus the complexity of this relationship is gauged by a deduction method.

1.3 Factors Determining FDI.

This section will mention briefly certain and many studies that have researched about the factors that determine FDI inflow. Since the current research is about CEE region, the literature review regarding the factors of the FDI will also be revolving around the scenarios that has been seen in the same area.

Bernard Njindan Iyke's conducted a study in order to authenticate whether trade openness plays an important role in the economic growth of the CEE countries. Previous studies have all produced results that have been different each time. This might be because of the use of only country's share of trade in the analysis. Followingly a paper by Squalli and Wilson (2011) encompasses trade openness with share of trade and the relationship the country shares with rest of the world. The methodology of the analysis was a Fixed regression model and has included 17 CEE countries for the period from 1994 to 2004. The results obtained from the study show a positive relationship between trade openness and the economic growth of the country. The results have a stark difference from results that were produced in the previous studies. The significance of the results increase as an when closed economies are deleted from the regression model. Balance of Payment measures that was previously used as a proxy for FDI production are considered inaccurate in the current times and is not used in any research papers anymore (Robert E. Lipsey,2006)

(Dunning 1979) was one of the initial studies that explained the locational advantages that businesses look into before investing in a foreign country. This is the factor/determinant that the author establishes in order to explain what attracts FDI into a country. Resource-seeking is one of the main types of FDI that Dunning mentions in the paper. This simply means businesses move to foreign territories in order to gain from the lower costs of inputs. The inputs include the land,capital,cheap yet skilled labour etc. A very different position was taken by Karluk (2000) where one of the major determinants affecting the FDI is considered as the geographical location the the host country. While it might be true in the case of the CEE region in terms of the closeness to rest of the Europe it cannot be considered as a major attracting factor. Campos and Kinoshita (2003) further categorized the locational determinants of the FDI inro three unique categories. The first being the host country features such as cheap-skilled labour, large domestic market, and infrastructural benefits the country has to offer. The second category belonged to the public and government institutions that shape policies to create an incentive for attracting FDI. The third category is given a unique name called Agglomeration economies, it is that section of economics that explains the benefits that occur out of an industrial relocation.

The influence of government policies on FDI inflow/outflow was looked into by various researchers. Brewer (1992) has stated that market imperfections of an economy when impacted with the right government policies has managed to attract FDI or encourage FDI outflows. The author also categorized the policies into the ones that have a direct impact and the ones that have indirect impact. Te Velde (2001) distinguished the purposes of government policies that are associated to FDI. The three main purposes are as follows: a) Policies to attract FDI into the region b) Policies to upgrade the existing conditions for FDI and c) improve the benefits FDI can give to the domestic producers. This study is heavily focusing on the policies that revolve around the tax system, which include the incentives given and tariff system. While a lot of other studies such as the one published by (Loree & Guisinger, 1995; Taylor, 2000; Kumar, 2002) have concentrated on the incentives that host governments offer for attracting investment there are a number of studies conducted after that which tells us that tax incentives do not have such a significant effect on the FDI inflow into a country. (Devereux & Griffith 1998) prove that tax incentives play a rather secondary role to the other fiscal policies that are taken by the government for attracting FDI.

A Report by OECD (1983) mentioned that incentives given by the government for promoting FDI actually promotes intra-regional economies and not foreign investment.. Hoekman and Saggi (2000) in their study proves that incentives of certain categories might benefit FDI in isolation but when it

comes to be applied on a macro level on the entire economy, it does not happen. The fundamental determinants of the FDI have a upper hand in attracting it to a country and not tax incentives according to (Caves, 1996). The author also goes on to explain that the government policies of investment are the most appropriate when export-oriented industries are more relevant. (Wells and Wint (1990) and Moran (1998) also argue that FDI promotional activities done by the host country's government is more effective than the incentives and policies introduced by the government. Through these promotional activities the right amount and kind of information is given to the investor and the host country. This abolishes any sort of market imperfection that might arise out of misinformation. Given all the above studies and review, this study has made a decision to not include tax incentives or government policies as a determinant to FDI in the research. When all is said and done the reader should not have the misconception that government policies do not impact FDI inflow, they do but it solely depends on the characteristics and features of the host country.

1.4 Literature Review on the Theoretical Background of FDI.

There are various theories aging back to the neo-classical economists regarding the foreign direct investment. The concept was regarded from the very beginning as a macroeconomic concept as it includes two or more international economies and affects the latter on a broader level initially. Trade theory developed and studied by various classical economists can be defined as the basis of FDI. The reasons for trade between two or more nations in the past were for many reasons and the major one among them was " Scarcity of resources". India was colonised solely for its spices. There was a spice route that originated from the subcontinent even before there was a structured government or kingdom. Over the years however the reasons for trade changed, and so the concept of FDI took birth and gave a dual solution to the difficulties that old-school trade consisted. In the initial studies of international economic associations, the motives of the firms and or the investor were based on three main principles. These were Absolute Cost Advantages, Product Differentiation advantages and the Economies of Scale. These motives were considered basic and did not prove the exact need of why people were willing to invest somewhere else than their familiar territory.

Hymers's Theory

However, (Stephen Hymer 1960's) produced a theory that went beyond these basic motivations and helped create framework for understanding FDI from a firm-specific point of view. Hymers Theory will be explained in the form of a theoretical context in the following

study. Through his theory Hymer was able to establish certain key aspects of FDI and they are as follows;

1. **Firm-specific advantages**: The advantage that is specific to the firm is what it will achieve once its moved onto new territories. The firm may or may not have exhausted all of its competitive advantage in the domestic territory and thus by moving international, it is opening itself up to newer consumer base.
2. **Removal of conflicts**: In case there is a firm on the other side of the river so to speak that is a potential threat, FDI can eliminate that threat by forming a collusion with the other firm. This business strategy is a major advantage for firms that have a motivation and the scale to go international.
3. **Propensity to formulate an internationalization strategy to mitigate risk**: Apparently it is believed that if a firm is successful in formulating an internationalization strategy by taking into account both short term and long term goals, this action is an indicator on how a firm can mitigate risk.

Thus, the theory that is brought forth by Hymer is a clear deviation from what the neo-classical economists. They believed that there will be perfect competition in the international markets however, Hymer was able to prove that there remains imperfection in the market. And this imperfection is one of the main reasons why firms will be able to compete and thrive in the international environment. And in order to prove that he has presented the above key features.

Production Cycle Theory of Vernon

(Raymond Vernon 1966) published a theory that describes the life cycle of the production process in any industry. The life cycle has four different stages and they are innovation of a an idea, the growth of the company, the maturity of the enterprise and the decline of it once there has been imitation of it throughout the country/region. The theory took this theory in order to explain the reasons why US companies started investing in Western European Countries after the second world war. In the study it is seen that as and when the investment happens in Western Europe, there initially was an increase in the demand for the manufacturing product that has been produced in the US. Thus there was an increase in the export of US products into Europe, and the markets were overflooded. The products became famous and so did the technology used to produce them. Thus the European manufacturers

started imitating the technology and the products. In order to not lose the competitive advantage, US firms set up their own production facilities in the foreign country thus giving birth to the FDI as we know it today in Europe. The boom of US FDI in Europe happened in the years between 1950 to 1970 and since then there has been a consistent inflow of FDI into the region. With the fall of the Soviet Union, the region of Eastern Europe having vast possibilities and untapped potential opened up for US FDI and since then there has been an influx of FDI into the new are as well.

The Theory of Exchange Rates on Imperfect Capital Markets

(Kenneth A Front, Jeremy C Stein 1991) in a paper examines the relationship between exchange rates and FDI. The environment that the study specifically researches about is the imperfection that is created in the global markets because of misinformation. The misinformation makes external financing outside the affordable limits. In such situations as external financing is unavailable internal financing becomes more desirable. Hence when exchange rates of the host nation is lowered, the domestic assets become more desirable for the foreign wealth owners. This can act as an incentive for attracting FDI into the country. Itagaki (1981) and Cushman (1985) support this theory and has noticed that when the foreign currency of another country has been appreciated, the US FDI was reduced by 25% in many cases. The one criticism regarding this theory is that it does not explain the practice of simultaneous investments of Foreign money in multiple countries.

Eclectic Paradigm

This theory was proposed by (Dunning 1979) and it has been briefly mentioned in the above section. The paradigm is also known as OLI model and it is a benchmark or a road map that enterprises can use to do an analysis on whether a particular foreign investment is necessary or not. The one assumption in the theory is that no company engages in open market operations if the need can be satisfied internally within the country. The full form of OLI is ownership, location and internalization. The main aim of the theory is to determine whether one approach is better than the other when it comes to investing in a foreign country. The measure to determine is by considering that alternative which adds the maximum value to the organization. The theory by Dunning only mentioned the manufacturing industries, however a recent study by (John Cantwell and Rajneesh Narula 2003) further extended the OLI model

into knowledge sharing as well as in todays world service industry is also a major foreign investment zone.

1.5 Impact Of FDI.

While most literature on FDI talks about the positive impact of it, there clearly is a section that studies the negative impact of Foreign Investment. Javorcik 2004; Kugler (2006)pointed out these negative impacts on the socio-economic variables of a region. The economic efficiency and productivity of the host nation is being affected at various levels because of the increased investment from foreign nations. Micro levels and Macro levels of the economy are simultaneously affected by the FDI into an economy. The social equity and the income inequality are the two main social factors that are impacted by the advent of serious foreign investment. This is phenomenon is normally seen in the developing countries. The problem associated with FDI and income inequality can be categorized as a vicious circle which ends in a poor economic growth. Income inequality is macroeconomic determinant that slows down the economic growth of a country.(Cingano,2014) has expressed concerns regarding the negative impact of income inequality on growth. The efforts made by a government to reduce poverty in a country can also be slowed down by rising levels of income inequality. The study has identified that FDI can increase income inequality in a country. Thus, on one hand FDI promotes economic growth and on the other hand it will increase income inequality which will indirectly affect the growth. FDI will thus be cancelling its effects thus stagnating the economy. (Figini and Görg 2011; Sylwester 2005) argue that FDI will not only slow down economic growth but also lead to destabilising the social fabric of a nation. Thus, this will be a dichotomy for developing countries that depend heavily on FDI but also wants to maintain a standard of living. Kálmán Kalotay (2016) brings out the relationship between 11 CEE countries and the inflow of foreign direct investment. The author explore the influence the FDI inflow has had on the transition of the economies from a socialist structure to a market economy. According to the author cheap semi - skilled labour in these countries are a result of the Great recession. Various financial crisis has affected the CEE region and reduced the competitiveness of the markets. Surplus of skilled and semi-skilled labour is one of the major advantages the CEE region has to offer, and if it is done in structured manner they will be able to leverage in the international market. It was found out that in the mid-2000s there was a fall in the inflow of total FDI into the country. This was true in the case of Foreign Portfolio Investment where the inflow fell. The study concludes on the note that if

the governments of each state actively interfere in institutional activity it will be good for FDI inflow.

1.6 Literature Review on Consumption Expenditure.

The second part of the research will concentrate on the impact FDI inflow from US has had on the private consumption expenditure of Czech Republic. For the purposes of achieving the second objective of the research, the following section will look into the major principles of Consumption Expenditure. The components of the variable, the theories associated with the variable, explanation in the context of the CEE region and the influences it has had on the growth of the economy will be covered in the literature review.

The concept of Consumption Expenditure is an integral part of understanding an economy in the world. It is an important component in the GDP of a country. Arnold (2008) has reached the conclusion that Consumption Expenditure has become the largest component in the GDP of developed countries. Thus it is clear from the above statement that the nature of Consumption Expenditure varies from country to country depending on the economic growth. While a high consumption expenditure is a result of the economic growth pertaining to a place, it can also be tagged as an indicator of economic growth. Thus by playing the dual role of a cause and an effect, there are many factors that influence the consumption expenditure and one of these factors can be seen as FDI. This literature is thus looking for associations that have been made in the past between consumption expenditure and Foreign investment in a country. As the fundamental discussion of Consumption Expenditure was initiated by Keynes, it is important to give an introduction of the Keynesian view of the Consumption Expenditure. Keynes (1934) suggested that the long-term growth rate of the economy is determined by the demand and the supply of the economy. Consumption Expenditure comes under the Demand side of the economy. And in Keynesian economics Government spending was regarded as Consumption expenditure, thus in order to contribute to the equilibrium of the economy this spending should be done in abundance. If one applies it today's open economy, one could argue that increased investment from foreign regions can contribute to fiscal expansion and through that the growth of an economy.

P.K Mishra conducted a study on the consumption pattern of India and derive from it the understanding of a consumption-led economic growth model. The general understanding is that the economic growth of a country is either led by consumption or by production. In the case of developing countries, consumption-led economic growth is the norm. The sole reason of this is the lack of production facilities and infrastructure present there. The composition of Consumption Expenditure in these countries dominate about 70-75% of the GDP. When the economy of the country is consuming at a very high rate, it is an incentive for the producers

to engage in more production and through that attract further investment into the country. This will shift the economy's growth from Consumption-led to Production-led. In the study, the period used for the analysis is from 1950-51 to 2009. The methodology used is the cointegration test and the vector error correction method for regression. The long-run relationship of the equilibrium is what's being explored in the study. The tests in the analysis have two different outcomes. The vector correction model brings out that in the long run there is a positive and direct relationship between the private consumption and the economic growth in the country, whereas the Granger causality test establishes that there is no relationship between the two in the short-run.

Gerstberger, C. and Yaneva, D., 2013 conducted an analysis of EU-27 household final consumption expenditure and discovered that the Baltic countries and Greece still suffering most from the economic and financial crisis. *Statistics in focus*, *2*, p.2013.Consumption is that economic variable which gives a clear indicator about the standard of living of a citizen of the country. The components of the household consumption expenditure include rent, energy, food and transportation needs. The period of the Financial crisis did take a toll on the household consumption expenditure in the EU region. The expenditure for the purposes of consumption was declining on at a rapid pace in Greece. The Baltic states also suffered a similar condition. The study however was unable to generalise the expenditure and the results revealed that only certain groups of consumption items had to suffer. The private consumption in most of the EU-27 regions were compromised in the wake of the Financial crisis and the recovery process has been quite organic owing to the stability across the world.

Paula-Elena Diacona *, Liviu-George Mahab (2014) presented a study that had the subject of the co-integration relationship between three major variables of an economy. The variables are income, consumption and GDP per capita. While income is the independent variable in this approach, consumption is the dependent variable and GDP is just a proxy for the standard of living. A panel data that consists of 79 countries is included in the analysis, the list of countries are included in the categories of low-income, middle-income and high-income. The time period of the study is 1980-2010. The results of the analysis revealed that the influence income has on consumption levels to be much stronger in either low-income or high-income countries. The reason high income countries have this effect is because when there is higher amounts of money available, the capital investments and more research and developments have chances of occurring therefore increasing the consumption levels. The above study is a major reason as to why the new research is taking the example of Czech Republic to determine the impact of FDI on private consumption.

There are a number of studies that have tried to understand the correlation between the two concepts of consumption of a country and its high economic growth one such study was done by (Radulescu, M., Serbanescu, L. and Sinisi, C.I., 2019). The paper however based the entire

study on the CEE countries. The main relationship explored here was the one between the consumption of the economy and its growth however various other exogenous factors influencing both these primary actors are also studied in the analysis. The methodology used in the study is the Panel Least Squares and Pool Least Squares. The time period taken for the study was the period between 2004-2017. The exogeneous variable in the study is the private consumption and the its effect on the GDP of the country in the short run and the long run is analysed. The results are such that in the short run consumption positively benefits the GDP of the economies in the CEE region. FDI is also used as an exogenous variable and it has a negative correlation with the economic growth of the region. Unemployment is used as an endogenous variable and it has a negative correlation with the FDI and Public spending by the government. Contrary to what we might believe the consumption in the CEE region does not influence the macroeconomic indicators in a positive or strong manner however it is influenced by the other factors in a major way. There are certain control factors that are taken into consideration in the study. These control factors are termed as qualitative factors in the study and they include control of corruption, government effectiveness, the stability of the political system etc. Corruption Perception Index is one of the variables that gave a clear analysis and it was shown that it has a negative correlation with the Unemployment rate in the CEE region. The above study is the motivation to use Corruption Perception Index as a government control in this particular study.

While doing a research on the Private expenditure of a region, it is important to keep in mind the pattern of its public expenditure. (Bogdan-Gabriel Zugravu Anca-ŞtefaniaSava) conducted a study in which the main variables were the Public expenditure structures that was present in the CEE region. A time period between 1995 – 2012 was taken and a panel data regression analysis was conducted in order to understand the relevance of public expenditure in the region. The influence Public expenditure had on the economic growth of the region given the financial crisis and deficit crisis was the major objective of the research. They realised that this kind of study is missed in economic history and hence wanted to bring out a correlation between these concepts. Armey's model was used for the empirical analysis and that aimed to bring out the exact composition of the current public expenditure and capital public expenditure. It was their expectation to understand whether the composition of the public expenditure is optimal and this is in reference to the neo-classical economic theory. However, the results of the analysis revealed that the public expenditure made in the CEE region is not optimal and does not directly contribute to the economic growth of the region. Thus the literature review chapter concludes here and the next section will be about the hypothesis and methodology which will be used in the research analysis.

CHAPTER 2

HYPOTHESIS AND METHODOLOGY OF RESEARCH.

2.1 Hypothesis

There have been a lot of theories on the origin of how an hypothesis has come to be, but a significant importance has been associated to Hempel's deductive-nomological model. The model explains that once an idea is observed by a researcher, an empirical nature is attached to the former. This phenomena is then used to derive a preliminary hypothesis that explains a vivid theory, finally the empirical analysis of the theory will prove whether the hypothesis is strong or weak. One can say that when one or more hypothesis are grouped together, a conceptual framework is created and every action taken by the researcher is within the confines of this framework. The norm of most of the academic studies is that the hypothesis is a statement that explains a relationship between two variables. The following research will also be based primarily on two variables, however the correlation of a string of variables will be assessed in respect to the main variable which is the Foreign Direct Investment Inward flow from US. The characteristics of the following Hypothesis that will be presented in this study are explained as follows;

Experimental Hypothesis: The hypothesis will be experimental in nature in the sense that when the independent variable is seen to change, a change is also expected to be seen in the dependant variable

Directional Hypothesis: The hypothesis is clearly stating that the direction of the relationship between the dependant variable and the independent variable is positive.

Given the above features of how the hypothesis is going to be presented, the next section will introduce the research hypothesis that is specific to the study. The main topic of the study is to **Determine the Pattern of US FDI Outflow into CEE countries and study the Impact US FDI has on the Private Consumption Expenditure of Czech Republic** Given the research topic, the study can be divided into two parts. The first part of the research will be an analysis into what is already present and the second part will be an effort to establish the direct positive relationship between US FDI inflow and the macroeconomic variable of Consumption Expenditure in the Czech Republic. As the first part is an analysis and does not involve an assumption of what the relationship will be, there will be no hypothesis in regards to the first part. However, the second part is a clear assumption made by the researcher and thus will have an alternative hypothesis and null hypothesis. In order to understand the research, it is imperative to specify the alternate hypothesis and null hypothesis as follows:

Alternate Hypothesis: There is a strong, direct and positive relationship between FDI inflow of Czech Republic from US and the Consumption Expenditure of the Czech Republic.

Null Hypothesis: There exists no direct relationship between the FDI inflow of Czech Republic from US and the Consumption Expenditure of the Czech Republic.

The study will also analyse the correlation between a string of macroeconomic variables and the FDI inflow from the US into the CEE countries. This is however not included in the hypothesis and the reason for that is the relationship between each of them and FDI has been explained multiple times and in various studies. In order to fulfil the first objective of the research, the independent variable will be FDI inflow from US and the dependant variables will be the economic determinants that have influenced FDI since a long time. It will be made sure from beginning of the study that both the objectives of the research go hand in hand.

2.2 Methodology

The field of economics that the research is based on are International Economics and Macroeconomics (Consumption Expenditure). Econometric analysis that has been used to understand the concepts in this field of research have been mostly based on either Time Series data or Cross-sectional data. The following study is however employing a Panel Data Analysis and a Time-series regression analysis. The data collected is from ten CEE countries over the period of 30 years representing 12 variables connected to the topic in study. The descriptive statistics of the data is shown in the following table.

Table 1: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Foreigndirectinves~w	188	1.380e+09	2.347e+09	-3000000	1.330e+10
Wagerates	76	20.496	3.7	13.481	32
OpennesssIndex	182	108.191	35.452	32.972	170.428
ExchangeRates	117	84.351	16.813	43.078	108.002
PrivateConsumption~e	181	3.538e+10	3.375e+10	2.338e+09	1.416e+11
InflationRates	191	33.56	136.787	-1.418	1058.374
PrivateConsumption~e	181	3.538e+10	3.375e+10	2.338e+09	1.416e+11
PrivateIncome	168	5.285e+10	4.938e+10	3.553e+09	1.851e+11
InterestRates	80	4.614	1.965	1.361	10.389
PersonalIncomeTax	170	17.754	5.285	4.743	37.866
Unemployment	193	9.68	4.43	1.1	20.7
CorruptionPercepti~x	150	4.953	.968	2.7	7.5

The first part of the project is concerned with understanding the impact of the given independent variables on the dependant variable of the FDI inflow from US. While normally Time-series and Cross-sectional data is used for this kind of research, the main benefit of using a Panel data is that the heterogeneity can be controlled and can allow for individual specific variables. The main reason for choosing Panel data regression is because the data spans for thirty years, and there are 10 countries. The other reasons for choosing a Panel Data Analysis are as follows:

- Data provides more information, variance in the data is higher and there is a higher degree of freedom..
- The collinearity between the variables are less.
- It is the most appropriate model for dealing with the behavioural economics
- Omitted variable bias can be easily dealt with when the data is in a panel data setting.

In the first part of the study, the independent variables that will be used are Wage rates, Openness Index, GDP , Corruption Perception Index , Exchange Rates and Inflation Rates. The variables are chosen in effect that these are the main reasons for why FDI is attracted into a country. The aim of the research is to understand whether the general determinants of FDI is applicable also in this case where US FDI inflow moves into CEE- 10 countries over the span of 30 years. In order to gauge the role played by each of the variables, the following is a description of each of the variables that will be used in the first part of the research.

1. **FDI Inflow from US** : The amount of FDI inflow from US into CEE countries over the past 30 years has been used in the dataset. The data of the specific countries intake has been obtained from the Bureau of Economic Analysis, US Department of Commerce's official website. The variable is expressed in Current US Dollars
2. **Wage Levels**: By definition it is the percentage of Labour that is working for a wage rate that is below two-thirds of median pay. The data is derived and curated from OECD Database and the data spans over 30 years.
3. **Openness Index**: The calculation of the openness index of a country is : Sum of Exports and Imports divided by the GDP of the country. The variable is an

econometric measure to understand the influence of Foreign Trade on the domestic economy. The data was obtained from European Chamber lists.

4. **Exchange Rates** : The exchange rates of each country over the span of 30 years has been obtained from the World Bank Database.
5. **Inflation Rates**: The inflation rates of each country over the span of 30 years has been obtained from the World Bank Database.

In the second part of the study, as there is only one country that is being studied , panel data cannot be used. Therefore a time-series regression model is being used. The data will have the variables for the past thirty years of Czech Republic. In the second part of the study, the dependant variable will be Private Consumption Expenditure of the Czech Republic and the main independent variable will be the US FDI inflow into Czech Republic over the years. The control variables in the following analysis will be Income of the country, Personal Income Tax rates, Unemployment, Wage Levels, Inflation. The aim of this particular part of the study is to understand how has increased FDI from a foreign (non-EU) country influenced the consumption levels of an average consumer in Czech Republic. The following is a description of all the variables that will be used in the second analysis in the research.

1. **Private Consumption Expenditure**: It is also known as Household Consumption Expenditure and it is the measure of spending conducted by the consumers of a country. The data is obtained from the World Bank database.
2. **FDI Inflow from US** : The amount of FDI inflow from US into Czech Republic over the past 30 years has been used in the dataset. The data has been obtained from the Bureau of Economic Analysis, US Department of Commerce's official website. The variable is expressed in Current US Dollars.
3. **Income**: The National Income of the country is taken as the proxy for income and the data is obtained from the World Bank database.
4. **Personal Income Tax Rates**: The personal income tax data over the past 30 years is taken into consideration. The data is obtained from the World Bank database.
5. **Interest Rates**: Interest Rate spread between Lending and Deposits is used as a proxy for Interest Rates. The data is obtained from the OECD database.
6. **Wage Levels**: By definition it is the percentage of Labour that is working for a wage rate that is below two-thirds of median pay. The data is derived and curated from OECD Database and the data spans over 30 years

7. **Inflation Rates**: The inflation rates of each country over the span of 30 years has been obtained from the World Bank Database.

While the first part of the analysis will be a Panel data regression and the second part of the analysis will be a time-series regression analysis. The analysis uses a multiple regression method in order to explain the first part and the second part of the research. The econometric tool that is used to conduct the quantitative analysis is Stata MP 16.4 version. A dataset is created on Excel initially and then the data is imported into the Stata Programme. The theoretical model of the panel data and the time-series data is expressed as follows:

Theoretical Model of the Analysis.

First Part of the research will look into all these independent variables and there will only be one dependent variable.

$$\boldsymbol{Y_{it}\ US\ FDI\ Inflow\ into\ CEE\ Countries} = \alpha_1 + \beta_1 Wage\ Rates + \beta_2 Openness\ Index + \beta_3\ Gross\ Domestic\ Product + \beta_4\ Exchange\ Rates + \beta_5\ Inflation\ Rates + Error\ Terms.$$

he Second Part of the research will look into the influence of US FDI inflow into Czech Republic on the Consumption Expenditure of Czech Republic and there will be other control variables.

$$\boldsymbol{Y_{it}\ Private\ Consumption\ Expenditure\ of\ Czech\ Republic} = \beta_1\ FDI\ Inflow\ from\ US\ into\ Czech\ Republic + \beta_2 Income\ Level + \beta_3 Interest\ Rates + \beta_4\ Personal\ Income\ Tax\ Rate + \beta_5\ Unemployment + \beta_6\ Inflation\ Rates + \beta_7\ Wage\ Rates + Error\ Terms$$

The above models will be used as aid for the entire process of the analysis. The null hypothesis and the alternative hypothesis is curated in order to fulfil the results that will be derived from running the model on Stata. The objective of the research is to create an understanding of the FDI and how it affects the Domestic Economy. The statistical and quantitative methods used is a meagre tool to prove the significance of the variables that are being considered. The results and the discussion of the analysis will help in deducing the right policies that will be required to map out that the future of FDI involvement in the CEE countries and the Czech Republic.

CHAPTER 3

ANALYSIS

3.1 Introduction

The following chapter will provide a deeper understanding of the study. The route of the chapter will cover the objective of the research topic and give a context to what the study aims to achieve. An explanation of Foreign Direct Investment in a macroeconomic context followed by the determinants that affect the FDI will be fleshed out in a chronological order. This will then aid to specifically bringing the case studies of US and CEE countries into the limelight. Finally, the chapter aims to break at a point where the field can then be narrowed down into the individual economic concept with Czech Republic as the case study.
Each of the topics will be analytical in nature, thus making the chapter an analysis which will include tables and graphs that have been derived from secondary sources of data.

Foreign Direct Investment over the years have developed to become more inclusive in nature. In the sense that the definition of FDI have come to incorporate more business activities than before. Foreign Direct Investment can thus be defined as a business activity in which a company, country or an economic legal entity is investing money and or capital into a foreign (host) country (Investopedia 2019) . The investment can been seen in the forms of Mergers and Acquisitions, starting operations and production houses in the foreign country, loaning amounts to the host country etc. In some cases the investors are silent partners and in most cases they form the management of the company in the host country. When there is foreign direct investment taking place between two countries, there is also a transfer of knowledge, expertise and technology. When an investor purchases a significant amount of shares in a foreign company, so much so that they now have say in the decisions of the board is also considered as a foreign direct investment. In the activity of FDI, the parent company is always based in the home country. (Investopedia 2019) The different types of the FDI have been scientifically categorized into some prominent groups and they are as follows.

- **Horizontal FDI**: This kind of FDI is carried out when a firm mirrors the same kind production and same value chain in the host country. E.g.: McDonalds opening restaurants in Czech Republic.
- **Platform FDI** : This is when the host country performs the function of a bridge from where goods are exported to a third country E.g.: Amazon Distribution Centre in Prague

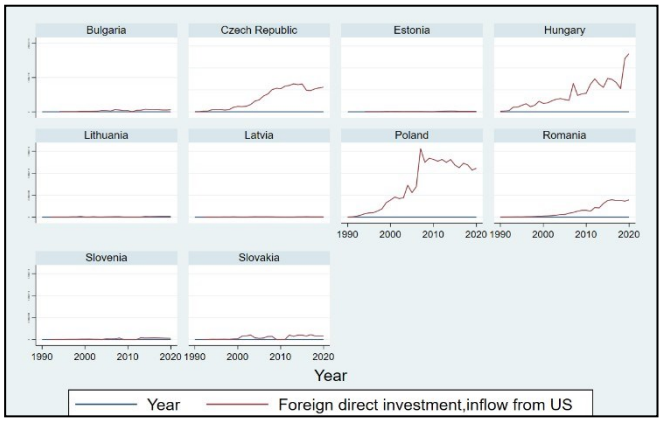
- **Vertical FDI** : When the firm has taken further steps in developing their existing business structure within the host country, and by doing so they have added value to the firm. E.g.: US acquiring raw materials from Slovakia .Thus, the study will now move on to specifically explaining the science behind the determinants of the investment and to what level they impact the economy of the host country. The determinants that attract the Foreign Investment into a country will change over time. The changes that have occurred have a push and pull factor that is associated to it. When there are significant changes in the methods of how business is conducted in the foreign country and these changes negatively affect the profit making motives of an organization it pushes them into looking for other avenues to conduct their business. This search most of the times lead to shifting the entire business or different parts of its production into new regions. The pull factor associated with the determinants can be seen in the host countries. When an economic or social condition in the host country goes through any change, the common determinants of FDI change in such a way that attracts the FDI into the host country. The changes and the correlation of the determinants with the FDI will be quantitatively analysed in the following sections.

3.2 Overview of US FDI into CEE countries (1990-2020)

In order to understand the investments that have been made into CEE countries we need to understand the lay of the area. The 10 CEE countries that have been discussed in the study have gone through monumental changes in terms of its political and institutional structures. They were all part of the Soviet East Block and gained independence only after 1991. This major change in the regions have resulted in foundational policy changes when it comes to attracting FDI into the countries. While still being a part of the Soviet Eastern bloc, the countries had very less interaction with other nations around the world. Most of the trade took place within the Eastern bloc and with Moscow (NataljaApanasovich[a]HenarAlcalde Heras[b]Mario DavideParrilli[c].) Thus before 1991, the CEE countries were closed economies and after that there was an influx of FDI from the rest of the world and particularly the US. The foreign bureaucracy was always a hindrance when it came to the trade between US and the Soviet Union. The political layers that were entrenched in the relationship spread to the small nation states associated with Moscow. The political history of the ten countries are important in order to understand the nature and the pattern of investment that came in from US. (Wikipedia.com) Czechoslovakia was sovereign nation and in 1993 it split into Czech Republic and Slovakia. The Baltic nations of Estonia, Lithuania and Latvia gained

independence from the Eastern bloc in 1988,1990 and 1991 respectively. Hungary and Poland gained independence in 1989, the same year in which Romania declared itself as a socialist republic. Bulgaria transitioned into a democratic nation in 1989 and Slovenia split from Yugoslavia in 1991 to form a sovereign nation. The understanding that we need to take away from the above historical moments is that in nations that were smaller in size and split from Soviet Union after 1990, the FDI attraction was much slower and smaller when compared to countries such as Romania, Poland and Hungary. There is a stark difference in capital investment when the sovereignty of each nation comes into play. Policies of each independent government after 1991 was to create an environment in order to attract investment from abroad (Aleksandr V. Gevorkyan). The reason for such policies and effort was because of the belief that foreign investment is bound to bring economic growth into the country. There were various tools used in order to bolster the FDI route. Some economists however argue that there is unwanted importance given to the role played by incentives and subsidies in the host countries. Accordingly incentives are to be given only the secondary position as at the end of the day an wholesome view of an economy is what attracts the investment into it. US was always strong on its FDI outflow strategies thus when the closed economies in the eastern bloc opened there was enthusiasm to invest and operate there. The geographical locations of the CEE countries which places it close to all major market capitals in Europe and the untapped consumer base in these countries were some of the major reasons to invest in these nations. The kind of investment made and the variety of industries that the direct flow of capital from US has made an influence and can be noticed in the following sections of the chapter. The next graph that is shown depicts the amount of FDI that has come from US into CEE countries for the time period 1990 to 2020.

Figure 1 : FDI Inflow from US to CEE 10 countries (1990-2020)



Source: US government BEA database: Own illustration of graph.

The above graph is a depiction of the pattern of FDI that is flown into CEE countries over the thirty years since they have moved into transition economies. It must be brought to the attention of the reader that in 6 out of the CEE countries, FDI from US did not exist in the very early 1990s.

Table 2: The year US FDI came into each CEE Country.

Country	Start Year of US FDI Investment
Bulgaria	1994
Czech Republic	1990
Estonia	1998
Hungary	1990
Lithuania	1997
Latvia	1997
Poland	1990
Romania	1990
Slovenia	1992
Slovakia	1995

The reason for the absence of US FDI within CEE countries until 1990 is because of the command economy policies that was encouraged by the Soviet Union. Once the transition process began, the economies took some time to jump start and only then did it start attracting investments (Oleh Havrylyshyn), especially from US. There is also a difference in the initial investments made by US in each of the countries. While in Hungary 1990 saw an FDI inflow of 119 million, in the same year Romania received an investment of just 10 million. Even though both the nations were sovereign in 1990 and Romania is a bigger country than Hungary, the socialist state in the latter area was one of the main reasons why the amount was less. Hungary on the other hand a great investment climate and thus investors were willing to invest in a nation that is in close proximity with a huge untapped consumer base and a hub that is being welcoming to foreign investors. In the following section, the paper will look into the different and major industries that have seen the US dollars over the span of 30 years.

There is a variety of industries that are designed to receive FDI (Grimalda, G., Barlow, D. and Meschi, E., 2010). . Some of the plans made by countries and their respective governments are created in such a way in order to attract foreign investment alone. This niche plans and strategies of attracting FDI can be found in smaller and newly independent nations that are trying to jump start their economy. In its rebuilding stage, Croatia in 2007 came with a range of business propositions for the development of the nation. There were huge infrastructure and manufacturing projects in the plan, and the government made the effort to market the projects for massive amounts of Foreign investment in the country. The above case of Croatia is an example of the kind of investment that the country expects in order to

pave way for a better economy. In the case of US and the CEE-10 countries, infrastructure investment is comparatively less than the manufacturing and service industry investment. The following table will give a brief idea into the different industries in CEE-10 countries that have significant amounts of US FDI investment.

Table 3 : Dominant Industries US FDI is present.

Country	Industry
Bulgaria	Manufacturing and Finance Industry.
Czech Republic	Service Industry
Estonia	Technical services and Chemical Manufacturing.
Hungary	Manufacturing and Information services.
Lithuania	Manufacturing and Financial non-bank companies.
Latvia	Manufacturing and Service Industries
Poland	Food Industries and Manufacturing machineries.
Romania	Food, Mining and Wholesale trade.
Slovenia	Wholesale Trade and Technical services.
Slovakia	Chemical Manufacturing and Transportation Equipment industry.

This table aims to depict the major industries that US FDI inflow has invested itself in. Each country in the group has a different forte. Thus investors are drawn towards the best that each nation has to offer. One example that can be seen is Estonia. The country in the recent future has managed to technically educate a major part of its population. This technical education comprises of university level degrees in information services. The part of the demography which is equipped with technical skills is considered as labour for a thriving information sector upcoming in the capital of Tallin. The Hungarian-American enterprise has proven to make successful investments in the private sector of Hungary. The bilateral economic relations between US and countries such as Latvia and Lithuania have promises of active and increasing trade (exports) over the coming years. US exports to Slovakia and Slovenia include energy, electrical and chemical production. One important point to be noted in the relationship between US and the CEE – 10 countries is that apart from the indirect impact US FDI has had on the countries, a direct influence in rebuilding

these nations post the soviet era has been played by US. During the period of transition in the CEE countries, variables of social development, openness to trade and privatization of enterprises and industries began to appear and boost the morale of the investors around the world to run their business there. The transition process was different of each country. The transition was categorized into the Gradualist approach and Shock Therapy approach (Oleh Havrylyshyn). As both the names suggest, the gradualist approach meant that the transition will focus on institutions and its restructuring over a period of time, whereas shock therapy meant to hit the ground running. In shock therapy absolute opening up of economy to the highest degree was given importance when compared to the stage by stage opening up that the gradualist approach pursued. Countries such as Poland, Czech Republic, Slovakia went for the Shock-therapy approach whereas Hungary went for the gradualist approach. During these years in the history, we can notice that the West was determined to help the CEE region and the rest of the post-soviet countries to transform itself into a market economy from a socialist one.

This is clearly seen in the Washington Consensus that was put to effect in order to help in granting the IMF loans. (Oleh Havrylyshyn) The consensus focused on three main areas, namely Stabilization, Privatization and Liberalization. All of the economic policies that was pursued by the countries targeted to develop the foreign relations around the world. Coming out of the Russian Ruble monetary zone was also a aimed at improving the individual identities of the countries and establish themselves as unique economies. The result of the different approaches in economic transformations was varied. An analysis done in the recent past have proven that the countries that opted for the Shock-Therapy approach was more successful in the future when compared to the countries that adopted the Gradualist approach. The European Bank for Reconstruction and Development produced a report in 2004 and the report brings out the fact that the Shock-Therapy transition economies have a much better market orientation than the gradualist approach countries. It must be noted that all these countries have also proven well on the social development side and grown into highly human developing societies. From the data that shows the outward FDI of US, it can be seen that in the early 2000s the FDI flow from US strengthened into CEE region. Although one must note that the region was and is still not the major destination for US investment however US is the biggest Foreign inflow partner for CEE region after its EU partner Germany. A trend that is noticed in the US FDI outflow across the globe is that it engages in labour-intensive businesses for investing. The reason being that there is a large pool of cheap and skilled

labour available around the world when compared to its home market. This is the case with CEE region as well, the major labour intensive industries that is heavily invested in by US is the transport equipment , electrical machinery and food industry. If we arrange things in a ranking system, one can say that US FDI outflow is highest in Asia followed by Latin America and then CEE region purely on the basis of cheap labour that is made available here. The social and economic environment in the CEE region changed over the years (especially after the Soviet era. The economic environment changes are broken down into specific macroeconomic variables and is presented in the next section of the analysis. The CEE region is the prime example when it comes to a transition economy. The restructuring of many institutions can be seen in the transition process, the efforts made by the government in moving from a planned economy to a market economy was being observed by every major country around the world. The untapped potential in the consumer base of the CEE region, the proximity to the European market and the Central Asian markets along with cheap labour and the onset of a fresh government structure are all the important specifics to be kept in mind before moving to the next section of the analysis.

3.3 An Analysis on the Factors that influenced US FDI into CEE countries.

The variables that are to be discussed in the following section will be treated as the main actors in the entire first part of study. The structure of the analysis will be such that it will start by giving a detailed and individual analysis on each of the determinants followed by an overall Panel Data analysis of the relationship between the dependent variable and the independent variables. The previous section highlights the political and economic environment that was prevalent during the time period and this will help in drawing a picture for the future analysis as well. All the determinants that are discussed in this study are macroeconomic in nature. The reason being that the study believes that FDI is a macroeconomic concept and if we try to explain it with microeconomic variables, an irregularity will arise out of it. It is important to also look into why would a company want to move out of its known territory to a foreign nation ?. The sole motive being profit maximisation, there are various methods to drag the differential line from break even to profits, and one of those methods is to shift its production elsewhere and gain from the low costs. Inputs into a company's production assumes different forms. There is obviously raw material inputs, capital inputs, financial inputs and the irreplaceable human input. By moving abroad a company can get far cheaper alternatives for all these inputs and thus aid in its profit. Once the production is carried out, the output is either sold in the foreign markets (thus

making for Horizontal FDI) or the output is sold to a third country (Platform FDI) or the third option is when both of this is combined together. The business is able to profit from FDI even in the distributing and selling stage as well. This is done in way of saving in the cost of transportation and storage. Thus, the intention of FDI investors are quite clear it primarily and fundamentally is profit making. However, there are other motivations as well such as better infrastructure available in the host country, a surplus of labour that is particularly skilled in the business one wants to carry out etc. All of these intentions are fulfilled by economies that are hoping to attract investments. Once, FDI flows into an economy, the impact of it is quite evident. There is the obvious increase in the employment rates, the betterment of the standard of living and eventually the undeniable growth in the productivity of the GDP. This is just a brief introduction on the motivations of a general investor who is interested in taking the FDI route, what is going to follow this is a detail oriented study. The study will specifically focus on six variables (that are macroeconomic in nature). Each of these variables will be analysed individually as it is important to know the nature, time graph and influence each of them have undergone in order to understand the final analysis. The individual analysis will include graphs, correlation matrixes and scatter plots as it will be quantitative in nature. The data that is being treated in the study involves the variables from 1990 to 2020. Thus, it encompasses a period just before transition, the period of transition, the growth of the economy during the latter year, the financial crisis of 2008-09 and the Covid-19 Pandemic of 2020. As all of these are macroeconomic in nature, it is safe to assume that all of them have been sensitive to all the global economic conditions. Therefore the analysis of the variables will include and thereby mention all of these encounters. Here, the independent variable is the Foreign Direct Investment Inflow from US that has come into the CEE region and the dependant variables are Wage Levels, Trade Openness, Inflation rates, Exchange Rates, Inflation rates and the Efficiency of the Government indicator (proxy : Corruption Perception Index).

3.4 Description of the Data and Summary Statistics

The following section will explain statistical analysis of the data that has been accumulated for the purposes of the study. Table 3 is a depiction of why these variables have been taken into consideration. It hopes to explain the aspects of influencers that the study is analysing. We want to know to what extend the availability of labour (cheap labour), the opening of the economy (moving from socialist economy to market economy), the prices in the local

markets, stability of the new currency and most of all the transparency and efficiency of the government works in favour for the FDI to come into a nation.

Table 3 : Description of the Data (First Analysis)

	Indicators	Variables Names	Descriptions
Dependent Variable	**Foreign Investment in CEE from US.**	**FDI Inflow**	**Imports and Capital Investments made in the CEE region by US based entities**
Independent Variables	**Availability of Labor**	**Wage Levels**	**The percentage of population that is working for below the median pay in these countries.**
	Acceptance by the transition economy	**Trade Openness**	**This is the sum of Exports and Imports divided by the GDP.**
	Stability of the Currency	**Exchange Rates**	**Exchange rate of each currency after moving out of the unified Ruble zone**
	Nature of the Consumer Economy	**Inflation Rates**	**Inflation rates over the years**
Control Variables	**Efficiency of the government**	**CPI**	**Corruption Perception Index**

The above data has been sourced from accurate sources. The data was firstly declared as Panel Data on Stata. The data was found to be strongly balanced as well. In order to get an idea of the entire data, I conducted a summary analysis. The purpose of the summary statistics is to give an initial outline as to what the study will be dealing with.

Table 4: Summary Statistics of variables

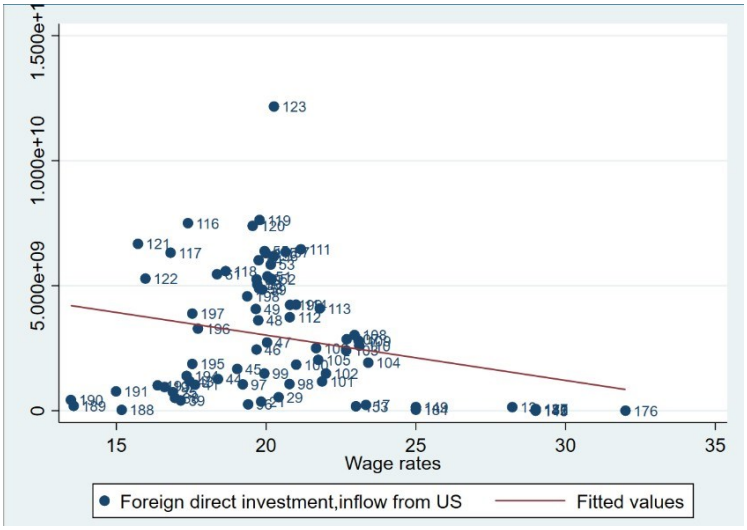
Variable	Obs	Mean	Std. Dev.	Min	Max
Foreigndirectinves~w	294	1.744e+09	3.183e+09	-4000000	1.561e+10
Wagerates	115	20.42	3.406	13.481	32
OpennesssIndex	284	1.109	.349	.391	1.907
ExchangeRates	178	83.224	18.479	42.104	112.655
InflationRates	298	30.2	117.244	-1.545	1058.374
Corruption Perception	236	4.894	1.029	2.6	7.5

The data has in total of 310 observations. The panel data is strongly balanced.

WAGE LEVELS

The wage level variable that has been used in this analysis is the proportion of working population that works below the median pay of the country. The data has been obtained from the OECD database. According to common assumption, a lower wage rate contributes to the attraction of FDI in a country as the cheaper factor of production will lead to profit maximisation. Hence in this case the relationship between FDI and the percentage of labour population working under median pay should be direct. Keeping the assumption in mind the analysis has brought out a scatter plot with the dependant variable being FDI and independent variable being wage rates. The scatter plot however brings out a negative relationship between the two, thus completely opposite of the assumption made initially. However, the reason for this can be seen in previous studies that hoped to understand the positive relationship between increasing wage rates and FDI.

Figure 2 : Scatter plot between FDI and Wage Levels.



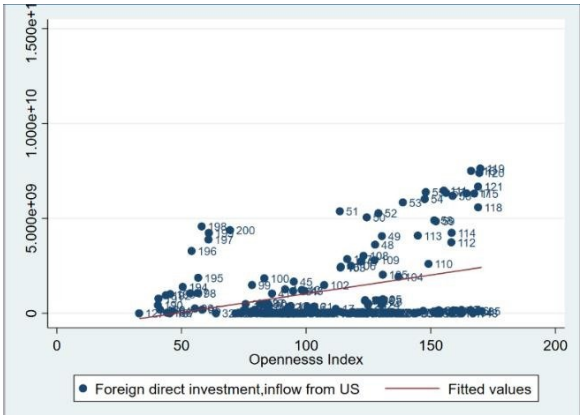
According to (Sonjoy Chakraborty, Paper to BOI) there are two specific reasons as to why lower wages don't necessarily attract FDI into the host country. The economic reason being that higher wages are mostly associated with highly skilled labour and a highly productive economy. Hence in that sense foreign investors will look into investing in the countries that have higher productivity and thus higher wages (proving the negative relationship). The social reason being that a political stable country is the only one in which there is a higher level of wages. Hence once again proving that foreign investors will only feel safe to invest in politically stable nations and thereby higher wages. Following the above analysis it is safe to say that the CEE countries are a great example of the transitioning process and that as time passed the percentage of labour population working below the median pay decreased and thus

it became an indicator for the development of the nation. Currently Bulgaria has a national minimum wage of $376 (making it the lowest among the 10 countries) and Slovenia has a national minimum wage of $1216 (making it the highest among the 10 countries). Thus, the assumption that cheap labour attracted US FDI flow into CEE countries can be cleared. The main reason for the US FDI flow in terms of labour is the high skills and the surplus availability of labour in these nations.

OPENNESS INDEX

The definition of openness index is that it is the sum of import and export of a nation divided by the GDP of the country. The Openness Index is published by The Legatum Institute under the name Global Index of Economic Openness. This is an indicator that depicts of how open an economy is towards investment from outside. It is often found in research reports that the most swift way for a developing economy to grow is by making it a foreign investment friendly place. The following is a scatter plot of the dependent variable being Foreign Direct Investment and independent variable being the Openness Index. The assumption is that there is a direct and positive relationship between both the variables. The scatter plot has proven the assumption right and one can say that the openness of the economies of the CEE-10 regions are positively related to the FDI it has been receiving from US since 1990. By being an open economy, it means the region is investor friendly and has the ability to make the efforts behind FDI much easier.

Figure 3: Scatter plot between FDI and Openness Index.



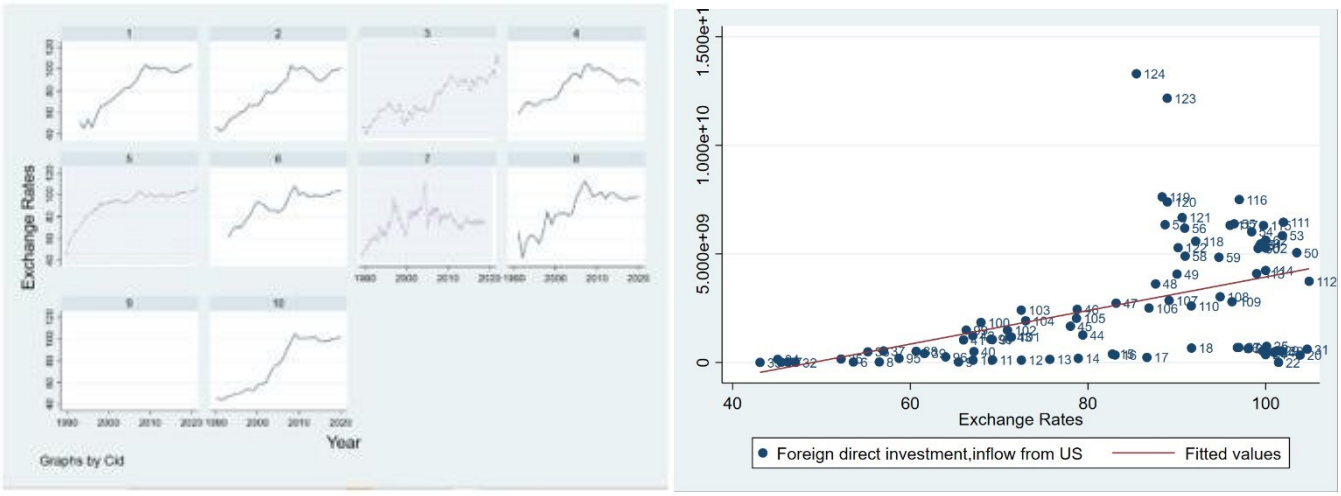
In this instant it is important to distinguish between Financial openness and Trade openness. The former is a development that arises after there has been successful openness to the economy. It so happens that when there is a free economy, there is a reduction of government on the financial institutions thus paving way for financial openness. This financial openness

then attracts more FDI, thus creating cycle between the three. A research paper by (LIEN, Nguyen Thi Kim) specifies that the method of trade openness decides whether the foreign investment is sustainable for the economy. FDI according to the author should be designed in such way that the exports of the country is more valuable than its imports. Also over the course of time it is advised that FDI should be from high-tech industries. By focusing more on technical industries, the host country benefits from the highly skilled workforce that develops there. This is then transformed into better domestic production houses thus proving a Spillover effect. This is can be seen in the cases of Romania and Estonia, where initially technical investment was attracted from US in the late 1990s and early 2000s. This was in the form of call centres and out sourcing agencies and this gave birth to a youth that is familiar with technology. Now Tallin (the capital of Estonia) is a recognised hub for Digital industries and the country is regarded as the Digital Leader in the CEE-region. Hence, we can say that the positive relationship between the openness index and the FDI in this context is a correct evaluation in regards to the evolution of the economies over the last 30 years.

EXCHANGE RATES

The literal definition of Exchange Rates is that it is the value that is associated to a particular currency in regards to the value of a foreign currency. In order to better understand how exchange rates relationship with FDI is it is important to know the general role played by exchange rate on the trade of that country. When the country has a higher exchange rate when compared to another country, it means the value of the former has appreciated. This then increases the value of the exports of the country whose value is appreciated and it decreases the prices of it imports. Now how does this affect FDI? when the exports of a particular country is expensive than its imports, the prospects of production becoming profitable is higher. Thus, by investing in production plants here will benefit in exporting outputs at a profit to a third party(Parallel FDI) and the imports (such as machinery and capital) will be much cheaper thus reducing the cost of production.

Figure 4 : Time Series graph of Exchange Rates Scatter plot between FDI and Exchange Rates.



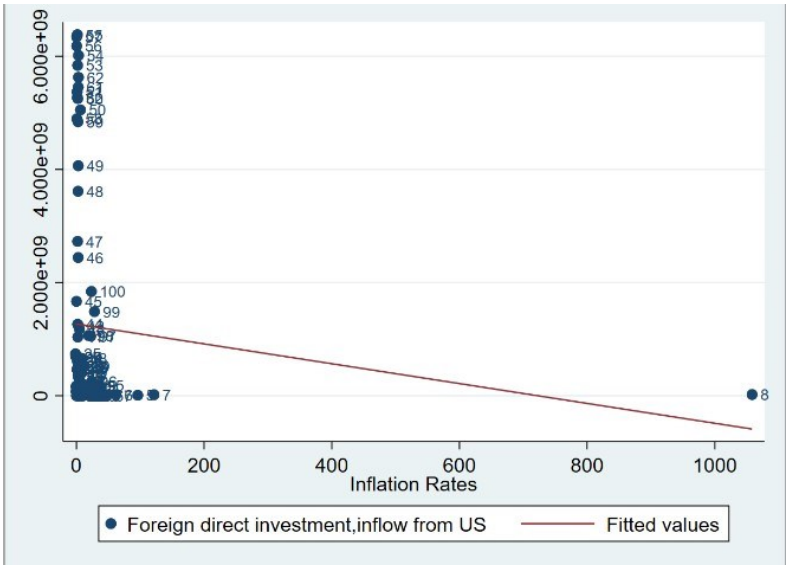
The above graphs show the nature of exchange rates in each country over the past 30 years and the assumption is that when Exchange rates of a country increase the FDI into the country will also increase. This can hence be seen through the above scatter plot that relationship between US FDI inflow and the Exchange Rate in CEE 10 countries is positive, The variable taken here is the real exchange rate from the World Bank database. The real exchange rate is a highly volatile variable as it can be seen from the time-series graph. However the general trend of the entire variable is that it has been on the higher trajectory. The only time period that the exchange rates took a major hit was during the pandemic of 2020 and the Global Financial crisis of 2008. The Financial crisis did leave a long lasting impact on most of the CEE countries. (A Working Paper of ADB) mentions that the exchange rates has a positive relationship in developing countries and this is different from the sunk costs that have a negative relationship with FDI. A higher exchange rate also means that the country's economy is doing well for itself and hence this increases the confidence among the foreign investors and this indirectly leads to more FDI. The study mentioned earlier however was not able to bring out a significant relationship between exchange rate and average rate of FDI. This is might be because of the difference in the industries that receive FDI (according to the author).

INFLATION RATES

The inflation rate is the increase in the price index of an economy over a period of time. The variable of inflation is an indicator of the health of an economy. However, it is said that inflation is like salt and you prefer to have it in a little quantity in your food (in this case your

economy). The reason this particular study chose Inflation as a determinant of FDI is because of the price index of an economy is an important factor when it comes to investing in a particular nation. Also, as both Inflation and FDI contributes to the economic growth of the economy it was expected both these variables might be related to each other. Every study that has been conducted regarding the relationship between the two variables as concluded that the relationship is negative in nature. Given that review of previous work, the following is a scatter plot is a depiction of the relationship of the dependent variable of FDI and the independent variable of Inflation of the CEE 10 countries.

Figure 5: Scatter plot between FDI and Inflation Rate.



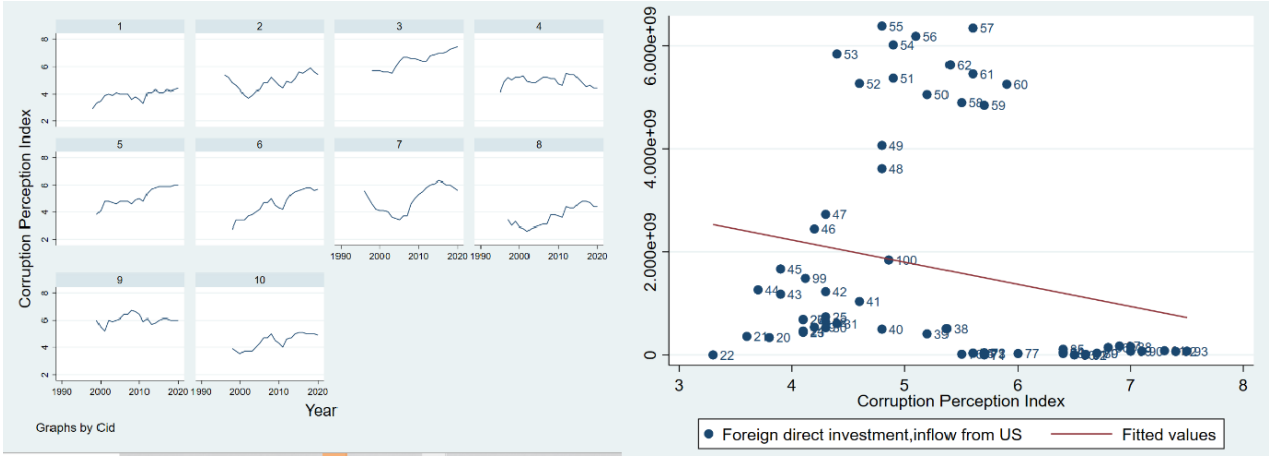
As per the previous studies, the conclusion stands true for the case of the studies that have been taken into consideration here as well. There exists a negative relationship between both the variables can be explained of some reasons. To simply put it, an increase in the inflation of the economy will force the governments to take certain steps to reduce the inflation. These steps taken by the government, while is better for the host economy, it eventually reduces the aggregate demand in the economy. As per a study conducted by (Selin Sayek in the Southern Economic Journal) during the period when the government is making reforms, the purchasing power of the earnings decreases and the consumption of the economy is delayed there. Hence, according to Selin Sayek this is one of the reasons that the FDI falls when inflation increases. However, according to the paper published by (The International Journal of Academic Research in Business and Social Sciences) the author believes that the contractionary Fiscal Policy adopted by the government will actually lead to FDI increase in the long run. As it is seen in the period of Fiscal contractionary policies, there is tax reduction

and fall in government expenditures. This will result in lower inflation and finally higher investments. And this is seen in the CEE region as well that over the years, whenever there is a rise in Inflation, the governments have taken steps towards reducing it through Contractionary Fiscal Policies.

CORRUPTION PERCEPTION INDEX

The Transparency International is a private, non-government organisation that publishes the Corruption Perception Index every year since 1995. The role of CPI in this study, it is considered as the Government Control variable. In the case of the transition economies, it would have been unfair to take political stability as a government indicator. As political stability came much later (post-soviet fall) for most of the nations. Thus, the indicator of CPI hopes to explain the efficiency of the nation's government. When the government is in order and there is absolute transparency between the public institutions and the private institutions of the economy, investor confidence is boosted and there is more flow of FDI. The CPI index associates a score from 1 -100 (1 being the most corrupted and 100 being the least corrupted) and as per the score ranks are given for each nation (1 being the least corrupted nation and 100 being the most corrupted nation). For the sake of the analysis, the rank of the CPI index is included in the dataset (numbers ranging from 1 to 100).

Figure 6: Time Series graph of Corruption Perception Index (score) Scatter plot between FDI and CPI (rank).



Given the nature of the numbers and the FDI variable, it was assumed that the CPI rank and FDI are negatively related to each other. Hence, the assumption is that as the CPI rank of the nation is lower, the FDI inflow into that nation is higher and vice versa. As shown in the

above scatter plot, the relationship between FDI and CPI is negative. The time series graph is to provide an overview into how the corruption has generally been in the CEE-10 region (for the purposes of the time series graph, the score of CPI has been taken into account) and it can be analysed that the initial post-soviet era did see an improvement in the government corruption scenario. However, it must be taken into account that the off late there has been a decrease in the number of the score in almost all the CEE-10 region. A report by (Balkan Insight, 2021) mentions that the people of all the CEE countries have complained that the corruption has increased. The report further goes on to explain that this increase in corruption figures are an impact of the pandemic. According to common population it is at the hospitals that most amount of corruption takes place. In order to avail a medical service, it has now become imminent that people have to have connections among medical staff. Pandemic has increased the need for medical services and thereby increased the corruption. This will negatively affect the FDI in the long run.

Review of the Preliminary analysis of the Determinants.

The preliminary analysis conducted in the above section is to understand and gauge the nature of each of the determinants individually and their unique relationship with the dependent variable of the US FDI inflow. There was a particular assumption associated with the result that was expected out of each result and this assumption was held true in all cases except for wage rates. In the case of wage rates the analysis provided a result that was aimed at another direction. The next part of the analysis will be all about a panel data regression. The regression will be showing the dependent variable and the significant relationship it has with all the explanatory variables. However, it must be taken into consideration the individual analysis shown in the above section as well in order to get an wholistic view of the objective that the research is chasing. The next section will be structured in the following, the methodology of the Panel Data Analysis will be explained along with the model, the regression analysis results will be shown, the explanation of the results will be accompanied by a theoretical discussion of the concept.

3.4 Panel Data Analysis

The dataset is designed as a panel data that involves the time period from 1990 to 2020, and there is data from ten different countries, and there are six variables in the mix. In order to mathematically and statistically calculate the influence the explanatory variables have on the dependent variable regression is used. Regression is a statistical tool that explains the variability of the dependent variable in response to the independent variables. The software used in this research is the Stata MP 17.0 version. The dataset was curated on an excel sheet and then imported to the STATA software where the statistical analysis (including the scatter plots) took place. The brief overview of the variables and the model are as follows.

Dependent Variable: Foreign Direct Investment
Independent Variables: Wage Rates, Openness Index, Exchange Rates, Inflation Rates, Corruption Perception Index.

Model Specification:

$$Y_{it}\ \textbf{US FDI Inflow into CEE Countries} = \alpha_1 + \beta_1 Wage\ Rates + \beta_2 Openness\ Index + \beta_3\ Gross\ Domestic\ Product + \beta_4\ Exchange\ Rates + \beta_5\ Inflation\ Rates + Residuals + Error\ Terms.$$

- α_1 **:** Is the intercept. It is a constant value that is regarded in the regression.
- β_1 **:** The beta value and all the other betas before the independent variables are the coefficient of the variable.
- **Errors and Residuals :** It is a set of values that is the difference between the expected values and predicted values of all the variables.

Methodology and Tests

Before the data is used for regression analysis, a series of tests are conducted in order to make sure that the data is a good fit for doing the analysis, the tests conducted in this study are as follows.

1. **Normality of Data**

The normality of the data is associated to the normal distribution of the data. It is expected that the probabilities of the data should be distributed in such a manner that the data is

symmetric when it is closer to the mean. There are fewer outliers in this case and the frequency between the data is more tight when closer to the mean. It is good to have a normally distributed data, however it is not a pre-condition for condition of any regression (Investopedia 2021). For the purposes of this study, a Shapiro-Wilk normality test was conducted. The Null hypothesis of the test is that there is normality and a p-value of less than 0.05% will reject the null hypothesis. In the case of the Panel Dataset of the following study , the p- value associated with all the variables were less than 0.05%. Thus, rejecting the null hypothesis and establishing the fact that the data is not normally distributed. As this is not a prerequisite for conducting the analysis, the research moves on to the next stage.

2. **Multi collinearity**

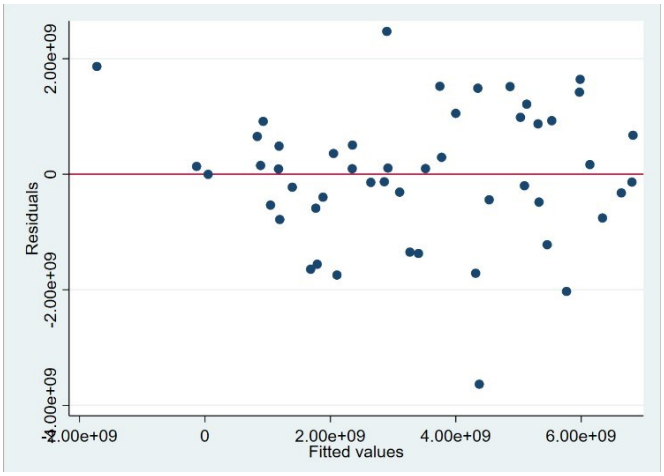
The multicollinearity of dataset is however a big concern before moving into the further analysis. As the name suggests, it simply means that when there is to any amount a correlation between the independent variables. That is if the explanatory variables in any way influence each other's movement, then the possibility of the regression analysis to be authentic is very less (Miachel Patrick Allen). In the case of multicollinearity the coefficient of regression will be unstable and the standard error window will be quite large. In this case the statistical significance associated to each of the variable is undermined. The test conducted on STATA to assess the multicollinearity is the VIF test. If the mean VIF value is less than the number 10 it is safe to say that there is no multicollinearity. The following Panel Dataset was put through the VIF test and the mean value that emerged was 2.05 which is a good measure and is less than 10 , therefore establishing the fact that there is no multicollinearity present.

3. **Heteroskedasticity**

The phenomena of Heteroskedasticity is when the residuals that are predicted with a given set of data, it is shown to scattered in an unequal sort of manner. Residuals or Error terms in a dataset is the difference between the actual values and the predicted values. One of the assumptions of regression is that the residuals will be homoscedastic (opposite of Heteroskedasticity and means there is a constant variance in the residuals). One of the major reasons that researchers prefer a homoscedastic database is because it avoids the possibility of considering a regression statistically significant when actually it is not. The test used on STATA to assess the heteroskedasticity is the Breusch–Pagan/Cook–Weisberg test for heteroskedasticity. If the p-value is less than 0.05%, the null hypothesis of homoscedasticity is rejected. In the following panel dataset however the p-value is 0.1849 which is more than

0.05 and thus there is no heteroskedasticity in the dataset and the further part of the research which is a regression analysis can be conducted with confidence and certainty of fulfilling the assumptions.

Figure 7: RVF plot



The above is an rvfplot that is a graphic representation of the difference between the predicted values and the actual values. From the graph it is clear that the dataset and the regression model. As there is no particular pattern arising, there is no heteroskedasticity in the dataset.

3.5 Regression Results

There are three different types of regression models that can be used during the analysis. It is the Pooled OLS model, the Fixed Effect Model and the Random Effect Model. While for this particular the option of Pooled OLS model is completely avoided and a choice is decide between the Fixed Model of Panel Data regression and the Random Model of regression. The difference between the two is that in the former model certain unique features of the variables do not change over time and in the latter model there is a particular random walk that will be present. In order to decide what model is the most suitable for the analysis, the Hausman Test was conducted. The results of the Hausman test revealed that the P- value is less than 0.05 therefore the analysis must reject the null hypothesis (Null Hypothesis being that it is a Fixed effect model). Hence, it can be concluded that the analysis will be done with a Random Effect Model of regression.

Table 5 : Panel Data Regression Table

Foreigndirectinves~w	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]
Wagerates	-2.133e+08	61367131	-3.48	.001	-3.336e+08	-93045575
OpennesssIndex	0.58875757	11130763	5.29	0	37059863	80691651
ExchangeRates	0.26943404	22912244	1.18	.024	-17963770	71850577
InflationRates	38877681+04	37625596	1.03	.301	-34867131	1.126e+08
CorruptionPercepti~x	-2.367e+08	4.158e+08	0.57	.0469	-5.781e+08	1.052e+09
Constant	-3.382e+09	2.348e+09	-1.44	.15	-7.985e+09	1.220e+09

Mean dependent var	3374480000.000	SD dependent var	2375166307.733
Overall r-squared	0.764	Number of obs	100
Chi-square	142.470	Prob > chi2	0.000
R-squared within	0.731	R-squared between	0.923

Once the regression is conducted, the study will now move into explaining each and every character on the table. The number of observations that have been included in the analysis are 100, this is lesser than the total number of observations. This is because the dataset also contains variables that will be used in the second part of the study. The p-value of the entire regression is shown as 0 and thus one can declare that this is a statistically significant model. The p-value threshold that the above analysis uses is 10% and therefore the variables of Inflation rates and the Corruption Perception Index is above the threshold and hence cannot be to an extend considered statistically significant. The R-squared of the analysis is taken as 0.731 and it is a good measure of fitness for the data. An R-square that large explains that the regression model is able to explain about 70% of the variance in the dataset. The next character to explain is the coefficients of each of the variables. The coefficient is that number which explains the exact numerical relationship that the explanatory variable has with the dependent variable. The sign that comes before the value explains the direction of the relationship that the two variables share. If it is a positive sign then there is a direct positive relationship and if there is a negative sign then there is a indirect negative relationship

between the two. In case of the first variable which is the wage levels of the CEE-10 region the coefficient of the variable is – 2.133e+08. This explains two things one is that there is an inverse relationship between both the variables and it translates to the fact that when there is a 1% increase in the wage levels of the country (percentage of people working below the median pay), there is a 0.00000002% decrease in the US FDI that flows and has come into the CEE region in the past thirty years. The relationship between FDI and openness index is positive and the coefficient is 0.0058875, which means when there is a 1% increase in the trade openness of the CEE region the FDI from US has also increased by 0.005% proportionally. Positive relationships between the US FDI inflow and the exchange rates and inflation have the coefficients of 0.0002 and 0.00003. While the relationship between the exchange rate coefficient was predicted by the scatter plot matrix in the previous section in the exactly same manner, it is not the case with Inflation rates. The scatter plot matrix showed a negative relationship between the two variables and the reasons of why such a relationship might occur is also given in the previous section.

However, the Panel data regression brought out the intricate positive relationship that they both have shared during the past thirty years. One must take into account however that the p-value of the Inflation coefficient is not statistically significant therefore the result should also be treated in that sense. However, for the reasons that are given in the previous section and the literature review, this study concludes that given the developing nature of the economies there will be a negative relationship between the two. The relationship between the Corruption Perception Index rank and the FDI is a negative one as well which explains that as and when there is an decrease in the corruption of the country there is an increase in the FDI from US into that CEE region and this has been the trend for the past thirty years. Thus it needs to be brought to the attention of the reader that even if most of the above analysis has been expressed in the present tense it is not the aim of the research to talk in present term. The study is specifically looking into how the situation has been in the past thirty years. So here the research is concluding that Wage Levels and CPI ranks and Inflation rates negatively affected whereas Exchange rates of the currency and the trade openness positively affected the FDI in the past. This might however not be the case in the future hence this is an analysis and not a prediction. The next section will give a brief overview of the theories that are normally associated with FDI and its determinants and whether this analysis has followed their pattern.

3.6 Theories and Theoretical Associations of the Analysis.

The above analysis is a truly independent one and there is no reference to any particular theory that exists regarding FDI and its determinants. However, in the past there has been studies that ventured into various aspects of the determinants that affected the FDI inflow into a country. Out of them, three theories are being discussed here and a comparison to the analysis will done.

1. **Production Cycle Theory**

The theory explains a relation between the four stages of the production namely Innovation, Growth, Maturity, Decline and the Foreign Direct Investment. Accordingly goes onto explain that when a company innovates a new product and wants to grow it will venture into the foreign market introducing the innovations and thereby growing. Eventually the growth of the foreign company is seen to mature as there is a copy of imitating industries in the host country. This can be seen in the case of certain technological hubs in the CEE region (Like Romania and Estonia) where initially there was a surge of FDI for technological investments and there is now industries of ICT that are homegrown and have their own identity. Therefore in that sense, a part of the Production Cycle Theory can be seen in the US FDI inflow into CEE region.

2. **Theory of Exchange Rates on Imperfect Capital Markets**

The above theory is also explained in the literature review. Imperfect capital markets such as the CEE region are subject to highly volatile exchange rates. Especially in the case of most of the countries in the CEE region that was under one monetary system (The Ruble zone) for a considerable amount of time. However, as per the analysis , the relationship between the exchange rates of the CEE region and the US FDI inflow are positively related for the past thirty years and the regression coefficient in the analysis also supported that. The theory however concluded that the appreciation of the foreign currency actually reduces the FDI inflow into a country. In this view, the analysis does not support the theory and there is a point of difference.

3. **Universal Model of FDI**

The Universal Model of FDI is the most associated theory to the analysis that is conducted by the study here. The universal model was brought forward by (Aristidis Bitzens,2011) in a paper that he submitted to the University of Sheffield, Greece. The intention of the paper was

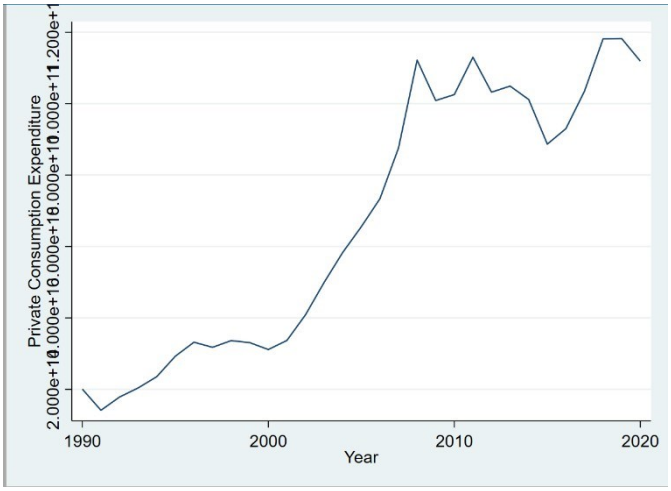
to bring under one umbrella all the theories that explain the determinants of FDI. The paper takes the case study of Bulgaria and dissects the major factors that affected the FDI inflow for a time period between 1992 to 2002. In the study two major points are revealed, that trade openness of the nation and the decline in corruption are two major incentives to FDI in Bulgaria. While 31% of foreign investors in Bulgaria is willing to invest when there are less trade barriers in the economy there is a whopping 54% of investors who are incentivised by less corruption in the country to do their investments. Th study made in the Universal Model of FDI determinants stands tall with the analysis of the this study as well where there is a positive relationship between the US FDI inflow and the trade openness of the CEE region and a negative relationship between Corruption and the former as well. The negative relation simply explains that when corruption is low in a country the FDI to that region is more enthusiastic.

3.7 Analysis of the Impact US FDI has on the Private Consumption Expenditure of Czech Republic.

The following section of the research is the fulfilment of the second objective of the research. It was the aim of the research to understand the influence FDI has on the private consumption of Czech Republic. The reason Czech Republic was the choice for this case study is because it is rapidly growing high income country among the CEE 10 countries. It was concluded in a previous study that the effect of FDI on the Private Consumption of a country can be evidently seen if the country belongs to the high income or the low income category. Hence, keeping in mind the factors and determinants that attracted FDI into CEE region, let us look into when once this FDI has come into a country what kind of impact does it have on the private consumption of the individuals there. The definition of private consumption is that it is the monetary value of the expenditure that an household incurs for the purchase and or use of goods and services. The category of private consumption is a broad one and can include everything from the food the household consumes, the electricity used, the automobile bought for travelling etc. The private consumption of a household is a direct indicator of the lifestyle that they live and for a country it is an indicator of the average standard of living that is prevalent there. If a nation’s economy is doing well for itself then the private consumption will increase, and then that action spreads to increase in domestic production and eventually the growth of the economy. Thus, one can say that the private consumption of a nation plays

a very important role in the growth of an economy. In the case of Czech Republic, the private consumption of the country has been gradually rising since the 1990s and has topped the charts when compared to all the other CEE region countries. In the most recent that has been posted by (CEIC data.org) the private consumption of the country accounted for 46.2% of the nominal GDP. It can be noticed that the country has adapted well to the changing standards of living. The development of consumer goods sector and services have given birth to city centres that are vibrant and created buzz for being in the heart of Europe,

Fig 8 : Private Consumption Expenditure in Czech Republic (1990-2020).



The following diagram is a time-series line that shows the journey that the private consumption has travelled in the past thirty years. Even during the periods of the post-soviet transition time and the Global Financial crisis one can see that there is an upward trend overall. This does show the relentlessness of the economy that is being shaped here. However, the reason for the growth of this variable must be studied closely and it must be looked into whether it is the FDI from US that has brought about such an increase in it. The reason this is being given a reasonable amount of consideration is that it has been noticed that whenever there is an influx of US dollars and its home grown consumer sector products into any country, a shift can always be noticed in the lifestyle of the host country. This research would like to call this change as the " McDonalds effect".

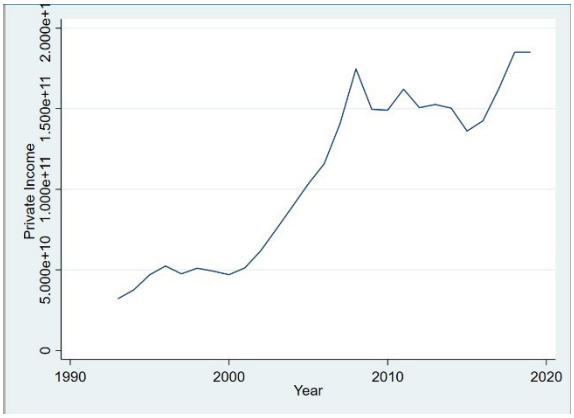
3.8 Analysis of each explanatory variable.

In this section of the research, apart from Foreign Direct Investment there are certain other variables that are being studied as well. This is in order to check the strength of correlations between these variables and Private Consumption Expenditure. In the final section a comparison will be drawn as to the relative correlations between FDI and these variables on the Private Consumption of Czech Republic.

1. Private Income

The definition of private income is that income which an individual or an household receives for contributing to an economic activity. This is seen in the form of salary, wages and or return on investments made. The income received may or may not have a frequency attached to it (it could be monthly, yearly or daily etc). In the case of the following analysis the private income of Czech republic is on an yearly basis for thirty decades.

Figure 9: Private Income in Czech Republic (1990-2020).



Only when an individual or household has income can they use it for personal consumption. Hence, the natural assumption is that when the private income increases the personal consumption also increases. In Fig 2.1 the private income is seen to be having an increasing trend over the past thirty years. However, we must see whether this increasing trend is correlated with the personal consumption. Hence the following table is a time-series regression result.

Table 6 : Time series regression between Pvt Income and Pvt Consumption (1990-2020).

PrivateConsumption~1	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]
PrivateIncomeL1	.66	.03	21.99	0	.598	.722
t	3098764.8	1.999e+08	0.02	.988	-4.095e+08	4.157e+08
Constant	-4.021e+08	1.403e+09	-0.29	.777	-3.297e+09	2.493e+09
Mean dependent var	70561323994.074		SD dependent var		35030217849.603	
R-squared	0.994		Number of obs		27	
F-test	1910.520		Prob > F		0.000	
Akaike crit. (AIC)	1255.630		Bayesian crit. (BIC)		1259.518	

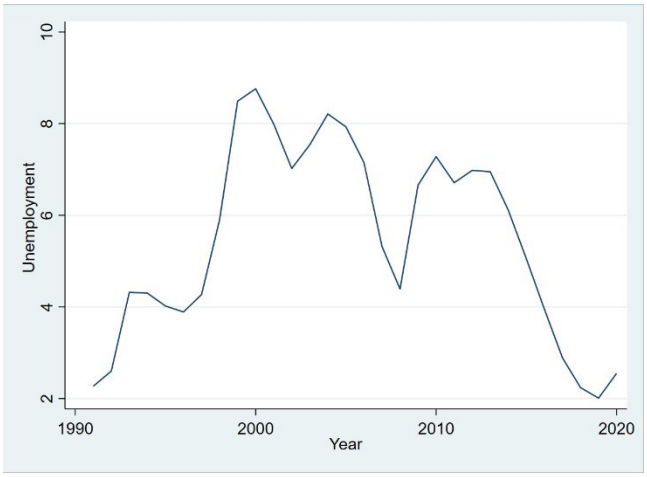
In the following table, the dependent variable is Private Consumption Expenditure and the independent variable is the Private income. The R-squared is 0.9 which goes on to show that a good amount of variance has been explained. The p-value is 0 which also shows that the result is statistically significant. The coefficient of correlation between the two variables is exactly 0.659. This explains that there is a positive relationship between the two variables. It clearly means that when there is a 1% increase in the private income of an individual there is a 65% increase

in the consumption of that individual as well. This can be thus categorized as one of the most important motivations for consumption directly.

2. Unemployment

The most common meaning of inflation is that it is that proportion of able population that cannot find an employment. The indicator of unemployment is the percentage of population in Czech Republic that was unemployed for a period of thirty years. Employment is the only way to earn income necessary for consumption. Hence the following analysis will explain the correlation between Private consumption and Unemployment.

Figure 10: Unemployment in Czech Republic (1990-2020)



Unlike the previous indicator the unemployment variable doesn't have a predominant trend. The unemployment has been increasing and decreasing over and over again. A brief period after late 1990s and evidently during the Global financial crisis, an upward tend of Unemployment can be seen in the country. Post 2020 is also said to have an upward trend in the unemployment rates. Given the individual analysis of the variable the following table is a time-series regression that explains the correlation between Unemployment and Czech Republic.

Table 7: Time series regression between Unemployment and Pvt Consumption (1990-2020).

PrivateConsumption~l	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]
UnemploymentL1	-5.036e+08	1.161e+09	-0.43	.668	-2.891e+09	1.884e+09
t	4.043e+09	2.828e+08	14.29	0	3.461e+09	4.624e+09
Constant	8.727e+08	8.441e+09	0.10	.918	-1.648e+10	1.822e+10

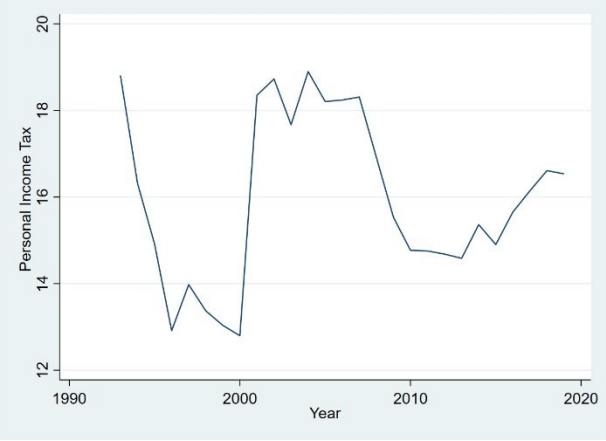
Mean dependent var	66798382185.931	SD dependent var	36574506635.963
R-squared	0.887	Number of obs	29
F-test	102.363	Prob > F	0.000
Akaike crit. (AIC)	1434.682	Bayesian crit. (BIC)	1438.784

In the following table, the dependent variable is Private Consumption Expenditure and the independent variable is unemployment. The R-squared is 0.8 which goes on to show that the regression has manged to explain majority of variance in the dataset. The p-value is zero and the result is thus statistically significant. The coefficient correlation between both the variables is -5.036e+08. This translates to the fact that when there is a 1% increase in the rates of unemployment, there is a 0.00000005% decrease in the personal consumption of an individual or household. The reason the numerical value is not that high is because when there is no income, households move on to their savings to use. Consumption in no matter stops as there will always be the need to sustain even with essentials. Hence we can conclude that although there is a negative relationship between the two unemployment cannot be termed as a momentous factor that influences consumption

3. Personal Income Tax

Personal Income Tax is defined as the tax that is levied on the personal income of an individual. The tax is in all cases levied by the government of the respective nation. The tax is used by the government for the purposes of social infrastructure development, government expenditures etc. When a tax is levied the disposable income that can be utilised for consumption is also affected. Hence, the following will be analysis of the correlation between the Personal Income Tax and Private Consumption.

Figure 11: Personal Income Tax of Czech Republic (1990-2020)



The figure is a time series line that shows the movement of Personal Income Tax in the past thirty years. A noticeable trend is not visible here. In the early 2000s there was a growth in the personal tax levied on the common population. This however changed just before and during the years of the Global Financial crisis. The country is also considered one of the best places in Europe to establish a foreign business because of its simplified tax regime that is even more simplified for foreign investors. Given the explanation of the variable the following is a regression model between personal income tax and private consumption in the country.

Table 8: Time series regression between Personal Income Tax and Pvt Consumption (1990-2020).

PrivateConsumption~1	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]
PersonalIncomeTaxL1	-42006533	1.337e+09	-0.03	.975	-2.802e+09	2.718e+09
t	4.112e+09	3.277e+08	12.55	0	3.436e+09	4.788e+09
Constant	-2.787e+09	2.205e+10	-0.13	.9	-4.829e+10	4.272e+10

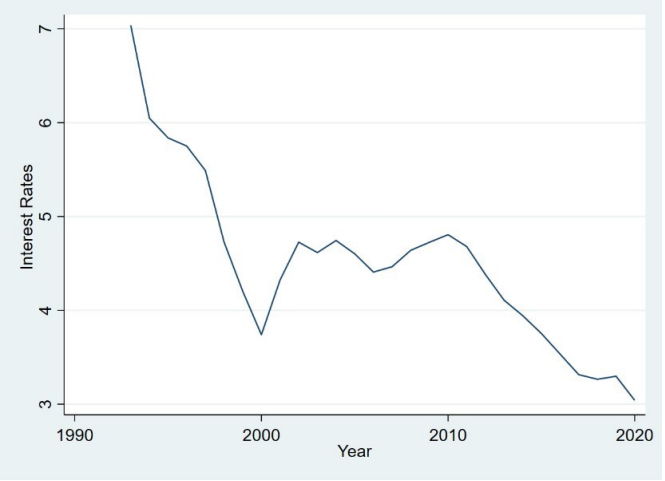
Mean dependent var	70561323994.074	SD dependent var	35030217849.603
R-squared	0.868	Number of obs	27
F-test	78.884	Prob > F	0.000
Akaike crit. (AIC)	1338.029	Bayesian crit. (BIC)	1341.917

In the above table, the dependent variable is Private consumption and the independent variable is personal income tax. The R-square is 0.874 and this means that most of the variance has been explained. The p-value being less than 0.10 goes onto show that the results are very significant. The Coefficient of correlation is -4.20e+08 . This explains a negative relationship between the two, and it is clearly indicates that when there is a 1% increase in the personal income tax, it burdens the consumer to the point that they have to reduce their private consumption. The study will also take into consideration other forms of taxes as well which if levied on goods and services indirectly reduce the private consumption of an individual or an household

4. Interest Rates

The proxy for interest rate that is used in this study is the interest rate spread of the country. The definition of the variable is the difference between the deposit interest rates and lending interest rates. This is an indicator for profit in the financial institutions that make the lending and receive the deposits. If the lending interest rates are higher, then a rational person tends to lend less from the banks. With minimum liquidity in their hands, their private consumption is also reduced. The following analysis will give a clear idea on how exactly interest rate spread affects the private consumption.

Figure 12: Interest Rate spread of Czech Republic (1990-2020)



The figure is a time-series line that shows the movement of Interest Rate spread in the past thirty years. Lending Interest Rate – Deposit Interest Rate is the formula. Hence it can be said that if the value of the difference is positive there is less liquidity in the market and if the value is negative there is more liquidity in the market. The reason this variable was chosen was because apart from Income and savings, the individual also does consumption from the loan/credit taken from the bank. Given the explanation of the variable the following is a regression model explaining the correlation between Interest Rate Spread and Private Consumption.

Table 9: Time series regression between Interest Rates and Pvt Consumption (1990-2020).

PrivateConsumption ~e	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]
InterestRates	-2.508e+10	5.708e+09	-4.39	0	-3.681e+10	-1.334e+10
Constant	1.851e+11	2.624e+10	7.05	0	1.311e+11	2.390e+11

Mean dependent var	72038562135.355	SD dependent var	35252942314.635
R-squared	0.626	Number of obs	28
F-test	19.300	Prob > F	0.000
Akaike crit. (AIC)	1426.902	Bayesian crit. (BIC)	1429.566

In the above table, the dependent variable is Private consumption and the independent variable is Interest Rates. The R-square is 0.626 which means that the regression has fairly managed to explain most of the variance. The p-value being 0 makes the result significant. The correlation coefficient is -0.00000002% which means that they have a negative relationship. With every 1% increase in the interest rate spread, private consumption has fallen the given percentage. The higher interest rate spread means lending rate is high therefore the general lending is much lower. The reason for the numerical value being so small can be accredited to the fact that consumption is not purely dependant on loans alone.

3.9 Time-Series Data Analysis

The dataset is designed as a time series data that involves the time period from 1990 to 2020,, There are six variables in the mix. In order to mathematically and statistically calculate the influence the explanatory variables have on the dependent variable regression is used. The time-series regression aims to understand what is the impact of FDI on private consumption of Czech Republic (if there is any). The regression is arranged in such a manner that there are various models which will show the interlink of all the variables with each other. The preliminary analysis has been given above explaining each of the variables. The FDI inflow is not elaborated as much because of its repetitiveness in the previous section. Hence the analysis of the second objective of this research will be as follows.

Dependent Variable: Private Consumption Expenditure

Independent Variables: Foreign Direct Investment Inflow from US, Private Income, Unemployment, Personal Income Tax and Interest Rates.

Model Specification:

Y_{it} ***Private Consumption Expenditure of Czech Republic*** = β_1 *FDI Inflow from US into Czech Republic* +β_2*Private Income* + β_3*Interest Rates* + β_4 *Personal Income Tax Rate* + β_5 *Unemployment + Error Terms.*

Tests before Regression

1. **ADF Unit Root test.**

This test is conducted in order to understand whether a data is stationary or not. Stationarity majorly explains whether the data and the variables that has been used for the analysis has managed to remain constant throughout. This does not necessarily mean that the values be the same at every point. The test was developed by Dickey and Fuller (1981). The test has a null hypothesis that the data is non- stationary (H0: $\alpha = 0$) and an alternative hypothesis where the data is stationary (H1: $\alpha \neq 0$). If the test statistic is larger than the critical value then the null-hypothesis will be rejected and stationarity will be established. In the following statistical analysis as well ADF test was conducted and the results have all been stationary. This was not the case initially, therefore a differenced variable was created for all the variables and the ADF test was run again, thus fulfilling the stationarity assumption.

Table 10 : Augmented Dickey Fuller Test result

Differenced Variable	Test statistic
Foreigndirectinvestmentinflowd	-4.317**
PrivateConsumptionExpenditureL1t,	-1.888**
PrivateIncomed	-4.161**
Unemploymentd	-3.305**
PersonalIncomeTaxd	-4.663**
InterestRatesd,	-4.176**

*** is the critical value which is at 5%.*

The above table shows the test statistic of each variable that rejected the null hypothesis. The upcoming section of the study will be about an wholistic time-series regression that will go on to explain and theorise the second objective of the research.

3.10 : Explanation of Results

ESTIMATION TABLE

Table 11:Time-Series Regression Model of the dependent variable of Private Consumption Expenditure.

Independent Variables	(I)	(2)	(3)	(4)	(5)
Foreign Direct Investment Inflow from US.	1.162462 ***				
LFDI	1.162462 ***				
Private Income		.6382853 ***			
D.Private Income		.6600982***			
Unemployment			-1.70e+09*		
D.Unemployment			-7.33e+08*		
Personal Income Tax				-42006533e+08***	
D.Personal Income Tax				-43006533e+08**	
Interest Rate Spread					-2.508e+10***
D.Interest Rate Spread	.		.		-2.48e+10***
R2 between	0.9394	0.9398	0.8	0.874	0.6
Number of obs	30	27	29	30	27
Prob > chi2	**0**	0	0.08	0	0.

****p<0.01 **p<0.05 *p<0. I*

The above is an estimation table that represents each of the relation that Private Consumption of Czech Republic has with every variable. There are precisely five models of regression and for each model the dependant variable is Private Consumption expenditure and the main independent variable is different for every model as shown in the table and all the other variables are treated as constants or control variables. The study has managed to explain the correlation between each variable and Private consumption in the previous section. However, the aim of this model of regression is to derive an wholistic view of the factors that actually determine the private consumption in the Czech Republic. Staying true to the objective of the research is important and thus it was imperative to know exactly which variable affected the Private Consumption expenditure in the country for the longest time. The p-value of all the regression models were well within and below 0.05/0.1 therefore ensuring that the results are significant. The R-squared remained high in almost every model, thus avoiding the possibility of maybe missing out on anymore of the variance. The number of observations have been 30 or less given that the time series data covers only one country. Even within the models of regression, the normal variables and the differenced variables have been utilised in the regression. This is to maintain the stationarity assumption that was fulfilled by the ADF unit root test. Hence in the above table there regression results between the original variables and the results of the differenced variables.

If a comparison is made between the initial individual regression results and the above table, it is safe to conclude that the conclusions have remained more or less the same and the relationship has not changed. The comparison that is the most relevant in the research is whether FDI inflow from US has a greater impact on the private consumption of the country. The coefficient of correlation of the FDI inflow is 1.1642 which means that with every 1% increase in inflow there is a 116% increase in the private consumption. This has been the reality of Czech republic since 1990 up until 2020. There is no other variable in the table that has this amount of impact on the consumption function of an household. The next closest strongest influence a factor has on consumption is Private income where the influence is 65% on the consumption. This concept of directly correlating private consumption and FDI inflow has not been explored in any study before. As mentioned briefly in the introduction, there is a McDonalds effect that follows every US FDI outflow and this is true in the case of Czech Republic as well. The term “McDonalds” is just a representation of the consumerist culture that US FDI can bring across borders. Today when we see a city with at least one McDonalds it is considered that the area/place is in touch with the outside world. While FDI in itself is a

purely economic activity that is done by US businesses to ensure profitability, the impact of the FDI is seen on a different landscape. The reason for such a high positive relationship can be separated into two different categories. One is the impact FDI has on the income of the nation, which is also very high. When FDI improves the income of a nation there is a larger proportion of the population that moves into earning higher than the median pay (as proved in the first section of the study with wage levels). This shift in the income levels ensure that there is an increase in disposable income for consumption. The second way is the increase in FDI inflow in any shape or form provides the customers of the country with a wider variety of choices for consumption. With a wider variety present in the market, the consumers are enticed to buy more. This influence of FDI directly increases the aggregate demand in the economy. When both these forces of the economy act in unison the influence of FDI is magnanimous.

A study conducted by (PWC 2005) mentioned the increase in the non-food retail chains that are spurring in every nook and corner of the country. Foreign brands of Tesco, Lidl, Carrefour have started to give serious competition to the homegrown retail chains. Food-retail outlets such as KFC, McDonald's etc. have commercialised the fast food industry to an extent that it has now gaining place in the essential commodity category. Shopping malls are being built for the consumer in order to enhance their shopping experience. FDI has brought variety in the products and variety in the methods to shop as well. The social impact of FDI is further contributing to the hike in consumption pattern. While a host of environmental factors such as digital platforms, social media pages, cheaper travel itinerates etc. have given rise to private spending the economic reasons are the foundations of it. If there was no probable income to support there would be no spending but it can be noticed in the analysis that the Private income of the country has been on an upward trajectory for the past thirty years. The progressive personal income tax should normally ensure a lesser disposable income, however in the case of Czech Republic the impact is in meagre decimals and is not significant. This leaves the dependent variable of Private consumption that has been rising to be hugely affected by the Foreign Direct Investment inflow from US. As the data used here is purely regarding the FDI from US although Germany is the investor, it is safe to say that the initial analysis presented in table 1.2 holds true. The FDI from US is majorly towards the service industry and this is a strong case for the gravitas of the relationship between consumption function and FDI. Consumption occurs mostly in the goods and services industry and in the case of Czech Republic that holds true.

CHAPTER 4

CONCLUSION

4.1 : Final Discussion

The following chapter will conclude the entire study and describe the limitations of the research and finally mention certain recommendations that can be carried out in the future. The literature review of the study revisited various studies that were conducted that had the same variables in it. The review was able to bring out the different theories that are etched in stone when it comes to the field of FDI and Private Consumption Expenditure. The chapter of Hypothesis and Methodology managed to mention the two hypotheses that the study has and the quantitative methods that will be used to conduct the analysis. As seen in the above chapter, there are two quantitative methods that are used in the study and they are the Panel Data Regression Analysis and the Time-series regression analysis. The design of the study resulted in the quantitative methods used, the objective of the study paved the way for the methodology accessed. The chapter of the Analysis is a detailed description of the hypothesis of the research. The analysis has explained every variable involved in the study with the precision required for this kind of wholistic study. The results of the analysis explains the relationship every variable has with each other and this paints a picture in the mind of the reader regarding the FDI inflow in CEE countries and the impact of it on the private consumption of the Czech Republic.

The results reveal that wage rates are not negatively related to inflow of FDI into the CEE region. It is a common assumption that one of the main reasons for choosing a host country is the cheap labour available there, however the result with CEE countries and its US FDI inflow this assumption has been laid to rest. Lower wage rates are an indicator of not well developed state, therefore for the inflow of US FDI, wage rates were not a determinant. Trade openness of the region especially after the 1990s played an important role in attracting FDI, it is proven now that higher the openness of the economy of the CEE region, higher is the FDI that flows into the region. Positive relationship can be noted between exchange rates and FDI inflow as well which means that as an when there is an appreciation of the currency rate in the CEE region, the FDI inflow from US has increased in the past 30 years. Inflation Rates and the Corruption Perception Index have a negative relationship with the FDI inflow. This means that when inflation rates increase, the FDI investors realise that the aggregate demand in the economy is less therefore the investment inflow will be halted for a while. The CPI is an indicator of the efficiency of the public institutions that are there in the countries. The negative relationship between the CPI rank and FDI inflow states that when the country has a

stable and transparent government, there is an increase in the FDI inflow into the country. Hence, the analysis of the determinants carefully lay down the theory that the above macroeconomic variables have an effect on the FDI inflow from US into CEE region. Through the results it is quite clear that the CEE region is not a destination for cheap labour, but for skilled ones that are paid above the average. The economy of the CEE region is open to FDI and the political conditions in these countries range from better to the best category. The volatile exchange rates and the effect Global Financial Crisis had on the inflation rates of the region is a testimony to how connected the CEE region is with the rest of the world economy. However, one of the major points that need to be understood is that the effect of each of these variables are in decimal terms and is less (numerically) although it is significant. This goes on to explain the that it is not just one of these variables that affect the FDI, it is these factors along with other millions of variables all of them making a small contribution. Thus, the effect of these determinants should not be looked into in isolation, it should be given its due place in the group of other factors that have not been explored in this study. The second part of the analysis brings out the relationship between FDI inflow from US and the impact it has on the private consumption expenditure of the Czech Republic. In this section, the direct relationship between FDI inflow from US and Private Consumption Expenditure in Czech Republic is explored but along with that the relationships between PCE and other major determinants are also analysed. These variables were namely Private income, personal income tax, unemployment and the interest rate spread. The results of the analysis was that FDI inflow from US has had a very strong influence on the private consumption expenditure of Czech Republic over the past thirty years. The coefficient of the relationship revealed that when 1% of FDI inflow increases there is a 116% increase in the consumption expenditure of the country. This kind of result was predicted as in the literature review a study conducted by Paula-Elena Diacona *, Liviu-George Mahab (2014) mentions that such an effect can be noticed on high income or low income countries. The analysis further reveals that the next in line factor that affects the consumption is income with a 66% influence on the former. While unemployment, personal income tax and interest rate spread results further strengthen the already existing theories, their numerical value is less when compare to the influence shown by the FDI and Private income.

4.2 Recommendations of the study

Keeping the above conclusion of the research in mind, there are certain recommendations that the investors and the host countries can follow in order to have a better experience at engaging in FDI. These recommendations are given to the investor and the host countries.

To Host Countries

- Stay away from the assumption that cheap wage rates can attract FDI into a country, ensure that the labour force of the country is highly skilled and is paid a good wage rate.
- Devaluation of exchange rates might help in bilateral trade, however higher exchange rates will be beneficial for attracting Foreign Direct Investment.
- Progressive taxation is the best tax system to follow if you want to attract FDI.
- Having political stability and transparency within the government will be a key attractive factor for foreign investment.
- Rather than concentrating on tax incentives and subsidies that you can give investors, develop the economy in a wholistic manner for the FDI.

To Foreign Investors

- Foreign Investment in consumer products will be more sustainable in building a brand image, dedicate resources to that sector.
- Ensure that products and manufacturing processes have patent rights so that you can avoid a loss in competitive advantage because of imitations.
- Always strategize the investments in correlation with the past performances of the society.
- Finalize the region for investment only on the basis of a study/research on the whole economy and not just a particular part.

4.3 Limitations of the Study

It is the belief of the researcher that the study has been successful in analysing the study however there were certain limitations that the research faced and they can be pointed as follows:

- Some data for the early years of transition was unavailable as there was no clear record of the data.
- The inaccessibility to some sections of US FDI inflow, reason being the database was obliged to protect the identity of the investors.
- The study was forced to use two measures of the Corruption Perception Index, the score and the rank. As the regression was unbalanced with the score.
- A direct relationship between FDI and Private Consumption Expenditure has not been explored before, therefore there was lack of previous studies.
- A primary data collection from to get a first-hand review from the people as to how FDI affected them would have brought a different angle.
- Effect of the pandemic could not be further analysed.

The goal of this research was to provide the reader with an analysis of the FDI inflow into the CEE region and prove the impact FDI has on the social fabric of the region. In order to achieve it, the study was designed to include major variables that could impact FDI and the indicator for the standard of living was taken as Private consumption expenditure. The contribution made by the research to the existing literature can be seen on many fronts. The time period of thirty years spans the transition period, the Global Financial crisis, the recovery period and finally the Global pandemic. As mentioned before the, a study on the direct relationship between FDI and Private Consumption Expenditure has been very limited or practically non-existent in the case of CEE region. “Hence to conclude” is not a phrase that suits the study of Foreign Direct Investment and its components. This is an ongoing study and as each year passes, the characteristics and features of the phenomena changes and the hope remains that this is not where it ends.

CHAPTER 5

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Databases and Websites

- OECD database
- World bank Database
- ILO Database
- UNCTAD Database.
- BEA US government dataset
- Corruption Perception Index
- Openness Index

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