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The effects of Foreign Direct Investments on the macroeconomic environment and inequalities in receiving countries: an empirical analysis

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ABSTRACT

La tesi è stata svolta presso la Norwegian University of Science and Technology (NTNU) di Trondheim, Norvegia, sotto la supervisione del professor Indra de Soysa.

La tesi ha l'obiettivo di analizzare l'impatto degli investimenti diretti esteri (FDI) sul contesto macroeconomico e sulle disuguaglianze all'interno dei paesi che li ospitano. Innanzitutto, sono stati analizzati i drivers attraverso cui le società multinazionali (MNC) scelgono dove indirizzare i propri investimenti all'estero. Successivamente le analisi si concentrano su come, una volta individuato il paese in cui l'investimento viene svolto, la presenza delle multinazionali modifica lo scenario macroeconomico e istituzionale del paese ospitante, e le disuguaglianze all'interno dello stesso.

L'analisi per ogni outcome considerato è stata condotta andando ad analizzare la letteratura economica esistente sull'argomento, e successivamente svolgendo delle analisi empiriche attraverso l'utilizzo del software STATA. Per svolgere le analisi empiriche ho usato un modello panel a effetti fissi o random, utilizzando un campione di dati provenienti da 217 paesi nel periodo 1960-2020.

I risultati delle analisi confermano la forte influenza delle scelte delle multinazionali in materia di investimenti diretti all'estero sul contesto socioeconomico e sul livello di disuguaglianze dei paesi ospitanti.

INTRODUCTION

Since 1991, the date conventionally used to determine the end of the Cold War following the dissolution of the Soviet Union, the process of globalization of the world economy has undergone a strong acceleration, becoming one of the most influential factors in the evolution of world economies. Local government policies over the past 30 years have been geared towards greater liberalisation, with the aim of increasing trade and financial flows between countries. Precisely for this reason, at the same time, the literature on the economic and financial effects of greater openness between countries has also increased, driven by the will to understand how globalization affects the economies. Foreign direct investment or FDI is one of the ways in which money can be transferred abroad, and over the past 20 years has become the main component of global economic integration. To better understand what FDI is, it is necessary to use two separate definitions. The first definition is the combination of FDI definitions taken from the sixth edition of the Balance of Payments Manual (BPM6, 2009), drawn up by the International Monetary Fund (IMF) and the OECD Benchmark Definition of Foreign Direct Investment Fourth Edition (2008): *"Direct investment is a category of cross-border investment made by a resident in one economy, the direct investor, with the objective of establishing a lasting interest in an enterprise, the direct investment"*

enterprise, that is resident in an economy other than that of the direct investor (OECD Benchmark Definition of Foreign Direct Investment, Fourth Edition, 2008)." The objective of the foreign direct investment is to create lasting interest, which is manifested when the direct investor holds at least 10% of the voting power of the direct investment firm. This creates a long-term relationship with the direct investment enterprise to ensure that the direct investor has a strong level of influence on the managerial decisions taken by the company resident in another country. The "lasting interest" is evident when the direct investor owns at least 10% of the voting power of the direct investment enterprise. Direct investment enterprises are corporation subsidiaries, in which over 50% of the voting power is held by the direct investor, or associates, in which between 10% and 50% of the voting power is held, or branches which are 100% owned by the direct investor. Relationships between companies may be complex and bear little or no relationship to management structures. These relationships are identified with the criteria of the Framework for Direct Investment Relationships (FDIR).

The second definition is taken from the methodological note of the World Investment Report prepared by UNCTAD (2017). FDI is defined as all investments that create a relationship with a long-term horizon and that reflect interest, ownership, and control of an entity resident in each economy

(the foreign direct investor or parent enterprise), in an enterprise resident in a country other than that of the foreign direct investor (Foreign Direct Investment enterprise or affiliate enterprise).

As we can see, foreign direct investment differs from other types of international monetary flows by establishing a lasting link between the investor and the host country. The long-term relationship therefore has important effects both on the institutions and on citizens of the host country, and the following thesis aims precisely to analyse these effects. The thesis is structured as follows: Chapter 2 analyses the macroeconomic and institutional characteristics of the host country, to understand the drivers in the choice of the country in which to invest by multinational corporations. The analysis identified four key drivers: the level of corruption in the host countries and the quality of political institutions; the level of taxation in the host country; the competitive advantage they could reach to do a vertical or a horizontal FDI; the level of the employees' instructions in the country. In Chapter 3, instead, I analyse how foreign direct investments affect the macroeconomic and political environment of host countries, in particular how they influence national competitiveness and corruption. Finally, Chapter 4 analyses the effects that FDIs have on the citizens of host countries, in terms of income inequalities, access to education and access to health.

I. THE MAIN DRIVERS IN THE CHOICE OF FDI

I.1. LITERATURE REVIEW ON THE MAIN DRIVERS IN THE CHOICE OF FDI

I.1.1. Introduction

Multinational Corporations decide in which country to invest their money for gaining a return in terms of Cash Flow or for penetrating in a specific market.

The decision where to invest is influenced by four main variables, that depend on the characteristic of the host country: the quality of the political institutions and the level of corruption in the host country; the level of taxation and the benefits of paying taxes in the host country compared to home country level of taxation; the level of the employees' instructions in the country and in the specific sectors in which the company works; the competitive advantage that they could reach by moving to the host country. These factors are thought to guide the choice between a horizontal FDI or a vertical FDI investment.

I.1.2. Level of corruption in the host countries and quality of political institutions

FDI bilateral flows are influenced by the level of corruption in the host country. MCNs are more provided to invest in country with low level of corruption, because in host countries with high levels of corruption they encounter predation from public institutions and private agents, and their property rights are less protected by the law system, including intellectual property,

that is one of key source of the economic success for MCNs. So high level of corruption has negative influence on the amount of FDI in a host country.

In their paper, Bradaa, Drabekb, Mendeza, Perez (2019) show the effect of corruption in the host country: it has a negative impact on term of economic dimension and on the volume and probability to receive FDI. In the most conservative estimate, there is an average reduction of 19% in FDI stocks for one unit reduction of the level of corruption in the host country. FDI average stocks decreased 4% when the gap in the host and home country corruption increases by 1%, but the effect could be larger.

There is also confirm the influence of the quality institutions on the level of FDI inflows (Jansen 2003,2006): in his papers, he shows that MCNs prefer to invest in democracies because policy maker's incentives align with MCNs interests (voters punish elected leaders who breach foreign contracts). Across a series of cross-sectional and panel regressions he shows democracies consistently receive more investment and predicts that "a democratic country will receive an added 0.61% as a percentage of GDP which amounts to an increase of over 45% of FDI inflows."

Also, Li & Resnick (2003) argue that democracies high regards for property rights drives the overall correlation, but policy makers face high electoral pressure to expropriate from MNCs to support greater redistribution to voters.

Thus, the political asset influenced the level of FDI stocks. Li (2009) analyses global data from 1960–1990 period to show that chief-executive constraints and turnover, rather than regime type per se, explain cross-country variation in the frequency of expropriations. Independently from the regime type, executives with longer time horizons expropriate less frequently than executive with short-time horizon. Staats & Biglaiser (2012) emphasize the rule of the law and the strength of the judiciary as the most salient measures of political risk, because they are central factors of high-quality contract enforcement.

Habib and Zurawicki (2002) and Wu (2006) suggest also that the gap in level of corruption in countries reduce the level of FDI between these countries; so, countries with high level of corruption receive FDI from country with high level of corruption, and the same happens for low-corrupted country. One of the reason of this scheme is that MCNs located in corrupted countries has learned how to work in an environment with high corruption and could use these skills in the host country for reaching good economic performance despite corruption; MCNs from low-corrupted countries haven't these skills and encounter problems in carrying out ordinary business activity efficiently, so decide to invest in country with similarly low levels of corruption.

A distinct school of research also studies the role of international agreements in the MCNs location decisions. International agreements, specifically Bilateral Investment Treaties (BIT) and Preferential Trade Agreements (PTA), could help host country to compensate their weak political and law institutions. Multinational Corporations receive more protection in the presence of BIT and PTA. By investing in the host country, they risk losing the investment if the local government decides to expropriate the assets of the multinational to defend national interests. BIT confer independent legal standing, PTA work on ex post trade barrier. Countries will pay direct penalties and indirect reputational costs in case of violations; although, international agreements don't mind the gap for poor-quality domestic institutions, but they can complement sound domestic institutions. BITs in the absence of sound domestic institutions, lack credibility. Neumayer & Spress (2005) analysis correlates total FDI inflows with an FDI-weighted measure of cumulative BITs with developed countries. They find countries with more cumulative BITs receive more FDI, but they find no conclusive evidence of BITs as substitutes or complements for domestic institutions.

Kerner (2009) concludes BITs attract investment through two distinct mechanisms. They provide both a legally binding commitment to uphold investors' property rights and a costly signal of the country's willingness to

respect investors' property rights by demonstrating a willingness to forgo sovereignty and confront domestic opposition. Drawing a distinction between signed and ratified BITs, Haftel (2010) shows that only ratified BITs increase FDI inflows because of the more credibility of the ratification. Drawing on precise measures of FDI, Kerner & Lawrence (2014) find US MNCs' investments covered by BITs are more intensive in fixed capital, the type of MNC asset most vulnerable to expropriation. Whether or not BITs stimulate more FDI, they privilege MNCs' interests.

Büthe & Milner's (2008) analysis of annual FDI inflows to non-OECD countries during 1970–2000 reveals a robust correlation between a country's cumulative PTA membership and the amount of FDI received. PTAs complement domestic political constraints by lowering information costs. Büthe & Milner verify that PTAs' market size-expanding effects do not account for FDI growth and show that PTAs with relatively more stringent provisions—reflecting a stronger commitment to economic liberalization correspond to larger increases in FDI.

I.1.3 Level of taxation in the host country

According to Dunning's OLI paradigm (1977), taxes could be classified as a Location factor (L) that attracts FDI. In the last decades, developing countries has started a race for attracting more FDI, and one of the ways in which they

compete for Foreign Direct Investment is fiscal incentives, tax provisions granted to investment projects that represent a favourable deviation from general regulations. The aim is to increase the rate of return of FDI projects or reduce costs and risks by reducing the tax burden. Host countries usually adopt a set of measures aimed at reducing the tax burden of MCNs who decide to invest in these countries, from the application of a reduced rate of corporation tax to reduced taxes on dividends. According to supporters of these measures, tax exemptions are effective in attracting new businesses and protect them from start-up costs, and investment incentives allow companies to extend their stay in the country, since they can only take advantage of these tax advantages if they invest; the reduced tariffs mainly attract export-oriented multinationals (Hines & Rice, 1994; Morisset, 2003; Morisset & Pirnia, 2001). On the other hand, some school of thought point out that the incentives once the positive effects of the first years are exhausted will have negative effects on the tax system, distorting investments, increasing government revenues costs (Auerbach, 2006; Friedman, 2003) and increasing the level of corruption in the host country (Diaw & Gorter, 2002; Fletcher, 2002).

Investors use FDI to establish themselves in a specific geographical area and sector; consequently, as highlighted by Buckley (2004) strong competition to

attract foreign investment is created between similar countries in terms of characteristics and located in the same geographical area. Examples of such competition are present worldwide: within the regions of China (Yao & Zhang, 2008), the counties of the United States (Gurtner & Christensen, 2008; Oates, 2002) and between European countries (Davies & Voget, 2008; Hansson & Olofsson, 2008).

There is a lot of literature on the relation between FDI and taxes; one of the first was done by Hartman (1984): he explains FDI as dependent on the after-tax rate of return on investment (ROI) of foreign investors, because gross ROI decreases as the level of taxation increases. Slemrod (1990) argued that tax response by investors from high tax countries is different from those of exemption countries. Those from exempt countries are expected to have higher elasticity of taxes on investment. However, he found no pattern indicating that investors from exemption countries are more sensitive to tax changes than others. From the work of Swenson (1998), in which FDI are distinguished into six types (new plants, plant expansion, mergers and acquisitions, joint ventures, capital increases and others) it also appears that the fiscal elasticity of new plants and plant expansion was significantly negative while significantly positive for mergers and acquisitions. Since FDI in

M&A is now predominant, it can be concluded that the elasticity at the level of taxation assumes positive values.

From the analysis of the literature concerning the relationship between the level of taxation and the flow of FDI we cannot conclude with certainty that a decrease in the level of taxation is correlated with an increase in the flow of FDI in the host country, as it depends on the type of FDI we consider and on which component of taxation we change; at the same time, the level of taxation has tangible effects on the level of FDI, and concur with the other variables examined to define the level of FDI that a nation manages to attract.

In addition, the volatility of the country's economy also has a fundamental impact on corporate taxation policy; it has an inhibitory effect on FDI flows and, by reducing the effective tax base, has a negative influence on the rate of corporate tax.

I.1.4. Competitive advantage (vertical and horizontal FDI)

Historically, economic literature distinguishes two main types of FDI: horizontal FDI and vertical FDI. The MCNs adopt a horizontal relocation when they begin to produce the same good or service in multiple countries, or even when they perform a single part of the production process within multiple countries; vertical relocation is created when a MCN organizes the entire

production process in headquarters located in different countries, thus having a final product for each headquarters.

The idea behind the vertical FDI is to carry out the production phases that require highly skilled workers in countries abundant with this productive factor, and the phases that require little skilled workers in countries highly equipped with these workers. We can therefore see vertical FDI as a specific manifestation of the theory of competitive advantages, and therefore because of differences in factors of production between nations. As a result, as shown by the work of Zhang and Markusen (1997), highly specialised countries in specific sectors manage to attract large volumes of FDI, while poorly concentrated countries attract smaller volumes of foreign investment. Similarly, we can see from empirical data that the level of the country's GDP is directly correlated with the inflow of FDI into the country itself.

Horizontal FDI usually occurs in the same foreign sector where the company operates in the domestic market and mainly between developed countries with similar input composition. We distinguish horizontal FDI into two categories: those of market-seeking type oriented to the local market, carried out when a multinational company serves a foreign market producing locally, but separately in each country, the same good produced in the domestic market; those oriented towards horizontally integrated international

production, when a multinational company producing a diversified asset decides to separate geographically and rationalise at enterprise level, their production activities in such a way as to specialise each unit in the production of a specific part of the production, in order to be able to adapt the products to market tastes or to the quality requirements present in a given geographical area, and at the same time be able to exploit the benefits of economies of scope and scale. It requires a relatively large market and is more common among similar countries and with low tariff barriers (Feenstra and Taylor, 2009). The MCNs decide to carry out horizontal FDI to achieve several objectives.

First, they allow greater penetration in foreign markets. Horizontal FDI also allows for the reduction of production costs within the host country, especially commercial and transport costs. They also overcome restrictions on the free movement of goods between countries, which have a negative effect on the profitability of exports. Another reason for investing in horizontal foreign direct investment is the desire to exploit the specific locational advantages present in certain areas, such as the presence of natural resources. According to Vernon (1979) moreover, the life cycle of the product can also influence the choice of direct investment abroad: the market pioneer MCNs in their own country, once their product has reached a particular stage of its life cycle,

decide to invest in other developed countries that have the characteristic of having a demand high enough to support local production.

I.1.5. The level of the employees' instructions in the country

In the neo-classical model's growth is explained through the accumulation of labour, capital, and other production factors with diminishing returns to scale.

In these models, the economy converges to a steady state long term equilibrium, in which per capita income is determined by investment, depreciation, saving and population growth, but where there is no permanent income growth. Developing countries couldn't improve investment and savings, so low development and income levels is not only consequences but also causes of low saving and high population growth. In Solow Growth Model (1959) technology is considered like an exogenous factor, but since 1980s growth school of thinking has focused on make endogenous technological variable; this means that in long term growth rate could increase, instead of the steady state per capita income levels theorized by neo classical models. To absorb well technological spill overs and so generate sustainable growth, countries must improve education and human capital.

According to Blomström, Kokko (2002) in last decades, attitude to FDI is changed, countries have liberalized their policy to attract more FDI. This because MCNs could help and teach about the technology that they installed in

host country, and hire local operative employers and management, that after their experience could work in local firm. These externalities improve the level of technology and human capital in host country. However, we must keep in mind that the relation between FDI and human capital is not linear: MCNs are attracted to countries that could receive better their technology, so countries with low level of human capital could receive low-level technology, and this couldn't help to raise the level of human capital in this country. Initial level of Human Capital in host countries is an important determinant of FDI flows. It's important to discuss the relation between human capital development and FDI, for understand in which way FDI are attracted by the level of human capital and worker's skills and explain how these kind of investments affect the average level of human capital and skills.

MCNs could contribute also to improve the level of human capital in the host country, teaching local employees new working patterns; these teachings could work in different mode, with seminar, intensive course, or professional formation. Human capital improvement could affect directly host country, if the MCNs pay for a part of the schooling, or indirectly, if local employers go to work for local firms, or if they become entrepreneurs.

MNCs could affect also formal education, because increase demand for high skilled labour, in STEM subjects and business sciences, and this could be an incentive for students to enrol in higher education.

Cost of training for MCNs are influenced by the level of instruction of the host country: if it is high it is possible to take more benefits from the formation, and costs are lower. Also, concurrency is a key variable, if MCNs have no concurrency, national or international, they don't need to be more competitive, so they reduce spent in education. There are a lot of evidence about MCNs' formation in host country with low level of scholarships, but for developed country is more difficult to find this evidence, because in country with low level of scholarship these effects are bigger. Some observations suggest that everywhere in computer and software industries MCNs employers' education contributes to spillovers. Gershenberg (1987) concludes that MNCs offer more training of various sorts to their managers than private local firms do, although not more than joint ventures or local public firms; this conclusion is supported by other studies, like Siburuang and Brimble (1988), Yong (1988) and Iyanda and Bello (1979).

In addition, as shown in the work of Iwai and Thompson (2012), most foreign direct investment flows in developing countries have been attracted by a small number of countries in this category, and that the main discriminant of this

division concerns precisely the configuration of human capital within these countries.

In their article, Kottaridi Louloudi and Karkalakos (2019) analyse how school organization within the country host attracts FDI flows, comparing the educational policies of Western Europe with those of the other EEC countries.

The conclusions reached by the authors suggest that countries to attract FDI should not only increase the quantity and quality of education, but also consider the differences in skills present in training, endeavouring to improve educational structures by making them more robust to meet this need.

Governments must therefore recognise the importance of specific skills, especially at the professional level, since the increase in the number of educated people does not necessarily lead to greater growth, both in economic and social terms, if the education system does not respond efficiently to the needs and demands of employers; better communication and cooperation between the private sector and the entire education system is therefore needed.

By improving the level of the nation's human capital, governments will be able to attract high value-added activities that would in turn improve the average level of education of their workforce, creating a process of self-feeding human-FDI capital.

As seen in the analysis of the literature, the macroeconomic and social characteristics of the host country are of fundamental importance in the decision-making process that leads the leaders of multinationals to decide which foreign country to invest in. Direct investment abroad cannot be separated from this choice since it is linked to the economic success of the entire investment. The discussion then proceeds with the analysis based on historical data taken from the World Bank database to study whether the four main drivers in the choice of the location of foreign direct investment identified by the literature just mentioned have a real influence on the choice of investment. The existence of significant results shows that the quality of the political institutions, the level of corruption in the host country, the level of taxation, the level of the employees' instructions and the competitive advantage that MCNs could reach by moving to the host country have a direct influence on the investment choices of the Multinational Corporation.

I.2. EMPIRICAL ANALYSIS OF KEY FACTORS IN THE CHOICE OF FDI LOCATION

I.2.1. Description of the analysis

To analyze how the characteristics of the host country influence the choice of multinationals to make a direct investment abroad, I used an estimation pooled ordinary least-squares regression and fixed-effects regression models with Driscoll and Kraay standard errors. These standard errors are robust to autocorrelation and spatial dependence (Hoechle 2018). The sample is a panel-data, with data from 217 countries in the period 1960-2020. The sample of variables analyzed is heteroschedastic, because within it there are subgroups that have different variances. Through this analysis we study how the summarizing variables of the FDI level, in absolute and relative terms, are influenced by the characteristics of the host country. For more consistent results, variables with high skewness have been transformed through a logarithmic function. In addition, given the temp t value of the dependent variable, the independent variables are measured at time t-1; this is because the MCNs in their investment decisions at time t take into account country data at time t-1, not having data available at time t.

The analyses carried out analyzing the fixed effects allow us to understand how the dependent variable is influenced by the independent ones during the period considered for each single state, while the analyses carried out on

random effects allow us to understand how the effects of the independent variables act on those dependent on the variation of the country considered.

The regression model used is as follows:

$$FDI_{inflows} = \beta_0 + \beta_1 \vec{C}_1 + \beta_2 \vec{T}_2 + \beta_3 \vec{T}_3 + \beta_4 \vec{CA}_4 + \varepsilon$$

\vec{C}_1 = variables describing the corruption regime within the host country

\vec{T}_2 = Level of taxation of the host country

\vec{E}_3 = Access to education in the host country

\vec{CA}_4 = characteristics of the reference market in the host country

I.2.2. Definition of the variables

Table I.2.2.1. Dependent variables

Variable	Source	Definition
Foreign direct investment, net inflows (% of GDP) (L)	World Bank, World Development Indicators.	Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors and is divided by GDP.

FDI inflows per capita (L)	World Bank, World Development Indicators.	net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy in relative terms to the size of the population.
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Table I.2.2.2. Independent variables

Variable	Source	Definition
Political corruption index (L)	V-Dem Codebook v9, Varieties of Democracy (V-Dem) Project. 2019.	The corruption index includes measures of six distinct types of corruption that cover both different areas and levels of the polity realm, distinguishing between executive, legislative and judicial corruption. Scale: Interval, from low to high (0-1).
GDP per capita (L)	World Bank, World Development Indicators.	GDP per capita is gross domestic product divided by population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.
Total natural resources rents (% of GDP) (L)	World Bank, World Development Indicators.	Total natural resources rents are the sum of oil rents, natural gas rents, coal rents (hard and soft), mineral rents, and forest rents.
Electoral democracy index (L)	V-Dem Codebook v9, Varieties of Democracy (V-Dem) Project. 2019.	The electoral principle of democracy seeks to embody the core value of making rulers responsive to citizens, achieved through electoral competition for the electorate's approval under circumstances when suffrage is extensive; political and civil society organizations can operate freely; elections are clean and not marred by fraud or systematic irregularities; and elections affect

		the composition of the chief executive of the country.
Civil war on going (L)	Economic governance and homicide: some theory and empirics, 1990–2017”, de Soysa, 2020.	Measure an ongoing conflict taking the value 1 and 0 if not.
Years of peace (L)	Economic governance and homicide: some theory and empirics, 1990–2017”, de Soysa, 2020.	Peace years measure the history of peace for any given country as a count.
Tax to GDP (L)	World Bank, World Development Indicators.	Tax revenue refers to compulsory transfers to the central government for public purposes. Fines, penalties, and most social security contributions are excluded. Refunds and corrections of erroneously collected tax revenue are treated as negative revenue.
Educational equality (L)	V-Dem Codebook v9, Varieties of Democracy (V-Dem) Project. 2019.	Measure to what extent is high quality basic education guaranteed to all, sufficient to enable them to exercise their basic rights as adult citizens. Basic education refers to ages typically between 6 and 16 years of age but this varies slightly among countries.
Distance from USA, EU, Japanese market	World Bank, World Development Indicators.	Measures the distance from the three principal market: USA, Japan, and the European Union. Belgium is considered the geographical centre of European Union, and so the distance is measured from Bruxelles.

I.2.3 Results of the analysis

Table I.2.3.3: FDI inflows/GDP analysis

VARIABLES	Full Sample	Full Sample	Full Sample	Full Sample	Developing	Developing
	1970-2019	1970-2019	1991-2019	1991-2019	1991-2019	1991-2019
	Random Effects	Fixed Effects	Random Effects	Fixed Effects	Random Effects	Fixed Effects
	FDI inflows/GDP	FDI inflows/GDP	FDI inflows/GDP	FDI inflows/GDP	FDI inflows/GDP	FDI inflows/GDP
Corruption Index	0.0477 (0.0984)	0.0475 (0.105)	-0.242* (0.136)	-0.182 (0.144)	-0.242* (0.142)	-0.187 (0.137)
Gdp per capita	0.0235 (0.0396)	0.0392 (0.0465)	-0.0602 (0.0589)	-0.253*** (0.0747)	-0.0815 (0.0652)	-0.340*** (0.0798)
Electoral Democracy Index	0.301*** (0.0927)	0.328*** (0.103)	0.231 (0.158)	0.182 (0.172)	0.237 (0.149)	0.142 (0.170)
Resources to GDP	0.0419 (0.0280)	0.0683** (0.0292)	0.0331 (0.0410)	0.0997*** (0.0339)	0.0267 (0.0436)	0.0942** (0.0348)
Civil war ongoing	-0.0696** (0.0293)	-0.0590* (0.0326)	-0.109** (0.0405)	-0.0990** (0.0404)	-0.108** (0.0431)	-0.102** (0.0414)
Peace Years	0.00430*** (0.000801)	0.00446*** (0.000862)	0.00263** (0.00119)	0.00191 (0.00121)	0.00381*** (0.00120)	0.00335*** (0.00113)
Constant	0 0	0 (0.470)	1.128** (0.665)	2.588*** (0.490)	1.268** (0.490)	3.164*** (0.683)
Observations	6737	6737	4591	4591	3947	3947
Number of groups	171	171	171	171	148	148
Standard errors in parentheses						
*** p<0.01, ** p<0.05, * p<0.10						

Table I.2.3.4: FDI inflows per capita analysis

VARIABLES	Full Sample	Full Sample	Developing
	1970-2019	1991-2019	1991-2019
	FDI inflows per capita	FDI inflows per capita	FDI inflows per capita
Corruption Index	-0.383*** (0.0738)	-0.318*** (0.101)	-0.305*** (0.0808)
Gdp per capita	0.762*** (0.0231)	0.801*** (0.0238)	0.875*** (0.0334)
Electoral Democracy Index	-0.253 (0.154)	-0.279 (0.181)	-0.0310 (0.132)
Resources to GDP	-0.174*** (0.0329)	-0.218*** (0.0355)	-0.242*** (0.0334)
Civil war on going	-0.307*** (0.0404)	-0.268*** (0.0485)	-0.172*** (0.0441)
Peace Years	0.00629*** (0.00147)	0.00510*** (0.00148)	0.00865*** (0.00144)
Observations	6,536	4,492	3,848
R-squared	0.591	0.522	0.565
Number of groups	168	168	145
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.10			

The level of corruption has a negative effect on the FDI inflows in the host country. An increase of 0.01 in the corruption index is linked to a reduction of 0.242 in the ratio of FDI inflows to GDP for the analysis on the random effects, with a probability of error lower than 0.1. This negative effect is bigger on the FDI inflows per capita, with also a higher level of significance.

GDP per capita is negatively correlated with FDI inflows to GDP ratio, with a higher effect if we consider only the developing countries in the period after the cold war. The significance is strong, with a probability of error less than 0.01. Instead, GDP per capita increases the level of FDI inflows per capita, with a high level of significance.

Electoral democracy index is positively correlated with FDI/GDP ratio; significant effects are shown both in random and fixed estimation, but only considering the full sample in the full period, but the significance is strong. There is no significance in the relation between this index and the level of FDI inflows per capita.

Positive influence for the presence of natural resources is shown for all the analysis of the fixed effects, moving from 0.0683 considering the full sample in 1970-2019 to 0.0997 considering the full sample in the period after the cold war, with a high level of significance. The relation is negative for the estimation for the FDI inflows per capita.

The last two variables show us the inverse relationship between civil war and FDI inflows: there is a negative correlation with the civil war on going, and a positive one with the years of peace. The effects of the years of peace are weaker than the effects of the other variables, but the significance for this estimation is strong, lower than 0.01. The same results are shown for the FDI inflows per capita, with a stronger effect of the civil war ongoing variable, and a similar one for the peace years.

Table I.2.3.5: FDI inflows/GDP analysis

	Full Sample 1970-2019	Full Sample 1970-2019	Full Sample 1991-2019	Full Sample 1991-2019	Developing 1991-2019	Developing 1991-2019
VARIABLES	Random Effects FDI inflows/GDP	Fixed Effects FDI inflows/GDP	Random Effects FDI inflows/GDP	Fixed Effects FDI inflows/GDP	Random Effects FDI inflows/GDP	Fixed Effects FDI inflows/GDP
GDP per capita	0.0683* (0.0395)	0.147** (0.0591)	0.0577 (0.0486)	0.0500 (0.0774)	0.0748 (0.0673)	-0.133 (0.0889)
Tax to GDP	0.0147*** (0.00524)	0.0143*** (0.00453)	0.0101* (0.00508)	0.00830** (0.00391)	0.0112** (0.00474)	0.00962** (0.00350)
Constant	-0.130 (0.355)	0 (0)	0.0572 (0.451)	0.173 (0.679)	0 (0)	0 (0)
Observations	3,668	3,668	2,943	2,943	2,367	2,367
Number of groups	154	154	151	151	128	128
Standard errors in parentheses						

Table I.2.3.6: FDI inflows per capita analysis

VARIABLES	Full Sample		Developing 1991-2019	
	1970-2019			
	FDI inflows per capita	FDI inflows per capita		
GDP per capita	0.861*** (0.0344)	0.890*** (0.0352)	0.578*** (0.164)	
Tax to GDP	0.0280*** (0.00741)	0.0265*** (0.00804)	0.0106 (0.00644)	
Constant	-5.597*** (0.277)	-5.046*** (0.290)	0 (0)	
Observations	3,546	2,832	2,256	
R-squared	0.538	0.472	0.559	
Number of groups	147	144	121	
Standard errors in parentheses				

GDP per capita has a positive correlation with the FDI inflows/GDP, considering the entire sample in the period 1970-2019, for both random and fixed effects; in the fixed effects we can see a stronger influence with a higher level of significance. Considering the level of FDI inflows per capita, the influence of the independent variable is higher, with a probability of errors less than 0.01.

Level of taxes are directly correlated with the growth of FDI inflows in all the estimation. As we see, the influence is bigger considering the full sample and the period 1970-2019, with also a higher level of significance. Concordant results are shown by the analysis on FDI inflows per capita, with a probability of errors less than 0.01 and a bigger effect compared to the effects on FDI/GDP ratio.

Table I.2.3.7: FDI inflows/GDP analysis

	Full Sample 1970-2019	Full Sample 1970-2019	Full Sample 1991-2019	Full Sample 1991-2019	Developing 1991-2019	Developing 1991-2019
VARIABLES	Random Effects FDI inflows/GDP	Fixed Effects FDI inflows/GDP	Random Effects FDI inflows/GDP	Fixed Effects FDI inflows/GDP	Random Effect FDI inflows/GDP	Fixed Effects FDI inflows/GDP
GDP per capita	0.0790* (0.0409)	0.0765 (0.0461)	-0.0339 (0.0595)	-0.209*** (0.0683)	-0.0460 (0.0614)	-0.283*** (0.0745)
Educational Equality Index	-0.0326 (0.0200)	-0.0596*** (0.0190)	0.0750 (0.0442)	0.0176 (0.0482)	0.0654 (0.0458)	-0.0241 (0.0371)
Constant	0.157 (0.317)	0 (0)	0.959* (0.476)	0 (0)	0 (0)	2.894*** (0.572)
Observations	6,886	6,886	4,641	4,641	3,997	3,997
Number of groups	171	171	171	171	148	148
Standard errors in parentheses						
*** p<0.01, ** p<0.05, * p<0.10						

Table I.2.3.8: FDI inflows per capita analysis

	Full Sample 1970-2019	Full Sample 1991-2019	Developing 1991-2019
VARIABLES	FDI inflows per capita	FDI inflows per capita	FDI inflows per capita
GDP per capita	0.787*** (0.0304)	0.845*** (0.0260)	0.349*** (0.103)
Educational equality Index	0.144*** (0.0184)	0.140*** (0.0238)	0.0867 (0.0858)
Constant	-4.648*** (0.240)	-4.237*** (0.210)	-0.398 (0.791)
Observations	6,715	4,551	3,907
R-squared	0.580	0.506	0,535
Number of groups	168	168	145
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.10			

Table I.2.3.5 shows us that the influence of the GDP per capita on the FDI/GDP ratio change over time: the random effects for the full sample in the period 1970-

2019 show us a positive correlation between the two variable, but the significance is lower than the results of the analysis of the fixed effects on the full sample and the developing countries, that show a negative correlation with a probability of errors less than 0.01. The effect is always positive on the level of FDI inflows per capita, with a high value of influence and significance.

The Educational Equality index has a negative influence considering the fixed effects on FDI/GDP ratio, with a high level of significance. On the other hand, the effects per capita are positive at the same level of significance.

Table I.2.3.9: FDI inflows/GDP analysis

	Full Sample 1970-2019	Full Sample 1970-2019	Full Sample 1991-2019	Full Sample 1991-2019	Developing 1991-2019	Developing 1991-2019
VARIABLES	Random Effects FDI inflows/GDP	Fixed Effects FDI inflows/GDP	Random Effects FDI inflows/GDP	Fixed Effects FDI inflows/GDP	Random Effects FDI inflows/GDP	Fixed Effects FDI inflows/GDP
GDP per capita	7.39e-06*** (1.70e-06)	7.98e-06*** (2.64e-06)	2.45e-06 (1.93e-06)	-4.99e-06 (5.86e-06)	3.23e-06 (3.33e-06)	-7.78e-06 (4.60e-06)
Distance from USA market	-2.10e-05 (2.53e-05)	0 (0)	-3.83e-05 (2.57e-05)	0 (0)	-4.74e-05* (2.62e-05)	0 (0)
Distance from EU market	6.89e-06 (2.77e-05)	0 (0)	-1.58e-07 (3.31e-05)	0 (0)	2.04e-06 (3.57e-05)	0 (0)
Distance from Japan market	1.23e-05 (1.95e-05)	7.03e-05*** (1.82e-06)	2.18e-06 (2.39e-05)	7.85e-05*** (5.74e-06)	-7.33e-06 (2.56e-05)	7.74e-05*** (2.84e-06)
Constant	0.816* (0.448)	0 (0)	1.086* (0.529)	0 (0)	1.259** (0.590)	0 (0)
Observations	6,958	6,958	4,550	4,550	3,975	3,975
Number of groups	188	188	188	188	165	165
Standard errors in parentheses						
*** p<0.01, ** p<0.05, * p<0.10						

Table I.2.3.10: FDI inflows per capita analysis

VARIABLES	Full Sample	Full Sample	Developing
	1970-2019	1991-2019	1991-2019
	FDI inflows per capita	FDI inflows per capita	FDI inflows per capita
Distance from USA market	-0.000202*** (1.65e-05)	-0.000239*** (1.47e-05)	0 (0)
Distance from EU market	2.89e-05*** (9.05e-06)	2.84e-05** (1.28e-05)	0 (0)
Distance from Japan market	-0.000119*** (9.86e-06)	-0.000141*** (7.86e-06)	0.000226*** (5.24e-07)
Observations	7,282	4,529	3,942
R-squared	0.313	0.200	0,208
Number of groups	181	181	158
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.10			

The only evidence from Table I.2.3.7 are a high level of significance for a positive correlation between the distance from Japan and the FDI to GDP ratio, relative to the fixed effects for both the period and both the full sample and the developing countries, and a positive effect of GDP per capita considering the full sample for the period 1970-2019, but the influence is lower compared to the other variable.

Table I.2.3.8 suggests a high level of significance for the influence of all the independent variables on the level of FDI inflows per capita: positive effects are shown for the GDP per capita and the distance from the EU market; negative effects are shown for the distance from the US market and Japanese market. The probability of error is less than 0.01 for all the estimations.

II. EFFECTS OF FDI ON HOST COUNTRIES' MACROECONOMIC VARIABLES

II.1. THE MACROECONOMIC EFFECTS OF FDIS IN THE HOST COUNTRIES: A LITERATURE REVIEW

II.1.1. Introduction

The phenomenon of globalization has led to a growth in the number and importance of multinationals since the 1990s. This translated into an increase in scientific research on the role of multinationals and how they manage to influence host nations. This is because MNCs are companies that differ from the others since they can transfer managerial, organizational, and production practices across borders between different economic, institutional, and cultural contexts; with the term multinationals we refer to "*any company that has an organizational presence in two or more national jurisdictions*"(Morgan, 2005: 555).

The widespread presence in several countries, their operational, financial, and organizational structure and size give multinationals a potential influence in different sectors, in terms of capital mobility, which in turn affect employment and industrial, social, and institutional relations. Operating in different countries, multinationals operate in different institutional contexts. This allows them to engage in regime shopping or to threaten the relocation of

production and withdraw investment to influence local legislators if MNCs are unhappy with their conditions. The MNCs, driven by their global value chains, are the ideal environments for creating new disruptive technologies, and therefore have a key role in Research and Development. Because of these characteristics, the MNCs are defined as "powerful players" by Leonard, Pulignano, Lamare, Edwards (2014).

As powerful players, MNCs influence the host countries across three main areas: the level of corruption, the labour market, and the level of competitiveness of the host nation in terms of its economic position.

This chapter is divided into two sections: the first aims to analyse the literature on the influence of FDI on these three dimensions. After examining the literature, this study will empirically investigate the question of how MNCs might matter in the three areas identified above.

II.1.2. Corruption

Taking up the considerations of Dacin et al. (1999), we can look at globalization as a process that deprives companies and individuals of their local structures and allows for a reorganization of the same on a global level. Following this perspective, Kwok and Tadesse (2006) believe that the presence of subsidiaries abroad reduces on average the level of corruption in the host country. The same authors believe that the host country modifies its

institutional characteristics to gain greater international legitimacy that allows it to attract more and more investments. MNCs influence the institutional environment through three main effects: regulatory pressure effect, demonstration effect, and professionalization.

The branch office of an MNC faces two sets of isomorphic pressures: that of the MNC and that of the host country (Davis et al., 2000; Kostova and Roth, 2002). The branch may be reluctant to apply host country-specific bribery practices as it may face internal pressure from the home country headquarter which may have adopted rules and practices that prohibit corrupted behaviours in their subsidiaries, but also from outside (DiMaggio and Powell, 1983; Oliver, 1997). Examples of national and international anti-corruption regulations for an American MNC to comply with are the US Foreign Corrupt Practices Act (1977) and the Convention on Combating Bribery of Foreign Public Officials in International Business Transaction (1997). The branch can refuse bribes, as it is intimidated by the pressure of the law.

The demonstration effect arises from the fact that in the host countries, corruption is often inherent in the local business culture, and so the businessmen believe that it is the typical way of doing business. By getting in touch with MNCs through negotiations, joint ventures, or other modalities, they can closely observe the decision-making modalities of the MNCs (Eden et

al., 1997). The way of doing business of MNCs demonstrates how ethical business practices can lead to a more efficient performance in the long run.

The last effect derives from the fact that MCNs have a strong influence on the new generations, who prefer to work for these companies that guarantee higher salaries and greater job opportunities abroad than traditional companies.

At the same time, MNCs try to hire graduates from the best universities or who meet certain standards certified by public institutions. Consequently, even the heirs of small national companies try to comply with these ethical standards, which they will adopt even if they do not find work within the MNCs. The standardization of university training required by MCNs can therefore decrease the general level of corruption within the host country.

However, we must consider the evidence that the presence of MNCs carry also undesirable negative consequences. Robertson and Watson (2004) argue that MCNs increase the level of corruption in the short run. The influx of FDI represents a greater amount of foreign money flowing into the country, and therefore an increase in the chances of corruption. Furthermore, the eventual impatience of foreign investors to enter the market may lead the citizens of the host countries to resort to corruption as a means of sharing the profit opportunities presented by their country (Robertson and Watson, 2004).

Pinto and Zhu (2016) analysed the effects of FDI on the level of corruption. Their results showed a controversial relationship, some evidence shows how FDI reduces the level of corruption within the host country, while some instead supports a positive correlation between the two variables. To explain these different findings, they argue that the effect depends on the host country's economic context: FDI inflows are associated with high levels of corruption in economic environments where FDI displaces domestic investment and competition.

While some investors are attracted to countries with a favourable business environment and governance institutions, others are motivated by the opportunities for annuity creation and extraction in countries whose leaders are institutionally unconstrained and politically unchallenged. Investors of the latter type may very well worsen political and economic conditions in host countries, and particularly in less developed ones.

II.1.3. Conditions of employees

According to Belanger and Edwards (2006), MNCs are key strategic and political actors using their powers to shape the terms under which they conduct their productive activities. Employment within subsidiaries is the outcome of mediation between the standards imposed by the host government and the central headquarters of the MNCs.

The big growth of FDI in recent decades has had a strong impact on the labor market, modifying its structural components, including the demand for labor. FDI brings capital and technology to host country companies and industries, influencing labor demand and thus the composition of the workforce, employment, and average productivity. The composition of the workforce varies according to the type of host country, which we can distinguish into a developing or a developed country; therefore, the effects of FDI also vary according to the type of country. The effects deriving from FDI can be classified into direct effects and spillover effects: the direct effects arise directly from the decisions taken by the foreign company, the spillover are instead indirect consequences, externalities generated by the foreign activity that can be positive or negative, based on how they are addressed by local governments.

The literature on the subject agrees that the direct effects of FDI lead to an increase in the average wage, greater productivity but also greater inequalities in wages, since the increase in the salaries of skilled workers is greater than that of unskilled workers. The conclusions of the traditional literature believe that FDI expand the nation's production towards more sophisticated goods by introducing advanced technologies (Hale, Xu,2016); this leads to an increase in labor demand and higher wages for skilled workers, with a greater effect in countries with few skilled workers and a large technology gap.

Hale and Xu (2016) examine 30 papers published between 1995 and 2015 that analyse empirically the effects of FDI on various aspects of labor markets. These documents vary greatly in the methodology of analysis, for example in how they measure FDI, the level of aggregation, the econometric methodologies, or the period and countries considered. However, the estimates of the effects of FDI on the labor market do not systematically vary between different FDI measures but vary from one region to another.

Hale and Xu emphasize how, with a few exceptions, the literature agrees in noting that FDI leads to higher wages in both advanced and developing host economies. For developing economies, the authors find an extremely positive effect on total employment and productivity, while the effects on these outcomes are mixed for advanced economies. Finally, they cite more studies that have shown that IEDs lead to an increase in inequality rather than a decline.

On the other hand, FDI studies do not agree when the analysis is carried out at a lower, more disaggregate level (industries, regions, or enterprises). While the aggregate analysis captures the overall effects, it measures only the total effect of FDI on the host country without being able to distinguish between direct effects and spillover effects. Studies at the firm or sector/region level are

generally able to identify direct and spillover effects separately but may not be able to measure the magnitude of the overall impact of FDI.

Employment effects studies focus solely on the employment of target firms or industries, without measuring any spillover effects, as it is difficult to isolate employment changes that are driven by FDI in other firms or industries. For target firms, the literature notes that employment could rise or fall in advanced economies, while in developing economies the direct effect on employment in target firms is extremely positive.

This is consistent with the idea that FDI improves productivity for firms in developing countries and, due to the structure of the market, higher productivity tends to be associated with larger company size, resulting in higher employment. Almost all studies on the effects of FDI on inequality are conducted at the aggregate level, thus measuring the total effects. An increase in foreign investment increases wage dispersion in target firms or industries and the effect is statistically significant, for both developing and advanced economies. In their work, Hale, and Xu (2016) show that FDI has a positive correlation with the level of wages, as well as with the productivity and skill level of the workforce.

While some low-skilled workers may be adversely affected and some domestic businesses may face competitive pressures in terms of the availability of

skilled labor, most of the literature suggests that working conditions improve thanks to FDI. The increase in inequality resulting from disproportionate growth in demand for skilled labor may lead the workforce to seek education and training, believing that there is insufficient evidence on the spillovers effects of FDI on the composition of the labor market in which domestic firms operate.

Almeida (2006) analyses the interaction between foreign ownership and labor market outcomes using a matched employer-employee data set of Portuguese firms from the 1990s. Almeida concludes that the selection of the type of investment and the host country is fundamental for foreign investments, especially for companies whose activity requires a high level of human capital skills. Existing empirical evidence for European countries is scarce and, apart from evidence for the UK, not much is known about the impact of overseas acquisitions on labor market outcomes. The analysis of the Portuguese case is interesting thanks to the characteristics of the country: during the period considered the legislative framework was favourable for foreign companies, and consequently the influx of FDI was high, and therefore also the data on which to conduct the analyses were adequate. Furthermore, Portugal has lower levels of economic development than the major world economies but is classifiable as an advanced country and consequently the results of this

analysis can be used to study the effects of foreign direct investment on the labor market of transition economies, which could acquire similar characteristics in their development process over the next few years.

Almeida concludes that enterprises acquired by foreign investors have a higher level of human capital and pay higher wages for the same jobs performed by workers. Furthermore, Almeida notes that in the cases in question the acquisitions concern companies with similar characteristics to those of the multinational companies, and therefore there are no positive effects on the quality of workers, because MNCs are already satisfied with the average level of skills and has no incentive to improve it.

There is evidence that the size of the enterprise increases and that the hourly wages for those workers who remain in the enterprise slightly increase following the acquisition by foreigners. However, the increase in average wages is modest (between 2% for low educated workers and 4% for highly educated workers) and well below the cross-sectional estimates of the foreign wage premium; however, this could be a measurable effect even if the acquisition is carried out by a national company, and therefore the effect could be linked to the acquisition and not to the origin of the company it acquires.

II.1.4 Competitiveness

Since the 1990s, FDI has become the largest source of foreign funding for developing economies. The governments of these countries have encouraged the influx of FDI through advantageous tax policies, import exemptions and other instruments, driven by the belief that FDI inflows generate positive externalities in the technological and managerial field. Local companies can improve their production processes by copying or taking inspiration from those carried out by foreign companies. The MCNs also spend more on training their employees; if these employees then go to work in local companies, they will find more qualified staff without having to carry out training.

Aitken and Harrison (1997) based their analysis on a sample of data from Venezuela and found a positive correlation between foreign participation and productivity of plants defined as small, that is, with less than 50 employees. For larger companies, however, this positive correlation disappears. In addition, the authors stress that, as foreign direct investment increases, the productivity of other domestic plants decreases. Secondly, the productivity of domestically owned plants decreases as foreign investment increases, and this generates negative effects on national competitiveness. According to the authors, the sum of these effects has limited or no impact on the competitiveness of the host country. Foreign companies can also play the role

of a long-term source of input demand, allowing national upstream companies to train experienced employees to be recruited in the long term and at the same time to maintain relationships with experienced collaborators.

The productivity of domestic enterprises can be reduced, especially in the short term, due to foreign presence. If uncompetitive companies face fixed production costs, foreign companies with lower marginal costs will have the incentive to increase production compared to domestic competitors. In such a scenario, the entry of foreign companies that produce for the local market can attract the demand that was previously satisfied by national companies and encourage them to reduce production. The levels of productivity of national companies would be reduced if the market to which these companies are targeting becomes smaller, due to their higher fixed costs compared to MNCs. If the fall in productivity caused by this demand effect is sufficiently large, even if the multinationals transfer the technology or their specific activities to the national companies, the national net productivity will decrease.

In his work, Caves (1974) analyses the potential benefits deriving from FDI, identifying three ways in which they manifest themselves: allocative efficiency, technical efficiency, and technology transfer.

A multinational company may lead to a significant increase in competition in the market of the host country. It tends to populate industries where the entry

barriers for new businesses are high. In this way, it can reduce monopolistic distortions and increase the productivity of the host country's resources by enhancing their allocation.

The subsidiary can bring a higher level of technical efficiency to all those nationally owned companies with which they compete, from which they source or which they purchase from it. This effect is likely to arise from MNC's great competitive strength and from the demonstration effect, which we have discussed before, in industries with low levels of competition.

The presence of a subsidiary of a multinational company has the effect of accelerating the transfer of technology and innovations in production processes, leading them to share more quickly with domestic companies that interact with the branch itself. To measure a direct and net benefit from this technology transfer, the transfer must occur more swiftly, cheaply, or both, through the multinational companies rather than through traditional competition channels, like licensing of patents and know-how or embodiment in internationally traded capital goods.

Gugler & Brunner (2007) create a theoretical framework that acts as a link between Porter's theory on the creation of the competitive advantage of nations and that of the school of international business, revisiting the existing theoretical and empirical literature on technology transfer and the upgrade of

human capital based on this context. The international success of a nation in each sector is determined by four main characteristics, which can influence positively or negatively the creation of a competitive advantage (Porter 1990):

- Factor endowments: the nation's level of development and availability of the production factors in each sector, such as infrastructure, skilled labor, technological and physical resources.
- Business strategy, structure, and rivalry: the level of organizational and managerial development of the nation, which makes it possible to organize, create and manage businesses as well as rivalry with national competitors.
- Related and supporting industries: the presence or absence in the nation of supplying industries and related industries and institutions, such as research or education institutes, which are competitive at the international level.
- Demand conditions: the quantitative or qualitative nature of the internal demand for products or services in the sector.

The Porter model is widely known, although many scholars, in particular international business scholars, believe that Porter's diamond model does not consider or misunderstand the impact of the activities of multinational companies on the economic convenience of the host country.

Dunning (1993) believes that Porter has not fully understood the "globalization of economic activity". Foreign direct investments have a major

impact on the aggregate level of national competition, but the structure and the level of competition of the single firm do not fully have these effects. Companies engage in cross-border business to take advantage of their specific ownership interests. These benefits may have arisen from Porter's initial analysis, but because of cross-border activity, competition has turned to cross-border. FDI is likely to bring new resources and technologies to a country because a foreign investor could import benefits from his home country and some of his assets could bring specific benefits (Dunning, 1993).

For Dunning, all aspects of the model are related to transnational activities, because FDI can satisfy factor conditions, related and supporting industries and demand conditions, as well as strategy, structure, and competition. Rugman's approach to Porter's diamond model is based on similar considerations. According to him, Porter's model is only applicable to large countries such as the United States but has serious flaws when applied to small open economies (Rugman and D'Cruz 1993).

Gugler and Brunner (2007), referring to a work by Porter (1998), investigate the role of clusters on the ability to absorb FDI. The most decisive aspects of the entrepreneurial environment are often specific to the cluster in which the company carries out its activity, but also the technology transfer and the enhancement of capital are influenced by the economic context in which the

companies that use them carry out their activities. Precisely for this reason in their article Gugler & Brunner analyse whether FDIs have a positive effect for the host nation, and if proximity and networking increase the absorption capacity of national companies and therefore the positive effects of FDI. They conclude that the host country can benefit from the influx of FDI as a source of technology sharing and increased human capital skills, but that the extent of this benefit depends on the host country's absorption capacity, and that capacity depends on the characteristics of the cluster and of the region in which the investment from abroad is located. These findings have implications for policymakers aiming to attract FDI and achieve maximum benefits. Governments play a crucial role in shaping the competitiveness of their nations (Porter 1990), but policymakers should take the absorptive capacity of their region into account, because different region has different absorptive capacity and so need different type of policy for maximizing the benefit effect from FDI.

After reviewing the literature on the subject, the analysis will be carried out to understand whether FDI have an impact on these three dimensions in the host country, testing the significance of these results.

II.2. EMPIRICAL ANALYSIS OF THE EFFECTS OF FDI AT MACRO LEVEL IN THE HOST COUNTRY

II.2.1. Description of the analysis

To analyse the effects of FDI on the labour market, the corruption, and the competitiveness of the host country, I used an estimation pooled ordinary least-squares regression and fixed-effects regression models with Driscoll and Kraay standard errors. The sample is a panel-data, with data from 217 countries in the period 1970-2020. The sample of variables analysed is heteroscedastic, because within it there are subgroups that have different variances. Through this analysis we study how the macroeconomic variables are influenced by the FDI stock and flows level. As the literature review has shown, the variable to be analysed are regime and political corruption index; unemployment rate and violations of labour rights; educational and health inequality; natural resources. For more consistent results, variables with high skewness have been transformed through a logarithmic function.

The analyses carried out analyzing the fixed effects allow us to understand how the dependent variable is influenced by the independent ones during the period considered for each single state, while the analyses carried out on random effects allow us to understand how the effects of the independent variables act on those dependent on the variation of the country considered.

The regression model used is as follows:

$$\overrightarrow{\text{Political Corruption Index}} = \beta_0 + \beta_1 \overrightarrow{\text{GDPpc}}_1 + \beta_2 \overrightarrow{\text{FDIflows}}_2 + \beta_3 \overrightarrow{\text{FDIstock}}_3 + \varepsilon$$

$$\overrightarrow{\text{Labour Market}} = \beta_0 + \beta_1 \overrightarrow{\text{GDPpc}}_1 + \beta_2 \overrightarrow{\text{FDIflows}}_2 + \beta_3 \overrightarrow{\text{FDIstock}}_3 + \varepsilon$$

$$\overrightarrow{\text{Competitveness}} = \beta_0 + \beta_1 \overrightarrow{\text{GDPpc}}_1 + \beta_2 \overrightarrow{\text{FDIflows}}_2 + \beta_3 \overrightarrow{\text{FDIstock}}_3 + \varepsilon$$

Political Corruption Index = Level of corruption of host country institutions

Labour Market = Local labour market conditions

Competitiveness = Level of corruption of host country institutions

Local labour market conditions = Ability of the host country to create optimal conditions for the labour market

$\overrightarrow{\text{GDPpc}}$ = GDP per capita of the host country

$\overrightarrow{\text{FDIflows}}$ = FDI flows received

$\overrightarrow{\text{FDIstock}}$ = FDI stock received

II.2.2. Definition of the variables

Table II.2.2.1: Dependent variables

Variable	Source	Definition
Regime of corruption index	V-Dem Codebook v9, Varieties of Democracy (V-Dem) Project. 2019.	This index relates closely to V-Dem's political corruption index but focuses on a more specific set of actors – those who occupy political offices - and a more specific set of corrupt acts that relate more closely to the conceptualization of corruption in literature on neo patrimonial rule. Scale: Interval, from low to high (0-1).
Political corruption index	V-Dem Codebook v9, Varieties of Democracy (V-	The corruption index includes measures of six distinct types of corruption that cover both different areas and levels of the polity realm, distinguishing between executive, legislative and judicial corruption. Scale: Interval, from low to high (0-1).

	Dem) Project. 2019.	
Unemployment rate, % of total labor force	World Bank, World Development Indicators.	Unemployment refers to the share of the labor force that is without work but available for and seeking employment. Definitions of labor force and unemployment differ by country.
Violations of labour rights	ILOSTAT database of labour statistics	Statistics on the occupational injuries incidence rate, calculated as follows: Fatal occupational injuries incidence rate = Number of new cases of fatal occupational injuries during the reference period x 100'000 divide by the number of workers in the reference group. I used this variable because it is a measure of how dangerous the working environment is and shows the level of protection of workers' rights.
Educational and Health Equality Index	V-Dem Codebook v9, Varieties of Democracy (V-Dem) Project. 2019.	The educational and health equality index is the result of the arithmetic mean of two variables: education equality and health equality index. educational equality measures "high quality basic education guaranteed to all, sufficient to enable them to exercise their basic rights as adult citizens"; health equality index measures "high quality basic healthcare guaranteed to all, sufficient to enable them to exercise their basic political rights as adult citizens".

Total natural resources rents (% of GDP)	World Bank, World Development Indicators.	Total natural resources rents are the sum of oil rents, natural gas rents, coal rents (hard and soft), mineral rents, and forest rents.
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Table II.2.2.2: Independent variables

Variable	Source	Definition
GDP per capita (L)	World Bank, World Development Indicators.	GDP per capita is gross domestic product divided by population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.
Foreign direct investment, net inflows (% of GDP) (L)	World Bank, World Development Indicators.	Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors and is divided by GDP.
FDI stock to GDP (L)	World Bank, World Development Indicators.	According to OECD's definition, the FDI stocks/GDP ratio is "the measure the total level of direct investment at a given point in time, usually the end of a quarter or of a year."

II.2.3. Valuation of the analysis

Table II.2.2.3: Regime of corruption analysis

VARIABLES	Full Sample	Full Sample	Full Sample	Full Sample	Developing	Developing
	1970-2019	1970-2019	1991-2019	1991-2019	1991-2019	1991-2019
	Random Effects	Fixed Effects	Random Effects	Fixed Effects	Random Effects	Fixed Effects
GDP per capita	-0.0449*** (0.00899)	-0.0295*** (0.00634)	-0.0626*** (0.0117)	-0.0342*** (0.00776)	-0.0501*** (0.0143)	-0.0332*** (0.00760)
FDI flows to GDP ratio	-0.00445 (0.00481)	-0.00492 (0.00443)	-0.00391 (0.00526)	-0.00370 (0.00458)	0.00514 (0.00578)	-0.00175 (0.00637)
FDI stocks to GDP ratio	0.0386*** (0.00805)	0.0393*** (0.00824)	0.0121 (0.0109)	0.0134* (0.00781)	0.00747 (0.0120)	0.0129 (0.00843)
Constant	0.890*** (0.0722)	0 (0)	0 (0)	0 (0)	0.959*** (0.122)	0.800*** (0.0498)
Observations	5,729	5,729	4,525	4,525	3,882	3,882
Number of groups	167	167	167	167	144	144
Standard errors in parentheses						
*** p<0.01, ** p<0.05, * p<0.10						

Table II.2.2.4: Political Corruption analysis

VARIABLES	Full Sample	Full Sample	Developing
	1970-2019	1991-2019	1991-2019
	Political Corruption Index	Political Corruption Index	Political Corruption Index
GDP per capita	-0.0296** (0.0134)	-0.0141 (0.0175)	0.00223 (0.0161)
FDI flows to GDP ratio	0.0304* (0.0153)	0.0170 (0.0134)	0.0243 (0.0228)
FDI stocks to GDP ratio	0.0927*** (0.0163)	0.116*** (0.0179)	0.0902*** (0.0197)
Constant	0.955*** (0.0814)	0 (0)	0 (0)
Observations	5,704	4,511	3,868
R-squared	0.507	0.540	0.342
Number of groups	167	167	144
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.10			

In Table II.2.2.3 we can see a negative correlation between the level of corruption in public administration and GDP per capita. We can therefore conclude with a high level of significance and with a probability of error of less than 1%, that the higher the level of income per capita the smaller the probability that politicians use their offices for personal interests. Whereas the FDI flows variable has no significant effects, the FDI stock has a direct correlation with the level of corruption of the host country: taking into account

the full sample in the period 1970-2019 this is confirmed with both Random and Fixed Effects, with a p-value lower than 0,01; when limiting the analysis to the period after the end of the Cold War instead, the effect is not significant with the RE model, whereas it remains significant with the FE, although with a higher p-value; no significant results emerge when limiting the sample considered to the developing countries.

Moving the analysis to the effects of the same independent variables on the Political Corruption Index, in Table II.2.2.4 we observe a negative correlation between the dependent variable and GDP per capita, just as in Table II.2.2.3 but with a lower level of significance, being here the probability of error between 1% and 5%. The results are significant only if we consider the entire sample in the period 1970-2019. When considering the same sample after the end of the Cold War or developing countries only, results are not significant. The FDI flows to GDP ratio shows a positive correlation with the political corruption index, with a probability of error between 5% and 10%. We can therefore say that as FDI flows increase, the level of corruption in the country increases. The positive correlation of the level of corruption is also present with FDI stocks, both considering the full sample and considering only developing countries and in all relevant time periods, with a higher level of significance and a probability of error of less than 1%.

Table II.2.2.5: unemployment analysis

VARIABLES	Full Sample	Full Sample	Full Sample	Full Sample	Developing	Developing
	1970-2019	1970-2019	1991-2019	1991-2019	1991-2019	1991-2019
	Random Effects	Fixed Effects	Random Effects	Fixed Effects	Random Effects	Fixed Effects
GDP per capita	-0.973*** (0.245)	-1.686*** (0.307)	-0.973*** (0.245)	-1.686*** (0.307)	-0.895*** (0.257)	-1.198*** (0.267)
FDI flows to GDP ratio	-0.0406 (0.0929)	-0.0455 (0.0948)	-0.0406 (0.0929)	-0.0455 (0.0948)	0.413** (0.188)	0.290** (0.115)
FDI stocks to GDP ratio	0.367 (0.244)	0.284 (0.220)	0.367 (0.244)	0.284 (0.220)	0.381 (0.316)	0.0377 (0.226)
Constant	14.59*** (2.523)	20.54*** (3.030)	14.59*** (2.523)	20.54*** (3.030)	15.48*** (2.218)	0 (0)
Observations	4,670	4,670	4,670	4,670	4,027	4,027
Number of groups	172	172	172	172	149	149
Standard errors in parentheses						
*** p<0.01, ** p<0.05, * p<0.10						

Table II.2.2.6: Labour Rights analysis

VARIABLES	Full Sample	Full Sample	Developing
	1970-2019	1991-2019	1991-2019
	Violations of Labour Rights	Violations of Labour Rights	Violations of Labour Rights
GDP per capita	-1.293*** (0.117)	-1.293*** (0.117)	-0.870*** (0.218)
FDI flows to GDP ratio	0.497** (0.212)	0.497** (0.212)	0.721* (0.395)
FDI stocks to GDP ratio	-0.598** (0.232)	-0.598** (0.232)	-1.177** (0.510)
Constant	16.60*** (1.542)	16.60*** (1.542)	14.28*** (1.265)
Observations	331	331	189
R-squared	0.278	0.278	0.225
Number of groups	58	58	37
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.10			

As we can see from Table II.2.2.5 there is a negative correlation between GDP per capita and the unemployment rate we can then conclude, with a probability of error less than 1%, that as income per capita increases within the host nation, unemployment rate decreases. The high level of significance is observable in all the different specifications. Taking into consideration the relationship with FDI flows to GDP, we have no significant results if we consider the full sample both in the period 1970-2019 and in the period 1991-

2019. If we look at developing countries only after 1991, we can see a positive correlation between the variables. Therefore, we can conclude with a probability of error of between 1% and 5% that as the FDI flows increase, the unemployment rate increases within developing economies. However, there is no significant effect of the FDI stock on the unemployment rate.

Table II.2.2.6 shows us that as GDP per capita increases, the number of fatal accidents at work decreases, and therefore the increase in the average level of income improves working conditions. The same relationship is detected with FDI stocks, while for FDI flows we note a positive correlation with the number of fatal accidents. All analyses have a strong significance, with a probability of error less than 1%.

Table II.2.2.7: Educational and Health analysis

VARIABLES	Full Sample	Full Sample	Full Sample	Full Sample	Developing	Developing
	1970-2019	1970-2019	1991-2019	1991-2019	1991-2019	1991-2019
	Random Effects	Fixed Effects	Random Effects	Fixed Effects	Random Effects	Fixed Effects
GDP per capita	0.0538** (0.0225)	-0.0450** (0.0180)	0.0652** (0.0298)	-0.0764*** (0.0274)	-0.00515 (0.0289)	-0.0992*** (0.0323)
FDI flows to GDP ratio	0.00255 (0.0232)	0.00198 (0.0201)	0.0407** (0.0194)	0.0372** (0.0160)	0.0218 (0.0242)	0.0140 (0.0232)
FDI stocks to GDP ratio	-0.0976*** (0.0218)	-0.103*** (0.0197)	-0.0725** (0.0276)	-0.0819*** (0.0169)	-0.0631*** (0.0209)	-0.0659*** (0.0211)
Constant	0 (0)	0 (0)	0 (0)	0 (0)	0.270 (0.260)	1.104*** (0.225)
Observations	5,729	5,729	4,525	4,525	3,882	3,882
Number of groups	167	167	167	167	144	144
Standard errors in parentheses						
*** p<0.01, ** p<0.05, * p<0.10						

Table II.2.2.8: Natural Resources analysis

VARIABLES	Full Sample	Full Sample	Developing
	1970-2019	1991-2019	1991-2019
	Natural Resources	Natural Resources	Natural Resources
GDP per capita	2.585** (1.122)	3.684** (1.667)	4.303** (1.630)
FDI flows to GDP ratio	2.450*** (0.411)	2.177*** (0.323)	3.521*** (0.470)
FDI stocks to GDP ratio	1.618 (1.509)	2.734 (2.071)	1.081 (2.271)
Constant	-1.918 (6.848)	0 (0)	0 (0)
Observations	6,000	4,740	4,097
R-squared	0.070	0.080	0.072
Number of groups	180	180	157
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.10			

As we can see in Table II.2.2.7, the results regarding the analysis of the effects of GDP per capita on equal access in education and health are very different depending on the specification. The correlation is positive with an average level of significance considering the random effects of the Full Sample, in both time periods. The correlation is positive with an average level of significance

considering the RE model on the full sample, in both time periods. The correlation is negative with FE in the full sample, considering both time periods, but with different levels of significance: the probability of error considering the period 1970-2019 is between 1% and 5%, while in the period 1991-2019 is less than 1%. The correlation is negative also considering only developing countries, again with the maximum level of significance.

Table II.2.2.8 shows us the results of the analysis carried out by considering the level of natural resources as dependent variable. The results for GDP per capita all have a high level of maximum significance, with a probability of error between 1% and 5%. They show us a positive correlation between the variables considered. Analysis of the FDI flow relative to GDP also shows a positive correlation, with an even higher level of significance, and a probability of error of less than 1%.

III. EFFECTS OF FDI ON HOST COUNTRIES' INEQUALITY

III.1. THE MICROECONOMIC EFFECTS OF FDI IN THE HOST COUNTRY: THE LITERATURE REVIEW

III.1.1. Introduction

As we have seen in the previous chapters, the work carried out by multinationals through foreign direct investment influences the institutional, political, economic, and competitive context of the host countries. As a result, this activity also affects the living conditions of individuals in these countries. It is therefore necessary to analyse the impact of such investments on inequalities. First, FDI influences income inequalities, which may decrease or increase depending on the characteristics of the host country. At the same time, it is necessary to understand whether and how FDI have an impact on access to education, a fundamental factor for the economic growth of a nation but also a channel through which a large part of the population manages to improve their living conditions. Finally, the analysis focuses on the effects on access to health care, which is also a driver of economic growth and an indicator of the country's well-being. The analysis aims to understand whether economic growth resulting from the inflow of foreign investment improves the conditions of the most disadvantaged in society, or whether the positive effects are unbalanced in favour of the better-off classes.

III.1.2. Income Inequality

Literary research does not show consistent results regarding the impact of FDI on income inequality. This is because the analyses carried out use heterogeneous data, and consequently the conclusions vary depending on the countries or regions considered.

According to the Mundell theory (1957), MNCs transfer capital to developing countries because they are characterised by a low level of capital; the logic behind this conclusion is that factors of production are characterised by decreasing marginal returns. Therefore, investing in a relatively scarce country of capital allows you to have a higher return on investment. By investing in these countries, the marginal return on capital is decreasing as capital gets more abundant, while the demand for domestic labour is increasing, thus leading to an acceleration of convergence between labour income and income from capital, and thus reducing income inequality in developing countries.

Other studies instead believe that FDI increase income inequality in host countries in the presence of imperfect competition, outsourcing and technological heterogeneity. According to the studies of Hymer (1976), MNCs have a privileged track in access to patents or property rights, business management models and economies of scale, and decide to make direct

investments abroad to exploit these advantages instead of exporting the goods or services produced in the host country. In addition, according to Bornschier and Chase-Dunn (1985), the use of advanced technologies and therefore of more skilled workers, combined with the payment of higher wages lead to an increase in income inequality in countries receiving foreign capital. The effect of increasing inequality can be further reinforced if FDI accelerates skill-based technological change and thus increases demand for skilled workers.

Skill bias technology can extend from subsidiaries of multinationals to national enterprises and can take place through demonstration or imitation, competition, linkages, or training.

Just like the literature, empirical analyses on the effects of FDI on inequality come to different conclusions. Gopinath and Chen (2003) find, using data from 11 developing countries, that FDI widens the gap between the wages of skilled and unskilled workers, but at the same time find that they lead to convergence of wages between different countries. Basu and Guariglia (2007) using a panel of about 80 countries test their theoretical model that connects the FDI to growth and inequality in human capital, concluding that the flow of FDI increases economic inequality. Mahler, Jesuit, and Roscoe (1999), Sylwester (2005) and Adam (2008) show a statistically significant correlation between the flow of FDI and the increase of income inequalities, while Wei, Yao, and Liu

(2009) suggest that the cause of the increase in income inequalities is not attributable to the FDI itself, but to the uneven distribution of issues within China. In contrast, Jensen and Rosas (2007) measure an inverse correlation between FDI inflow and income inequality in Mexico.

In their work, Lin, Kim, and Lee (2015) conclude that FDI are correlated with rising income inequalities, and that this effect increases as the financial sector develops within the host country, because development benefits those who already had access to the financial system, who usually are high-income individuals, and well-structured enterprises. To broaden the economic opportunities of disadvantaged groups associated with the liberalisation of FDI, the authors suggest that political authorities should reform the financial sector considering this effect, to promote economic growth with a more egalitarian approach to income distribution through FDI.

Nguyen (2021) analyses the relationship between FDI and income inequality in developed and developing countries in the period 2005-2018. The analysis carried out shows that FDI has the effect of increasing income disparities in developed countries with a good institutional environment, while reducing it in developing countries with a poorly developed governance environment. Nguyen also finds that education, economic growth governance affects inequalities in both types of countries and suggests that FDI inflows that

reduce income inequalities are selective FDI flows, consistent with the level of education and working skills of most of the population of the country concerned. It is therefore the responsibility of the country's government to carry out this selection, making sure that the incoming FDI flows succeed in helping to overcome income inequalities. This requires a high level of quality in the institutions, so that the selection process is not influenced by corruption, which could guide the choice in favour of certain subjects or categories, and not of the entire host country.

Alili e Adnett (2018) analyse the effect of inward FDI on wage inequality in European transition economies. The results indicate that an increasing share of inward FDI in gross domestic product (GDP) has increased wage inequality in transition economies, although its overall effect has been relatively small. However, rather than limiting FDI, governments should try to enhance the supply of skilled labor in these nations, as evidenced by its overall positive effects on labor markets. This relationship, however, is complicated. Wage disparities are expected to be influenced by differences in average wages, wage differentials, skilled workers employment shares, and the relative size of the foreign-owned sector.

Tran (2019) uses a fixed-effects model to examine if the interaction effect between FDI and political risk influences the link between inward FDI and

inequality. His findings imply that a 1% increment in the quantity of inward FDI brings about a 0.03-point decrease in the GINI index.

III.1.3. Educational Inequality

In the economic growth theory proposed by Solow (1956), both FDI and human capital are fundamental factors driving growth. Lucas (1988) shows how the difference in the growth rates of different nations is the result of the difference in the level of accumulation of human capital in countries. The process of globalization since the 1980s has led the FDI to be the first source of financing from abroad for developing countries, according to Mughal and Vechiu (2009). However, it is necessary to analyse whether and how FDI and human capital are interrelated, but especially whether FDI leads to an increase in inequalities in access to education, to understand if even the poorest part of the population benefit from the influx of this foreign capital and manage to improve its own conditions.

Mughal and Vechiu (2009) analyse the gross enrolment rate according to the level of development of the countries. They conclude that at a time when the level of FDI in countries has increased, the rate for primary education has increased more for low-income countries (LICs), while the rate for secondary and tertiary education has remained constant in these countries, unlike the advanced economies in which it grew up. Their analysis of the rate of

enrolment in tertiary education for middle- and low-income countries shows that FDI have an inverse correlation with university education; an explanation of this effect is given by Stiglitz (2002), according to which if a country without a good financial structure opens, the impact is detrimental to the income of citizens, and this has a strong negative impact on educational decisions. The impact differs if we consider brownfield and greenfield projects; greenfield projects need a lot of time to be realized, and therefore the impact on the education rate is there but it is far ahead in time. Brownfield projects, on the other hand, export foreign workers and therefore do not necessarily influence the demand for higher education. Regarding the impact on the secondary school enrolment rate, however, analyses show that FDI do not have a significant impact on low-income countries, while for middle-income countries the impact is positive but weak.

According to Blomström and Kokko (2002), MNCs play an important role in the development of human capital through FDI in developing countries, and appropriate policies are needed to maximise them. The authors in their paper analyse the role of MNCs in formal education, stressing that MNCs increase the demand for skilled labour especially in STEM subjects, and this may be an incentive for students to enrol in institutions offering higher education. The multinationals themselves also have an interest in improving the level of

university education in the country they are investing in, requiring highly qualified employees, and creating direct links with training institutions. They also contribute to a greater internationalisation of tertiary education and encourage local leaders who work for them to continue their training process even at the necessary cost.

As mentioned, in addition to increasing demand for skilled workers in the host country, the MCNs also carry out training activities for workers. Training is necessary to be able to recruit workers suited to the needs of the multinational, and this is especially necessary in countries with low levels of education, which have more low skilled workers. At the same time, training in these countries is expensive and requires additional time and is therefore more difficult to carry out compared to countries where the average level of education is higher (Te Welde and Xenogiani, 2008).

Gershenberg (1987), also supported by other authors such as Yong (1988) and Iyanda and Bello (1979) concludes that the MCNs offer more training to their managers than private companies in the host country, but no more than local public enterprises.

UNCTAD (1999) also stresses the importance of MCNs training for management: empirical evidence shows how local business executives started their careers at MCNs, and once they absorbed the managerial logic within the

multinational they moved to local businesses, where they play managerial roles to implement the skills acquired by working in the multinational.

UNCTAD (1994) also analyses the training carried out by multinationals within the countries hosting FDI in the service industry. In this field, training mainly concerns the skills and know-how of workers. As many services are by their nature not tradable between nations, companies invest more in training in these specific areas, and at the same time the gap between the salaries of the parent company's employees and those of the subsidiary is lower on average than average differences in the industry.

Among the jobs requiring a low skilled workforce, a higher level of training carried out by the MNCs is found in the hospitality sector, in the hotel and catering sector (UNCTAD, 1994). In this sector training is very high because multinationals must offer the same level of services in each country in which they operate to strengthen their brand. From this analysis we can conclude that regardless of the sector, the MNCs can improve the level of skills of workers by investing in training, because on this training depend on the economic results of the activity and therefore direct investment abroad.

Te Welde and Xenogiani (2007) analyse the evolution of the theory of openness to international trade, and the links that openness and therefore FDI have with education inequality. The authors cite the new theory of trade, based

on the assumption that economic growth is endogenous, and therefore the effects of greater openness depend on the characteristics of the host country, on the initial income level and technology available. As a result, after opening, growth may have a non-linear pattern: Low-income countries could specialise in low-specialisation sectors, such as manufacturing, as they are abundant in low-skilled labour and unable to compete with countries which are more specialised in other sectors. Wood and Ridao-Cano (1999) show how openness to international trade has increased the gap in primary and secondary school enrolment between developing countries and advanced economies, this leads back to the effects of FDI in terms of educational inequality. As previously stated, Te Welde and Xenogiani (2007) also suggest that governments in developing countries should seek to coordinate their policies on education and human resources with the needs of multinationals, to maximize the resources spent on training by the MNCs.

As we have seen, the effects of FDI on inequality in access to education depend on the characteristics of the host country, whether it is a high-income country or not. Zhuang (2008) analyses public education spending in the USA. The US school system has always been funded through local taxes; as a result, richer districts have more funding than low-income districts. Because the MNCs pay better wages, the link between direct foreign investment and unequal access

to education is evident. The decision of the MNCs, in fact, could be guided by the search for qualified personnel, more abundant in the richest districts, and consequently would increase inequalities; at the same time, however, the MNCs could decide, especially for greenfield investments, to locate the investment in the poorest districts with lower land costs. This can increase the district's tax revenue, and thus the funds for education, and at the same time attract high-income skilled workers to these districts, leading to a decrease in inequality in access to education in the country.

Taking these considerations into account, Zhuang, using the aggregated data for each US state from 1992 to 2002, concludes that FDI increases the budget for school expenditure, and decreases inequalities in education expenditure, by increasing employment and the average level of wages, and hence the tax revenues of the States.

III.1.4. Health Inequality

According to Herzer and Nunnenkamp (2012), Foreign Direct Investment could lead to a general increase in the health conditions of workers through two channels: by paying higher wages and thereby allowing workers and their families better access to care and, above all, by ensuring their support services and a safer working environment, both in terms of physical and mental health. In addition, the flow of investment guaranteed by the FDI generates a higher

economic inducement for the host country, and thus an indirect increase in wages and consequently in expenditure on health services. The increase in demand for health services as disposable income increases is explained by the fact that additional health services are considered a higher commodity (Waldmann, 1992). The elasticity of demand for higher-income goods is greater than zero; consequently, the increase in demand for such services is more than proportional to the increase in disposable income.

According to Nagel, Herzer and Nunnenkamp (2015), another direct positive effect of the FDI can be found when the investment is made in the pharmaceutical sector: this investment would enable better medicines to be produced within the nation and increase the supply of such medicines to reduce their price, increasing access to treatment, especially in developing countries. Also in the same paper, Nagel, Herzer and Nunnenkamp (2015) conclude that the relationship between FDI and health is not linear but depends on the level of income of the host country: FDI have a positive effect on health and health inequalities in low-income countries, but the effect decreases as income increases, until it becomes negative for developed countries.

An interesting contribution to understanding the positive potential of FDI effects on the health of the country comes from Lwanda (2006), which

highlights the important contribution of MNCs in South Africa in preventing the spread of the HIV virus. He also concludes that it is mainly in developing countries with low levels of health care that FDI can have the greatest effects. In these countries, the technological spillovers imported with this type of investment can be more relevant, expanding the technological frontier of the country much more than in already developed economies, and therefore with low margins of improvement.

In the literature there are, however, some criticisms of this assumption, as in the paper of Deaton, 2003: not always and not in all countries the FDI lead to an increase in wages, and not always a greater expenditure for health care involves a higher life expectancy.

Taking up again the paper by Herzer and Nunnenkamp (2012), the theory that FDI have a positive impact on the average level of health care in the host country is also criticized because FDI have an impact on the competitive pressure of workers. In the MCNs this pressure is very high, causing increases in average levels of stress and uncertainty in workers, especially when FDI is carried out in the form of mergers and acquisitions, in which the organisational structure is typically reorganised using redundancies and restructuring. Empirical evidence of these effects is shown in the papers of Scheve and Slaughter (2004) Ferrie, Shipley, Marmot and Stansfeld, 2002.

Another negative effect generated by FDI can be traced back to the assumption of relative income, according to which people assess their level of well-being by comparing it to the other members of society. As a result, income inequality generated by foreign direct investment can worsen health conditions through an increase in the level of stress of disadvantaged social classes (Kawachi & Kennedy, 1999). Therefore, Wilkinson and Pickett (2006) conclude that most empirical studies suggest that in societies with higher income differences the average level of health is lower.

Moreover, as already explained in the previous chapters, competition, especially in developing countries, in seeking to attract foreign investment between different countries leads governments to grant tax or infrastructure incentives to multinationals. Since public expenditure is subject to a budgetary constraint, the resources needed to grant such incentives must be achieved by cutting expenditure in other areas, including public health. In their work, Herzer and Nunnenkamp (2012) examine the long-term relationship between FDI and population health for developed countries, concluding, for a sample of 14 countries, that FDI have an adverse effect on health in developed economies.

Another negative effect generated by FDI can be traced back to the assumption of relative income, according to which people assess their level of well-being

by comparing it to the other members of society. As a result, income inequality generated by foreign direct investment can worsen health conditions through an increase in the level of stress of disadvantaged social classes (Kawachi & Kennedy, 1999). Therefore, Wilkinson and Pickett (2006) conclude that most empirical studies suggest that in societies with higher income differences the average level of health is lower.

III.2. EMPIRICAL ANALYSIS OF THE EFFECTS OF FDI AT MICRO LEVEL IN THE HOST COUNTRY

III.2.1. Description of the analysis

To analyse the effects of FDI on inequality in the host country, I used an estimation pooled ordinary least-squares regression and fixed-effects regression models with Driscoll and Kraay standard errors. The sample is a panel, with data from 217 countries in the period 1970-2020. The sample of variables analysed is heteroscedastic, because within it there are subgroups that have different variances. Through this analysis I study how the level of FDI stock in the host country influence the income, educational, and health inequality in the host country. For more consistent results, variables with high skewness have been transformed through a logarithmic function. The analyses were carried out only on fixed effects, to analyse the differences within countries over the period considered.

The regression model used is as follows:

$\overrightarrow{\text{GDPpc}} = \beta_0 + \beta_1 \overrightarrow{\text{FDIstock}}_1 + \varepsilon$ $\overrightarrow{\text{Health Equality}} = \beta_0 + \beta_1 \overrightarrow{\text{GDPpc}}_1 + \beta_2 \overrightarrow{\text{FDIstock}}_2 + \varepsilon$ $\overrightarrow{\text{Educational Equality}} = \beta_0 + \beta_1 \overrightarrow{\text{GDPpc}}_1 + \beta_2 \overrightarrow{\text{FDIstock}}_2 + \varepsilon$
$\overrightarrow{\text{GDPpc}}$ = GDP per capita of the host country
Health Equality = Equal access to healthcare in the host country
Educational Equality = Equal access to education in the host country
$\overrightarrow{\text{FDIstock}}$ = FDI stocks received

III.2.2. Definition of the variables

Table III.2.2.1. Dependent Variables

Variable	Source	Definition
GDP per capita, (L)	World Bank, World Development Indicators.	GDP per capita is gross domestic product divided by population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. In this analysis we use GDP per capita and not the Gini coefficient because it is an indicator that synthesizes a lot of information about the level of development of the country concerned. The effects of FDI on inequalities may vary according to the characteristics of the country, but by using GDP per capita we can divide the conclusions according to the level of development of the country concerned.
Health equality Index	V-Dem Codebook v9, Varieties of Democracy (V-	Measure to what extent is high quality basic healthcare guaranteed to all, sufficient to enable them to exercise their basic political rights as adult citizens. Poor-quality healthcare can make citizens unable to exercise their basic rights as adult citizens by failing to adequately treat

	Dem) Project. 2019.	preventable and treatable illnesses that render them unable to work, participate in social or political organizations, or vote (where voting is allowed).
Educational equality Index	V-Dem Codebook v9, Varieties of Democracy (V-Dem) Project. 2019.	Measure to what extent is high quality basic education guaranteed to all, sufficient to enable them to exercise their basic rights as adult citizens. Basic education refers to ages typically between 6 and 16 years of age but this varies slightly among countries.

Table III.2.2.3. Independent Variable

Variable	Source	Definition
FDI stock per capita (L)	V-Dem Codebook v9, Varieties of Democracy (V-Dem) Project. 2019.	The main independent variable used is the FDI stock per capita, a measure of the level of FDI that the host country has attracted on a historical basis.

III.2.3. Valuation of the analysis

Table III.2.2.3: GDP per capita analysis

VARIABLES	Full Sample	Full Sample	Developing
	1970-2020	1991-2020	1991-2020
	Fixed Effects	Fixed Effects	Fixed Effects
Stock of FDI per capita	GDP per capita	GDP per capita	GDP per capita
Constant	8.030*** (0.0624)	8.200*** (0.0604)	7.934*** (0.0621)
Observations	6,159	4,827	4,184
Number of groups	180	180	157
Standard errors in parentheses			

*** p<0.01, ** p<0.05, * p<0.10

As we can see in Table III.2.2.3, the stock of FDI per capita is positively related to the level of GDP per capita of the host country, with a high level of significance and a probability of error of less than 1% for all analyses conducted. This means that both since 1970 and after the end of the Cold War, an increase in the FDI stock available to the host country increases the level of GDP per capita for the country. The effect is greater considering the entire period 1970-2020 and considering the whole sample of countries, while it is less if we consider only the developing countries in the period 1991-2020.

Table III.2.2.4: Health equality analysis

VARIABLES	Full Sample	Full Sample	Developing
	1970-2020	1991-2020	1991-2020
	Fixed Effects	Fixed Effects	Fixed Effects
GDP per capita	0.0691*** (0.0171)	0.00379 (0.0244)	-0.0130 (0.0230)
Stock of FDI per capita	0.0195*** (0.00680)	0.0209*** (0.00748)	0.0175** (0.00706)
Constant	0 (0)	0.383 (0.230)	0 (0)
Observations	5,807	4,560	3,917
Number of groups	167	167	144
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.10			

The analysis conducted on inequality in access to health in Table III.2.2.4 shows that as GDP per capita increases, inequality decreases, since GDP per capita is significantly correlated with the Health Equality Index; the significance is maximum, but it is found only by considering the full sample for the entire period under study; in the other analyses, however, the results are not statistically significant. However, the level of FDI stocks received by the host country has a positive correlation for all analyses conducted. We can conclude, with a probability of error lower than 1%, that as the flow of FDI increases, so equality in access to health care in the host country does.

Table III.2.2.5: Education Equality analysis

VARIABLES	Full Sample	Full Sample	Developing
	1970-2020	1991-2020	1991-2020
	Fixed Effects	Fixed Effects	Fixed Effects
	Educational Equality Index	Educational Equality Index	Educational Equality Index
GDP per capita	0.0219 (0.0258)	-0.0393 (0.0472)	-0.0704 (0.0542)
Stock of FDI per capita	-0.0155** (0.00725)	-0.0252** (0.0110)	-0.0326*** (0.0108)
Constant	0 (0)	1.147*** (0.340)	0 (0)
Observations	5,807	4,560	3,917
Number of groups	167	167	144
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.10			

In Table III.2.2.5 we analyse the effects that the stock of FDI received has on equality in access to education in the host country. GDP per capita has no significant effect on inequality in access to education, while the stock level of FDI per capita is negatively correlated with the Educational Equality Index in all analyses carried out. The significance of these results is greater if we consider only the developed countries in the period 1991-2020, with a probability of error lower than 1%, while considering the full sample in the periods 1970-2020 and 1991-2020, the probability of error is between 1% and 5%.

An explanation for this can be given by the fact that in advanced economies education funding are provided on a local basis; the MNCs choose to invest where the average level of education is higher, to draw more easily on the greatest possible number of skilled workers, namely in the richest districts,

where citizens have more economic opportunities to invest in the education of their children. As a result, the tax revenue of these districts is higher, and thus local resources for education increase compared to poorer districts, thus rising inequality in access to education in the host country.

CONCLUSIONS

The studies carried out in this thesis on the effects of FDI on host countries allow us to draw different conclusions about this relationship. The research carried out differs from most of the literature produced on the subject, as they seek to understand the channels through which countries can attract FDI and how the institutional and political scenario and the level of inequalities are affected by incoming FDI flows, while the present literature focuses on understanding how FDI stimulate the economic growth of host countries.

We can therefore conclude that as the level of corruption increases, the amount of incoming FDI decreases in the host country; Multinationals need an efficient institutional environment which guarantees that they can carry out their activities in the country without risking having their structures or patents expropriated to carry out their productive activities. This conclusion also justifies the existence of a negative correlation between the presence of civil wars within the country and the flow of FDI, as this contributes to greater instability in the social, political, and economic context of the host country, with the effect of decreasing foreign investment in the country. On the other hand, the analysis carried out did not show consistent results about the relationship between the presence of natural resources and the inflow of FDI. The analysis of the literature showed that the different schools of thought did

not agree on the correlation between the level of taxes and the flow of FDI received; in our analysis we see how this correlation is positive. The level of education of the host country shows ambiguous results, being negatively correlated with the FDI/GDP ratio but positively with the per capita flow of FDI received. This is because the variation in the type of FDI varies in the demand for labour required by investors; low-value-added jobs will require low-skilled workers, In the case of investments requiring highly skilled workers, the demand for highly skilled workers will increase. Even in the relationship between FDI and distance from major markets, we find conflicting results, which suggest the need for further analysis in the future.

Regarding the effects of the FDI on the macroeconomic and institutional context of host countries, the analyses carried out show that a greater flow of FDI is correlated with an increase in corruption within the host country. Local institutions are therefore in danger of seeing the quality of their services worsen, probably tempted by the possibility of obtaining personal gains by exploiting the large number of resources sent by multinationals in the host country. As we have seen in the literature on this subject, strict monitoring by international organisations is necessary to avoid this type of practice, which must be monitored to avoid corruption practices in host countries. Analyses of the effects of FDI on the unemployment rate have yielded significant results

only for developing countries in the period after the end of the Cold War (1991-2020). The negative correlation between the variables suggests that in these countries the FDI worsen the overall level of employment. An explanation for this can be given by the fact that, in these countries, local companies face strong competition from multinationals, and by not being as competitive as MNCs, they reduce themselves by increasing unemployment. Government decisions on foreign direct investment are therefore essential for the local economic fabric and must take account of the low competitive level of local businesses in these countries. The results regarding the relationship between FDI's inflow and the violation of workers' rights are contradictory, as the analysis of the literature had already shown. This is probably because the conditions of the workers are different from one undertaking to another, and therefore the present data are very different from each other and therefore difficult to interpret. The analyses carried out in relation to health and education access indicators also differ.

The literature on the subject showed different answers in the analysis of the correlation between FDI and income equality depending on the type of country considered. As we can see from our empirical analyses instead, FDI increases the level of GDP per capita of countries, both considering the entire sample of countries and considering only developing countries, with a greater effect in

the full sample. Health equality is positively correlated with the stock of FDI received, confirming the concept expressed by most of the work on the subject. Educational equality, on the other hand, is negatively correlated with the FDI stocks received by the country; this conclusion differs from that resulting from the analysis of existing literature.

References

- Aitken, Harrison. 1999. 'Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela'. *American Economic Review* 89 (3): 605–18. <https://doi.org/10.1257/aer.89.3.605>.
- Almeida. 2007. 'The Labor Market Effects of Foreign Owned Firms'. *Journal of International Economics* 72: 75–96. <https://doi.org/10.1016/j.jinteco.2006.10.001>.
- Asteriou, Dimitrios, Dimelis, Moudatsou. 2014. 'Globalization and Income Inequality: A Panel Data Econometric Approach for the EU27 Countries'. *Economic Modelling* 36: 592–99. <https://doi.org/10.1016/j.econmod.2013.09.051>.
- Blanton S.L., Blanton G. 2007. 'What Attracts Foreign Investors? An Examination of Human Rights and Foreign Direct Investment'. *The Journal of Politics* 69 (1): 143–55. <https://doi.org/10.1111/j.1468-2508.2007.00500.x>.
- Brada, Drabek, Mendez, Perez. 2019. 'National Levels of Corruption and Foreign Direct Investment'. *Journal of Comparative Economics* 47: 31–49. <https://doi.org/10.1016/j.jce.2018.10.005>.
- Brzozowski, 2021. 'Gender Equality as the Determinant of FDI Flows to Central European Countries', 26.
- Caves. 1974. 'Multinational Firms, Competition, and Productivity in Host-Country Markets'. *Economica* 41: 176. <https://doi.org/10.2307/2553765>.
- Çevi, Çamurdan. 2007. 'The Economic Determinants of Foreign Direct Investment in Developing Countries and Transition Economies', 15.
- de Soysa.2003. 'Foreign Direct Investment, Democracy and Development, Assessing Contours, Correlates and Concomitants of Globalization. Routledge
- Delabarre. 2021. 'The Economic and Institutional Determinants of Foreign Direct Investments'. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3917585>.

European Investment Bank. 2020. Impact of FDI on Economic Growth: The Role of Country Income Levels and Institutional Strength. LU: Publications Office. <https://data.europa.eu/doi/10.2867/846546>.

Fukao, Wei. 2008. 'How do the Location Determinants of Vertical FDI and Horizontal FDI Differ?'.

Institute of Economic Research Hitotsubashi University Kunitachi, Tokyo, 186-8603 Japan. <http://hi-stat.ier.hit-u.ac.jp/>.

Globerman, Shapiro. 2003. 'Governance Infrastructure and US Foreign Direct Investment'. *Journal of International Business Studies* 34 (1): 19–39. <https://doi.org/10.1057/palgrave.jibs.8400001>.

Gugler, Brunner. 2007. 'FDI Effects on National Competitiveness: A Cluster Approach'. *International Advances in Economic Research* 13 (3): 268–84. <https://doi.org/10.1007/s11294-007-9091-1>.

Hartman. 1984. 'Tax Policy and Foreign Direct Investment'. National Bureau of Economic Research, Cambridge, Ma Ozisk, U.S.A.

Herger, Steve McCorriston. 2014. 'Horizontal, Vertical, and Conglomerate FDI: Evidence from Cross Border Acquisitions', 36.

Herzer, Nunnenkamp. 2012.'FDI and health in developed economies: A panel cointegration analysis'. Kiel Working Paper, No. 1756, Kiel Institute for the World Economy.

Iwai, Thompson. 2012. 'Foreign Direct Investment and Labor Quality in Developing Countries: FDI AND LABOR QUALITY'. *Review of Development Economics* 16 (2): 276–90. <https://doi.org/10.1111/j.1467-9361.2012.00661.x>.

Kottaridi, Louloudi, Karkalakos. 2019. 'Human Capital, Skills and Competencies: Varying Effects on Inward FDI in the EU Context'. *International Business Review* 28 (2): 375–90. <https://doi.org/10.1016/j.ibusrev.2018.10.008>.

- Kucera. 2002. 'The Effects of Core Workers Rights on Labour Costs and Foreign Direct Investment: Evaluating the "Conventional Wisdom"'. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.313079>.
- Kwok, Tadesse. 2006. 'The MNC as an Agent of Change for Host-Country Institutions: FDI and Corruption'. *Journal of International Business Studies* 37 (6): 767–85. <https://doi.org/10.1057/palgrave.jibs.8400228>.
- Léonard, Pulignano, Lamare, Edwards. 2014. 'Multinational Corporations as Political Players'. *Transfer: European Review of Labour and Research* 20 (2): 171–82. <https://doi.org/10.1177/1024258914525559>.
- Mughal, Vechiu. 2011. 'The role of Foreign Direct Investment in higher education in the developing countries (Does FDI promote education?)'. hal-01885159f.
- Nagel, Herzer, Nunnenkamp. 2015. 'How Does FDI Affect Health?'. *International Economic Journal*, 29:4, 655-679, DOI: 10.1080/10168737.2015.1103772.
- Nguyen. 2021. 'The Difference in the FDI Inflows – Income Inequality Relationship between Developed and Developing Countries'. *The Journal of International Trade & Economic Development* 30 (8): 1123–1137.
- Ouedraogo, Marlet. 2018. 'Foreign Direct Investment and Women Empowerment: New Evidence on Developing Countries'. IMF Working Papers 18 (25): 1. <https://doi.org/10.5089/9781484339732.001>.
- Owen, Wu. 207. 'Is Trade Good for Your Health?'. *Review of International Economics*, 15(4), 660–682.
- Pandya, 2016. 'Political Economy of Foreign Direct Investment: Globalized Production in the Twenty-First Century'. *Annual Review of Political Science* 19 (1): 455–75. <https://doi.org/10.1146/annurev-polisci-051214-101237>.
- Pinto, Zhu. 2016. 'Fortune or Evil? The Effect of Inward Foreign Direct Investment on Corruption'. *International Studies Quarterly* 60 (4): 693–705. <https://doi.org/10.1093/isq/sqw025>.

- Robertson, Teitelbaum. 2011. 'Foreign Direct Investment, Regime Type, and Labor Protest in Developing Countries: FDI, REGIME TYPE, AND STRIKES'. *American Journal of Political Science* 55 (3): 665–77. <https://doi.org/10.1111/j.1540-5907.2011.00510.x>.
- Tavares-Lehmann, Coelho, Lehmann. 2012. 'Taxes and Foreign Direct Investment Attraction: A Literature Review'. In *Progress in International Business Research*, edited by Rob Van Tulder, Alain Verbeke, and Liviu Voinea, 89–117. Emerald Group Publishing Limited. [https://doi.org/10.1108/S1745-8862\(2012\)000007007](https://doi.org/10.1108/S1745-8862(2012)000007007).
- Train. 2019. 'Carroll round proceedings, vol xiv'. Pages 164-169.
- Tsai. 1995. 'Foreign Direct Investment and Income Inequality: Further Evidence'. *World Development*, Vol.23, No 3, pp. 469-483.
- UNCTAD, ed. 2003. *The Development Dimension of FDI: Policy and Rule-Making Perspectives: Proceedings of the Expert Meeting Held in Geneva from 6 to 8 November 2002*. United Nations Publication. New York, NY: United Nations.
- UNCTAD. 2017.'Definitions and Sources'.
- UNCTAD. 2017. 'World Investment Report, Methodological Note'.
- Al-Qaisi. 2017. 'Foreign Direct Investment and Its Literature Review'. *Journal of Reviews on Global Economics* 6 (April): 105–12. <https://doi.org/10.6000/1929-7092.2017.06.09>.
- Villaverde, Maza. 2015. 'The Determinants of Inward Foreign Direct Investment: Evidence from the European Regions'. *International Business Review* 24 (2): 209–23. <https://doi.org/10.1016/j.ibusrev.2014.07.008>.
- Yang. 2021. 'A Review of the Impact of FDI on Skill Acquisition'. *Canadian Social Science* Vol. 17, No. 1, 2021, pp. 80-86. DOI:10.3968/12053.
- Zhang, Markusen. 1997. 'Vertical Multinationals and host country characteristics.' National Bureau of economic research.