European Journal of Economic and Financial Research
ISSN: 2501-9430
ISSN-L: 2501-9430
Available on-line at: http://www.oapub.org/soc

DOI: 10.46827/ejefr.v7i2.1485

Volume 7 | Issue 2 | 2023

FOREIGN DIRECT INVESTMENT AND GROWTH: A LITERATURE REVIEW FROM 1990 TO DATE

Dimitrios Kostoulis[i]
BSc in Business Administration,
Postgraduate Student,
Master Program "Accounting & Auditing",
University of Thessaly,
Volos-Larissa, Greece

Abstract:
The aim of this paper is to study the concepts of foreign direct investment (FDI) and economic growth as well as the relationship between them through a literature review of papers published from 1990 until today. In order for better results to be achieved, the review is divided into three phases, each of them reviewing a different decade. In particular, the first phase reviews the period from 1990 to 2000, the second phase the period from 2001 to 2012, while the third phase the period from 2013 up to date. Prior to reviewing each period separately, we will elaborate on the two main concepts of the present paper. Finally, the conclusions of this paper will be recorded, which are very interesting, since there is obviously a significant correlation between Foreign Direct Investment and Growth over at least the last 30 years. Based on the literature, the scientific community seems to be particularly interested in the concepts discussed in the present paper.

JEL: F21, F43, F63, O40

Keywords: foreign direct investment (FDI), growth, technology, human capital, production

1. Introduction

In the last thirty years, the introduction of new technologies has led companies to target foreign markets rather than their country of origin in order to maximize their profits. According to the literature, back in the 1990s, technology played an important role in the activities of companies and the economic growth (Borensztein et al., 1998). Therefore, this development has prompted companies to transfer technologies or acquire new knowledge through their international activity. This global activity could and can be

[i] Corresponding author: email kostoulis.dimitrios@gmail.com

Copyright © The Author(s). All Rights Reserved.

achieved in multiple ways, such as acquisitions, through vertical integration of production, or horizontal direct investments (Shapiro & Moles, 2018, p. 635). In the present paper, emphasis will be placed on foreign direct investment (FDI) as a means of activity around the world, which will be considered in relation to Growth, and its contribution to the growth of the economy from 1990 until today.

Empirical research has shown that foreign direct investment is one of the vital means of promoting technology, leading to an increase in economic growth, as it presents a positive correlation (Choe, 2003). Recent studies reinforce this view, as they argue that foreign direct investment is the main force of growth by strengthening new production processes with the view to increasing productivity and fueling the economy (Alfaro, 2017). The results of the above studies indicate a strong link between foreign direct investment and growth. However, the decisive factor in order for such an investment to be successful is the macroeconomic environment of each country as well as the socio-political conditions there.

Thus, according to Batten and Vo (2009), foreign direct investment has a positive impact on the economic growth of countries that have a high level of education, use international trade and have a developed financial system that has low risk. The above view is in conflict with the developments in the economy following the financial crisis in the late 2000s. The following chapters of this paper elaborate in detail how foreign direct investment and economic growth were affected in the aforementioned time period. However, studies on the effect of the foreign direct investment on growth back in the 1980s show how catalytic the role of the host country of the investment is. In particular, according to the literature, investments in foreign countries are highly profitable only, when the host country has a required limit of human capital that can adequately absorb advanced and innovative technologies (Borensztein et al., 1998). In addition, in the mid-2000s some researchers, based on the empirical evidence up to that time, have expressed the view that foreign direct investment does not affect productivity so positively (Elboiashi et al., 2006).

Consequently, it is obvious that concerns and opinions raised on this issue have varied over the years. Therefore, this is the reason why this literature review is of particular usefulness for economy and entrepreneurship. Over time, many researches have focused on the topic of foreign direct investment, but there is a fairly small number of studies and theoretical articles among the scientific articles discussing foreign investment in the last 30 years. Thus, the diachronic nature of this review demonstrates its significant contribution to the international reality, highlighting the factors and the environment of foreign direct investment and its impact on growth. The aim of this paper is, therefore, to investigate and record the course of foreign direct investment in correlation with the growth of countries, but also of entire continents. In order to achieve this, this paper is structured in four chapters which focus on a range of years starting from 1990 up to the present day, i.e., a time period when developments have occurred which have greatly affected humanity, from the collapse and separation of countries (former Soviet Union and Yugoslavia) to the recent financial crisis, and the COVID-19 pandemic. More specifically, the periods to be studied are separated in ten-year periods,

i.e., 1990-2000, 2001-2012, and 2013 until today. Prior to the analysis, emphasis will be placed on clarifying the two terms discussed in this paper, i.e., foreign direct investment and growth, and, finally, the conclusions will be recorded. This review is requested to answer the following questions:

- How the contribution of foreign direct investment in the 1990s is evaluated?
- Has the new millennium changed the situation concerning foreign investment and economic growth?
- Has the financial crisis reduced the volume of foreign direct investment?

2. Clarification of the terms 'Foreign Direct Investment (FDI)' and 'Growth'

From all the above it is clear that foreign direct investment, its success, and its correlation with growth depend on many factors, which change over time. Therefore, prior to the conduction of the said review, a theoretical framework should be developed, which clarifies the concepts discussed in this paper. What is 'foreign direct investment' and how does it work? What is meant by 'growth of an economy'? How does foreign direct investment contribute to Growth? This chapter intends to provide answers to these questions.

2.1 Foreign Direct Investment (FDI)

According to Shapiro & Moles (2018, p. 634), an investment can qualify as a foreign direct investment, when the company acquires premises and equipment in a foreign country other than the country of the parent company. However, in order for such an investment to be successful, it is important for the company to identify from the outset which foreign investments have a positive present value by determining the imperfections of each country, as stressed by the same authors. Data from surveys in 69 countries show that since the 1980s investment flows to foreign countries had increased dramatically with an annual growth rate of 20% (Wang & Wong, 2009). This prompted investors and the academic community to engage significantly in the study of this phenomenon, according to the above researchers. Of course, it is important to note that foreign investment flows also significantly depend on whether a country is developed or developing. A relevant study points out that the impact of incoming foreign direct investment is multiple and depends on the growth of the host countries (De Mello, 1997).

But, why companies, investors, and entire countries have decided to get heavily involved in foreign direct investment? Scientific research has shown that foreign investment through transfer of natural capital and tangible and intangible assets leads to increased productivity and efficiency for the host economy, thus, giving added value to the foreign direct investment (De Mello, 1997). Therefore, countries have formulated policies since 1990, evolving domestic and international financial markets to favor an increase in foreign direct investment flows of more than 60% of private capital flows (Batten & Vo, 2009). In fact, in order to attract foreign capital and investment to their countries, state bodies have provided incentives for companies, such as tax breaks to multinationals (De Mello, 1997). Thus, multinational corporations maximize profits by

producing products with economies of scale by minimizing production costs (Shapiro & Moles, 2018, p. 643,), while host countries increase their economic growth by improving their macroeconomic performance (Alfaro, 2017).

2.2 Growth

Therefore, a link between foreign direct investment and growth emerges through scientific research. As mentioned in the introduction of this paper, foreign investment boosts economic growth. However, it is necessary to analyze the term 'growth' in more detail in the context of an economy. More specifically, according to Baumol and Blinder (2012, p. 177), the most important factors to achieve a long-term growth rate for the GDP of an economy are three. According to the above authors, in order for growth to be achieved, the indicators of employability of human resources and productivity must be bullish. For this to happen, the critical factors on which policy-makers need to focus are, as follows: (1) the rate of increase of the capital reserves of an economy, (2) the rate at which technology improves, and (3) the stock of human capital i.e., the level of education and training of the workforce of a country (Baumol & Blinder, 2012, pp. 177-178). According to the Economic theory, growth is conventionally measured as the rate of growth of real gross product (GDP), which is an indication that businesses hire and invest, statistically indicating the health and economic situation of each country (Almfraji & Almsafira, 2013).

2.3 Correlation of these two terms

In the light of the above, it is understood that there is a strong correlation between foreign direct investment and growth, since a successful foreign investment can help the host country to increase its growth rates, on the one hand, and the company to maximize its profits, on the other hand. Therefore, encouraging foreign direct investment constitutes a priority for an effective policy by state actors, as the economic benefits resulting from such an investment lead to development results (Batten & Vo, 2009). Furthermore, researchers report that improving local conditions and accelerating growth are likely to attract more foreign companies (Alfaro, 2017). However, this relationship between foreign direct investment and growth is sensitive to country-specific factors that are determined by external factors of the macroeconomic environment and the policies pursued by each country (De Mello, 1997).

Nevertheless, concluding this chapter it should be noted that there are studies that present evidence that is not so encouraging for the correlation of these two concepts discussed in this paper. In particular, a research carried out in the mid-2000s using mathematical models has produced inconsistent results, that is, researchers concluded that, although theoretical models indicated that foreign investment is beneficial for growth, empirical evidence in fact do not confirm the theory (Elboiashi et al., 2006). The same researchers stress that the literature finds a stable or zero effect of foreign direct investment on the productivity of domestic companies and a negative impact on overall growth as far as developing countries are concerned at both microeconomic and macroeconomic levels (Elboiashi et al., 2006).

3. Review of Foreign Direct Investment and Growth in the period 1990-2000

3.1 Socio-economic developments in the period 1990-2000

According to the structure described in the introduction to this chapter, a detailed literature review will be carried out on foreign direct investment and growth in the period 1990-2000. This period is of particular importance for the history of humanity, since many events occurred during this decade, which have affected entire nations. A year earlier, in 1989, the fall of the Berlin Wall and the subsequent unification of the West and East Germany as well as the dissolution of the former Soviet Union took place. In addition, during the 1990s, the war in the Balkans was waged, which resulted in the division of Yugoslavia into individual countries. Furthermore, the crisis of the Japanese economy created a complex environment for the international activity of companies.

Research focusing on that period states that in the 1990s technological progress and capital creation were the most important points of interest in the study of the economic growth (Choe, 2003). Moreover, in a research conducted in 23 developing countries and focusing on the period studied in this chapter, researchers found a positive correlation between foreign direct investment and infrastructure development and information dissemination as well as growth rate (Hsiao & Shen, 2003). Theory states that technology transfer can take place in various ways, with foreign direct investment being one of the main ones, creating a positive correlation between foreign direct investment and economic growth, according to empirical studies (Choe, 2003). In addition, with regard to the benefits of companies with an international character, studies carried out in 69 developing countries for the period in question show that it is highly likely that a company that chooses to invest in a foreign country will have lower costs and greater productivity compared to domestic competitors due to advanced management skills and more modern technology (Borensztein et al., 1998).

3.2 An early correlation between Foreign Direct Investment and Growth

What was mentioned in the previous paragraph shows a significant correlation between the international activity of companies, economic growth, and the factor 'technological progress'. It gives the impression that in the period 1990-2000 there was a strong interest in this issue on the part both of the scientific community and the investors. After all, the companies' aim is to maximize their shareholders' profits, and the executives of large companies seem to have noticed that foreign direct investment is a way to increase profits. It is no coincidence that data show that in the period 1990-2000 the countries of the Organization for Economic Co-operation and Development (OECD) held 76% of the total inflows of foreign direct investment (Baltas et al., 2018).

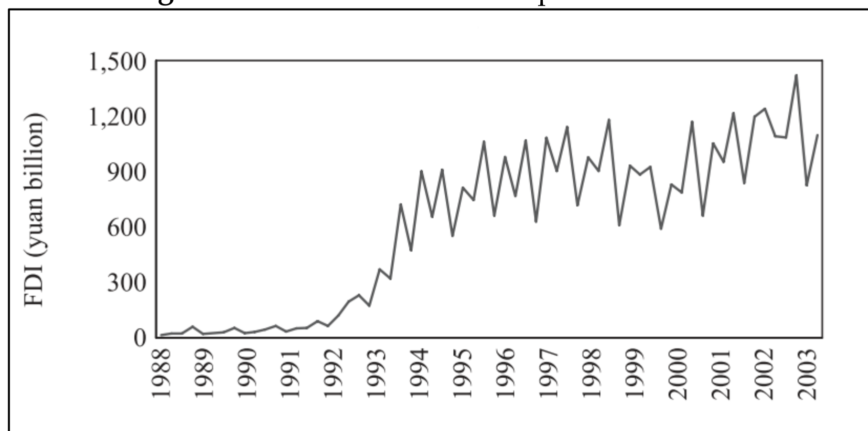
Nevertheless, research shows that the environment of such investment at that time was at a quite early stage based on researchers' results. In particular, the findings of studies conducted in the 1990s mainly in developing countries show that significant correlations between the variables studied in this paper do not necessarily mean that high inflows of foreign direct investment or percentages of GDP lead to economic growth (Choe, 2003). Furthermore, taxation is a disincentive factor for a multinational to invest

in another country (Hsiao & Shen, 2003), while Growth seems to affect Foreign Direct Investment more than Foreign Direct Investment affects Growth, according to the findings of that period (Choe, 2003).

3.3 Results of research on continents and countries

If we want at this point of the study to focus on specific continents and countries of the planet, the results of the various studies reveal interesting information about the period 1990-2000. For example, China, a country with one of the fastest-growing economies, has been the largest recipient of foreign direct investment among developing countries since 1993.

Figure 3.1: Chinese FDI for the period 1988-2003



(**Source:** Tang, Selvanathan, and Selvanathan, 2008)

More specifically, the amount of foreign investment in this country amounted to 488 billion US dollars during the period 1988-2003, with 271,963 multinational companies operating there since the 1990s (Tang et al., 2008). Using the VAR system in the case of China, the results of the research have shown that foreign direct investment played an important role in complementing domestic investment in the 1990s, positively affecting the country's economic growth; however, the findings have shown that it was domestic investment that had the greatest impact on the economic growth, rather than foreign investment (Tang et al., 2008). Other surveys in countries in the Southeast Asian region (Indonesia, Malaysia, the Philippines, and Thailand) have shown a positive correlation between the economic growth of these countries and foreign direct investment (Bende-Nabende et al., 2001). However, other scientists who studied the case of Indonesia have pointed out that the effect of foreign direct investment is positive in very few areas, while in some other areas the performance is even negative (Khaliq & Noy, 2007).

Further research carried out on a sample of 11 Latin American and East Asian countries during the period in question has shown that foreign direct investment promotes economic growth in East Asian countries over Latin America (Zhang, 2001). Going even further, findings of a study conducted in Saudi Arabia reveal a tendency of the foreign direct investment to affect the country's economy only in the short term, with domestic investment and the opening of Saudi Arabia's trade appearing to be the main

factors of the country's growth (Belloumi & Alshehry, 2018). This is perfectly normal as the countries in that region are economically dependent on the extraction and sale of oil.

3.4 Foreign Direct Investment and Growth: A Controversial Relationship

In conclusion, the review conducted for the period 1990-2000 shows that foreign direct investment has been considered a driving force that affects economic growth directly or indirectly, giving a positive correlation; however, in some cases a zero and even a negative relationship is observed (Almfraji & Almsafira, 2013). The economic data of the time show a slowdown in productivity during the 1980s to the mid-90s, which is the decade studied herein, while an increase in productivity by 2.5% is observed since 1995, which, in combination with the growth in economies, such as of America, had led to a sharp increase in investment (Baumol & Blinder, 2012, p.188-189). This fact leads to the conclusion that there was a significant rate of growth in the developed countries from one point onwards at that time, and this growth was transferred to developing countries, mainly to East Asian countries, with the help of foreign direct investment. Nevertheless, it should be noted that the magnitude of commercial freedom, education and macroeconomic stability in investment host countries have been major determinants for the effect of these investments on the growth of developing economies (Zhang, 2001).

4. Review of Foreign Direct Investment and Growth in period 2001-2012

4.1 Socio-economic developments in the period 2001-2012

Having formed a satisfactory picture of the foreign direct investment and growth in the 1990s, it was found that there is a significant correlation between these two concepts. But what about these two variables for the period of 2001-2012? Undoubtedly, this period is also very important as various socio-economic developments have taken place. Many countries joined the European Union, while Greece also adopted euro as its national currency, replacing drachma. However, the most important development was the global financial crisis in the late 2000s, which led to the collapse of the financial system.

Briefly, as a result of the collapse of the financial system, unemployment in the US rose to 10.2% in 2009 (Provopoulos, 2014), the GDP of countries such as Finland fell by 5.5% between 2008-2010 (Huhtala et al., 2014), and the economic downturn entered most countries of the world, with the United Kingdom watching its GDP shrinking by 6.4% in the first quarters immediately following the outbreak of the financial crisis (Cowling et al., 2012). The worst news came from countries with weak banking systems, where the pathogeneses of the past emerged due to the crisis and affected the entire economy, as was the case of Greece (Ozturk & Sozdemir, 2015). How did all these facts affect foreign direct investment and growth? This chapter endeavours, among others, to answer this question.

4.2 Foreign Direct Investment and Growth at the beginning of the period

According to Almfraji and Almsafira (2013), as indicated above, growth is related to productivity, that is, when an economy increases its potential production through the

simultaneous increase of the total demand, it increases its growth rates as well. The same researchers report that, in theory, foreign direct investment directly affects growth through the accumulation of capital and the integration of new inputs and technologies into the productive operation of the host country; however, the results vary, depending on the characteristics of each economy (Almfraji & Almsafira, 2013).

Therefore, the contribution of foreign direct investment to economic growth has been a widespread issue of study for the academic community (Dinh et al., 2019). Researches present important and useful data on foreign direct investment and growth in Europe and around the world, while at the same time deepening their research and the long-term impact of foreign investment. In fact, researchers seem to be mainly attracted to countries of the Organization for Economic Co-operation and Development (OECD), since they mainly represent a significant part of the global inflows of foreign direct investment, which amounts to 70% for this period (Baltas et al., 2018), as data indicate.

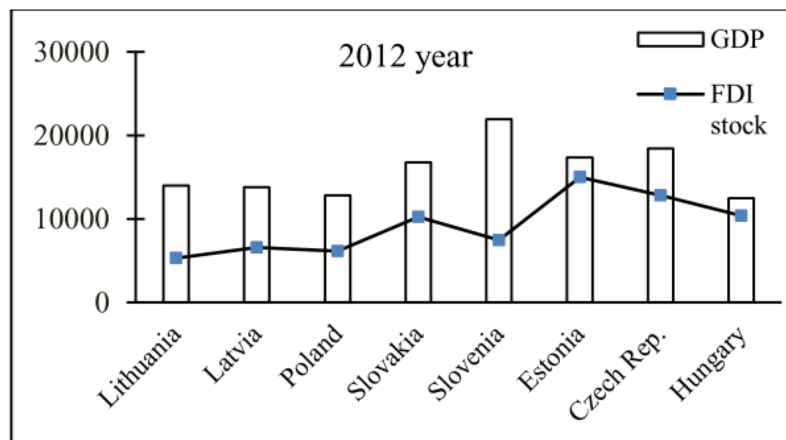
Thus, research for this period has shown that foreign direct investment contributes to stimulating economic growth in the long term, although it has a negative impact for the countries studied in the short term (Dinh et al., 2019). Furthermore, scientists who have studied this issue by focusing on Central and Eastern European countries for that same period find variations in the inflow of foreign investment and growth for the each country (Hlavacek & Bal-Domanska, 2016).

4.3 Research results for continents and countries

In more detail, economic and statistical data show interesting variations in a sample of countries, such as Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovenia, and Slovakia. It was observed that Estonia, Czech Republic, Hungary, and Slovakia have a higher volume of foreign direct investment, which contributes to the production and, therefore, to the subsequent increase of the gross domestic product of each country (Hlavacek & Bal-Domanska, 2016).

In contrast, Lithuania, Poland, Latvia, and Slovenia seem to have been less affected by foreign direct investment during the period in question (Hlavacek & Bal-Domanska, 2016). The world literature shows that countries like Korea see a strong positive effect of foreign direct investment on economic growth, while the human capital, exports, and employment positively affect the subsequent growth of the country (Dinh et al., 2019).

Graph 4.1: GDP and FDI of Central & Eastern European countries in 2012



(Source: Hlavacek and Bal-Domanska, 2016)

However, the studies of that period have urged investors to be careful, as, in the case of China, for example, the fact that the country may have experienced growth through foreign direct investment at that time does not mean that a slowdown in its economy would not be likely, if industries of the country, which were mainly affected by domestic investments, experienced significant decreases in their exports (Tang et al., 2008). Dinh (2019) concluded that, apart from foreign investment, short-term growth significantly depends on the positive impact of the money supply, domestic investments, and the credit given to businesses by the banking system. Therefore, it is understood that, even if capital flows into a country through investments, this does not necessarily mean that an economy will flourish.

4.4 How the Financial Crisis Affected Foreign Direct Investment and Growth

Financial crisis is a factor that has significantly affected the macroeconomic environment. As indicated above, the recent financial crisis, which the whole world suffered in the late 2000s, led to the collapse of the financial system, directly affecting economic activity. As a result, foreign direct investment was also affected at a European level, with Simionescu (2016) reporting in a research that time series analysis identified several European Union countries for which foreign direct investment did not lead to economic growth, something that was also affected by the recent economic crisis. In addition, the results of other research also emphasize that foreign direct investment decreases in the years following a Financial Crisis (Ucal et al., 2010). However, Simionescu (2016) finally concluded that in the case of the European Union, in general, there is a mutual relationship between growth and foreign direct investment, while the financial crisis creates a tendency to reduce disparities between countries as far as the attraction of foreign investment is concerned in the period studied in this chapter. Hlavacek and Bal-Domanska (2016) reinforced that view, noting that in the Central and Eastern European countries they studied a more visible effect of foreign direct investment is observed in the period 2009-2012. This is, admittedly, a surprising finding, considering the situation arisen due to the crisis.

5. Review of Foreign Direct Investment and Growth in the period 2013 to date

5.1 Establishing a link between the periods 2000-2012 and 2013 to date

Based on what was analyzed in the previous paragraphs, it is clear that there is a strong correlation between the periods 2000-2012 and 2013-present, as the financial crisis of 2008 as well as its impact were not easy to be combated within 4 years, and its consequences were obviously going to have a long-term impact on the affected countries. this is confirmed by the downturn which even very strong economies suffered, as mentioned above. In general, we can see that the financial crisis highlighted pathogeneses in the banking systems and economy of countries, such as Greece, making companies more pessimistic to invest in them. According to Baltas (2018), in the early 2010s foreign direct investment was too little, as the country was ranked in the bottom twenty out of a list of 141 countries, with the country’s complex tax system, constant changes and bureaucracy being inhibitors to investment. In other words, this is contrary to what we have seen above concerning the countries of Central and Eastern Europe. This information, therefore, confirms that the response to the crisis was more difficult for some countries, and the purpose of this chapter is to initially investigate the role of foreign direct investment in the new decade following the crisis outbreak. Did growth resume or does the downturn continue to affect some countries?

5.2 The impact of the Financial Crisis during the first years of the period from 2013 to date

The results show that, due to the crisis, there was a very strong effect on foreign direct investment inflows over a long time period in a sample of countries studied by Stoddard and Noy (2015), who stress that the financial crisis reduced the value of horizontal and vertical foreign direct investment, negatively affecting M&A activities. Poulsen and Hufbauer (2011) have predicted that the recovery of the economy and foreign investment will return to pre-crisis levels after 2014. The world economy was in a recessionary rhythm throughout the previous time, and the main goal of businesses and countries was their survival and the best possible management of the crisis.

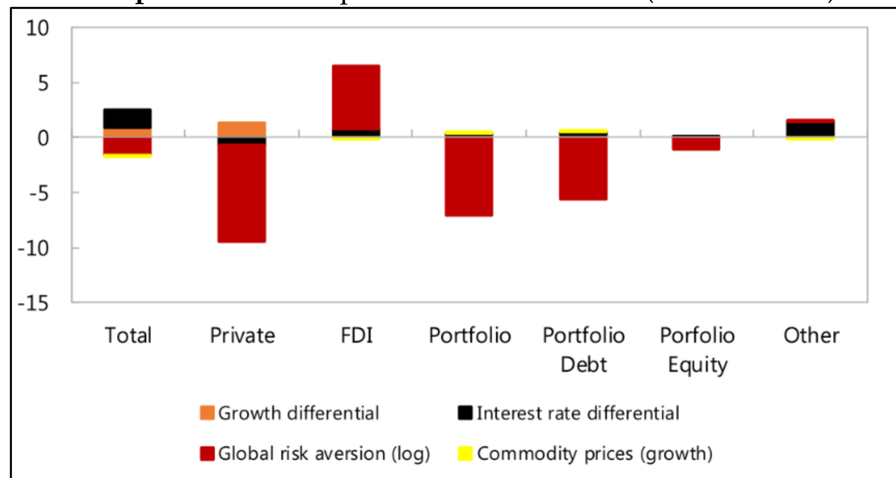
This is confirmed by the fact that all industrialized countries introduced temporary stimulus packages to deal with the crisis, however, they were not guided by any model, as there was insufficient research information (Ramey, 2019). Due to the crisis, the conditions of the macroeconomic environment had created a *“brave new world”* for capital flows (Hannan, 2017). However, as stated in the literature, foreign direct investment continue to dominate the overall flows in combination with the increasing trend of portfolio flows and other investments (Hannan, 2017), despite the decline they suffered in the previous period (2008-2011).

5.3 Resume of Foreign Direct Investment and Growth

The above reference to capital flows makes it clear that, following the crisis turmoil and the subsequent problems in the years that followed, the review shows that these flows increased with the aim of getting the economy out of the downturn and back onto the

path of growth. Perhaps this would have been achieved earlier, if policymakers had had the knowledge to formulate policies based more on tax rate reductions (Ramey, 2019).

Graph 5.1: Gross capital inflows 2009-2015 (share of GDP)



(**Source:** Hannan, 2017)

Thus, the research results showed that until 2015, with the opening of trade after the crisis, capital flows and, in particular, foreign direct investment pushed up foreign investment on the gross domestic product of developing countries, significantly contributing to the achievement of the Growth target (Hannan, 2017). Alvarado (2017) reports that, in a survey carried out in 19 Latin American countries, the results showed that there was a significant increase in foreign direct investment, with these countries benefiting from the transfer of technology and human capital. Therefore, the conclusion that follows from the above is that, despite the adversity, foreign direct investment withstood the crisis and, when permitted, it began to increase again after the normalization of the economy.

5.4 BREXIT

Nevertheless, the changes in the external environment – while the economy was improving – created a new complexity in the field of foreign direct investment. In particular, the decision of the United Kingdom to leave the European Union following a referendum had a significant impact on the financial markets of the countries of the Organization for Economic Co-operation and Development, affecting capital flows related to foreign investment as well (Welfens & Baier, 2018), as stated in the literature. More specifically, the data have indicated that BREXIT resulted in a significant reduction in foreign investment inflows into Europe, with the pound depreciating in 2016-2018 (Welfens & Baier, 2018). Eventually, following many negotiations between the United Kingdom and the European Union, an agreement was finally reached on Britain's withdrawal from the European Union.

5.5 The COVID-19 Pandemic

However, once again in this period (2013 to date) the variables studied in the present paper seem to have been significantly affected by developments in the world. This time it was not about a financial crisis or a confrontation between countries and organizations, but something even more important, something that had to do with the health. Thus, while growth had resumed in most countries, the health crisis due to the COVID-19 virus also affected the economy in many ways. The subsequent lockdowns that took place in order to reduce the spread of the virus resulted in the temporary closure of businesses, thus reducing the production of factories. As far as foreign direct investment is concerned, the COVID-19 pandemic, not unexpectedly, negatively affected the foreign direct investment flows, as specifically stated in the literature, however, with its impact varying from country to country (Fu et al., 2021).

More specifically, in a panel survey conducted in 96 countries from January 2019 until June 2020, the results showed that investors were not willing to invest in countries where COVID-19 spread rapidly, while investors reduced the value of investments that withstood, that is, they began to pay less capital (Fu et al., 2021). Other research indicated that such a shock to the global economy changed the investors' behavior (Jaworek et al., 2020). In particular, the pandemic has played an important role in deciding whether to invest in emerging countries, in which traditionally more investments are made, as confirmed by the above researches. Finally, it should be noted that the impact of the pandemic on foreign investment has varied from sector to sector. In particular, there has been no significant impact on agriculture and the mining sector in relation to tourism and education, which require a mass movement of people (Fu et al., 2021).

6. Conclusions and Suggestions

In conclusion, the literature review highlighted important information on foreign direct investment and growth. Since the 1980s companies began to be more extroverted, shows research. As indicated above, the period 1990-2000 reveals a significant growth in the field of foreign direct investment as the need of companies to acquire new innovative knowledge and production at the lowest possible cost led investors to increase their investments in foreign countries. This has maximized the profits of the multinational corporations, on the one hand, while the host countries have benefited from the technology transfer by foreign companies, on the other hand, which has contributed to the productivity growth by enhancing the gross domestic product of emerging countries, thus increasing their growth rates. Therefore, based on the economic and statistical data, scientists concluded that foreign direct investment has a significantly positive correlation with the development of countries, however the extent varies depending on specific characteristics of each country.

The same pattern was maintained in the first few years of the second period on which the present paper focuses. According to what was mentioned in the above chapters, at the beginning of the period 2001-2012, foreign investment continued to increase in emerging countries, but also in the countries members of the Organization for

Economic Co-operation and Development (OECD), which accounted for 70% of the global inflows of Foreign Direct Investment (Baltas et al., 2018). However, such high foreign capital flows in some countries did not affect growth to such a great extent, something that has been observed mainly in Southeast Asian countries, where – according to the data analyzed in the second chapter – foreign investment in other countries had a positive effect, while in some other countries little or no contribution to growth. Indonesia, for instance, relied mainly on domestic investment flows to achieve growth. Almfraji and Almsafira (2013) described the situation that prevailed at that time in the best viable way, while, in a survey they conducted, they report that until 2012 the results indicated a significantly positive relationship between foreign direct investment and growth, which, however, had opposite to the desired results in some cases, with many factors affecting this relationship.

However, despite this growth trend, the financial crisis in the late 2000s was so severe that it has significantly affected the world. Very powerful countries had received severe blows to their banking system and their economy, and the whole world had entered a new era characterized by intense downturn. The countries that were relatively well-organized were able to deal more effectively with the storm of the crisis contrary to countries such as Greece, which collapsed due to chronic pathogeneses. While, in general, it seems that the period of 2013 to date is a period of intense challenges for investors as well as entire countries, with one crisis succeeding the other, the most recent being the energy crisis after the start of the war in Ukraine and the successive sanctions between the West and Russia. The businesses are asked to decipher the applicable environment, when choosing a location to invest in. As Nielsen (2017) points out, scientists need significant study of the right location, in which an extrovert company should make a foreign direct investment. Therefore, research and development centers of multinational companies play an important role, as they have the ability to discover new technologies and locations around the world, where the environment is suitable for foreign investment. Innovation parks can also help companies around the world to find the right places where their projects can thrive with the view to maximizing profits for companies, on the one hand, and boosting the domestic development of the host countries, on the other hand.

The scientific community has a catalytic role in achieving the above, as future research could give new knowledge to the academic community by studying the impact and the effects of the energy crisis, which can be particularly useful for the real economy, since the recording and analysis of the successive crises of recent years could give useful information to companies. It is more relevant than ever for university institutions and the business community to achieve that degree of cooperation that will result in innovative ideas which will be directly transferred from theory to practice, that is, to the production process. This should be the axis of the future research with the ultimate goal of increasing foreign direct investment even by companies originating from countries with comparatively lower GDP compared to the strong economies of the world.

Acknowledgements

The author gratefully acknowledges the official translator Miss Dora Bouroutzi, for English-language editing. Also, he would like to thank the independent researcher Constantinos N. Mantzikos for his advice and contribution to this paper.

Conflict of Interest Statement

The author of this paper, has no conflicts of interest to disclose. Also, he hasn't received a research grant for this paper.

About the Author

Dimitrios Kostoulis holds a bachelor degree on Business Administration from University of Thessaly. He is a post-graduate student in the master program of the University of Thessaly "Accounting & Auditing". His research interests are Management, Economic, Accounting and Finance.
LinkedIn profile: https://www.linkedin.com/in/dimitris-kostoulis-05a832192
Academia.edu profile: https://independent.academia.edu/DimitrisKostoulis

References

Alfaro, L. (2017). Gains from foreign direct investment: Macro and micro approaches. *World Bank Economic Review*, *30*, S2–S15. https://doi.org/10.1093/wber/lhw007

Almfraji, M. A., & Almsafir, M. K. (2014). Foreign direct investment and economic growth literature review from 1994 to 2012. *Procedia-Social and Behavioral Sciences, 129,* 206-213. https://doi.org/10.1016/j.sbspro.2014.03.668

Alvarado, R., Iniguez, M., & Ponce, P. (2017). Foreign direct investment and economic growth in Latin America. *Economic Analysis and Policy*, *56,* 176-187. https://doi.org/10.1016/j.eap.2017.09.006

Baltas, N., Tsionas, M. G., & Baltas, K. (2018). Foreign direct investment in OECD countries: a special focus in the case of Greece. *Applied Economics*, *50*(52), 5579–5591. https://doi.org/10.1080/00036846.2018.1488054

Batten, J. A., & Vo, X. V. (2009). An analysis of the relationship between foreign direct investment and economic growth. *Applied Economics*, *41*(13), 1621–1641. https://doi.org/10.1080/00036840701493758

Baumol, W., J. and Blinder, A. (2012). *Macroeconomics: Principles and Policy.* Publications Paschalidis-Broken Hill Publishers Ltd

Belloumi, M., & Alshehry, A. (2018). The impacts of domestic and foreign direct investments on economic growth in Saudi Arabia. *Economies*, *6*(1), 1–17. https://doi.org/10.3390/economies6010018

Bende-Nabende, A., Ford, J., & Slater, J. (2001). FDI, Regional economic integration and endogenous growth: Some evidence from Southeast Asia. *Pacific Economic Review*, *6*(3), 383–399. https://doi.org/10.1111/1468-0106.00140

Borensztein, E., De Gregorio, J., & Lee, J. W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, *45*(1), 115–135. https://doi.org/10.1016/S0022-1996(97)00033-0

Choe, J. Il. (2003). Do foreign direct investment and gross domestic investment promote economic growth? *Review of Development Economics*, *7*(1), 44–57. https://doi.org/10.1111/1467-9361.00174

Cowling, M., Liu, W., & Ledger, A. (2012). Small business financing in the UK before and during the current financial crisis. *International Small Business Journal*, *30*(7), 778–800. https://doi.org/10.1177/0266242611435516

De Mello, L. R. (1997). Foreign direct investment in developing countries and growth: A selective survey. *Journal of Development Studies*, *34*(1), 1–34. https://doi.org/10.1080/00220389708422501

Dinh, T. T.-H., Vo, D. H., The Vo, A., & Nguyen, T. C. (2019). Foreign Direct Investment and Economic Growth in the Short Run and Long Run: Empirical Evidence from Developing Countries. *Journal of Risk and Financial Management*, *12*(4), 176. https://doi.org/10.3390/jrfm12040176

Elboiashi, H. a. T., Denisia, V., Contact, A. G., Number, S., Year, A., Degree, E., Supervisor, I. E., Namini, E., Co-investigator, N., Castellani, D., Carkovic, M., Levine, R., Barauskaite, L., Alfaro, L., Chanda, A., Kalemli-Ozean, S., Sayek, S., Akki, S. H. S. M., Omwaru, A. G. S., … Chetty, L. (2006). How does foreign direct investment promote economic growth? *Journal of Chemical Information and Modeling*, *53*(December 2010), 1689–1699. http://kau.diva-portal.org/smash/record.jsf?pid=diva2:4440%5Cn http://papers.ssrn.com/sol3/papers.cfm?abstract_id=314924%5Cnhttp://papers.ssrn.com/sol3/papers.cfm?abstract_id=1804514%5Cnhttp://theses.gla.ac.uk/3026/

Fu, Y., Alleyne, A., & Mu, Y. (2021). Does Lockdown Bring Shutdown? Impact of the COVID-19 Pandemic on Foreign Direct Investment. *Emerging Markets Finance and Trade*, *57*(10), 2792–2811. https://doi.org/10.1080/1540496X.2020.1865150

Hannan, S. A. (2017). The Drivers of Capital Flows in Emerging Markets Post Global Financial Crisis. *Journal of International Commerce, Economics and Policy*, *8*(2). https://doi.org/10.1142/S1793993317500090

Hlavacek, P., & Bal-Domanska, B. (2016). Impact of foreign direct investment on economic growth in central and eastern European countries. *Engineering Economics*, *27*(3), 294–303. https://doi.org/10.5755/j01.ee.27.3.3914

Hsiao, C., & Shen, Y. (2003). Foreign direct investment and economic growth: The importance of institutions and urbanization. *Economic Development and Cultural Change*, *51*(4), 883–896. https://doi.org/10.1086/375711

Huhtala, J. P., Sihvonen, A., Frösén, J., Jaakkola, M., & Tikkanen, H. (2014). Market orientation, innovation capability and business performance: Insights from the global financial crisis. *Baltic Journal of Management*, *9*(2), 134–152. https://doi.org/10.1108/BJM-03-2013-0044

Jaworek, M., Karaszewski, W., & Kuczmarska, M. (2020). Pandemic risk: doesn't it really matter? Foreign direct investment after COVID-19. *Ekonomia i Prawo*, *19*(2), 275. https://doi.org/10.12775/eip.2020.019

Khaliq, A., & Noy, I. (2007). Foreign Direct Investment and Economic Growth : Empirical Evidence from Sectoral Data in Indonesia Foreign Direct Investment and Economic Growth : Empirical Evidence from Sectoral Data in Indonesia Department of Economics University of Hawai ' i at Manoa. *Journal of Economic Literature*, *45*(1), 313–325.

Nielsen, B. B., Asmussen, C. G., & Weatherall, C. D. (2017). The location choice of foreign direct investments: Empirical evidence and methodological challenges. *Journal of World Business*, *52*(1), 62-82. https://doi.org/10.1016/j.jwb.2016.10.006

Ozturk, S., & Sozdemir, A. (2015). Effects of Global Financial Crisis on Greece Economy. *Procedia Economics and Finance*, *23*, 568–575. https://doi.org/10.1016/s2212-5671(15)00441-4

Poulsen, L. S., & Hufbauer, G. C. (2011). Foreign direct investment in times of crisis. *Transnational Corporations*, *20*(1), 19–37. https://doi.org/10.18356/138883a0-en

Provopoulos, G. A. (2014). The Greek economy and banking system: Recent developments and the way forward. *Journal of Macroeconomics*, *39*(PB), 240–249. https://doi.org/10.1016/j.jmacro.2013.09.016

Ramey, V. A. (2019). Ten years after the financial crisis: What have we learned from the renaissance in fiscal research? *Journal of Economic Perspectives*, *33*(2), 89–114. https://doi.org/10.1257/jep.33.2.89

Shapiro, A., C. and Moles, P. (2018). *International Financial Management.* Paschalidis Publications-Broken Hill Publishers Ltd

Simionescu, M. (2016). The relation between economic growth and foreign direct investment during the economic crisis in the European Union. *Zbornik radova Ekonomskog fakulteta u Rijeci: časopis za ekonomsku teoriju i praksu*, *34*(1), 187-213. https://doi.org/10.18045/zbefri.2016.1.187

Stoddard, O., & Noy, I. (2015). Fire-sale FDI? The impact of financial crises on foreign direct investment. *Review of Development Economics*, *19*(2), 387–399. https://doi.org/10.1111/rode.12149

Tang, S., Selvanathan, E. A., & Selvanathan, S. (2008). Foreign direct investment, domestic investment and economic growth in China: A time series analysis. *World Economy*, *31*(10), 1292–1309. https://doi.org/10.1111/j.1467-9701.2008.01129.x

Ucal, M., Özcan, K. M., Bilgin, M. H., & Mungo, J. (2010). Relationship between financial crisis and foreign direct investment in developing countries using semiparametric regression approach. *Journal of Business Economics and Management*, *11*(1), 20–33. https://doi.org/10.3846/jbem.2010.02

Wang, M., & Wong, M. C. S. (2009). Foreign direct investment and economic growth: The growth accounting perspective. *Economic Inquiry*, *47*(4), 701–710. https://doi.org/10.1111/j.1465-7295.2008.00133.x

Welfens, P. J. J., & Baier, F. J. (2018). Brexit and foreign direct investment: Key issues and new empirical findings. *International Journal of Financial Studies*, *6*(2). https://doi.org/10.3390/ijfs6020046

Zhang, K. H. (2001). Does foreign direct investment promote economic growth? Evidence from East Asia and Latin America. *Contemporary economic policy*, *19*(2), 175-185. https://doi.org/10.1111/j.1465-7287.2001.tb00059.x

Creative Commons licensing terms
Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s).Open Access Publishing Group and European Journal of Economic and Financial Research shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a Creative Commons Attribution 4.0 International License (CC BY 4.0).