



Foreign Direct Investment, Economic Growth and Economic Freedom: A Literature Survey

Burcu ŞENALP¹

ABSTRACT

The purpose of this study is to survey the literature on the relationship between foreign direct investment, economic freedom and economic growth. For several years, with regard to the determinants of foreign direct investment (FDI) inflows, there has been a tendency to draw attention to specific elements such as technological development, the stock of human capital, market size, economic distance/transport cost and factor costs. However, the potential other factors such as economic freedom as an institutional element seem to have been relegated to second place, and even ignored by some investigators. In the present survey, focusing on economic freedom, shows that it may have an influence on FDI inflows as well as on economic growth. Therefore, allowing for the institutional approach, this study can shed light on the potential interactions between economic freedom and foreign direct investment/economic growth. All the studies that the present paper reviews have suggested that FDI affects economic growth in two ways: positively or negatively. Those effects based mostly on initial effects which are briefly mentioned above. On the other hand, some other studies show that economic freedom is an explanatory variable for direct cross-border investments. Finally, the papers surveyed show that economic freedom causes growth.

Keywords: Foreign direct investment, economic freedom, economic growth

JEL Codes: F21, O43

ÖZ

Doğrudan Yabancı Sermaye, Ekonomik Büyüme ve Ekonomik Özgürlük: Bir Literatür Araştırması

Bu çalışmanın amacı doğrudan yabancı yatırımlar, ekonomik özgürlük ve ekonomik büyüme arasındaki ilişkileri ele alan literatürü incelemektir. Uzun yıllardan beri, doğrudan yabancı yatırımların (DYY) belirleyici unsuru olarak teknolojik gelişmeler,



DOI: 10.26650/ISTJCON490825

¹Assist. Prof. Dr., Kırklareli University, Faculty of Economics and Administrative Sciences, Kırklareli, Turkey

Corresponding author/Sorumlu yazar:

Burcu ŞENALP,
Kırklareli University, Faculty of Economics and Administrative Sciences, Kırklareli, Turkey
E-mail/E-posta: burcu.senalp@klu.edu.tr

Date of receipt/Geliş tarihi: 20.08.2018

Date of acceptance/Kabul tarihi: 08.10.2018

Citation/Atıf: Şenalp, B. (2018). Foreign direct investment, economic growth and economic freedom: A literature survey. *Istanbul İktisat Dergisi - Istanbul Journal of Economics*, 68(2), 301-336.
<https://doi.org/10.26650/ISTJCON490825>

beşeri sermaye stoğu, piyasanın boyutu, ulaşım maliyetleri ve üretim faktörleri maliyetleri gibi çeşitli faktörlerin üzerinde durulmuştur. Bu faktörler genel olarak birincil etkenler olarak ele alınmaktadır. Ancak, DYY'nin belirleyici faktörü olarak ele alınan birincil unsurlar dışında, ekonomik özgürlük gibi, çoğu zaman ikincil bir unsur olarak değerlendirilebilecek, kimi kurumsal yaklaşımlar da DYY'yi etkileyebilmektedir. Bahsi geçen kurumsal etken olarak ekonomik özgürlük, birçok araştırmacının gözünden kaçmakta ya da değerlendirme dışı bırakılmaktadır. Bu çalışma, ekonomik özgürlük kavramına odaklanmakta ve çeşitli kurumlar, örneğin Fraser Enstitüsü ve Heritage Vakfı, tarafından tanımlanan ekonomik özgürlüğün, DYY akışına ve hatta ekonomik büyümeye etki

edebileceğini gösteren literatürü ele almaktadır. Bu kurumsal yaklaşım sayesinde, ekonomik özgürlük ve DYY/ekonomik büyüme arasındaki potansiyel ilişkiye ışık tutulmak istenmektedir. Bu kapsamda, çalışma içerisinde yer alan makaleler, DYY ve ekonomik büyüme arasında hem pozitif hem de negatif yönlü bir ilişki olduğunu vurgulamaktadır. İki yönlü etkiye, ağırlıklı olarak birincil etkenlerin neden olduğu açıkça görülmektedir. Diğer çalışmalar ise, ekonomik özgürlüğün DYY için açıklayıcı bir değişken olduğunu göstermiştir. Ve son olarak, ekonomik özgürlük, büyüme ile ilişkilidir.

Anahtar kelimeler: Doğrudan yabancı sermaye, ekonomik özgürlük, ekonomik büyüme

JEL Sınıflandırması: F21, O43

EXTENDED ABSTRACT

The purpose of this study is to survey the literature on the relationship between foreign direct investment (FDI), economic freedom (EF) and economic growth. Although there have been several studies on either the FDI/growth relationship or the EF/growth, the relatively scanty previous research based on foreign direct investment, economic freedom and economic performance is a driver force behind this study. To clarify the relationships between those three variables, historical survey is undertaken in detail.

The importance of foreign direct investment started to increase on global scale in the second half of the twentieth century. Since then, it has become one of major areas of research for both academics and policymakers interested in international investments flows. In general, FDI flows are identified in two ways, inward FDI and outward FDI. The former term is used for direct flows hosted by countries and the latter expresses investments made in foreign markets. Today, we believe that FDI flows are unevenly distributed across countries. The largest volume of FDI flows have mostly moved between industrial countries for years. However, developing countries seem to have achieved the ability to acquire a higher share of global FDI inflows over the last decades.

The motivation behind the rapid increase in international direct investment is based on a belief commonly held by most countries: that FDI is an engine to promote economic growth. This expectation is also the power behind policies which encourage more FDI flows between nations. In this sense, economies generally become involved in the FDI process in order to utilize FDI-related growth as well as other benefits.

Although there exists a burgeoning body of literature that focuses on the impact of FDI on economic growth, research into this issue has not yet reached a general consensus. While some studies believe in the presence of a positive relationship between FDI and economic growth, others refuse such a positive linkage and suggest that foreign investments could hinder the process of economic growth in developing countries.

In the extensive literature with regard to the determinants of FDI inflows, there has for several years been a tendency to draw attention to specific elements such as technological development, the stock of human capital, market size, economic distance/transport cost and factor costs. However, the potential other factors such as institutional structure and economic freedom, which may have an influence on FDI inflows, seem to have been relegated to second place, and even ignored by some investigators. The main reason for this has been the lack of reliable data on this issue for a long time. Today, however, there are good quality data sources available on institutional structure and economic freedom. For instance, *Economic Freedom of the World* by the Fraser Institute and the *Index of Economic Freedom* by the Heritage Foundation/Wall Street Journal publish a variety of components of economic freedom. Based on those components, there have been some recent important studies of the relationship between economic freedom and FDI.

Therefore, the present study reviews the literature on whether economic freedom plays a role in attracting FDI inflows. To find answers to this question, we have reviewed the relevant literature by dividing it into two sections. Thus, we have examined some studies which have considered whether aggregated

economic freedom is an explanatory parameter for FDI. Other studies have found that one component of economic freedom would be a determining factor of FDI.

The paper also shall review the studies which have explored the relationship between economic freedom and economic growth. Through analysis of the previous studies, we can understand that, in some cases, economic freedom causes growth, but that in others economic growth is the reason for economic freedom, or a third option agreed on is that the interaction may be mutual.

1. Introduction

There are several studies which have investigated the reasons for variations in the growth rate of the gross domestic product (GDP) of countries. Those research studies have indicated that while some countries have higher growth rates of GDP and hence move first towards constituting welfare states, other countries have uneven growth rates. Observing differences in the growth rate of GDP, these studies have drawn an inference that countries worldwide tend to have no homogeneous structure in terms of factor endowments of resources, or economic and institutional features. In this study, we shall explore whether foreign direct investment (FDI) inflows and also the level of economic freedom as an institutional measure are the determinants of economic growth.

Through the extensive literature on FDI, we can see that the importance of this type of investment started to increase on a global scale after World War II. The motivation for the rapid increase in international direct investment is based on a belief commonly held by most countries all over the world: that FDI inflows may be an engine to promote economic growth. This expectation has also been the power behind policies to encourage more FDI inflows between nations. Therefore, countries started to become involved in FDI processes in order to utilize their positive effect, if any, on economic performance, as well as other benefits.

Although there exists a burgeoning body of literature that focuses on the impact of FDI on economic growth, research into this issue has not yet reached a general consensus. While some studies believe in the presence of a positive relationship between FDI and economic growth, others refuse such a positive linkage and suggest that foreign investments could hinder the process of economic growth in developing countries. The reason why the reported results on the linkage between FDI and growth differ from one another may be connected to the various methodologies applied in empirical works (Herzer et al, 2008; Li and Liu, 2005). In the first part of this current study, the literature on the relationship between FDI and economic growth will be analysed in detail.

Since the beginning of the 1990s, a number of empirical studies have started to be interested in the view that economic freedom may be taken into account to explain the variation in the rate of economic growth across countries. In this regard, a variety of components of economic freedom have been published by some institutions, such as *Economic Freedom of the World* by the Fraser Institute and the *Index of Economic Freedom* by the Heritage Foundation/Wall Street Journal. Although there have been many studies of this issue, there is still, in general, no consensus on the effect of economic freedom on economic growth. In the second part of the paper, studies analysing this relationship will be surveyed.

In the extensive literature with regard to the determinants of FDI inflows, there has for several years been a tendency to draw attention to specific elements such as technological development, the stock of human capital, market size, economic distance/transport cost and factor costs. However, the potential other factors such as institutional structure and economic freedom, which may have an influence on FDI inflows, seem to have been relegated to second place, and even ignored by some investigators. The main reason for this has been the lack of reliable data on this issue for a long time. Today, however, there are good quality data sources available on institutional structure and economic freedom. Thus, there have been some recent important studies of this issue. The relevant literature focusing on the relationship between FDI and economic freedom will be analysed in the third part of the present paper.

The remainder of this paper is organized as follows. Section 1 is a review of the literature on the relationship between FDI and economic growth will be analysed in detail. Section 2 is a survey of those studies analysing this relationship between economic freedom and foreign direct investment. Section 3 is a review of papers on the relationship between FDI and economic freedom. Section 4 concludes.

1. The effect of foreign direct investment on economic growth

The importance of foreign direct investment (FDI) started to increase on global scale in the second half of the twentieth century. Since then, it has become one of major areas of research for both academics and policymakers interested in international investments flows. In general, FDI flows are identified in two ways, inward FDI and outward FDI. The former term is used for direct flows hosted by countries and the latter expresses investments made in foreign markets. Today, we believe that FDI flows are unevenly distributed across countries. The largest volume of FDI flows have mostly moved between industrial countries for years. However, developing countries seem to have achieved the ability to acquire a higher share of global FDI inflows over the last decades (Zhuang, 2008). According to UNCTAD (2011) was an historic year for developing countries since those economies succeeded for the first time in attracting global FDI inflows of over 50% in that year.

Foreign direct investments are typically carried out through fully equipped, complex organizations such as multinational enterprises (MNEs). These are international corporations with enormous research and development (R&D) budgets. Thanks to these huge budgets, they become centres of advanced technology, innovation and entrepreneurship (TIE) and thereby provide advantages for not only the home countries which are the headquarters of MNCs, but also the host countries in which they operate.

The motivation behind the rapid increase in international direct investment is based on a belief commonly held by most countries: that FDI is an engine to promote economic growth. This expectation is also the power behind policies which encourage more FDI flows between nations. In this sense, economies

generally become involved in the FDI process in order to utilize FDI-related growth as well as other benefits. In turn, as is widely accepted, FDI enables industrial countries to put forward their existing superior technology, high managerial and organizational skills, and marketing advantages into the international market so that they can reap a profit by transferring all the advanced qualities to countries characterised by a relative lack of high-quality ability. In addition, direct investment in foreign countries provides developed economies with the benefit of the resources and cost advantages of the host countries thanks to comparative advantages in terms of technology, innovation and entrepreneurship. For this reason, developed prosperous countries have voluntarily become part of this type of investment so as to capture maximum profit during the production process¹.

For developing countries, as several studies have emphasised, the main purpose is to capture a sustainable trend in economic growth. To achieve this goal, many governments have an incentive to host MNEs since multinationals located inside the border of the country mean an opportunity to benefit from the spillover effect produced by FDI inflows. That is to say, through the contribution of positive spillover, if any, developing countries have an opportunity to focus their attention on compensating for the existing inadequacies in their production mechanism and thereby promoting their own economic growth. To be able to implement that purpose, governments of developing countries give priority to setting fiscal, financial and non-financial policies such as tax incentives, subsidies for foreign investors and infrastructure (De Mello, 1997).

Due to the positive externalities or spillovers from industrialised countries to the rest of the world, the former seem to be the leaders of the latter. In simple terms, externalities occur as follows: a knowledgeable and well-equipped direct investor locates in a relatively less-developed country, bringing with it high technology and training for employees and it introduces new managerial methods.

¹ In a developed country perspective, efficiency seeking is a preliminary factor as well as rent seeking. Thus, when this country wants to invest abroad and it expects production efficiency to be equal or more in a host country than that in the home developed country (Blalock and Gertler, 2008).

All these may, therefore, allow the receiving country to modify its backward technology, employ skilled workers have well-structured organizations in the domestic arena and integrate itself into the international market. Under these circumstances, growing competition among local economic actors through FDI spillovers pushes them to produce as effectively as they possibly can. That process may give rise to gaining an increasing return to scale in their production systems (De Mello, 1997) and also increase the impact of FDI on economic growth. In order to benefit from the spillover effect, however, the essential thing for a host country is that its local conditions must compromise on some specific factors such as having sufficient absorptive capacity (Crespo and Fontoura, 2007). Without such a benchmark, FDI-related growth may not be as they expected.

Taken as a whole, FDI, which mostly occurs in connection with multinational organizations, is expected to contribute to the growth of a host developing country. In order to scrutinize whether there exists a linkage between foreign direct investment and economic growth, we shall first review the growth models. Second, those studies which have found a positive relationship between FDI and economic growth will be surveyed. In the subsequent section, we shall conduct a survey of a negative FDI/growth nexus.

1.1. Historical survey of FDI and economic growth theory

The literature which appeared after the Second World War on economic growth theory has drawn attention to factors such as technology, human capital and public infrastructure. In particular, all those variables have come to be potential underlying factors in terms of long-term economic growth. Furthermore, they have been utilized to investigate the growth-inducing effect of FDI. In general, most of the literature on growth theory is based on studies of three main theories: The Harrod-Domar (Post-Keynesian) Growth Theory, Neoclassical Growth Theory and Endogenous Growth Theory. This part of the study attempts to survey the last two of these main growth theories. A review of this kind might be able to provide an understanding of the discussion about the extent to which growth theories contribute to the scope of FDI.

i. Neoclassical growth theory and FDI

The neoclassical theory of economic growth was developed by Solow (1956), Swan (1956), Cass (1965) and Koopmans (1965) over the period during which post-Keynesian predictions started to become out-of-date. According to Solow (1956), long-term growth is consistent with population growth, technological progress, capital accumulation and an increase in labour quality. The point which needs to be emphasised is that technological change and the labour force exert an influence as exogenous factors. In other words, they are not determined inside the model, but rather outside it. Also, to achieve long-term economic growth in the absence of labour force growth and progress in technology is out of question. Although an increase in capital stock has become the driving force for economic growth, which is endogenously variable, it cannot be held to be a growth-enhancing determinant within the neoclassical framework because of the diminishing returns to physical capital over time.

Thus, as indicated by De Mello (1997), FDI as a source to enlarge capital accumulation can only affect short-run growth and help boost the level of output. As a result, as can be seen in Reichert and Weinhold (2001), there occurs nothing beyond indigenous investments. Under such circumstances, the suggestion that FDI could fail to explain the increase in the growth rate of output is confirmed by the exogenous growth model.

All the statements made above were confirmed by Barro and Sala-i Martin (1995). According to them, in the neoclassical growth model FDI generates only a short-term effect. The diminishing return to capital is the main reason for this outcome. Despite the fact that direct investments from foreigners are available, countries fail to take advantage of them. As a result, in the neoclassical growth model, there is no difference between FDI-led economic growth and growth induced by local investments.

ii. Endogenous growth theory and FDI

Since the neoclassical model of growth became inadequate to explain the long-term growth in an economy, subsequent seminal works by Romer (1986,

1991), Lucas (1988) and Grossman and Helpman (1991) set out to produce more powerful hypotheses in order to overcome its shortcomings. Following the pioneering studies of the aforementioned scholars, the new endogenous growth theory started to provide some plausible evidence for long-term growth. For example, Lucas (1988) and Romer (1991) presented evidence that technological change and human capital are endogenous determinants, and do lead to obtaining long-term growth. In other words, growth is expected not to diminish over time, but rather to have an increasing trend. Moreover, the endogenous growth theory lends support to the hypothesis that FDI serves to generate an increase both in the level of growth and in the rate of growth, in contrast to neoclassical growth theory that stresses only a level effect (Bengoa and Sanchez-Robles, 2003).

Unlike the neoclassical model, the new growth models regarded FDI as a potential source to increase productivity in the economic system together with domestic investment. As indicated by Romer (1986), the construction of new and original knowledge by a firm provides an opportunity for another firm to increase its productivity by means of positive externalities in the case of the absence of legal rights on a patent. Following this idea, the modern advanced knowledge embodied in FDI appears to be the most important channel to spread high-productivity gains when foreign investors accept that they have to share their advantages. Thus, FDI inflow is expected to remove the restrictive effect of diminishing returns to capital and in turn contribute to the acquisition of a long-term growth rate of per capita income.

Romer (1991) analysed the impact of technological change on growth by using a neoclassical model. Nonetheless, his study is regarded as a new growth models since he took technology as an endogenous variable. The current author suggests that growth is a process contingent on technology change through rent-seeking investors in the global markets. In terms of capital, change in technology seems to be a promoter of its accumulation. Therefore, technological change going hand-in-hand with capital accumulation results in growth. Additionally, the author suggests that technological change is associated with the stock of human capital in

an economy. This does not mean that populous countries will have more changes in technology, since the notion departs from the concept of the relevance of population size. Consequently, countries with high levels of human capital are likely to grow more rapidly.

Another well-known study is that of Lucas (1988). He explained the scope of technological change, physical and human capital accumulation, and learning-by-doing. He used a model based on previous studies (Denison, 1962; Solow, 1956) and analysed three different models depending on the relationship between variables shown in the upper rows.² Specifically, what separates his study from the neoclassical growth model is the employment of human capital in the model as an endogenous variable. According to this assumption, human capital is closely related to raising productivity in growth, which in principle is only likely to occur through human capital-led positive externalities. This kind of externality is also contingent on the policy being open to international trade, and in turn to FDI. Furthermore, Lucas (1988) suggested two notions, 'schooling' and 'learning-by-doing', which are closely associated with human capital accumulation. In this sense, Lucas's (1988) view provides the theoretical basis for a number of empirical studies.³

Finally, in the context of endogenous growth theory, another approach came from Barro and Sala-i Martin (1997), who pointed out the presence of a convergence effect. They claimed that many countries with a low degree of development are unwilling to generate new ideas and design new products, in addition to their lack of effective human capital. This is because less-developed countries find it easy to observe and imitate the advanced qualities demonstrated by developed economies. Consequently, the formers' growth rate of income converges to that of the latter.

² Both Solow and Denison attempted to account for the main features of the US economic growth. Their purpose was not provide a theory of economic development.

³ Where the effect of human capital accumulation is explored by some education related proxies, such as school attainment and literacy. Xu (2000); Borensztein et al. (1998) and Barro and Lee (2000) are examples of that kind of research studies.

1.2. A review of the literature on FDI and economic growth

Although there exists a burgeoning body of empirical literature which has focused on the impact of FDI on economic growth, research studies on this issue have not yet reached a general consensus. While some studies believe in the presence of a positive relationship between FDI and economic growth, others refute such a positive linkage and suggest that foreign investments could hinder the process of economic growth in developing countries. The reason why the reported results on the linkage between FDI and growth differ from one another may be connected to the methodologies applied in the empirical works (Herzer et al., 2008; Li and Liu, 2005). If this is the case, it explains why the use of a range of techniques such as cross-country, panel data and time series generates findings that are not endorsed unanimously. In theoretical works, however, the published results on the issue are regarded as being more consistent with one another.

i. The Positive Linkage

The huge empirical literature includes several studies on the concept of FDI and its positive impacts on economic growth. In this context, if host countries want to enjoy externalities that arise from FDI inflows and then promote their own economic growth, the requirement from them is to have some qualifications and also to fulfil minimum requirements such as those of human capital, financial markets and the ability to adopt advanced technology. In other words, local conditions, or in the words of Abramovitz (1986) "social capacity", are decisive factors for investment decisions by foreigners.

Borensztein, De Gregorio and Lee (1998) analysed the growth-inducing impact of FDI by using cross-country regressions. They tested the data from a sample of 69 developing countries over the period 1970-1989. According to the regression results, there was a positive relationship between FDI and economic growth in recipient developing countries. Although the effect of FDI alone on economic growth was positive, it was not robust. The authors found those analytical results through the recent growth theory identifying advanced technology to be one of driving forces behind economic growth. Directing high

technology from developed home to developing host nations, FDI is believed to provide an environment in favour of economic growth in host countries. More importantly, Borensztein et al. (1998) showed that even though the transmission of superior technology is crucial, human capital is at least as important as technology. That is, the impact of FDI on economic growth is closely tied to the presence of human capital in the host country. As a result, the advanced technology embedded in FDI incorporates countries' absorptive capability and thus enhances their economic growth.

They also concluded that the investments of foreigners are more productive than those of local investors who have a minimum level of human capital. Nonetheless, foreign entrants do not crowd-out domestic investments.

Similarly, another study by Wang and Wong (2009) has shown that when countries have a large stock of human capital, FDI is expected to be able to enhance economic growth. In contrast, with a minimum level of human capital, direct investments are expected to have a negative effect on the process of economic growth.⁴ A further explanation of this issue was offered by Xu (2000) who analysed the effect of the technology transfer by US MNCs on other countries' productivity growth. He used data from both developed and developing countries, each group consisting of twenty countries. According to his results, while the technology transferred by US MNCs augmented productivity in developing countries, the correlation between given variables was found to be weak for less-developed countries (LDCs) since they had an insufficient stock of human capital.

An important study conducted by Blomstrom, Lipsey and Zejan (1994) confirmed the view that the contribution of investments from foreign firms on economic growth is positive. Clearly the result is consistent with the conclusion drawn by Borensztein et al. (1998). However, these two groups of scholars diverged on whether the influence of FDI on growth is statistically significant.

⁴ Their analytical results are based on the sample of 69 country over period of 1970-1989.

Unlike Borensztein et al. (1998), the investigation by Blomstrom et al. (1994) showed that there is a significant linkage between FDI inflows and growth rate of income.⁵ Moreover, splitting the dataset for developing countries into two subgroups with regard to their per capita income level – high- and low-income developing countries – Borensztein et al. (1998) showed that the growth effect of FDI is statistically significant in countries with higher levels of income. Although the result associated with FDI-related growth is reversed for countries with low levels of income, the indication of the coefficients is still positive. In Blomstrom et al. (1994), the initial stock of human capital is replaced by a minimum quality standard on development. For example, an adequate level of technological development in less-developed countries makes it easier for them to imitate and supply the technology transmitted by MNCs. Fulfilling such a precondition, therefore, the home country gains beneficial effects of FDI on economic growth.⁶

Another approach to the analysis of the FDI/growth relationship is suggested by Alfaro et al. Chanda, Kalemli-Ozcan, and Sayek (2004), which added a financial development parameter to the regressions. Even though several previous studies had investigated the linkage between financial development and growth, and the FDI/growth nexus as well, Alfaro et al. (2004) broadened the perspective of previous studies by exploring the relationship between the local financial system, FDI and economic growth. Here, the interaction of the financial market with FDI was introduced as an explanatory factor into the tripartite relationship. According to the analytical results found by employing cross-country data for a twenty-year period, 1975-1995, financial institutions such as banks and equity markets, and the level of development, play a key role in attracting FDI due to the advantages provided by borrowing to finance new investments. Also, the growing benefits of technology spillover are a response to a developed financial system in the local economy. As a result, FDI increases economic growth through a well-functioning financial system.

⁵ They use the relevant cross-section dataset which is available for the sample of 101 countries-78 developing and 23 developed countries.

⁶ Yet another prominent studies which indicate the importance of starting amount of human capital in a economy include scholars such as Balasubramanyam et al. (1996, 1999); Makki et al. (2004).

Hermes and Lensink (2003) likewise showed the positive association between the development of a financial system and FDI. As with Alfaro et al.'s (2004) results, they provided evidence that the more developed the local financial market, the more technology dissemination is embedded with FDI. In particular, Latin American and Asian countries in the examples confirmed the above-mentioned empirical results in which FDI is a growth-enhancing process, but this is not a direct effect. Rather, well-regulated financial institutions mediate the relationship between FDI and growth. As can be realized, this is not a direct FDI effect on growth. In a very recent study, Alfaro et al. (2010) maintained the importance of supporting the needs of developed financial markets.

In a recent empirical evidence, Iamsiraroj and Ulubasoglu (2015) also demonstrate that size of government, magnitude of inflation, educational level and the level of foreign aids have an impact on the degree to which FDI occurs as well as financial development. Furthermore, unlike the studies which examine the FDI-growth relationships only for developing countries, Iamsiraroj and Ulubasoglu (2015) show that FDI imposes positive effects on economic growth in both developing and developed countries.

Mayer-Foulkes and Nunnenkamp (2009) stated that the 'convergence' effect may occur through foreign direct investment. That is, FDI, regarded as a package of capital stock, technology and know-how (De Mello, 1997), might provide an opportunity for latecomer developing countries to catch up with developed economies in terms of income per capita. In this sense, FDI appears to be a process conducive to fostering growth rates in host developing countries.

Mayer-Foulkes and Nunnenkamp (2009) used a database provided by the US Department of Commerce's Bureau of Economic Analysis (BEA). This data is basically related to US activities in the form of FDI. Contrary to many earlier dominant empirical approaches which used aggregate FDI data, this study pursued a different path in which the authors took advantage of disaggregated FDI data for various industries. They examined the extent to which US FDI undertakes an intermediary role enabling economies to converge with income

per capita in the US. According to the results, high-income receivers⁷ were shown to be countries in which US FDI promoted the rate of growth in per capita income because of their ability to exploit transferred technology, and in turn contribute to their convergence processes. However, US FDI never contributes to middle- and low-income countries and therefore their catch-up growth is inadequate in view of the inadequacy of their absorptive capacity. Unlike the studies mentioned above, Mayer-Foulkes and Nunnenkamp (2009) showed that despite the presence of a minimum level of absorptive capacity in an economy, this is not enough in terms of FDI-related convergence; in other words, a threshold is required above minimal quality.

ii. The Negative Linkage

Charkovic and Levine (2005) criticised the literature which concluded that there is a positive influence of FDI on economic growth. Mainly, the authors blamed the macro-based studies which provided this evidence in comparison with the micro-based studies. In the light of this argument, Charkovic and Levine (2005) revised the variables employed in the articles surveyed above. They found that the development of financial markets (Alfaro et al., 2004, 2010; Hermes and Lensink, 2003), the level of per capita income (Blomstrom et al., 1994), and the stock of human capital (Borensztein et al., 1998; Wang and Wong, 2009; Xu, 2000), contrary to the assertion, do not mediate between FDI and economic performance. That is, the positive FDI impact on growth is associated with none of these variables. As a result, although Charkovic and Levine (2005) successfully addressed the weakness within previous studies, such as unobserved country-specific effects, the endogeneity bias of the FDI variable and no lagged dependent variable, the authors found that there was no positive and robust role for FDI in generating growth. To achieve this result, they used the Ordinary Least Square (OLS) and the Generalized Method of Moment (GMM) panel techniques as econometric models to test 72 countries over the period between 1960 and 1995. Finally, the authors carried out a sensitivity analysis to assess robustness.

⁷ Nunnenkamp (2009) uses country data of income classification represented by World Bank. According to that, economies which have one-fourth of US per capita income are called to be high income countries.

Another strand of literature on determining the relationship between FDI and growth is connected with micro- or firm-level analysis, instead of multi-country aggregate data analysis (macro-economic) as used by Charkovic and Levine (2005). In this regard, the study conducted by Aitken and Harrison (1999) is an example among micro-based studies. They used firm-level data for one sample country, Venezuela. The results showed that beneficial spillovers do not occur as a result of FDI. For example, positive technology spillover directed from FDI to local direct investments cannot be proved due to the absence of evidence, which is in contradiction with the previous findings. Since foreign firms have a typical tendency to invest more productive sectors in the selected location because of their potential cost advantages, local firms face the loss of their competitive edge in their own region. Not surprisingly, this leads in turn to a reduction in the productivity of domestic firms. Taken as a whole, these results support the view that FDI exerts a negative effect on growth.

Following Aitken and Harrison's (1999) results, Hanson (2001) provided similar findings on the inference: the more foreign ownership there is in a region, the less productivity growth there will be in domestically-owned firms. Firms owned by foreigners avoid the sectors with low-productivity since those industries do not match the benefits they plan to gain. This situation negates the stimulating effect of FDI on the productivity of the recipient country. According to the empirical evidence provided by the author's theoretical model, which employed two countries (Brazil and Costa Rica) and three companies (General Motors, the Ford Motor Co. and Intel), he found that positive productive spillovers are not contingent on promoting FDI. Rather, in Brazil, for instance, the presence of foreign firms in related sectors decreased the benefits to local firms.

1.3. Summary of the relation between FDI and economic growth

All the studies reviewed above have suggested that FDI affects economic growth in two ways: positively or negatively. The studies that found a positive relationship have suggested that FDI has either a direct or an indirect effect on economic growth. If the effect is indirect, it means that FDI inflows affect economic

performance through variables such as the stock of human capital and the level of financial development. However, a direct relationship between FDI and growth is not based on a specific level of quality to absorb the knowledge transfers which arise from FDI. On the other hand, some studies have reviewed claim that there is no positive linkage between FDI and growth. In general, those studies have been based on micro-economic analyses and hence provide evidence for the negative impact of FDI on economic performance.

Some studies claim that FDI has an impact on economic growth through a third variable which is related to the level of the absorptive capacity which countries have. In the next section, we shall go further and survey the studies which have examined the growth effect of FDI through the level of economic freedom.

2. The relationship between economic freedom and FDI

In the extensive literature with regard to the determinants of FDI inflows, there has for several years been a tendency to draw attention to specific elements such as technological development, the stock of human capital, market size, economic distance/transport costs and factor costs. Several authors have frequently used those determinants in their empirical models by focusing their efforts on analysing the extent to which these factors determine the attractiveness of a host country to attract FDI. However, other potential factors such as institutional structure and economic freedom, which may have an influence on FDI inflows, seem to have been relegated to second place, and have even been ignored by some investigators. The main reason for this has been the lack of reliable data on institutional determinants for a long time. But good quality data sources on institutions are available today. As a matter of fact, much more continuation of limited datasets might have restrained the explanatory power of studies investigating cross-country differences on FDI inflows and the rate of economic growth correlated with FDI.

In this second part, the initial aim is to explain specifically the notion of 'Economic Freedom'. An additional aim is to review the literature on whether

economic freedom plays a role in attracting FDI inflows. Before analysing the literature concerning the linkage between economic freedom and FDI inflows, first, the definitions of economic freedom published by some establishments – the Fraser Institute and the Heritage Foundation/Wall Street Journal – will be discussed. In the subsequent section, the literature on the specific components of economic freedom and, in turn, their contribution to preparing an attractive domestic climate for foreign direct inflows will be reviewed in detail.

2.1 The definition of economic freedom

Ever since the days of Adam Smith's (1776) analysis of a free market, the concept of being free economically has become an important issue which has been argued elaborately by several scholarly studies and policy makers. As a result, various definitions that try to bring clarity to what economic freedom means are now available. In a basic expression proposed by the Fraser Institute, economic freedom refers to voluntary actions without government controls and restrictions. These actions go parallel with economic agents' choices. A broader definition of the term 'economic freedom' devised by the same organization is:

"Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. An index of economic freedom should measure the extent to which rightly acquired property is protected and individuals are engaged in voluntary transactions." (Gwartney and Lawson, 1996)

According to the Heritage Foundation/Wall Street Journal (2018 Index of Economic Freedom), economic freedom is an important right that each economic unit must have. This right allows individuals to participate in the workforce, operate a business and regulate consumption and investment functions any time they want. Furthermore, in an economically free society, the protection of economic agents in relation to their activities must be guaranteed by governments. In addition, governments must keep away from restrictions on economic activities.

Following these classical definitions, it is necessary to identify the components of economic freedom in order to promote a better understanding of the issue. To attain objectively constructed components through reliable sources is a crucial factor to measure the degree of economic freedom correctly. In this sense, some scholarly articles (Knack and Keefer, 1995; Scully and Slottje, 1991) have appeared to initiate the creation of the proper indicators of economic freedom. However, in this study, as in most of the relevant literature, attention will be focused on the two indices of the components of economic freedom published by the Fraser Institute and the Heritage Foundation/Wall Street Journal. All these components are useful for measuring the extent to which an economy is functioning by having a free structure or without government constraints. The Index of Economic Freedom of the World (2017) published by the Fraser Institute divided the components of economic freedom into five main categories, and assessed their degrees of economic freedom. In addition, the Index of Economic Freedom published by the Heritage Foundation/Wall Street Journal (2018) measured the degree of economic freedom using four main groups of indicators.

2.2. A review of the literature on economic freedom and FDI

i. Aggregated index of economic freedom and FDI

Examining seven East Asian countries from 1995 to 2000 through the panel data method, Quazi (2007) found that economic freedom is a strong determinant compared with other determinants to motivate foreigners who plan to invest directly in any other place. Unlike other studies which decided generally to use the Fraser Institute's Index, for Quazi (2007), the Heritage Foundation/The Wall Street Journal was main source in terms of an index of economic freedom. He therefore confirmed the view that the presence of a high level of economic freedom affects FDI positively by applying a comparatively less-used index. He also emphasized that the priority requirement for a nation is to achieve a freely functioning economy for the long term. When this condition is satisfied, increased certainty in a country's economic atmosphere will in turn attract the attention of larger foreign direct investors. At the same time, the positive atmosphere will imbue foreigners' respect for their own investment decisions with a sense of being in the right place.

Another study that supports the view suggested by Quasi (2007) was that of Kapuria-Foreman (2007). Like many other scholars, in order to analyse the impact of economic freedom on FDI, the author traced the two indices published by the Fraser Institute and the Heritage Foundation/Wall Street Journal. In addition, he based his study on the dataset for developing countries, excluding transition economies such as China. As a result, by using cross-country growth regressions, the author reached a conclusion that economic freedom and FDI inflows are positively related.

Similarly, Bengoa and Sanchez-Robles (2003) argued whether economic freedom might be a determinant of FDI. Using both the cross-country and the panel data methods, they tested eighteen Latin American countries over the period 1970 to 1999. Depending on their regression estimate controlling the level of GDP, debt service, inflation and public investment, Bengoa and Sanchez-Robles (2003) stressed that an increase in the degree of economic freedom gives rise to an increase in FDI inflows.

Azman-Saini et al. (2010) also suggested that the level of economic freedom has a positive influence on FDI. Using analysis through the generalized method of moment (GMM), the authors identified an interaction between economic freedom and FDI and then tried to investigate the effect of interaction on growth. As a result of the analysis, they reported that the effect of FDI on economic performance increases through economic freedom. That is, they provided evidence that economic freedom mediates to attract more FDI inflows.

ii. Disaggregated index of economic freedom and FDI

In this section, we shall review some studies in which the components of economic freedom are examined individually. For example, articles that include intellectual property rights, labour market regulations, corruption and monetary distortion/inflation will be reviewed one after another.

The presence of the protection of intellectual property rights (IPRs) is considered to be one of the indicators of economic freedom. Some studies (for

example, Javorcik, 2004; Nunnencamp and Spatz, 2004) are good examples of examinations of the effect of property rights on FDI inflows. Javorcik (2004) employed a unique firm-level dataset for a sample of countries in Eastern Europe and the former Soviet Union. He set out a clarification of how much direct investment from companies all over the world, and also for what purpose, flowed into twenty-four countries in that region. He found a significant linkage between the level of IPR protection and FDI flows to those countries. In other words, if an economy fails to protect IPR, this will in turn lead to discouraging much-needed FDI inflows. This forces foreign investors to centre their activities on distribution instead of production. All these results are not based on a discrimination of one sector (such as technology-incentive) from another.

However, a research study which provided evidence for a dissimilar result after exploring the IPR/FDI nexus was that of Gross and Saggi (2002). In their theoretical study, they used a product cycle model in which there were two notional areas called the North (an innovating region) and the South (an imitating region). In the case of the South, when the protection of intellectual property rights was strengthened, it created a decrease in the rate of imitation. Accordingly, in the matter of FDI, the imitating region that constrained by IPR legislation will render such inflows meaningless.

Javorcik and Spatareanu (2005) examined the other component of economic freedom: labour-market regulations. They analysed fourteen Western and five Eastern European countries for the period 1998-2001 using firm-level data. The objective of the study was to test whether there is an interaction between the degree of labour market flexibility in a host country and FDI. During the tests, the researchers used indices that characterize labour market flexibility such as 'the GCR Index of Flexibility of Hiring and Firing Practices'. The results showed that less flexibility in the host countries' labour market was a disincentive for FDI inflows. In addition, an unfavourable degree of labour market distortion in the host country was found to be a driving force for investors to invest in their home country, which has comparatively less rigidity in the labour market.

This result was supported theoretically by Haaland and Wooton (2007) who found that in the presence of employment regulations authorized by governments, the rates of redundancy payment, not the same in every country, will pose a threat to FDI inflows by MNCs. This implies that MNCs will have to bear the cost of an increasing wage bill, and this in turn will give rise to an increase in the value of the investment. This explanation makes it clear that employment protection persuades multinationals that there are no potential gains from direct investment.

The Index of Economic Freedom published by the Heritage Foundation and the Wall Street Journal suggests that the presence of economic freedom in countries is also connected with the extent of corruption. Sometimes, corruption may be a sufficiently severe problem in economies as to destroy economic freedom, although it may be low and therefore considered to be harmless behaviour in some places. Wei and Shleifer (2000) demonstrated that a high level of corruption in recipient countries is expected to weaken, or rather deter, FDI inflows. By contrast, a reduced level of corruption is the reason for a country being selected by foreign investors. Such a result is a response to a unique firm-level dataset which tried to show the degree of attractiveness of twenty-two countries in Eastern Europe and the former Soviet Union in terms of FDI inflows in the 1990s. In that study, the authors came to the conclusion that if corruption is pervasive in a country, foreigners are inclined to shun wholly-owned investments. Instead, their preference is mostly to pursue the investment process by means of joint ventures or acquisitions.

A study of the impact of corruption on foreign direct investments was carried out by Habib and Zurawicki (2002). Their findings seem to confirm the view that the presence of corruption generates a complex environment and hence affects foreigners' investment decisions negatively. This result was based on an analysis of 89 countries over the period 1996 to 1998.

Although the two analyses described above point out the negative relationship between FDI and corruption, Egger and Winner (2005) argued that there could be a positive linkage between those variables by examining 73 developed,

developing and transition countries for the period 1995-1998. They explained the positive impact of corruption on inward FDI by observing implications in the short-term and the long-term. Even though the presence of corruption makes it difficult, in the short-run, for foreigners to invest in another country by virtue of the cost effect of direct inflows (bribery can be seen a kind of tax, for instance), well-functioning regulations and administrative mechanism are expected to turn disadvantages into advantages for FDI inflows in the long run. On the other hand, Akcay (2001) cast doubt on these results by suggesting that corruption and FDI inflows have no statistically significant relationship.

Finally, we can consider inflation in order to further comprehend the nature of economic freedom. In essence, low and stable inflation is accepted as a required element in terms of macro-economic stability in economies, more specifically, of sustainable growth (Fisher, 1993). When governments fail to determine monetary policies that refrain from a high rate of inflation, which in turn indicates price distortions, it has been suggested that this can put a limit on economic freedom (Gwartney and Lawson, 2003). Bengoa and Sanchez-Robles (2003) showed that economic freedom is negatively influenced by a higher inflation rate. They also found that the linkage between inflation and economic freedom is statistically significant.

2.3. Summary of the relation between economic freedom and FDI

The purpose of this section has been to seek the answer to the question of whether level of economic freedom is a determinant of FDI. In other words, the fundamental principle of this part has been to understand whether economic freedom is an explanatory variable for direct cross-border investments. To find answers to this question, we have reviewed the relevant literature by dividing it into two sections. Thus, we have examined some studies which have considered whether aggregated economic freedom is an explanatory parameter for FDI. Other studies have found that one component of economic freedom would be a determining factor of FDI. So the presence of intellectual property rights, labour market regulations and the lack of corruption and inflation can all help to attract FDI inflow.

3. The relationship between economic freedom and economic growth

In the previous sections, we reviewed some studies which are associated with issues such as the FDI/growth nexus or the relationship between FDI and economic freedom. In the first part of the present study, the papers which analyse the impact of FDI on economic growth are surveyed. In the subsequent section, the studies are reviewed which have attempted to explain the extent to which the indicators of economic freedom, either partly or overall, have an influence on FDI. Broadly speaking, those are research studies which have categorised economic freedom as one of the determinants of FDI. In this final part of the paper, we shall review the studies which have explored the relationship between economic freedom and economic growth.

Since the beginning of the 1990s, a number of empirical studies have started to take interest in the view that economic freedom may be taken into account to explain the variation in the rate of economic growth across countries. A variety of components of economic freedom published by some indices such as *Economic Freedom of the World* by the Fraser Institute and the *Index of Economic Freedom* by the Heritage Foundation have been subjected to empirical analyses. Over time, while one group of studies has preferred to use the aggregate measure of economic freedom, other studies have established potential specific indicators to induce growth by disaggregating the index of economic freedom. Meanwhile, yet another group has indicated the importance of causality testing.

3.1. A review of the literature on economic freedom and economic growth

i. Aggregate approach

From the beginning of the 1990s until recently, many studies have suggested that economic freedom is positively correlated with economic growth. Johnson and Lenartowicz (1998) are among those who have made that suggestion. According to them, two separate variables, economic freedom and economic growth, are connected to each other by means of national culture and the

relationship between economic freedom and growth is statistically significant.⁸ Another study which has explored the link between economic freedom and growth link is that of Nelson and Singh (1998). Using data on economic freedom, they produced results in line with Johnson and Lenartowicz (1998) findings that there has been a significant positive association between economic freedom and economic growth.

Scully (2002) explored the link between economic freedom and economic performance in addition to investigating the extent to which economic freedom can determine income distribution, and the trade-off between income equity and economic growth. The results were based on the structural and reduced form models. Some developing Asian and a number of developed economies took part in the analysis as sample countries. Because of their better quality, Scully (2002) used the indicators of economic freedom proposed by Gwartney, Lawson, and Block (1996), which had evolved over time after the research of Scully and Slottje (1991).⁹ As a result, Scully (2002) provided evidence that the level of economic freedom (based on an initial year) plays a strong positive role in generating economic growth, which confirms the results mentioned above.

Some other studies (for example, De Haan and Sturm, 2000; De Haan et. al 2006; Leertouwer et al. 2002) have found that only change in economic freedom over a given number of years can be expected to promote economic growth. De Haan et. al. (2000, 2006) used the method of extreme bound analysis (EBA). They estimated the model by adding two explanatory variables, the level of economic freedom (or the initial level of economic freedom) and the change in economic freedom. While 1975 was taken as a benchmark for the former, in the latter case, the period 1975-1990 was used as a measure. As a result, the value of the

⁸ The notion of natural culture indicates that if in a country self-determination is widespread, where there may be a tendency to pursue liberal economic policies. However, the country is far from individual autonomy, instead it is close to conservative or hierarchical construction, in which government interventions is common interrupt the function of liberal economic policies.

⁹ Thanks to Scully and Slottje (1991), the literature has received its first systematic index of economic freedom.

coefficient of the change in economic freedom was found solely to be non-zero. Therefore, they rejected the robust level effect on growth of economic freedom, which is the opposite of the result produced by Scully (2002). De Haan et. al. (2000, 2006) also highlighted the robustness of the two given variables (the change in economic freedom and growth) in contrast to most studies which have not engaged in sensitivity analysis.

Doucouliaagos and Ulubasoglu (2006) investigated the effect of economic freedom on economic growth, and their study differed from previous studies by using a new meta-analysis technique. The authors took an opportunity to search both the direct and the indirect impact of economic freedom on economic performance. They tested the impact of indirect economic freedom through physical capital, suggesting that many studies in the literature appeared to prefer not to include physical capital in their specifications, as it is unlikely to enable an exact estimate of the relationship between economic freedom and economic growth. In the light of their meta-analysis technique, the authors pointed out that economic freedom has a positive, significant and, most importantly, direct effect on economic growth. Likewise, the impact of economic freedom on physical capital is positive and statistically significant. In other words, by removing control of physical capital and then providing interaction between economic freedom and physical capital, the result is that economic freedom affects economic performance through physical capital formation (Doucouliaagos and Ulubasoglu, 2006).

ii. Disaggregate approach

There are a number of components with regard to economic freedom. Admittedly, determining which measures should be looked at more closely and which features make some components prominent in the growth process might not be as easy as could be expected. In this regard, Carlsson and Lundstrom (2002) developed their studies by using components of the economic freedom index developed by Gwartney et al. (1996) in the belief that that index facilitates drawing an inference on which components of freedom substantially explain economic growth.

Using the framework of the decomposition method, Carlsson and Lundstrom (2002) analysed the individual impact of the components of economic freedom, divided into seven main categories, on economic growth by using extreme bound analysis over the twenty-year period 1975-1995. They concluded that two factors of economic freedom (the size of government and international exchange/freedom to trade with foreigners) have negative and statistically significant effects on growth. Excluding the variables of monetary policy and price stability, which were insignificantly correlated with growth, the remaining components had, as expected, positive and statistically significant impacts on economic growth.¹⁰

In some respects, the findings of Carlsson and Lundstrom (2002) remain contentious. First, there are some studies (Sala-i Martin, 1997; Sachs and Warner, 1995) whose findings contradict Carlsson and Lundstrom (2002)'s claim that economic freedom for the two given categories (smaller government size and trade with foreigners) and economic growth are positively related. Second, from a causality point view, Dawson (2003), whose study will be considered later in detail, suggested that Carlsson and Lundstrom's (2002) research had some empirical shortcomings. The main criticism arose from ignorance of the need to test the casual link between the underlying components and growth. The authors focused only on the correlation between the related variables.

An earlier study (Ayal and Karras, 1998) can be seen as proof of the conclusion reached by Carlsson and Lundstrom (2002). Ayal and Karras (1998) suggested that the disaggregate measure of economic freedom is as important as the aggregate measure of economic freedom. On the basis of this suggestion, they identified thirteen different areas of economic freedom and then examined their effect on economic growth. Their analysis showed that eight of the components had a positive and statistically significant influence on growth.

¹⁰ The components of economic freedom which promote economic growth: Economic structure and the use of markets, freedom to use alternative currencies, legal structure and security of private ownership, freedom of exchange in capital markets.

Another work (Berggren and Jordahl, 2005) applied cross-country regressions and used data collected between 1970 and 2000 from a sample of 78 countries. Their analysis was based on the index decomposed by Carlsson and Lundstrom (2002) and proposed more specific techniques such as Least Trimmed Squares (LTS) and Reweighted Least Squares (RLS) as methods of sensitivity analysis. While their results were partly in line with the findings of Carlsson and Lundstrom (2002) (legal structure and security of private ownership, and freedom for international exchange – positive and negative effects on growth, respectively), different results were available for size of government and sound money – statistically insignificant and significant, respectively. Furthermore, they highlighted one of five distinct areas of economic freedom. This was taxes on international trade, which are obtained by disaggregating the component of freedom to trade with foreigners. Hence, economic growth is expected to be enhanced by higher taxes. This result within the given categorization is incompatible with that of Carlsson and Lundstrom (2002) who had not made that kind of classification.

iii. Causality approach

Another different approach in the existing literature on the economic freedom/growth nexus has been presented by Dawson (2003), Justesen (2008) and Heckelman (2000). They focused their research on the issue of causality, and they also criticised those published studies which did not encompass the Granger causality test to assign the direction of the correlation between given variables. Of those three studies, Dawson (2003) suggested that level of economic freedom and change in economic freedom seemed to have different relationships with economic growth in terms of causality. According to his results, the causal linkage between the overall level of economic freedom and growth is unilateral, while the causality which prevailed between change in freedom and economic growth is in the form of a bilateral relationship. Adding a new dimension to the existing literature by the use of a causality test, Dawson's (2003) finding confirmed the result of De Haan and Sturm (2000), who had detected the correlation between economic freedom and economic performance, and found in turn that the change in the former is robustly related to the latter.

A more recent paper on the issue by Justesen (2008) tested the causality, an empirical technique introduced by Granger (1969), between economic freedom and economic growth by using panel data for a wide range of countries covering the period 1970 to 1999. While Heckelman (2000) had used the Index of the Heritage Foundation for the measures of economic freedom in his study, Justesen (2008) applied the Economic Freedom of the World data (Fraser Institute, 2007; Gwartney and Lawson, 2007). As a result, he provided evidence that the composite index of economic freedom and two of the aggregated measures of economic freedom – government size and regulatory policies – are the causes of economic growth. The association between those factors and economic growth seems to be robust. However, Dawson's (2003) findings suggest that there is a different direction of causality between government size and economic growth, in comparison with Justesen's (2008) test result. That is to say, government size can be expected to induce economic growth.

3.2 Summary of the relation between economic freedom and economic growth

A number of studies which have scrutinised the association between economic freedom and economic growth have used various types of theoretical and empirical techniques with a range of samples over a particular period of time. It is apparent that the degree of the explanatory power of components available on economic growth varies in connection with the way in which those indicators are taken, either as a whole or singly. In general, there has been no consensus about the sign of the coefficients of components estimated; for example, while one has a positive influence on growth in one study, it might show an opposite result – a negative effect on growth, or no impact at all – in another study. It can also be seen that the casual link between economic freedom and economic growth is as important as the correlation between these two variables. Through analysis of the previous studies, we can understand that, in some cases, economic freedom causes growth, but that in others economic growth is the reason for economic freedom, or a third option agreed on is that the interaction may be mutual.

4. Conclusion

The first attempt of the present paper is to survey the effect of foreign direct investment (FDI) on economic growth. The relationship between FDI and growth has long been discussed by the large number of studies. In some of these works, the belief is that FDI has a beneficial influence on economic growth. According to them, direct investment is associated with advanced technology. Directing high technology from developed home to developing host countries is one of driving forces behind economic growth.

Human capital also appears to be crucial when deciding on investment due to exploit the superior technology. When host nations of the investment have adequate human source and benefit from knowledge externality created by direct investments, FDI has a positive impact on economic growth. The growth effect of FDI would be significant in countries with higher levels of income, which might have adequate physical capital.

Therefore, as suggested by De Mello (1997), FDI can be regarded as a package of capital stock, technology and know-how. Nonetheless, a well-functioning financial system might be as important as human and physical capital stocks and technological knowhow. For example, financial institutions such as banks and equity markets offers significant advantages to foreign investors. The advantages provided to borrower to finance new investments encourage foreign direct investors, and in return that the investment increases economic growth.

Although the literature which focuses on the positive impact of FDI on economic growth, there is another literature which suggests the opposite. Those studies mostly argue the issue on a micro-level rather than a macro-level analysis. In this structure, they claim that foreign direct investment has a negative impact on economic growth.

As can be seen from above lines, the relationship between foreign direct investment (FDI) and economic growth has been discussed from different

perspectives in the literature: FDI affects economic growth in two ways: positively or negatively. While discussing foreign investment, the studies surveyed in this line ignore to seek the answer to the question of whether level of economic freedom is a determinant of FDI. But some others do this. Thus, in a second attempt, the present paper has examined the studies which have considered whether aggregated economic freedom is an explanatory parameter for FDI. Further, we have reviewed papers in which one component of economic freedom would be a determining factor of FDI. In this sense, the studies show that the presence of intellectual property rights, labour market regulations and the lack of corruption and inflation can all help to attract FDI inflow.

The third attempt of the present study is to demonstrate that in some cases, economic freedom causes economic growth, but that in others growth is the reason for economic freedom, or a third option agreed on is that the interaction may be mutual.

Acknowledgement: I would like to thank Manchester University for providing resources and facilities during this study was conducted. The usual disclaimer applies.

References

- Abromovitz, M. (1986). Catching up, forging ahead, and falling behind. *The Journal of Economic History*, 46, 385–406.
- Aitken, B. J., and Harrison, A. (1999). Do domestic firms benefit from direct foreign investment? Evidence from Venezuela. *American Economic Review*, 89, 605–618.
- Akcay, S. (2001). Is corruption an obstacle for foreign investors in developing countries? A cross-country evidence. *Yapi Kredi Economic Review*, 12, 27–34.
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S., and Sayek, S. (2004). FDI and economic growth: The role of local financial markets. *Journal of International Economics*, 64, 89–112.
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S., and Sayek, S. (2010). Does foreign direct investment promote growth? Exploring the role of financial markets on linkages. *Journal of Development Economics*, 61, 242–256.
- Ayal, E. B., and Karras, G. (1998). Components of economic freedom and growth: An empirical study. *The Journal of Developing Areas*, 32, 327–338.

- Azman-Saini, W. N. W., Baharumshah, A. Z., and Law, S. H. (2010). Foreign direct investment, economic freedom and economic growth: International evidence. *Economic Modelling*, 27, 1079–1089.
- Balasubramanyam, V. N., Salisu, M., and Sapsford, D. (1996). Foreign direct investment and growth in EP and IS countries. *The Economic Journal*, 106(1), 92–105.
- Balasubramanyam, V. N., Salisu, M., and Dapsoford, D. (1999). Foreign direct investment as an engine of growth. *Journal of International Trade and Economic Development*, 8(1), 27–40.
- Barro, R. J., and Lee, J. W. (2000). International data on educational attainment updates and implications. *NBER Working Paper Series*. Retrieved from <https://www.nber.org/papers/w7911>
- Barro, R. J., and Sala-i Martin, X. (1995). *Economic growth*. New York, NY: McGraw-Hill.
- Bengoa, M., and Sanchez-Robles, B. (2003). Foreign direct investment, economic freedom and growth: New evidence from Latin America. *European Journal of Political Economy*, 19(3), 529–545.
- Berggren, N., and Jordahl, H. (2005). Does free trade really reduce growth? Further testing using the economic freedom index. *Public Choice*, 122(1–2), 99–114.
- Blalock, G., and Gertler, P. (2008). Welfare gains from foreign direct investment through technology transfer to local suppliers. *Journal of International Economics*, 74, 402–421.
- Blomstrom, M., Lipsey, R., and Zejan, M. (1992). What explains developing country growth. *NBER Working Paper Series*. Retrieved from <https://www.nber.org/papers/w4132>
- Borensztein, E., De Gregorio, J., and Lee J. W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45, 115–135.
- Carlsson, F., and Lundstrom, S. (2002). Economic freedom and growth: Decomposing the effects. *Public Choice*, 112, 335–344.
- Charkovic, M., and Levine, R. (2005). Does foreign direct investment accelerate economic growth? In H. Moran and E. M. Graham (Eds.), *Does foreign direct investment promote development?* (pp. 195–220). Washington, DC: Institute for International Economics.
- Cass, D. (1965). Optimum growth in an aggregative model of capital accumulation. *The Review of Economic Studies*, 32(3), 233–240.
- Crespo, N., and Fontoura, M. (2007). Determinant factors of FDI spillovers - what do we really know? *World Development*, 35, 410–425.
- Dawson, J. W. (2003). Causality in the freedom-growth relationship. *European Journal of Political Economy*, 19, 479–495.
- De Haan, J., and Sturm, J. E. (2000). On the relationship between economic freedom and economic growth. *European Journal of Political Economy*, 16, 215–241.
- De Haan, J., Lundstrom, S., and Sturm, J. (2006). Market-oriented institutions and policies and economic growth: A critical survey. *Journal of Economic Surveys*, 20, 157–191.
- De Mello, L. R. Jr. (1997). Foreign direct investment in developing countries and growth: A Selective survey. *Journal of Development Studies*, 34, 1–34.

- Denison, E. F. (1962). Unites States economic growth. *The Journal of Business*, 35(2), 109–121.
- Doucouliaqos, C., and Ulubasoglu, M. A. (2006). Economic freedom and economic growth: what difference does specification make? *European Journal of Political Economy*, 22, 61–81.
- Egger, P., and Winner, H. (2005). Evidence on corruption as an incentive for foreign direct investment. *European Journal of Political Economy*, 21, 932–952.
- Fischer, S. (1993). The role of macroeconomic factors in growth. *Journal of Monetary Economics*, 32, 485–512.
- Granger, C. (1969). Investigating causal relations by econometric methods and cross-spectral methods. *Econometrica*, 37, 424–438.
- Gross, A. J., and Saggi K. (2002). Intellectual property rights and foreign direct investment. *Journal of International Economics*, 56, 387–410.
- Grossman, G. M., and Helpman, E. (1991). *Innovation and growth in the global economy*. Cambridge, MA: MIT Press.
- Gwartney, J, and Lawson, R. (2003). The concept and measure of economic freedom. *European Journal of Political Economy*, 19, 405–430.
- Gwartney, J., Lawson, R., and Block, W. (1996). *Economic freedom of the world: 1975–1995*. Vancouver, BC: The Fraser Institute.
- Gwartney, J. D., and Lawson, R. (2007). *Economic freedom of the world: 2007 annual report*. Vancouver, BC: The Fraser Institute.
- Haaland, J. I., and Wooton, I. (2007). Domestic labor markets and foreign direct investment. *Review of International Economics*, 15, 462–480.
- Habib, M., and Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of International Business Studies*, 33(2), 291–307.
- Hanson, G. H. (2001). Should countries promote foreign direct investment? *G-24 Discussion Paper*. Retrieved from <https://core.ac.uk/download/pdf/7043195.pdf>
- Heckelman, J. C. (2000). Economic freedom and economic growth: A short-run causal investigation. *Journal of Applied Economics* 3, 71 – 91.
- Hermes, N., and Lensink, R. (2003). Foreign direct investment, financial development and economic growth. *Journal of Development Studies*, 40, 142–163.
- Herzer, D., Klasen, S., and Nowak-Lahman, D. (2008). In search of FDI-led growth in developing countries. *Economic Modelling*, 25, 793–810.
- Iamsiraroj, S., and Ulubasoglu, M. A. (2015). Foreign direct investment and economic growth: A real relationship or wishful thinking? *Economic Modelling*, 51, 200–213.
- Javorcik, B. S., and Spatareanu, M. (2005). Do foreign investors care about labor market regulations? *Review World Economics*, 141, 375–403.
- Johnson, J. P., and Lenartowicz, T. (1998). Culture, freedom and economic growth: Do cultural values explain economic growth? *Journal of World Business*, 33(4), 332–356.

- Justesen, M. K. (2008). The effect of economic freedom on growth revisited: New evidence on causality from a panel of countries 1970-1999. *European Journal of Political Economy*, 24, 642–660.
- Kapurria-Foreman, V. (2007). Economic freedom and foreign direct investment in developing countries. *The Journal of Developing Areas*, 41(1), 143–154.
- Knack S., and Keefer P. (1995). Institutions and economic performance: Cross-country tests using alternative institutional measure. *Economics & Politics*, 7(3), 207–227.
- Koopmans, T. (1965). On the concept of optimal economic growth. In *The econometric approach to development planning*. Amsterdam: North Holland.
- Leertouwer, E., Sturm, J-E., and de Haan, J. (2002). Which economic freedoms contribute to growth? A comment. *Kyklos*, 55, 403–416.
- Li, X., and Liu X. (2005). Foreign direct investment and economic growth: An increasingly endogenous relationship. *World Development*, 33, 393–407.
- Lucas, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22, 3–42.
- Makki, S. S., and Somwaru, A. (2004). Impact of foreign direct investment and trade on economic growth: Evidence from developing countries. *American Journal of Agricultural Economics*, 86(3), 795–801.
- Mayer-Foulkes, D., and Nunnenkamp, P. (2009). Do multinational enterprises contribute to convergence or divergence? A disaggregated analysis of US FDI. *Review of Development Economics*, 13(2), 304–318.
- Nelson, M. A., and Singh, R. D. (1998). Democracy, economic freedom, fiscal policy and growth in LDCs: A fresh look. *Economic Development and Cultural Change*, 46, 677–696.
- Nunnenkamp, P., and Spatz, J. (2003). Intellectual property rights and foreign direct investment: A disaggregated analysis. *Review of World Economics*, 140, 393–414.
- Quazi, R. M. (2007). Economic freedom and foreign direct investment in East Asia. *Journal of the Asia Pacific Economy*, 12(3), 329–344.
- Reichert, U. N. and Weinhold, D. (2001). Causality tests for cross-country panels: A New Look at FDI and economic growth in developing countries. *Oxford Bulletin of Economics and Statistics*, 63(2), 153–171.
- Romer, P. M. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94(5), 1002–1037.
- Romer, P. M. (1991). Endogenous technological change. *NBER Working Paper*. Retrieved from <http://pages.stern.nyu.edu/~promer/Endogenous.pdf>
- Sachs, J. D., and Warner, A. (1995). Economic reform and the process of global integration. *Brookings Papers on Economic Activity*, 1, 1–118.
- Sala-i Martin, X. (1997). I just ran two million regressions. *The American Economic Review*, 87, 178–183.
- Scully, G. W., and Slottje, D. J. (1991). Ranking economic liberty across countries. *Public Choice*, 69(2), 121–152.

- Scully, G. W. (2002). Economic freedom, government policy, and the trade-off between equity and economic growth. *Public Choice*, 113(1–2), 77–96.
- Smarzynska, B., and Wei, S. J. (2000). Corruption and the composition of foreign direct investment: Firm-level evidence. *NBER Working Paper Series*. Retrieved from <https://www.nber.org/papers/w7969>
- Solow, R. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics*, 70, 65–94.
- Swan T. W. (1956). Economic growth and capital accumulation. *Economic Record*, 32(2), 334–361.
- UNCTAD. (2011). *World investment report. Non-Equity modes of international production and development*. Retrieved from https://unctad.org/en/PublicationsLibrary/wir2011_en.pdf
- Wang, M., and Wong, M. C. S. (2009). Foreign direct investment and economic growth: The growth accounting perspective. *Economic Inquiry*, 47(4), 701–710.
- Wei, S. J., and Shleifer, A. (2000). Local corruption and global capital flows. *Brookings Papers on Economic Activity*, 2000(2), 303–354.
- Xu, B. (2000). Multinational enterprises, technology diffusion, and host country productivity growth. *Journal of Development Economics*, 62, 477–493.
- Zhuang, H. (2008). Foreign direct investment and human capital accumulation in China. *International Research Journal of Finance and Economics*, 19, 205–215.