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**L’impatto delle Imprese Multinazionali  
sull’Economia Locale**

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The Impact of MNEs on Local Markets

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## **ABSTRACT**

Il presente lavoro esamina gli effetti sull'economia locale degli investimenti diretti esteri, operati dalle imprese multinazionali.

Negli ultimi decenni, l'economia globale ha subito un'elevata crescita dei flussi di IDE, e l'Unione Europea ha giocato un ruolo significativo in questo scenario registrando un'alta concentrazione delle attività delle multinazionali sin dall'inizio degli anni Novanta. In questo contesto, l'Italia registra performance peggiori rispetto al resto dei paesi europei, attraendo decisamente meno IDE. Occorre infatti sottolineare che, mancando di adeguate capacità e strutture organizzative, non tutte le imprese sono state in grado di trarre beneficio dall'apertura dei mercati al commercio internazionale. In dettaglio, il quadro della Regione Marche presenta delle carenze dal lato delle competenze e delle visioni imprenditoriali. Emerge quindi la necessità di modificare l'approccio dei soggetti economici verso le nuove sfide del mercato. A dimostrazione di ciò, solo le imprese di maggior dimensione sono riuscite a farsi strada nell'internazionalizzazione delle proprie attività, potendo far leva su una maggiore efficienza delle operazioni e un livello di gestione superiore.

La questione dell'impatto degli IDE sul mercato locale ha destato l'interesse di numerosi ricercatori, tuttavia non è ancora chiaro se i relativi spillover positivi compensano quelli negativi. Questa dissertazione propone una rassegna di

molteplici ricerche scientifiche incentrate sull'argomento, considerando conseguenze positive e negative degli investimenti diretti esteri e soffermandosi sull'impatto di questi sul mercato italiano e marchigiano.

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The paper aims at individuating the impact that foreign direct investments performed by multinationals have on local markets. During the last decades, the global economy experienced high growth rates in FDI flows and the European Union held a great concentration of multinationals' activities since the early 1990s. Nevertheless, Italy attracted decidedly less FDI compared to other EU countries. In fact, not every enterprise has been able to move forward in a scenario where the openness to international trading requires certain capabilities and organisational structures. The entrepreneurial system of the Marche, for instance, lacks of adequate competencies and visions, oriented to the modification of the economic behaviour of businesspeople. The major players for the internationalisation path of the region are in fact the largest firms, which are able to reach higher levels of efficiency.

Although many econometric researches have been performed in the field, the view of the academics about FDI spillovers is not unanimous. This dissertation reviews

a collection of researchers, which bring forth the positive and negative consequences of FDI's on the local markets, focusing especially on the Italian and Marche's marketplaces.

## INTRODUCTION

The purpose of the dissertation is to examine the contribution of multinational enterprises (MNEs) in the local economy. The decision to focus on this category of firms is motivated by their peculiarity: MNEs are indeed renowned for the stimulus and the capabilities they bear in order to develop and disseminate technology. Further to this, they distinguish themselves for their facility to operate in more countries and coordinate the work of many subsidiaries at once.

The common though associates the idea of multinational company with enormous and powerful companies and this is actually confirmed by the literature<sup>1</sup>: the majority of them are large enterprises and their role in the worldwide business has constantly grown since the Second World War.

In detail, the intention of the paper is to objectively consider the effects that MNEs have on a local scale in their entirety, so as to determine their role in the economy and in the community. It is worthy to take into consideration the society as well because this topic affects not only the economy itself but rather it is of interest of many disciplines, first and foremost politics, for its social implications. It is

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<sup>1</sup> See G. Ietto-Gillies, *Imprese transnazionali. Concetti, teorie ed effetti*, Carocci, Roma, 2005, 29-36.

important to reflect on the fact that the opinions about multinationals are divided between those who claim that their presence is deleterious for the traditional sectors and those who think that their existence can bring important advancements to the global economy. In other words, what is meant is the dispute between sovereigntists and globalists movements, born as a response to globalisation. The existence of MNEs is linked to the globalisation process since it involves, among other things, the integration of markets on a global level and the creation of conditions that made it possible for enterprises to operate in many regions at once.

Since the emergence of multinationals is one of the most appropriate representations of the results of globalisation, it is worthwhile to consider some aspects in order to better understand the context where they operate. Many experts have attempted to define the concept of globalisation, however it is hard to find an explanation that can embrace all facets. A good depiction is given by P. Bairoch and R. Kozul-Wright (1996), where they explain:

*“[Globalisation is the] process in which the production and financial structures of countries are becoming interlinked by an increasing number of cross-border transactions to create an international division of labour in which national wealth creation comes, increasingly, to depend on*

*economic agents in other countries, and the ultimate stage of economic integration where such dependence has reached its spatial limit<sup>2</sup>.”*

What emerges from this definition is the weakening of the meaning of national borders where the ability of Sovereign States to control the flows of any type of goods is becoming more and more fragile. The political opinions are divided on this matter since the advantages and disadvantages that arise are many and tend to depend to the characteristics of a country, region, territories or social strata. This implies an ambiguous perception of globalization. According to M. Marsonet (2017), it generates two different attitudes towards nationalism: on the one hand, national sovereignty assumes minor importance; on the other hand, it is possible to observe the growth of nationalism where also the smallest nationalities are striving for gaining their own self-determination.

Passing from thought to fact, the complete self-sufficiency of a single nation does not work anymore in the majority of cases. The idea of supremacy in the domestic policy and of the independence from the foreign law may have nowadays the negative effect of isolation of a country by the rest of the world.

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<sup>2</sup> From P. Bairoch, R. Kozul-Wright, *Globalization Myths: Some Historical Reflections on Integration, Industrialization and Growth in the World Economy*, Discussion Paper no. 113, UNCTAD, 1996, page 3.

The domestic affairs of states are not regulated anymore only by the national law since the international legal system turned out to build a strong community where economic alliances play an important role, becoming the most typical form of association (M. Marsonet, 2017). Some economic organization (such as WTO, IMF) involve the majority of countries of the world and today only a few countries are able to carry out isolationist policies and avoid any associations.

With a clearer idea of the environment where multinationals arise and continue to evolve, it is possible to start the analysis this paper aims to conduct. The first part of the thesis begins with an overall description of the multinational firms. In addition, making use of several scientific articles, the analysis will continue on the topic of the repercussions of the MNEs' presence on the surrounding marketplace. In literature, there is no question about their power to innovate and their actual capacity to invest on the research and development field. Nevertheless, the view of the academics on the importance of spillover is not unanimous, bringing to light the uncertainty about their effects on the economy. Lastly, the chapter will address the issue of the manner in which the government should intervene in order to deal with inward foreign direct investments.

In the second chapter, the attention is drawn on MNEs' spillovers for what concerns the Italian territory. This section deals with the contribution a MNE can give to the

territory where it is located. It emerges that the greatest advantages derive from the cooperation between multinationals and local firms but it is not always possible to build such linkages due to structural and cultural frameworks. Moreover, this part of the paper also discusses the problems of Italian infrastructures and the possible interventions to make this nation become more attractive for businesses.

The third part rotates around the Marche Region. Looking at the features of the entrepreneurial system and analysing the aspects regarding the composition of the marketplace of the area, this section aims at studying the role that the biggest firms of Marche play in the regional panorama. The purpose here is to investigate the presence of the premises to create an interchange of competencies between international firms and the local industries and verify if some kind of contamination is already in place.

## **I. HOW MNEs AFFECT THE LOCAL ECONOMY**

### **I.1. THE CHARACTERISTICS OF MNEs**

Multinational enterprises can be considered one of the most appropriate representations of the results of globalisation for what concerns the flow of investments and the total stocks derived for them (H. Görg et al., 2004). These firms are responsible of large capital flows between different countries and regions by implementing foreign direct investments and play a fundamental role in the international commerce (S. Iammarino, 2016).

Before analysing the consequences of the arrival of a multinational firm in the domestic market, it is necessary to introduce some primary elements. By talking about MNEs, it is intended the set of foreign direct investments (FDIs) made by those corporations with the intent of acquiring substantial controlling interests in a foreign firms or setting up a subsidiary in a foreign country (J. R. Markusen, 1995). According to the United Nations Conference on Trade and Development (UNCTAD), FDIs are investments made by firms in an external economy, through either direct investments or parent enterprises, with the objective of establishing a lasting interest in a foreign enterprise (UNCTAD). Some academics distinguish

between *greenfield* and *brownfield* FDI. The former term stands for investments in the constitution of new economic units abroad, such as new plants or buildings, resulting from growth strategies. *Brownfield* investments refer to the acquisitions or mergers relative to already existing foreign firms (G. Ietto-Gillies, 2005). The purpose of such decisions is the creation of a long-lasting relationship between the direct investor and the direct investment enterprise with the execution of a significant degree of influence on the management of the enterprise side. In detail, the UNCTAD indicates, as requisite for the existence of FDI, the ownership of 10% or more of the voting power of a direct investment enterprise by a direct investor. Moreover, FDI implies the presence of inter-company debt and the reinvestment of earnings that are not distributed as dividends.

Enterprise decides to implement FDI when the following three conditions are in place: Ownership advantage, Location advantage and Internalisation advantage (condition also known as *OLI advantages*). The first condition is the willingness of the firm to exploit a unique mobile asset it owns or controls (such as patents, trademarks or managerial/organisation skills). Then, there must be conditions that allow the exploitation of asset abroad in a cost-efficient way (*location advantage*) and finally the firm must benefit the direct control of the asset abroad, rather than contracting the use of the asset to an independent foreign firm (*internalisation advantage*). In practice, the decision of implementing FDI implies that the

exploitation of the asset abroad is more efficient than at home (G. H. Hanson, 2001 and S. Iammarino, 2016).

That multinational firms are different from purely domestic firms is abundantly clear. Relative to local firms they are larger, pay workers higher wages, have high factor productivity and are more profitable. Moreover, they are more intensive in capital, skilled labour and intellectual property, boasting a relative technological superiority. Being in possession of all these characteristics is the consequence of being able to outperform domestic and foreign rivals. For these reasons, they are often considered direct or indirect sources of progress for domestic firms in host economies (G. H. Hanson, 2001).

C. Criscuolo et al. (2005) analysed the features that make MNEs have a stronger engagement in innovation output relative to their purely domestic counterparts. Analysing data, it emerged that globally engaged firms do use more researchers and make great use of knowledge inputs. The academics have recognised that their great volume of innovation and knowledge generation also contribute to the high productivity levels of these firms. Indeed, MNEs create more patents, self-reported innovations and higher fraction of sales due to innovations according to the above-mentioned academics. Moreover, it is possible to notice that multinationals not only take advantage from the knowledge present in the outside environment but also, and more significantly, from flows within the firm, particularly from enterprises

within the enterprise group. The sources from which MNEs draw information differ in relation to the type of innovation generated. In detail, it emerged that patents benefit from the collaboration of MNEs with universities while for process or product innovations, information that flows from customers and suppliers plays a major role (C. Criscuolo et al., 2005).

## **I.2. THE LITERATURE ABOUT FDI's SPILLOVERS**

The present paragraph will focus the attention on the widely held assumption according to which foreign firms bring not only new investments that foster national income, but also secondary spillovers (H. Görg et al., 2004).

Although many econometric researches have been performed in the field, the view of the academics on the repercussions of spillover is not unanimous. Some econometricians argue that the current statistical methods and data sets are unable to detect them and that they are part of the residual that appears in the growth equations. Another problem can be individuated in the heterogeneity of spillovers, which make it difficult to identify a method to study them in their entirety, combined with the bad quality data sets available for multinationals (H. Görg et al., 2004).

The protection of knowledge within a corporation seems to be the strongest reason at the basis of the decision to expand abroad rather than export directly or license products and technology. In fact, through exportation, the protection of the proprietary knowledge would be much more difficult. Therefore, firms internalise some operations with the purpose of protecting brand, technology and marketing advantages. Indeed, multinational corporations typically develop some operations identifiable as best practices such as innovation management, organisational processes or new production methods and it is important to keep them confidential. Nevertheless, it is complicated for a multinational that locates abroad a subsidiary to avoid that its practices are imitated by domestic firms. Those spillovers can potentially raise the productivity of the host economy in presence of the capability to take advantage from them, ability related to the absorptive capacity of the receiving country (H. Görg et al., 2004).

Now, it is clear that FDIs can be considered as an opportunity for the receiving economy to improve under a technological perspective, especially in emerging markets. G. Blalock et al. (2008) have analysed this aspect and argue that its diffusion is mostly directed to local suppliers rather than to local competitors. Of course, multinationals own a private interest in transferring technology along the supply chain and that is the reason why multinationals should build supply chains overseas in a way that allows a strategic transfer of technology to local vendors.

They will do so with the intention of improving the productivity of their suppliers but, at the same time, they must face the issue of knowledge-protection. The purpose of such transfer may be the improvement of the quality and at the same time the reduction of the price of non-labour inputs, with repercussions on competition in the host country (G. Blalock et al., 2008).

The channels through which spillovers can foster the productivity in the host economy are four: *imitation, skills acquisition, competition* and *exports*<sup>3</sup>.

With the term *imitation* it is intended the transmission of knowledge, mainly related to technology transfer. The intensity of the advantages derived from imitation depends on the complexity of the products and processes. It is also possible to talk about imitation for what concerns the managerial and organisational innovations<sup>4</sup>. The host economy may take advantage of the piece of knowledge dissipated by the process and undergo an upgrade to the local technology, with consequent benefits for the productivity of local firms (H. Görg et al., 2004).

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<sup>3</sup> See H. Görg, D. Greenaway, *Much Ado about Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment?*, The World Bank Research Observer, Vol. 19(2), 2004, 171-197.

<sup>4</sup> A. Zanfei (2012) reports a case of innovative managerial practice introduced by a multinational firm in Honduras: they provided a free breakfast to employees before the start of the morning shift. This not only provided incentives for workers to show up on time, but also helped to improve their productivity. This simple idea rapidly spread to other domestic firms in the sector, increasing their overall productivity.

The *skill acquisition* channel represents the dissemination of technology through the knowledge of human resources. In fact, multinationals are usual to invest in training of their employees and knowledge is something hard to protect from spreading. The local market can take advantage from both direct spillovers to complementary workers and from the movement of employees in other companies (H. Görg et al., 2004). In other words, domestic firms may benefit from these spillovers by hiring workers whose training costs have been paid by the multinational (G. H. Hanson, 2001). This channel can be considered as the one of the main way in which knowledge pass from a multinational to the host economy. *Competition* plays a prominent role as well since the entry of multinationals have the effect of putting pressure on local firms affecting their price margins, inciting a more effective use of their capabilities and technologies, with the result of productivity gains and increasing adoption of innovative solutions. This channel is the representation of the effects of a liberal marketplace, identified as one of the major sources of gain in literature (H. Görg et al., 2004). However, the degree to which multinationals and domestic firms compete may differ. In fact, usually foreign firms produce abroad with the intention of exporting, while it can be stated that local companies mainly produce for the local market (G. Blalock et al., 2008). Finally, *exports* represent an indirect way in which spillovers disseminate in the domestic market, where domestic companies learn how to export from multinationals. In fact, generally, multinationals have expertise in this business

since they usually need to export abroad what they produce. Local firms, through collaboration or imitation, can learn more about the practise and exploit distribution networks, transport infrastructure and take advantage from the information they have about consumers' tastes and regulatory arrangements (H. Görg et al., 2004).

Foreign direct investments appears to be quite sensitive to host country characteristics. The quality of local infrastructure represents a great source of attraction for both initial investments and the maintenance of clusters, in particular communication and transportation facilities play an important role. Moreover, host countries are more likely to benefit from spillovers in conditions where the presence of skilled labour is in large supply and if domestic firms have high levels of technological capacity (G. H. Hanson, 2001).

It is clear that the grater the difference in technology advancement of the two economies, the greater the potential opportunities for the backward country. Taking into consideration the “catching-up effect” theory, it is also possible to expect that the developing countries would grower faster than the developed ones since they can imitate the achievements of the latter<sup>5</sup>. The speed of adoption is even greater if the company that expand abroad establishes upstream and downstream networks,

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<sup>5</sup> See R. Lucas, *Some Macroeconomics for the 21st Century*, The Journal of Economic Perspectives, 14(1), 2000, 159-168.

promoting the diffusion of innovation, since the domestic firms involved in this system may benefit from the exposure to new technology. If on the one hand, the technology gap suggests important opportunities and short catching-up time for developing host-countries, on the other hand it displays some obstacles in terms of absorptive capacity for the potential backwardness of infrastructures, human capital skills distribution networks to support FDIs (G. H. Hanson, 2001). Moreover, the bigger the gap, the lower the quality of technology transferred and the lower the potential for spillovers (H. Görg et al., 2004).

In confirmation of what above mentioned, a study undertaken on US multinational enterprises shows that FDIs concentrate in countries with large markets, high infrastructure quality and industrialised economies<sup>6</sup>. Interestingly, another characteristic that make a destination country attractive is the presence of a large stock of initial FDI as it indicates that multinationals choose locations with a substantial concentration of industrial firms, linked to existent FDIs.

M. Abramovitz gave an important contribution in the evolution of the catching-up theory<sup>7</sup>. The academic extends the simple catch-up hypothesis by analysing the

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<sup>6</sup> See G. H. Hanson, *Should Countries Promote Foreign Direct Investment?*, G-24 Discussion Paper 9, UNCTAD, Geneva, 2001.

<sup>7</sup> See M. Abramovitz, *Catching Up, Forging Ahead, and Falling Behind*, *The Journal of Economic History*, vol. 46, no. 2, 1986, pp. 385–406.

fluctuations of the processes and the relations between the leaders and the latecomers' economies. The catch-up hypothesis in its original form is concerned with only one aspect of the economic relations among countries: technological borrowing by followers. Besides this aspect, according to the author, there are interactions by way of trade and its rivalries, capital flows and population movements. In detail, M. Abramovitz (1986) adds the consideration of another variable in addition to the technological factor between leader and follower economies: the so-called "social capability". Under this point of view, the country's potential for rapid growth is strong when it is technologically backward and socially advanced at the same time. The combination of the technological gap and the social capability defines a country's potentiality for productivity advance by way of catch-up in the long run (M. Abramovitz, 1986).

In short, social capability depends on education and on the organisation of firms of a specific economy and the capacity of an economy to absorb more advanced technologies. The concept also implies other aspects of economic systems such as their openness to competition, to the establishment and operation of new firms and to the sale and purchase of new goods and services. However, the institutional and human capital components of social capability develop slowly as education and organization respond to the requirements of technological opportunity (M. Abramovitz, 1986). By studying the variance among the productivity levels of the

USA (which is the leader economy in this model) and 15 follower countries<sup>8</sup>, M. Abramovitz clearly observed the influence of the potential for catching up<sup>9</sup>. It could be possible to notice that initial productivity gaps constituted a potentiality for fast growth. But only in very few cases, the potentiality of growth became visible early. Indeed, it could be noticed that if a country was incapable to exploit the opportunity in the short term, it did so later, with a stronger growth potentiality. This latter consideration is the evidence of the existence of the social capabilities, since it implies that countries that grew later needed time to acquire the educational and institutional characteristics to make use of modern technologies to some advanced degree (M. Abramovitz, 1986).

In Table I.1 the main factors that contribute to the success of the performance of FDIs are collected according to what mentioned in the present chapter.

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<sup>8</sup> The follower countries considered are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Sweden, Switzerland and United Kingdom.

<sup>9</sup> The variance among the productivity levels of the 15 "follower" countries declines drastically over the century: from a coefficient of variation of 0,5 in 1870 to 0,15 in 1979. Moreover, the decline in variance was continuous from one key year to the next, with only one reversal in the period across World War II. In the same way, the inverse rank correlation between the initial productivity levels in 1870 and subsequent growth rates over increasingly long periods becomes stronger and stronger, until we reach the correlation coefficient of 0,97 across the entire 109 years (M. Abramovitz, 1986).

*Table I.1 – Conditions contributing to FDI success.*

<b>Conditions contributing to FDI success</b>
Quality of local infrastructures (especially communication and transportation facilities)
Large supply of skilled labour
High levels of technological capacity by domestic firms and presence of absorptive capacity
Substantial concentration of industrial firms, linked to existent FDIs
Industrialised economy and developed financial systems
Large market
Large stock of initial FDI ( <i>agglomeration economies</i> )

From a macro perspective, the relationship between FDI and growth is positive in conditions where countries have high levels of human capital or developed financial

systems. Externalities associated with FDI may raise or lower national welfare, depending on whether positive productivity spillovers from multinationals more than offset the loss in profits due to crowding domestic firms out of the market (G. H. Hanson, 2001). When considering the relationship between inward FDI and domestic firm-level productivity at the micro level, evidence is much more mixed (J. Bitzer, 2007). The opinions of academics on the subsistence of positive production spillovers in the host economies are strongly heterogeneous and there are no clear results that domestic firms unambiguously gain from the presence of multinationals.

A stream of thought highlights how the creation of forward and backward linkages made by the arrival of multinationals have the power to enhance the process of industrial development of the host country<sup>10</sup>. The idea here is that multinationals give less developed economies access to the stock of knowledge proper of more developed economies, with the effect of making the host economy more productive. The contribution of FDIs may attain to the increase of the national welfare level by bringing foreign technology and other resources into an economy, which raises the productivity of domestic factors. The arrival of multinationals has an impact on the efficiency of domestic suppliers or customers through vertical linkages. For

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<sup>10</sup> See H. Görg, D. Greenaway, *Much Ado about Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment?*, The World Bank Research Observer, Vol. 19(2), 2004, pp. 171-197.

instance, these firms can give access to technical assistance to their local supplier by providing incentives to upgrade their technology and be in line with the company's quality standards. For what concerns the customers' side, and usually in developing countries, multinationals find themselves imparting instruction on how to use their products properly (H. Görg et al., 2004).

At the same time, there are those that draw attention to the creation of unfavourable conditions. H. Görg et al. (2004) collected 40 studies about the horizontal productivity spillovers and only 22 of those report unambiguously positive and statistically significant horizontal spillover effects (see Appendix – Figure 1). Anyway, 14 of these studies that report unambiguously positive spillovers use cross-sectional data, which may lead to biased results.

Stronger evidences about the negative effects created by the enter in the market on MNEs are described by G. H. Hanson (2001) that finds weak evidence that FDI generates positive spillovers for host economies and supports the idea that domestic firms are wiped out of production by FDIs<sup>11</sup>. He in fact claims that there is little proof at plant level that FDIs raise the productivity of domestic enterprises and it appears that plants in industries with a larger multinational presence display lower

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<sup>11</sup> See G. H. Hanson, *Should Countries Promote Foreign Direct Investment?*, G-24 Discussion Paper 9, UNCTAD, Geneva, 2001.

rates of productivity growth, for instance by driving them into less profitable market segments. Aitken and Harrison (1999) analysed data on Venezuelan manufacturing plants and found that productivity growth in domestic plants is negatively correlated with foreign presence in the sector. In detail, they estimated that a domestic plant in a sector with 50% of employment in foreign-owned plants have on average 13% lower annual productivity growth than a domestic plant in a sector with no foreign firms (G. H. Hanson, 2001).

Empirical studies by G. H. Hanson (2001) display that their presence sometimes appears to depress the productivity of domestic plants. In addition to this, the demand of labour made by multinationals often does not cover the workplaces lost after the exiting of domestic firms from the market, leading to a loss in national welfare. G. Blalock et al. (2008) explain that foreign firms hire talent away from local firms and, by paying higher wages, may raise the labour costs for all firms in the market. G. H. Hanson (2001) observe such scenario in the FDI made by Intel in Costa Rica. In this case, the multinational demanded intensively skilled labour: Intel prefers workers with at least a high-school education (level of schooling well above the average in the host country). GM and Ford, which opened subsidiaries in Brazil, offered a hourly wage of 9\$, amount well above the Brazilian average. The result of such happening are, as expected, the creation of upward pressure on the local factor price thus reducing the profitability of domestic firms. Finally, promoting

inward FDIs does not bring any improvement on the welfare grounds, since their benefits are not sufficient to justify FDI promotion policies (G. H. Hanson, 2001).

Some academics have also focused the attention on the distinction between vertical and horizontal productivity spillovers from inward FDIs<sup>12</sup>. By implementing such strategies, MNEs may generate pecuniary and technological effects for local firms, but an important part of these effects is pecuniary in nature. For instance, if a multinational enter a downstream industry and decide to source locally, they induce the demand for such goods that can be interpreted as an incentives for domestic firms to enter the industry of intermediate products. The result may be the increase of the variety and the decrease of prices for those inputs, creating a pecuniary externality for MNEs and domestic firms producing final goods (A. Zanfei, 2012). J. Bitzer et al. (2007) estimated a model using OLS and compare industry level data coming of 17 OECD countries with the purpose of analysing the significance of horizontal and vertical spillovers and comparing those data with the ones for CEEC (Central and Eastern European Countries). Considering the period of economic transition and the substantial structural changes over the under examination (1989-2003) it is likely that the benefits from FDIs differ from OECD and CEE countries.

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<sup>12</sup> See J. Bitzer, I. Geishecker, H. Görg, *Productivity spillovers through vertical linkages: Evidence from 17 OECD Countries*, Discussion Papers 07/26, University of Nottingham, GEP, 2007.

The results of this research display the existence of both vertical and horizontal linkages between multinationals and domestic firms in all countries, with a much higher intensity in CEEC compared to OECD countries for what concerns vertical linkages. J. Bitzer et al. (2007) highlights the statistical positive significance of downstream FDIs, suggesting the importance of spillovers through backward connections (from buyer to supplier). Since the results for OECD and CEE countries vary for historical reasons, J. Bitzer et al. (2007) modified their model by calculating a dummy variable for the two groups of countries. After this adjustment, the researches noticed larger horizontal effects and, more importantly, that backward linkages generate larger spillovers in CEECs than in other OECD countries. It emerges a thesis according to which the role of vertical linkages assumes great relevance in terms of benefits derived from FDIs in less industrialised transition economies. Also H. Görg et al. (2004) argue that vertical spillovers may be a more important channel for knowledge externalities than the horizontal ones. G. H. Hanson seems to have a similar opinion on the matter, declaring that a multinational should opt for vertical FDI if factor-cost differences between origin and host countries are large and choose the horizontal FDI only when countries are similar in terms of market size and factor cost<sup>13</sup>. Spillovers do not affect all

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<sup>13</sup> See G. H. Hanson, *Should Countries Promote Foreign Direct Investment?*, G-24 Discussion Paper 9, UNCTAD, Geneva, 2001.

companies in the same way: the absorptive capacity of the firm and the proximity to the multinational play a significant role (H. Görg et al., 2004).

On the other hand, it emerges the absence of effects for upstream vertical production spillovers for domestic firms' productivity (J. Bitzer et al., 2007).

Now, considering the outward FDI, new problems emerges. In fact, some sectors suffer from the delocalization of firms causing problems in the labour supply. In particular, the regional economies characterized by routine mansions are the most exposed to the phenomenon since such professional profiles can be easily replaced in low-cost countries (S. Iammarino, 2016).

To conclude, it must be pointed out that in the majority of cases, the assimilation of spillovers, even when positive, is not costless. If it is true that the gains originated by the labour mobility channel require the lowest effort in terms of expenses, when we consider spillovers channels such as imitation or competition the investment required to benefit from them are significant. In particular, to take advantage from knowledge transfers, domestic firms need to devote substantial resources to their relations with the foreign firm<sup>14</sup>.

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<sup>14</sup> The case of Quang An, a supplier of plastic bottles for Unilever's plant in Hanoi (Vietnam), provides an interesting example of the importance of investments by suppliers and the potential pecuniary externality for other firms. When Quang An became a supplier of Unilever in 1997, it had

*Table I.2 – Host economies’ advantages and disadvantages related to the entry of FDI in the domestic market.*

<b>Advantages generated by inward FDI</b>	<b>Disadvantages generated by inward FDI</b>
Access to knowledge through technological spillovers	The technology superiority of MNEs make the domestic productivity standards obsolete (the assimilation of spillovers, even when positive, is costly)
Increase in the firms productivity through the imitation of MNEs’ best practices	Loss in profits for domestic firms (for instance by driving them into less profitable market segments) and relative possible market exit
Higher demand of raw materials increases domestic welfare (if sourced in the host economy)	Loss in national welfare consequent to the reduction of labour demand after the exiting of domestic firms from the market
Incentives for domestic firms to enter the industry of intermediate products, resulting in a decrease of inputs price (if MNEs source locally)	Attraction of talents away from local firms by MNEs’ offering higher wages and consequent raise of labour costs for all firms in the market

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to adopt specific quality standards, sampling procedures and analytical test methods in confirmation of the fact that knowledge transfer associated with backward and forward linkages are far from being costless for local firms (A. Zanfei, 2012).

Table I.2 collects the above-mentioned points on the effects of FDI in the domestic market according to the empirical researches performed on the issue.

It can be derived that multinationals are potential sources of advantage and create growth opportunities by entering the domestic market. Nevertheless, the increase of efficiency and competitiveness in the host industry most of the times depends on the presence of some conditions of the receiving economies, first and foremost the capabilities of domestic firms to take advantage from FDI spillovers (A. Zanfei, 2012).

### **I.3. GOVERNMENT INTERVENTION TO PROMOTE FDI**

Among academics and policy-makers it can be noticed a general consideration of FDI as a precious tool to foster the economic development of a country, heightened by the new technologies that such processes bring along. Governments of both industrialised and developing economies regard the attraction of foreign direct investments as a priority, expecting positive effects of inward FDI to fuel growth of the domestic economy (J. Bitzer et al., 2007). As discussed in the previous paragraph, the opinion of researches about the effects that inward FDI have on the host economies is not unanimous and there seems to be little evidence on their

positive impact. However, what is irrefutable is the actual worldwide presence of FDI promotion policies, regardless of its positive or negative consequences. With this term, it is meant a special treatment for multinationals compared to domestic firms. In absence of externalities, there is no justification for either subsidies or taxes for FDIs. The reason for such apparently groundless behaviours of governments can be found, according to G. H. Hanson (2001), in the existence of conditions according to which the government that does not offer concessions to multinationals is cut off from a system where this practice has become commonplace. Another reason for this functioning lies in the interests of host-countries politicians: attracting multinationals may benefit specific constituencies, from whom politicians derive support, or may fit into political strategies (G. H. Hanson, 2001).

In most transition and developing economies, governments see the FDIs as the tool through which the country can improve the total factor productivity and the key driver for economic growth. This means that many countries believe in the positive effects that a multinational corporation can have in the domestic market and they often put in place policy intervention to attract inward FDIs. The reason of this approach may lie in the belief that multinationals own best practises in the technology and management fields and that their knowledge cannot be entirely kept secret by the corporate. Nevertheless, even if there is an actual possibility that

indigenous firms can absorb these assets, the researchers find it difficult to reach robust empirical evidence to support the existence of spillovers. The explanation can be that multinationals adopt effective measures to protect their knowledge or researches do not focus on the right elements to spot them (H. Görg et al., 2004).

The most effective policies seems to be the ones that focuses on the improvement of the economic environment, that is fostering the education and training policies aimed at upgrading the labours' skills, technology interventions to develop clusters and public investments to enhance the transportation and communication networks. According to H. Görg et al. (2004) general policies could be the most effective way to increase the probability of positive spillovers from FDIs.

However, regulatory and fiscal issues represent a very important factor that companies consider when deciding where to delocalise. These measures do not regard the regional governments but rather they have to do with the central law system (J. Potter, 2010). It is clear that many are the advantages that a multinational gain from receiving subsidies. First, they lower production costs and consequently raise the incentive to create patents, trademarks, sustaining headquarters activities. They obviously enhance the attractiveness of locating production in the country offering incentives and raises the economic benefits of FDI relative to exporting (G. H. Hanson, 2001). Most commonly, policies to promote FDIs correspond with

partial or complete exemptions from corporate taxes and import duties. In many cases, the governments also require multinational to establish production facilities in the host country in specified lines of activities or designated. Besides these measures originated by formal legislation, multinationals and host governments often negotiate on the contents of different direct subsidies and other types of concessions<sup>15</sup> (G. H. Hanson, 2001).

On the other hand, it seems that specific policies aimed at attracting FDIs, such as the TRIMs (trade-related investment measures), are less efficient since they involve the offering of investment incentives and affect primarily the distribution of rents. The researches on the topic have failed to demonstrate a direct link between these measures and the transfer of technology, also due to fact of the difficulty of monitoring them (H. Görg et al., 2004).

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<sup>15</sup> Here are reported some examples of the negotiation between governments and single multinationals. In 1991, *Portugal* provided a lump-sum subsidy and promised tax breaks on future earnings to *Ford* and *Volkswagen* in return for their constructing a jointly operated automobile production facility in the country. In 1995, *Ireland* granted employment subsidies to *IBM* and *Citibank* for locating data-processing jobs in the country. In 1996, *Turkey* enticed *Honda* to build a new automobile production facility in the country by easing tax rules on new plants and relaxing import duties on automobile parts. *Germany* offered investment subsidies to *Advanced Micro Devices* in 1995, after it decided to build a semi-conductor plant in Saxony and to *Motorola* in 1998, after it decided to build a new facility in Bavaria. In the *United States*, investment subsidies from state governments helped attract *Mercedes-Benz* to Alabama and *BMW* to North Carolina (G. H. Hanson, 2001).

According to G. Blalock et al. (2008), the government intervention is necessary in order to give multinationals incentives to share new technology. In fact foreign firms have their own advantages in sharing technology along the value chain since it helps to improve the quality of their inputs and low their price. In addition, in order to avoid depending on just one supplier, the multinational will most likely diffuse knowledge between more vendors, adding value to the advantages brought to the host economy. Nevertheless, the social benefits a multinational can bring to the economy by transferring technology are greater than the private advantage that the firm takes by simply satisfying its needs. In other words, without public subsidy, the multinational may transfer less technology than would be socially optimal for the host country. For this reason, technology should be warranted by public policy intervention according to these academics.

It is possible to conclude that G. Blalock et al. (2008) are in favour of public subsidies for FDIs. To be more specific, they recommend host economies to provide incentives to encourage FDIs or at least not to raise barriers to them.

However, the opinions of researchers again do not coincide.

G. H. Hanson (2001) derived a simple theoretical model that allows the analysis of the effects of subsidies for inward FDIs in the national welfare of the host economy (See Appendix for further details on the derivation of the model). The model contemplates the effects of a per unit production subsidy by the host economy on

domestic output of a single foreign firm 1. The following equation displays the host economy welfare:

$$dW = (dzD_1 - ds)Y_1 + \sum_i \phi_i dy_i + dY_1 \sum_i \beta_i.$$

The first term of the equation represents the effect of a subsidy to foreign firm 1 in factor incomes, net of the direct subsidy cost.  $Y_1$  is the output of the foreign firm 1. Intuitively, if the government aims at inducing the multinational to raise its output, this term must be negative since the subsidy  $s$  should more than compensate the firm for the extra costs it will incur by expanding output  $zD_1$  (where  $z$  is the wage paid for skilled labour and  $D_1$  represents units of skilled labour).

The second term of the formula displays the change in profits for domestic firms caused by the subsidy. According to the fact that the arrival of the foreign firm 1 raises the demand for skilled and unskilled labour in the host economy, also the relative wage rises. This fact results in the general increase of the marginal costs for the firms in the host economy, leading to lower outputs  $y_i$  and profits. In absence of spillovers, any domestic firm that undergoes such scenario would have a negative value for  $\phi_i dy_i$ , where  $\phi_i$  captures the strategic effect of changes in domestic output on domestic profits and  $y_i$  is output of the domestic firm. Only domestic firms whose output will rise will be those receiving a substantial positive productivity spillover.

The third term of the equation illustrates the impact of the productivity spillover on domestic profits  $\beta_i$ , which are directly proportional to  $Y_f$ , the output of the foreign firm. Nevertheless, larger increases in foreign firm output also lay upward pressure on demand for skilled labour, making it more likely that the second term will be negative.

All this said it is clear how the net effect of subsidies is ambiguous. The model displays the conditions under which subsidies to FDI are likely to have a positive effect on the host country welfare. It shows that only if a multinational makes use of elastically supplied factors, does not lower the market share of domestic firms and generates strong positive productivity spillovers for domestic agents, than it makes economic sense to subsidise FDI (G. H. Hanson, 2001).

The requisite of being intensive in the use of elastically supplied factors coincides with a situation in which the production costs for domestic firms does not raise. This condition is unlikely to hold for many reasons. First, the multinational produces its factors in large scale and the prices of inelastically supplied factors used in production may rise. A subsidy to FDI, all else equal, would lower national welfare because it would generate higher incomes to the factors employed in domestic firms, which would offset the higher production costs to domestic firms. In other words, under these conditions, the FDI is likely to raise the production costs for domestic firms (G. H. Hanson, 2001).

The only circumstance in which any increase in the production by a multinational is unlikely to directly lower the profitability in the host economy is the absence of a direct domestic rival. Nevertheless, at the same time, the non-existence of direct competition implicates the lack of productivity spillovers in the host country. Lastly, it is probable that foreign firms prefer to distribute profits abroad, rather than sharing them with host-country suppliers or employees. Even if it is complicated investigating on such matter, it seems to be no significant reasons for multinationals to share rents with their host-country workers (G. H. Hanson, 2001).

## **II. MNEs IN THE ITALIAN ECONOMY**

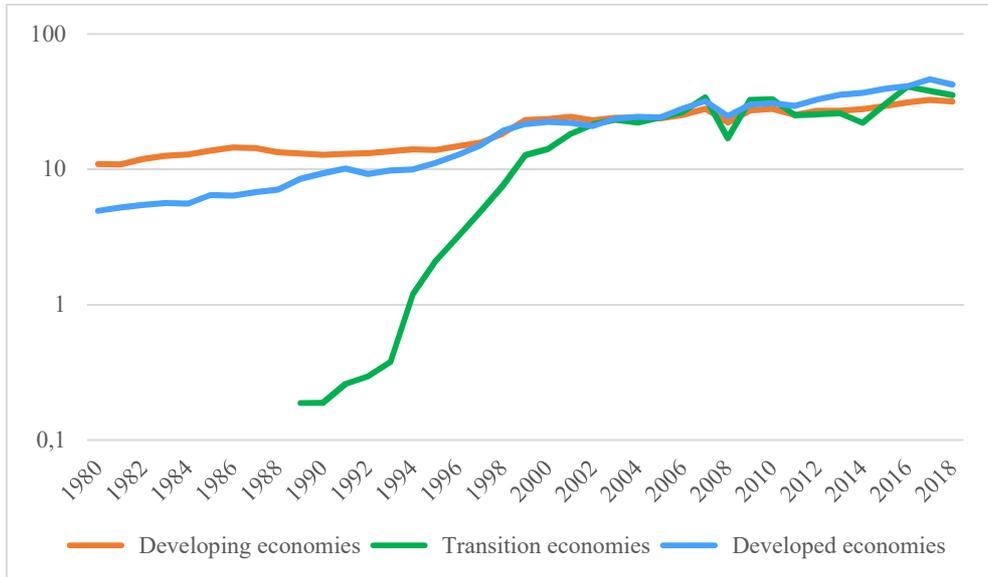
### **II.1. THE INTERNATIONAL ENVIRONMENT**

The diffusion of MNEs in the different areas of the globe has radically changed in recent years. Since the Second World War, the majority of FDI were located in the so-called Triad, consisting in North America, Europe and Japan, while international investments towards developing and transition countries played a marginal role. The scenario changed from the second half on the 1990s, when the latter economies started to gain more and more importance in the attraction of FDI (S. Iammarino, 2016). Figure II.1 displays the logarithms of inward FDI stocks calculated as percentage of GDP between 1980 and 2018. In the first half of the period, the share of inward FDI stocks on GDP were higher in the developing economies than in the developed ones. The contrary is true from 2005 on. Most likely, this is the consequence of very high inward FDI stocks in developing countries compared to their level of GDP before 2005. Transition economies grew rapidly starting from the 1990s, accordingly to the end of the URSS<sup>16</sup>.

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<sup>16</sup> According to the classification of UNCTAD, transition economies are mainly constituted by the former Soviet Union and Eastern bloc countries of Europe. Namely they are Albania, Armenia, Azerbaijan, Belarus, Bosna and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro,

**Figure II.1 - Inward FDI Stocks by Region (expressed as %GDP).**



Source: Elaboration of UNCTAD data.

The current situation of the global economy is wrapped in an uncertainty atmosphere, which also exercises its influence in the inward FDIs worldwide, causing their contraction (-13,4%) (Rapporto ICE 2018-2019).

In 2018, the inward FDI flow of the developed economies has registered the lowest results since 2004, with a decrease of 27% compared to the previous year (See Figure II.2). In particular, the European Union countries observed a decrease of 18,5% in the 2017-2018 period.

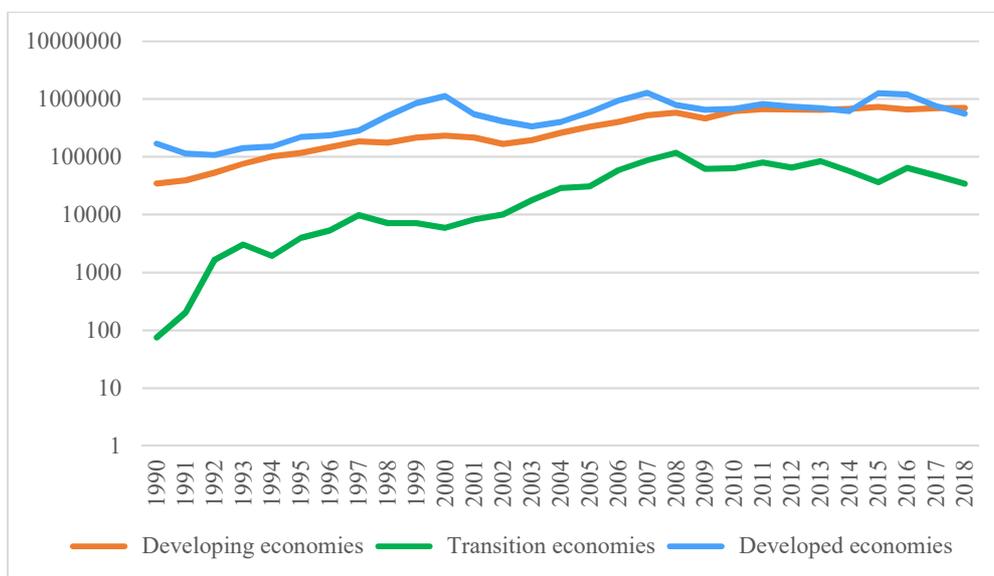
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Macedonia, Republic of Moldova, Russian Federation, Serbia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

On the other hand, the FDI flows towards the developing economies for the same period have risen of 2,3%, accounting for 54% of the global flows (See Figure II.2). The area where greenfield investments have grown at most is Asia (+41% of value of FDI projects). In general, flows towards Asia have increased of 6% and are mainly concentrated in China, Hong Kong, Singapore and Indonesia. African inward FDI flows register +10% and Egypt is the main destination, despite its fall of 8% for the 2017-2018 interval.

Inward FDI flows of transition economies are experiencing a deceleration since 2009. Only in the 2016-2018 period it is possible to observe a decrease of 47%.

**Figure II.2 Inward FDI Flows (values expressed in logarithms of US dollars at current prices in millions).**

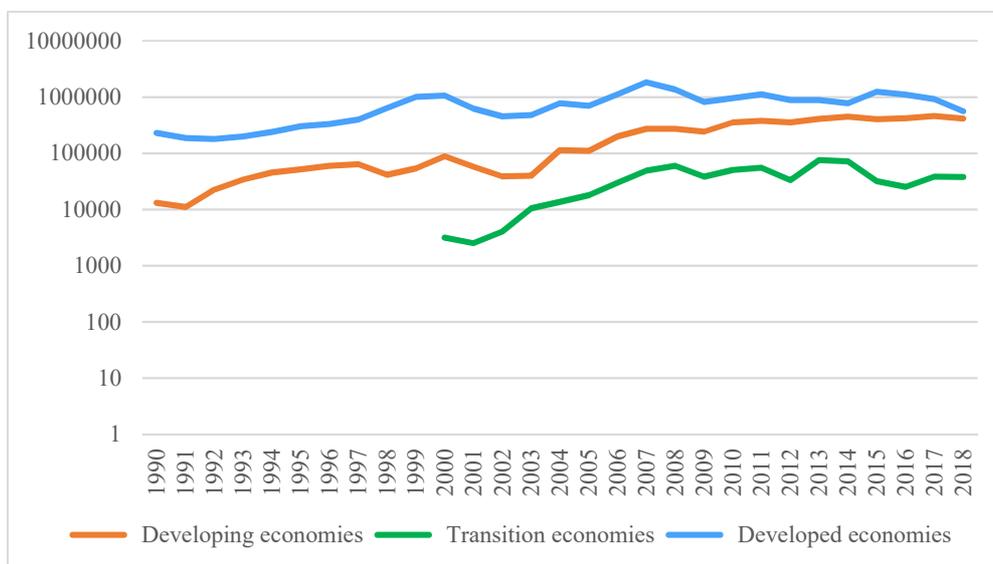


Source: Elaboration of UNCTAD data.

Despite the -8% of inward FDI flows of 2018, the USA are the most attractive location in the world, collecting 24% of the global inward FDI stocks, followed by China, Hong Kong and Singapore. The first European country of this ranking is the Netherlands that register +20%. Italy is at the 15<sup>th</sup> position in 2018 collecting 1,9% of the global inward FDI flows.

Taking into consideration the global economy in 2018, the outward FDI flows have registered a fall of 28%. It is estimated that large part of this record is linked to the

**Figure II.3 Outward FDI Flows (values expressed in logarithms of US dollars at current prices in millions).**



Source: Elaboration of UNCTAD data.

repatriation of profits made by the USA MNEs as a consequence of the fiscal reform of the end of 2017. The impact of such occurrence can be noticed in Figure II.3, where the value for the FDI flows relative to the developed economies display a clear decline (nearly -40% in the 2017-2018 interval).

The biggest player, for what concern outward FDI, is Japan, followed by China and France, which has more than doubled its outward FDI flows between 2017 and 2018. Italy represent 2,1% of the global outward FDIs and is placed at the 15<sup>th</sup> position.

FDI flows regarding transition and developing economies remained almost stable in the 2017-2018 period (see Figure II.3).

## **II.2.FDIs FROM AND TOWARDS ITALY**

A recent ISTAT report defines inward FDIs in Italy represents as an opportunity to consolidate the national production system growth, while Italian outward FDIs are described as the tool to enhance a perspective of greater openness and international integration<sup>17</sup>. A valid example of the positive contributions of inward FDIs is their

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<sup>17</sup> See ISTAT, *Struttura e competitività delle imprese multinazionali*, November 2019 [https://www.istat.it/it/files//2019/11/Report\\_Multinazionali\\_Anno\\_2017.pdf](https://www.istat.it/it/files//2019/11/Report_Multinazionali_Anno_2017.pdf)

important contribute to the Italian R&D field, which represents the 11,7% of the total expenditure in innovation (equivalent to circa 2,8 billions) for the period 2017-2019 (ISTAT, 2019). Nevertheless, according to C. Cozza and A. Zanfei (2018), the FDI's presence does not guarantee any technological linkage with local partners and it doesn't necessarily lead to a boost to the economic development.

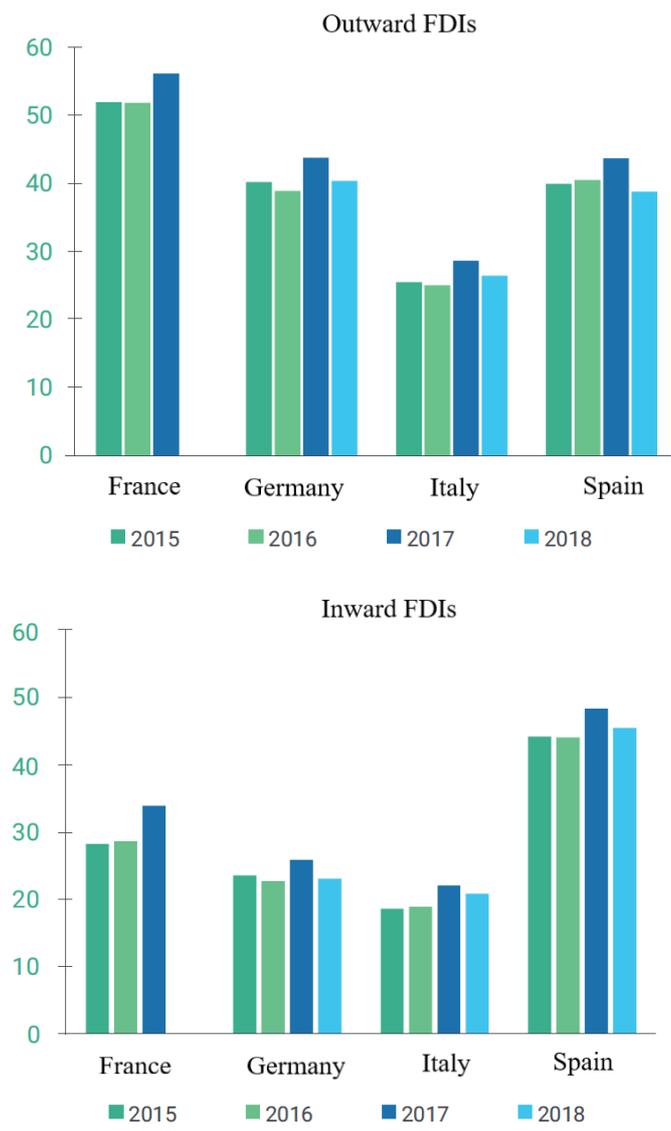
In 2018, the share of inward and outward FDI's on GDP has decreased in the four main economies of Eurozone (namely France, Germany, Italy, and Spain). In particular, in Italy it remained at a significantly lower level with respect to the other countries (See Figure II.4) (Rapporto ICE 2018-2019).

In Italy, at the end of the same year, the stock of outward investments was equal to 26,5% of the GDP (+1% compared to 2015), while inward FDI's accounted for 20,8% of GDP (+2,2% compared to 2015). However, the growth rate of Italian inward FDI's has surpassed the ones registered for Germany (-0,5% compared to 2015) and Spain (+1,3% compared to 2015) (Rapporto ICE 2018-2019).

During the last decades, the global economy has experienced high growth rates in the flow of FDI's and the European Union has had a great concentration of multinationals' activities since the early 1990s (D. Castellani et al., 2003).

In this context, Italy has substantially lagged behind, attracting decidedly less FDI's with respect to the others EU countries (R. Basile et al., 2005). According to a

**Figure II.4 – Outward and Inward FDIs in the main countries of Eurozone.  
(Percentage ratio between stock and GDP).**



Source: Rapporto ICE 2018-2019

research made by R. Basile et al. (2005), it emerges that, compared to other similar European areas, Italian regions are able to attract 40% less FDIs. In particular, the distribution of such investments is low in all Italian regions with exception for Lombardy, where it is possible to observe high concentration of MNEs, even beyond its actual potentialities.

It is probable that such observations are linked with a sort of country-effect. With the purpose of analysing this scenario, R. Basile et al. (2005) studied the role that some institutional variables play in the localisation decisions of MNEs. The factors under examination are the public administration efficiency, the legal system and the protection of property rights, the taxes on labour and on profits and the labour market regulations. The researchers bring to light that the major problems related to the Italian marketplace attraction regard the inefficiency of public administration. Moreover, the lacking conditions of infrastructures and the scarce R&D investments play a significant role in the localisation choices of MNEs (R. Basile et al., 2005).

Another relevant feature of the country is represented by its duality that can be found in the great differences between Northern and Southern regions. It emerges that the level of performed investments in Southern Italy is much lower than its potentiality. G. Barba Navaretti et al. (2009) have analysed this aspect by

elaborating a compelling synthesis of the issues linked to the attractiveness of Southern Italy.

The low level of internationalisation of this territory is due to a set of elements. Also in the present analysis it is noticeable that the bureaucracy inefficiency represent an obstacle for the Italian regions. Moreover, other features strictly connected with Southern areas are the insufficient level of tertiary education and the combination of the low income with the high labour cost (that do not compensate the scarce demand of final goods). The low concentration of infrastructures, qualified employees, corporate services and weak local demand cause the deterioration of the possibility for the setting up of economy of aggregation, which would represent very powerful strength for the attraction of further investments. In addition, social and environmental factors, such as the widespread criminality and the problematic institutional context, discourage inward FDIs. It goes with it that MNEs are not encouraged to locate their subsidiaries in such a scenario. For all these reasons, enhancing the presence of FDIs in the Southern regions is not easy (G. Barba Navaretti et al., 2009).

Table II.1 collects the key points of the issue related to the low presence of FDIs in Italy compared to its potentiality, summarising the aforementioned considerations.

*Table II.1 – Problems related to the attractiveness of Italian regions.*

<b>Threats to FDI attraction in Italy</b>
Inefficiency of public administration and bureaucracy
Lacking conditions of infrastructures
Scarce R&D investments
<b>Problems mostly related to Southern regions</b>
Insufficient level of tertiary education and low concentration of qualified employees
Weak local demand
Widespread criminality

In the next paragraphs it will be reported a detailed description of the presence of outward and inward FDI in Italy. It is interesting to notice that firms belonging to multinational groups have on average large dimensions, especially when compared with the average size of Italian firms (3,8 employees). In fact the average number

of employees for Italian subsidiaries abroad is 75,6 employees and foreign subsidiaries in Italy employ on average 91,1 people. (ISTAT, November 2019).

### II.2.1. Outward Foreign Direct Investments from Italy

The Italian outward FDIs account for 23.727 subsidiaries and the units that operate in the industrial sector have the greater economic relevance in terms of number of employees and turnover compared to those active in the services field. The manufacturing registered positive performances in 2017 and the branch that grew more that year is the one related to the computers, electronics and optics products, electro-medical devices, measuring devices and watches (+19,0% employees and +21,9% turnover) (ISTAT, November 2019).

Between the firms that underwent delocalisation, 69,3% has transferred activities or functions that support the main operations of the company, while 43,4% have transferred the main activities (ISTAT, June 2019). However, the tendency towards the delocalisation of business activities or function is decreasing. In 2015-2017 period only 3,3% of medium-big enterprises has transferred its operations abroad

while in 2001-2006 interval they were 13,4% of the total. In Europe, it is possible to observe an analogous trend.

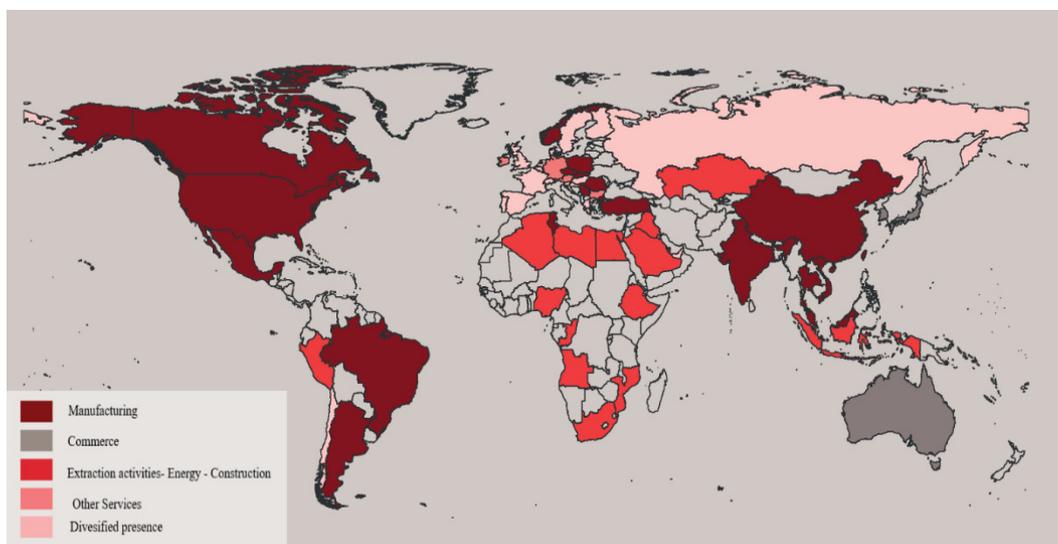
The firm's dimensions and the belonging to groups represents important factors for the internationalisation decisions. Large firms that delocalise are 5,6% while medium sized companies are only the 2,9%. Moreover, the 4,6% of firms belonging to groups undergo such strategy whereas the 0,6% are independent companies (ISTAT, June 2019).

Two are the main factors that the biggest Italian MNEs seek when they establish new subsidiaries abroad: the improvement of the quality and the development of new products (22,5%) and the access to new technological competencies and specific knowledge (19,4%). The labour cost, although affecting significantly the internationalisation choices, is not between the major reasons to invest abroad anymore. In fact, it is possible to see that in 2011-2012 period 55% of firms claimed it was the principal reason for their location choices while in the 2018-2019 interval the shares drops to 31,1% (ISTAT, November 2019).

The United States represents the main destination for Italian outward FDIs accounting for more than 157 thousand employees in the industry sector and about 112 thousand on the services. In the industry field, at the second and third place there are China (with more than 92 thousand employees) and Romania (with over

90 thousand employees). For what concern services, Brazil (with 73 thousand employees) and Germany (with about 67 thousand employees) are the second and third preferred (ISTAT, November 2019).

**Figure II.5 - Italian foreign affiliates for prevalent macro-sector of economic activity and country of localization.**



Source: ISTAT, *Commercio estero e attività internazionali delle imprese*, Annuario 2019. [http://www.annuarioistatice.it/contenuti/Guida\\_alla\\_lettura.pdf](http://www.annuarioistatice.it/contenuti/Guida_alla_lettura.pdf)

Figure II.5 represents the favourite destinations of Italian outward FDIs and highlights the prevalent macro sectors. It emerges that the Italian foreign affiliates internationalised mainly in the manufacturing sector. At the second and third place, it is possible to individuate the Commerce and the Extraction activities - Energy - Construction sectors, respectively.

*Table II.2 – Outward FDI volume and growth rates in the 2014-2018 period for destination areas (all values in million Euros).*

<i>FDI destination areas</i>	<i>Volume of FDI in 2018</i>	<i>Growth rate 2014-2018</i>
<b>EUROPE</b>	<b>414.907</b>	<b>1,40%</b>
The Netherlands	78.379	-6,28%
Luxemburg	52.460	0,58%
Germany	49.377	17,47%
<b>AMERICA</b>	<b>73.896</b>	<b>58,34%</b>
United States	40.177	40,50%
Brazil	11.812	68,41%
Chile	8.755	429,32%
<b>ASIA</b>	<b>59.958</b>	<b>44,85%</b>
China	11.944	48,17%
United Arab Emirates	11.165	53,94%
India	6.419	46,25%
<b>AFRICA</b>	<b>26.421</b>	<b>59,46%</b>
Algeria	10.288	71,61%
Egypt	7.822	36,37%
Tunisia	2.064	63,68%
<b>OCEANIA</b>	<b>2.823</b>	<b>35,59%</b>
Australia	2.608	29,62%
New Zealand	82	36,67%

Source: elaboration of ISTAT-ICE data. ISTAT-ICE, *Consistenze di investimenti diretti per area e paese - Anni 2014-2018*, 2019 [http://www.annuarioistatice.it/italia/anal\\_geo.html#](http://www.annuarioistatice.it/italia/anal_geo.html#)

By elaborating data for the stocks of FDI towards Italy, it is straightforward to calculate the relative growth rate for each destination country. In Table II.2, the continents are sorted by volume of outward FDI in 2018 and the first three countries of those areas are reported following a descending order: from the one

where the biggest amounts of investments are directed from to the one with the fewest. The table also displays the growth rates in the 2014-2018 period.

The Netherlands is the country with the highest stock of investments in 2018 but displays a decrease of attraction for Italian investments compared to those made in 2014. Investments in Luxemburg are at the second place and remain nearly unchanged. Germany is another relevant destination for Italian outwards FDIs and the volume of investments experienced an increase of 17,5% between the 2014 and the 2018. Within the period, the continents that display the greater foreign direct investments growth are Africa and America, with an increase of nearly 60% for each area. Also Asia experienced growing importance under this point of view. On the other hand, outward direct investments in Europe undergo very little growth rates (1,40%).

Looking towards the future, from the ISTAT investigation (November 2019) it emerges that the UE15 will remain the main localisation area for the next Italian outward FDIs both for the industry and the service field, which register respectively 24,4% and 32,7%. The industry field's subsidiaries also favour, in order of preference, United States and Canada (20,6%), Asia, Middle East and Oceania (13,8%) and Central-Southern America (9,2%). The service sector subsidiaries are planned to be located, in order of preference, in Asia, Middle East and Oceania

(12,9%), United States and Canada (12,3%) and in China (9,2%). However, it also emerges the desire to exploit the possibility of accessing to new markets. The future investments are mainly realized for production purposes but also for fostering logistics & distribution, marketing, sales & after-sales services and assistance center (ISTAT, November 2019).

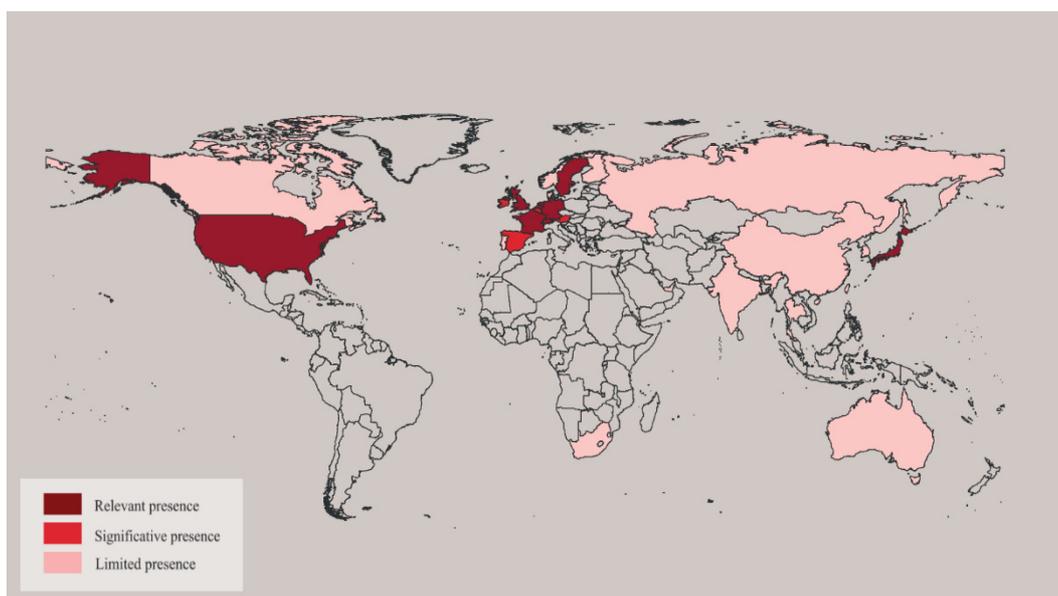
#### II.2.2. Inward Foreign Direct Investments towards Italy

Inward FDIs present in Italy are 14.994 and register 18,5% of the total industrial national turnover, providing occupation for 1,4 million people, that is 8% of the Italian employment. They are mainly concentrated in the services sector, in particular in commerce, rental, travel agencies and business support services.

The first ten countries of origin where the multinationals operating in Italy come from, represent a large portion of the total, accounting for 86,9% employees, 82,3% turnover and 85,3% of value added. The United States is the nation with the greater number of subsidiaries and workers located in Italy (2.314 firms, with more than 284 thousand workers). Germany (with 2.073 firms and about 181 thousand workers) and France (with 1987 firm and more that 271 thousand employees) are

respectively at the second and third place in terms of international presence (See Figure II.6) (ISTAT, November 2019).

**Figure II.6 - Foreign affiliates resident in Italy for country of the parent company.**



Source: ISTAT, *Commercio estero e attività internazionali delle imprese*, Annuario 2019. [http://www.annuarioistatice.it/contenuti/Guida\\_alla\\_lettura.pdf](http://www.annuarioistatice.it/contenuti/Guida_alla_lettura.pdf)

Similarly to the previous paragraph, Table II.3 reports data about inward FDI volumes and growth rates in the 2014-2018 period for areas of origin.

By looking at the table, it is straightforward to notice that the biggest part of inward FDI comes from European countries, especially from France, the Netherlands and Luxemburg. Furthermore, the investments from Europe register considerable growth rates in the 2014-2018 period (18%). Particularly, it stands out the growth of the volume of investments performed by France firms: 65%. Luxemburg,

although the high volume of FDIs observed in 2018, display a fall in the growth rate equivalent to about -15%. For what concerns the American continent, the United States are the bigger players in terms of volume of investments and the relative growth rates for 2014-2018 increased of nearly 18%. Japan is the country where the larger Asian FDIs come from.

**Table II.3 - Inward FDIs volume and growth rates in the 2014-2018 period for areas of origin (all values in million Euros).**

<i>FDIs origin areas</i>	<i>FDI volume in 2018</i>	<i>Growth rate 2014-2018</i>
<b>EUROPE</b>	<b>450.785</b>	<b>18,10%</b>
France	98.658	64,85%
The Netherlands	95.723	26,87%
Luxemburg	78.425	-14,64%
<b>AMERICA</b>	<b>15.632</b>	<b>16,68%</b>
United States	11.813	17,84%
Brazil	760	22,38%
Argentina	638	67,89%
<b>ASIA</b>	<b>9.220</b>	<b>16,37%</b>
Japan	3.367	22,35%
China	1.213	14,54%
South Korea	668	18,86%
<b>AFRICA</b>	<b>1.769</b>	<b>40,17%</b>
Ethiopia	520	84,40%
Algeria	357	71,63%
Tunisia	135	110,94%
<b>OCEANIA</b>	<b>575</b>	<b>13,41%</b>
Australia	540	16,63%
New Zealand	31	-26,19%

Source: elaboration of ISTAT-ICE data. (STAT-ICE, *Consistenze di investimenti diretti per area e paese - Anni 2014-2018, 2019* [http://www.annuarioistatice.it/italia/anal\\_geo.html#](http://www.annuarioistatice.it/italia/anal_geo.html#))

The quality nature information on the foreign subsidiaries provides interesting insights on the investments strategies and on the behaviour of the foreign partners. In the period 2017-2018, 30,9% of the foreign subsidiaries operating in Italy in the industrial field and the 26,5% of the ones operating in the services sector declare to benefit from the technological and scientific knowledge transfers originated from the holding (ISTAT, November 2019).

By analysing the profiles of the production and selling activities realised by the foreign MNEs in Italy it is possible to notice that, in the 2017-2018 period, about 47% of subsidiaries of the industrial sector developed in Italy significant innovation and research contents (ISTAT, November 2019).

The economic factors and the national context influence the economic programming of firms, particularly in the decisions concerning whether confirming the presence abroad and the potential expansion of the business in Italy. The forecasts of the foreign investors for the period 2019-2020, 45,8% of the industrial firms and 60,2% of firms operating in the service field plan to consolidate their presence in Italy without modifying the present levels of activities. More importantly, 40,5% of the industrial sector firms and 26,8% of the service sector intend to increment their activity levels. Only the 4,1% of the industry firms and the 4,7% of the service firms forecasts a reduction of more than 30% of the activities. Foreign MNEs consider positively the presence of technical and

specialised competencies in the labour force (93,8%) and the managerial and adaptability skills (92,5%) (ISTAT, November 2019).

On the other hand, foreign MNEs subsidiaries judge negatively the factor costs present in Italy (such as the labour cost, taxes and incentives) and the restrictions imposed by the regulation. Moreover, foreign MNEs, especially the ones operating in the service sector, report problems connected to the quality of infrastructures (i.e. roads, bridges but also favourable contexts for the research, development and innovation) (ISTAT, November 2019).

Only the 0,9% of firms has declared to have transferred in Italy activities previously carried abroad in the 2015-2017 period. This happening may have been influenced by the reduction of the fiscal pressure (for the 84,5% of firms), labour market policies (79%), incentives for localisation (75,5%) and incentives for innovation R&D (70,9%). Also the offer of loans for the purchase of machinery are fundamental measures in attracting the industrial firms while firms operating in the service sector find it important the presence of technology skilled labour (ISTAT, June 2019).

### II.3.THE EFFECTS OF FDI'S OPERATIONS

D. Castellani et al. (2003) analysed the effects of FDI's spillovers on the domestic market in Italy, Spain and France and could verify that Italy, out of the three countries, is the only one country that took benefit from MNE's presence<sup>18</sup>. The academics aimed at studying the productivity gaps between foreign and domestic firms together with the absorptive capacity of local companies by using a combination of longitudinal firm level data sets. Externalities from foreign MNEs are positive only in the Italian case and it is possible to argue that the impact of inward FDI's on total factor productivity is strongly connected with institutional and structural features of the economies (D. Castellani et al., 2003).

In detail, the characteristics of the national marketplace that positively and significantly contributed to the domestic productivity in Italy are the population density and the local innovative performance, while long-term unemployment is significantly and negatively associated to innovation (D. Castellani et al., 2003 and

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<sup>18</sup> The sample of the research contains 3932 manufacturing firms operating in the three countries, 980 of which are located in Italy. Regressions were run using OLS regression with standard errors robust to heteroschedasticity. See D. Castellani, A. Zanfei, *Technology gaps, absorptive capacity and the impact of inward investments on productivity of European firms* \*, *Economics of Innovation and New Technology*, 12:6, 2003, 555-576.

A. Ascani et al., 2013). Moreover, the high average in the total factor productivity gap between foreign and domestic firms confirms the catching-up hypothesis, which identifies a positive relation between the size of technological gaps and growth opportunities induced by foreign investments. It might also signal that, on the one hand, technological opportunities offered by foreign firms are high, and, on the other hand, Italian firms have reached the sufficient level of absorptive capacity, fruitful to benefit from multinational presence. The results lead to the demonstration of the presence of critical conditions to benefit from the positive FDI externalities but it is also noticeable a decrease of both foreign presence and domestic productivity (D. Castellani et al., 2003).

It is possible to argue that a local firms that become part of a group gains easier access to the resources required for innovation, such as capital, technological knowledge and skilled labour thanks to the close relations with other member companies and centralized management of resources (E. Guzzini et al., 2014 (1)). In fact, it is possible that SMEs find it more difficult to conduct formal R&D due to limited resources, weaker competencies and inadequate scale and scope economies (E. Guzzini et al., 2014 (2)).

According to the common hypothesis of current literature, group affiliation is expected to increase both the R&D investment of firms that are part of a group and their innovation performance. E. Guzzini et al. (2014 (1)) developed an empirical

model that enables the analysis of the correlation between innovative performance and the belonging to a business group. The research involved over 4000 Italian manufacturing firms with more than 10 employees. The empirical results highlight how subsidiaries set up in Italy show higher probabilities of investing in R&D compared to stand-alone counterparts, particularly in science-based sectors and in circumstances where competitor's size is consistent. The presence of positive externalities in business groups are justified by the fact that R&D results are shared among the group members so that the potential spillovers are internalized (E. Guzzini et al., 2014 (1)). This is also due to the fact that affiliated companies share financial resources and coordinate their R&D investments (E. Guzzini et al., 2014 (2)). In fact, it is possible to notice that in some cases firms introduced innovations without investing in R&D but by benefiting from the flow of knowledge within the group (E. Guzzini et al., 2014 (1)). It is interesting to observe that what matters in this context is also the position of the company within the group. Holdings and intermediate firms are the ones that benefit more from positive R&D spillovers since they can appropriate part of knowledge generated with other companies of the group. On the other hand, the research demonstrated that there is no significant difference between standalone firms and firms that are at the bottom of a group (i.e., companies that do not control other firms) (E. Guzzini et al., 2014 (2)).

C. Cozza, G. Perani, A. Zanfei (2018) provide information about the propensity of MNEs to collaborate with domestic Italian firms in the R&D field. Interestingly, it emerges that this characteristic depends on the origin of the parties. In particular, foreign MNEs are more prone than domestic firms to set up R&D collaborations with foreign partners, but they have a lower propensity to R&D cooperation with local counterparts. In parallel, domestic owned MNEs display greater inclination toward the cooperation with local companies. On the other hand, Italian multinationals appear to have a lower propensity to collaborate abroad. These observations can be justified by the difficulties that the foreign counterparts may find in dealing with a relatively unfamiliar context. Moreover, the empirical research highlighted the fact that the costs and risks derived by foreign MNEs from operating in the Italian context persist over the years, thus penalising linkages creation (C. Cozza, G. Perani & A. Zanfei, 2018).

According to A. Ascani et al. (2013), in the existing literature the potential negative effects of foreign disinvestments may pass unnoticed mainly because of the lack of available data for the issue. However, it must be considered that these events may weaken the local production system and reduce the intensity of knowledge externalities. This concern is particularly important, also in the light of some interventions regarding public incentives for the attraction of FDI in the southern regions of Italy that did not properly take into account the long-term sustainability.

An additional issue that is rarely explicitly addressed in literature is the unfavourable effects on competition that inward FDIs may provoke by entering the market. Nonetheless, a negative competition effect due to the entry of MNEs with superior technological, managerial and organizational skills often implicates the market exit of local firms and affect the structure of the local production system weakening local innovative potentials (A. Ascani et al., 2013).

#### **II.4. THE MEASURES TO BENEFIT FROM MNEs ACTIVITIES**

Investments promotion combined with complementary infrastructural policies can be considered by national and supra-national governments as a key tool to enhance industrial growth (D. Castellani et al., 2003). It emerges how incentives and public subsidies are determinant to enhance the possibility to encourage foreign investments. In fact, the potentiality of the agglomeration of MNEs in the territory is demonstrated by Basile et al. (2005) to be a significant attraction factor for new foreign plants. In other words, the presence of FDIs in an area serves as a positive signal for other foreign firms. The scarce agglomeration of FDIs in Italy depresses the attraction potentiality of the country. In this context, incentives to attract FDIs may play an important role if they are designed in a way to impact on a national

level (R. Basile et al., 2005). According to D. Castellani et al. (2003), the key to foster the presence of high value added inward investments lies in a set of complex measures aimed at the modernisation of infrastructures, human capital formation and support local firms including suppliers of MNEs, in order to increase linkage creation and technology transfer (D. Castellani et al., 2003). C. Cozza & A. Zanfei (2018) individuate a double strategy to sustain research and innovation networks. They propose to attract and favour the embeddedness of foreign firms in the Italian R&D system together with supporting the growth of Italian R&D performers and their connection to international research networks.

Some of the main factors that discourage new FDIs are linked to the national business environment. For instance, as mentioned in the previous paragraphs, bureaucratic procedures are a good example of weakness of the Italian marketplace. A reduction of 10% of procedure necessary to resolve contract disputes and to establish a new firm allows an increase in the potentiality of attraction of new investments equivalent to 22%. On the other hand, reduction of income and labour taxes does not have great positive consequences (G. Barba Navaretti et al., 2009).

G. Barba Navaretti et al. (2009) have individuated a set of measures that can potentially increase the attractiveness of the Southern regions of Italy, which, as mentioned in the previous paragraph, are the areas with the major problems in the

attraction of FDIs. The first step regards fostering the tertiary education. The low levels of education represents a problem in whole Italy but regards with more intensity the southern regions since it emerges how the quality of the scholar system is lower in this area compared to the rest of the country. What can be done to enhance and speed this process may be the increase of the labour demand since it can activate a virtuous circle where labour demand influences the labour supply and vice versa (G. Barba Navaretti et al., 2009).

A further issue to solve is related to labour cost. According to G. Barba Navaretti et al. (2009), this is one of the variables that affects new investments at most. The reduction of the 10% of the average labour cost determines a growth of 27% of new investments. The fact that the salary of the employees of South of Italy are at the same level of the ones employed in Northern Italy affect negatively the potential attractiveness of the former area.

### **III. MULTINATIONAL ENTERPRISES IN THE MARCHE REGION**

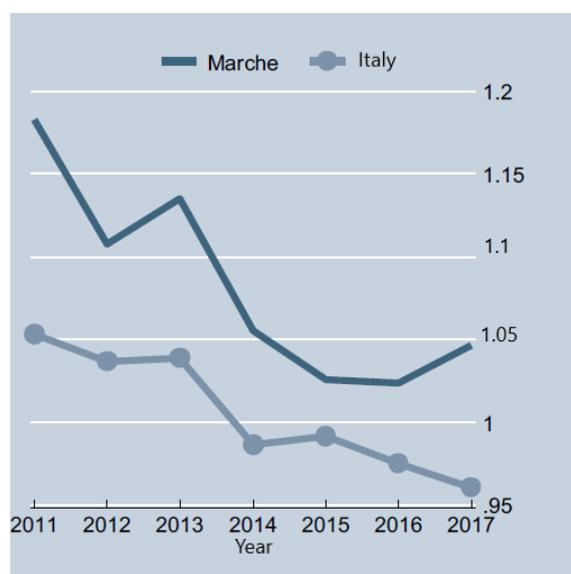
#### **III.1. THE FEATURES OF THE AREA**

##### III.1.1. What data say

The Marche is one of the most industrialised region of Italy and holds a strong economical advance, boasting fields of excellence in many sectors. Its main entrepreneurial activity is embodied by micro and small enterprises and a large portion of the area is characterised by a big concentration of family-owned businesses with a very close connection between the socio-personal reality and the economical context (G. Dini, 2009). As a confirmation of this, figures show that half of the employment within the region is concentrated in micro enterprises. However, companies with 10-19 and 20-49 employees are growing in number and are gradually evolving. Even though the small companies play a prominent role, it possible to notice some consolidation processes of the entrepreneurial system, both on the side of the organizational structures and on the increasing number of employees (G. Goffi, 2013). Small and big enterprises do not represent alternatives,

but rather perform in different settings in a complementary way. Each category owns its reason and its advantages to compete in its segments (G. Dini et al., 2015).

**Figure III.1** *New enrolments in the Register of Companies in Italy and in the Marche.*



Source: Iacobucci D., Micozzi A., Micozzi F., (2018), *Rapporto sull'imprenditorialità nelle Marche: Anno 2017*, *Economia Marche Journal of Applied Economics*, XXXVII(1): p. 67.

By looking at Figure III.1, it can be easily observed that the region holds above-average performance with respect to the Italian levels. According to figures<sup>19</sup>, in the 2010-2015 period, even if the region experienced a drop in the number of new

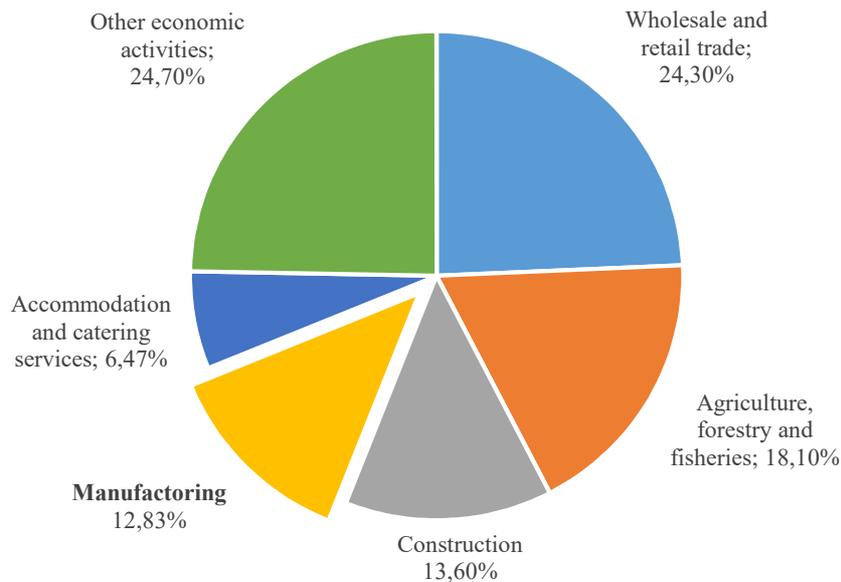
<sup>19</sup> See Iacobucci D., Micozzi A., Micozzi F. (2018), *Rapporto sull'imprenditorialità nelle Marche: Anno 2017*, *Economia Marche Journal of Applied Economics*, XXXVII(1): pp. 64-97.

enterprises, the Marche still registers positive records. From 2016 onwards, the differential between the Italian and the regional figures started to increase to the benefit of the Marche: the region has observed an increase in the quantity of new companies, while Italy confirmed its downward trend. In detail, the increment has been relevant especially for the provinces of Macerata and Ascoli Piceno (D. Iacobucci et al., 2018).

Nevertheless, it must be underlined that the entrepreneurial system of the Marche has been hit hard by the crisis and that it still suffering its consequences. In fact, not every local enterprise has been able to move forward in a scenario where the openness to the international trading requires certain capabilities and structures. In the last decade, many firms exited the market or have been acquired. Such context has forced the majority of companies to adopt strongly dynamic behaviours aiming for innovation to win competition (V. Balloni, 2018 and S. Bertini, 2018).

Figure III.2 shows the sectorial composition of the Marche region. Wholesale & retail trade, agriculture, forestry & fisheries and construction represents the main business activities in terms of number of active enterprises. Although the manufacturing sector is placed at the fourth place in this classification, it is possible to assert that it plays a fundamental role within the regional economy. In fact, this sector is characterised by a lower number of enterprises compared to other business

*Figure III.2 – Main active enterprises in the Marche region by business activities.*



Source: Elaboration of SIS data 2017

activities but the majority of its firms are larger and play a key role in term of turnover.

By drawing a parallel between the Marche, Veneto, Emilia Romagna and Tuscany, regions with comparable productive structure, it is possible to observe a relevant role of the manufacturing sector in the Marche (G. Dini et al., 2015). This sector represents a quarter of the regional GDP and nearly the totality of the regional exports (Fondazione Aristide Merloni, 2019).

The majority of businesses within the sector is concentrated in four branches: mechanical, footwear & leatherwear, wood & furniture and textile & clothing (see

Table III.1). The mechanical industry holds the greater number of enterprises, value added, employment and exports (G. Goffi, 2013).

**Table III.1 – Detail of the composition of manufacturing sector in the Marche.**

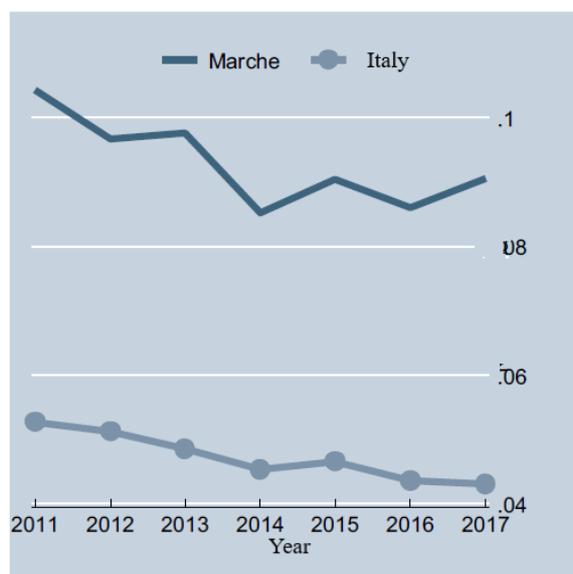
	<b>Firms</b>	<b>Value Added</b>	<b>Employment</b>
<b>Mechanical field</b>	25%	40%	36,5%
<b>Footwear &amp; Leatherwear</b>	21%	17,2%	19%
<b>Wood &amp; Furniture</b>	14%	*17,2%	19,5%
<b>Textile &amp; Clothing</b>	12%	6,7%	9,6%

Source: G. Goffi, *Il sistema economico delle Marche. Artigianato e mercato del lavoro dagli anni Novanta alla crisi attuale*, Economia Marche Journal of Applied Economics, XXXII(1): 96-125, 2013.

\* Together with plastic rubber and other manufacturing industries.

In general, the manufacturing business constitutes a strategic segment for the perspectives of an area because it enhances the presence of sectorial expertise and encourages tangible and intangible investments (D. Iacobucci et al., 2018). This sector display a greater propensity to efficiency and innovation because it is heavily exposed to internal and international competition and it accounts 75% R&D expenditure within the region. These firms represent a high demand of advanced services, contributing to the development of their stakeholders (Fondazione Aristide Merloni, 2019).

**Figure III.3 - New enrolments in the Register of Companies for the manufactory sector.**



Source: Iacobucci D. et al., (2018), *Rapporto sull'imprenditorialità nelle Marche: Anno 2017*, *Economia Marche Journal of Applied Economics*, XXXVII(1): p. 69.

The Marche has doubled the Italian rate of new enrolments in the Register of Companies in the manufacturing sector and the continuous flow of establishment of new firms confirms the presence of companies operating in this field as a peculiarity of the region. Nevertheless, the crisis of the Italian and regional manufacturing system has determined a continuing reduction on the opening of new enterprises in the past years (See Figure III.3), even if it is possible to observe a

turnaround in 2017. The turnaround is even more relevant when taking into consideration the fact that the overall situation has not improved in Italy.

For what concerns the value added in the manufacturing sector in the Marche, it is noticeable a substantial return to growth from 2014 on, after the bad consequences of the recession. If on the one hand, these improvements are due to the growth of the productivity and of the number of employees, on the other hand the positive results are the consequence of the exit from the market of the less efficient and less innovative firms. In other words, the growth of this sector is not linked to the increasing number of new entrants, but rather to the expansion of the soundest companies, with a consequent growth of their average dimension (Fondazione Aristide Merloni, 2019).

As mentioned above, a peculiarity of this territory is the diffusion of small-enterprises networks. The cohesion of these numerous business entities has brought the region from a pre-industrial era (e.g. the manufacture of footwear, clothing and furniture) to the export industry (M. Blim, 1987, p.5 and G. Fuà, 1983) constituting a pillar of the economic advancement of the area in the past decades. For many years, the industrial districts represented the strength of the Marche, creating a dense network of masteries. Traditional sectors with low capital intensity and low labour productivity prevail. The evolution of the clusters has been encouraged by

the overall rise of the incomes in the 1950s, when the demand for consumer goods increased, and then it spread in the 1970s and 1980s. With the pass of the time, the traditional model of the industrial districts started to collapse, also as a result of delocalisation and other forms of internationalisation. In fact, these latter strategies are opposed to the very nature of the districts, which have as peculiarity their close connection with the local community.

It must be borne in mind that, with the pass of time, the region underwent some critical circumstances. With the fall of the Berlin Wall, new markets, but also new competitors from Eastern Europe and Asia, entered the business offering medium-low quality goods in the textile industry, footwear and wood & furniture. After the Maastricht Agreement in 1992, Italy lost the possibility to devaluate the lira and, with the launch of the euro in 2001, the Italian products became very expensive within the marketplace, also because of the US dollar exchange rate. In addition to all these adverse factors, the 2008 crisis badly hit the territory, firstly by damaging the wood & furniture and mechanical sectors and then spreading in the whole economy. The property of the regional economy were such that the recession profoundly affected the Marche, exposing all its vulnerability. The long period of low demand, the reduction in household expenditure and the high pressure coming from the international competitors negatively affected all commercial activities, especially the small enterprises. The 2008-2009 years had been dramatic for firms:

many abandoned their activity and the Marche Region lost employment and profitability (G. Goffi et al., 2013).

However, the production base of the area is also characterised by the presence of enterprises that undertook significant growth paths in the recession period. In its most recent publication<sup>20</sup>, the Bank of Italy individuates a group of high-growth firms that doubled their turnover in the 2007-2016 period. In 2018, this group of enterprises accounts for 6% of the market. The leading sector is again the manufacturing, where firms with the most advanced technologies boast the highest growth rates. Another characteristic of the high-growth firms is their average level of investment per employee: this value is much higher for this group than for the other companies of the region. It is possible to observe the same results for what concerns the R&D investments. The greater portion of the high-growth firms display a vaster application of new technologies and strategic dynamism. The majority of this category of companies, indeed, have changed at least one of the following competitive strategy elements: range of services offered, number of target markets, number of foreign branches and number of suppliers. (Banca D'Italia, 2019).

It seems that the largest firms represent the major players for the internationalisation path of the region. The value added per employee constantly decreases with

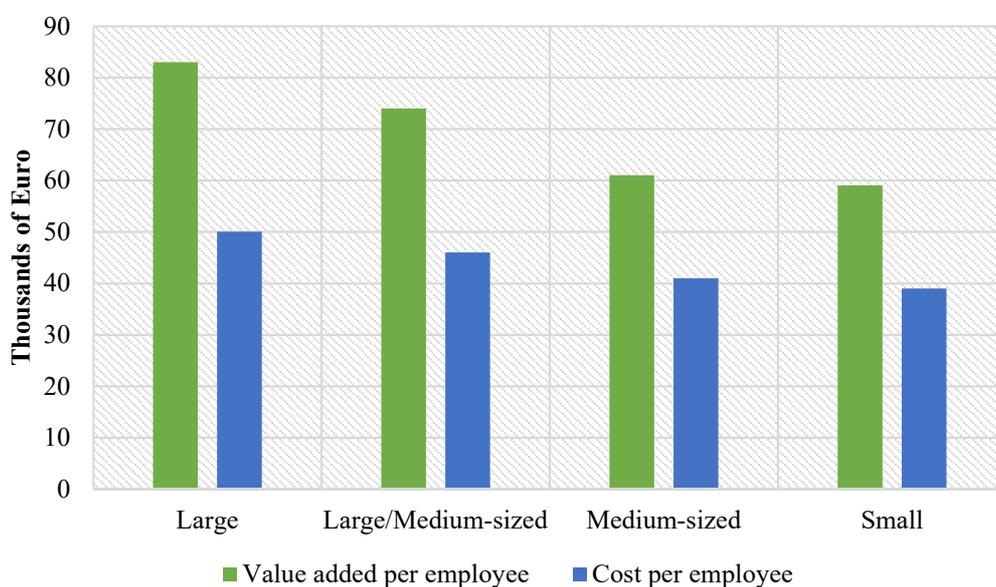
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<sup>20</sup> See Banca D'Italia, *L'economia nelle Marche. Rapporto Annuale*, Banca d'Italia, Ancona, 2019.

decreasing firms dimension, underling the high levels of efficiency that a large firm is able to reach. The gap between the biggest and the smallest enterprises is greater than 25% (See Figure III.4) (Fondazione Aristide Merloni, 2019).

The smallest businesses find the biggest difficulties in implementing internationalisation strategies and the experts express the need for a greater support to encourage them to expand abroad. A greater openness to foreign market may be the key for SMEs for overcoming the stagnation of the domestic demand. Taking into consideration the fact that the EU market demand is slowly shrinking, the

**Figure III.4 - Value Added and Cost per employee compared to firm dimension, 2018.**



Source: Fondazione Aristide Merloni, *Classifica delle principali imprese marchigiane. Anno 2018*, Fondazione Aristide Merloni, Ancona, 2019.

current opportunities come from the extra UE market segment but this remains inaccessible for the small operators, having regard to the difficulties that these entities undergo under this aspect.

The concerns that they have with a potential internationalisation can be individuated in some limits inherent in the nature of the small company. In particular, they consist in the organisational issues together with the growth of competitiveness. In other words, the structure of small enterprises does not allow a deep reorganisation such as to take advantage of the opportunity coming from the foreign markets. However, in this way they could bring positive effects to the local occupation and to the regional economy as a whole (D. Iacobucci et al., 2018).

This does not mean that the key to success resides in the dimension of a company. In many marketplaces, “being big” is not enough. What matters is the capability of taking advantage from the market opportunities. In order to do so, a strong entrepreneur leadership and adequate organisational and managerial skills are needed. The limitations of the Marche’s companies are to be found between those aspects: namely, problems related to the governance models. The Italian traditional model of firm is represented by the family-owned businesses, characterized by exclusive ownership structure and centralised management, even in large/medium-sized firms. The indicated style may be favourable in the first phases of the company’s development, as it ensures continuity in the entrepreneurial vision,

rapidity in the decisional process and effective management. But it can become a problem with the growth of firm's dimensions since the company's complexity grows more and more together with the need for innovation, diversification and geographical expansion (D. Iacobucci, 2018).

Furthermore, there are a lot of criticalities to be considered within the regional economy, many of which represent a huge obstacle in the development and advancement of the entrepreneurial activities of the area. A major issue of the productive system is the lack of adequate competencies and visions, oriented to the modification of the economic behaviour of businesspeople. According to G. Dini et al.<sup>21</sup>, the problem does not derive from the inadequacy of skills but, on the contrary, it lies with the very characteristics of the regional economy. What can be observed is, indeed, that most young people benefit from a higher educational background than the previous generations (i.e. vocational or university education) but they find it difficult to enter the labour market because of the abundance of low position-jobs offered in that environment (e.g. the industrial districts). The regional economy does not seem ready for this new component of the labour force (G. Dini et al. 2015).

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<sup>21</sup> See Dini G., Goffi G. and Blim M. (2015), *Il declino dei distretti industriali tradizionali. Il caso dell'artigianato marchigiano*, *Economia Marche Journal of Applied Economics*, XXXIV(2): 1-29.

As a consequence, this factor creates the conditions for the adoption of a second-best policy that hits the whole market, bringing it to compete at lower than potential levels. Indeed, the Marche faces a low presence of high tech firms while the medium-low technology sectors are gaining importance (G. Goffi, 2013).

What can be done to improve the state of affairs is enhancing the research and technology cooperation among firms or between industry and universities. The region needs the implementation of R&D investments in order to create new innovative firms, which are at the moment lacking in the territory (D. Iacobucci et al., 2018). The key to further competitiveness is identifying an optimal balance between existing, traditional specialisations and a smart diversification.

A curious trait of the innovation model of the region is depicted by the term “innovation without research”, where new ideas were the result of creativity, design solutions, organisational and market development rather than coming from the setting up of R&D or collaboration with research organisations. In the 2000s, before the 2008 recession, it could be possible to notice an increasing trend in the regional R&D expenditure but still it has always been below the average of similar regions, such as Tuscany, Emilia-Romagna and Veneto. The same has been recorded for what concerns the number of R&D workers in relation to the population: figures show the significant backwardness of the region compared to the rest of Italy (A. Ciffolilli, 2014). The crisis brought to light many sets of problems belonging to the structure of the economy. The system grew and stood for many years the same

relying on interaction between suppliers and producers and on their creativity. Nevertheless, this is no longer enough to guarantee enduring competitiveness and growth. According to A. Ciffolilli<sup>22</sup>, what was missing in the boom years of the 90s were, indeed, a long-term vision of both market operators and regional policies aimed at encouraging R&D and organisational innovations. That was probably a missed opportunity to facilitate structural change. Now that the crisis has already hit the region, the effort required by all the market entities to overcome the difficulties is huge. The challenge concerns especially business and government expenditure.

A. Ciffolilli (2014) individuated some issues connected to the innovation system of the Marche and these are:

- Inadequate capacity to invest in R&D;
- Low share of operators in hi-tech sectors;
- Insufficient propensity of SMEs to collaborate with others enterprises and scarce inclination of the higher education sector to cooperate with firms;
- Meagre portion of companies innovating in-house;
- Poor infrastructure facilities.

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<sup>22</sup> See Ciffolilli A. (2014), *An assessment of research and innovation policy in the Marche region: the results of the EC Regional Innovation Monitor*, *Economia Marche Journal of Applied Economics*, XXXIII(2): 1-42.

The investments on the R&D field and the reinforcement of the collaboration between businesses seems to be a valid and necessary solution to get over the recession. However, the scarce propensity to invest diffused in the territory is tied to a set of cultural reasons and it is evident that this is a hard practice to remodel. In this field, the Marche is lagging behind compared with regions with similar productive structure. The causes of the problem may be individuated between the rigidity of the ownership structures, the unsuccessful generational turnover and the weak management skills of the companies (D. Iacobucci et al., 2018).

Many are the action that can be taken with the aim of enhancing investments in the innovation field and policy is starting giving its contribution too. The incentives to follow this innovation path may also come from the policy by promoting the consolidation of advanced knowledge-intensive service sector. Policy can create the proper conditions to achieve these objectives by creating the premises for a step forward. For instance, it may revive the economy by facilitating access to credit meant for nourishing the development stages of a company or it can support the interaction between research institutes and firms. Some measures are actually already in place. In 2003, Marche approved a regional law, the L.R. no. 20/2003, to support fields of improvement in sectors such as research and innovation, business investments, credit access, internationalisation and environmental sustainability with the aim of intervening in the industry, craft and service sectors. The regulation also regards interventions in typical local production and quality marks, in addition

to the provision of technical assistance for the emergence of innovative start-ups, without forgetting the connections with the international markets (A. Ciffolilli, 2014).

### III.1.2. From figures to facts: the congress by Fondazione Aristide Merloni

In addition to the consultation of statistical data and literature, it is worth paying attention to the perception of the very operators of the region. On 12<sup>th</sup> November 2019, Fondazione Aristide Merloni held a conference which hosted some important personalities connected with the regional economy. This Foundation can be defined as a Cultural Institute for its effort in studying and analysing the economic and social development in the Marche by examining the trends of the local companies and the effects of their actions on the business. Every year, the Foundation holds a conference named *Classifica delle Principali Imprese Marchigiane* (namely, Ranking of the Main Firms in the Marche), where investigations on the course of the regional companies are presented. The conference offers some important hints for a better understanding of the dynamics that the firms are undergoing, beyond displaying the future perspectives. The latest meeting (33<sup>rd</sup> edition of the congress) highlighted the need for a long-term strategy to give impetus to the regional

economy, focusing on a greater growth. What emerges since the first speech by the president of the Confindustria Marche, Claudio Schiavoni, is that the present circumstances of the economy are a matter of concern for the region. There is the urgency of identify the future challenges for the short and medium term in order to maintain competitive the manufacturing sector not only in the region but also on a national level. R&D investments and product quality are individuated as the main properties that a successful firms should have. Moreover, C. Schiavoni underlines the importance of a sound capitalization of the enterprises, the valorisation of the human capital and the possession of a stable presence in the international environments.

***Table III.2- Sales and employment growth for the manufacturing sector in the Marche region.***

	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Sales growth</b>	+6%	+7.2%	+4.9%
<b>Employment growth</b>	+3.4%	+2.8%	+2.7%

Source: Fondazione Aristide Merloni, 2019.

The president of the Foundation, Antonio Merloni, opens its speech with the exaltation of the Marche's manufacturing industry on the national environment. He

displays a positive perception for the performance of this sector, on the wake of the positive trends registered in 2016 and 2017 (see Table III.2).

After the long stagnation period caused by the recession, the manufacturing firms of the region has succeeded in the improvement of the productivity (value added per employee). Despite this enhancement, the gap between the productivity levels of the Marche's and Italian firms is still very significant. This fact depends especially from the sectorial composition of the area, from the dimension of the Marche's firms and from other external factors such as the poor conditions of the infrastructures with respect to the ones of the North of Italy. According to A. Merloni, the change to revive the productivity levels of the region should origin from the companies themselves. They are responsible for the innovation process and for the talent seeking between the young generations. Also in this intervention, reference is made to the importance of the investments in R&D and in innovation, focusing on digitalization and on the modernisation of the organizational structure, in the belief that these two elements represent the keys to overcome the difficult period.

The forecasts for the 2019 trend are uncertain and can reveal worsening. His hope for a future progress of the global economy lies in the synergies between nations. In particular, he talks about a desirable compromise in Europe on the commercial level, with a view to an economic and political union.

Besides the manufacturing industry, Professor Donato Iacobucci underlines another advanced sector: the informatics. In general, the regional production system is characterized by the presence of a great number of SMEs and a few big corporate. The case of digital sector is even more accentuated. In fact, the Marche's system for informatics switches from a company leader at a national level, namely TeamSystem, with turnover higher of 232 million Euro, to other many smaller enterprises, each of which does not reach 40 million Euros. In the last years, the sector has registered high growth rates, also as a result of the government incentives (the so called *Industria 4.0 incentives*<sup>23</sup>).

Talking about manufacturing, in his talk, Professor Iacobucci focused on the analysis of the firm's balance sheet. It is possible to notice that nowadays the sector displays solidity for what concerns their financial structure. Compared to the years prior to the recession, the sector has greater liquidity, less debt and it is much more capitalized. Taking into consideration the low cost of the lending capital of this period, his suggestion for entrepreneurs is to take advantage of the favourable situation and invest. The hesitation of the companies to make investments confirms

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<sup>23</sup> With the *Industry 4.0 incentives*, the Italian government aims at encouraging the innovative investments by fostering the private expenditure for R&D and innovation. The program is valid for the period 2017-2020 and addresses the Industry 4.0 entities, Venture Capitalists and Start-ups. The measure include hyper-depreciation incentives for investments linked with the Industry 4.0 field; tax deductions for start-ups and innovative SMEs; equity funds to invest on the development of patents or ideas with high technological content.

the uncertainty climate within the economy. He concluded his speech inviting the entrepreneurs to take into consideration the possibility of supporting the creation of innovative start-ups, with the aim of connecting the need for innovation of the traditional sectors and the desire of young people to develop their ideas.

After this excursus, the next paragraph will focus on the international presence within the Marche Region with the purpose of studying the role of the biggest firms in the territory. Having a well-defined idea of the reality of the region allows a better understanding of the composition of the marketplace that will be discussed below. An overview of the regional entrepreneurship system can be seen in Table III.3, where the most salient features of the Marche are gathered within the SWOT analysis.

The purpose of the following paragraph is to investigate the presence of the premises to create an interchange of competencies between international firms and the local industries and verify the presence of contaminations.

**Table III.3 - SWOT analysis for the entrepreneurship system in the Marche Region.**

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• High business density (one active firm for every 10 inhabitants vs. 1:15 in Italy and 1:25 in the EU)</li> <li>• One of top 15 to 25 industrialised regions in the EU</li> <li>• Highly diverse economy, with 27 industrial clusters</li> <li>• Presence of 4 universities</li> </ul>	<ul style="list-style-type: none"> <li>• Predominance of family firms and legacy of sector-based economic development model</li> <li>• Dependence on firms created 30-40 years ago</li> <li>• Relatively unknown location for external investments</li> <li>• Weak business support infrastructure, e.g. business development services</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Strong entrepreneurial spirit</li> <li>• Diversity of skills and knowledge of human capital</li> <li>• Higher than average percentage of graduates</li> <li>• High level of migrants in tertiary education</li> <li>• Geographic location at crossroad of the Adriatic Corridor and gateway to South and Eastern Europe</li> <li>• 37% active population (25-50 year olds); among the youngest in Italy</li> <li>• Service sector potential, e.g. tourism</li> </ul>	<ul style="list-style-type: none"> <li>• Competitiveness of emerging economies</li> <li>• Possibility of de-industrialisation taking root</li> <li>• Continuing reduction in exports and in profitability</li> <li>• High mortality rate of established enterprises as owners approach retirement</li> <li>• High rate of unemployment, youth unemployment and long-term unemployment due to recession and loss of competitiveness</li> </ul>

Source: J. Potter, A. Proto, M. Marchese, *SMEs, Entrepreneurship and Local Development in the Marche Region, Italy*, OECD Local Economic and Employment Development (LEED) Working Papers 12, OECS, 2010, p. 86.

## **III.2. FDI FROM AND TOWARDS THE MARCHE REGION**

### **III.2.1. The market signals**

The Marche Region has not embraced the globalization process yet since it seems that its economy is still immersed in the traditional commerce system, where trades constitutes the core of the business, rather than investments. From a long-term point of view, this state of things can potentially damage the region because the openness to foreign markets allows greater competitive advantages. According to J. Potter et al.<sup>24</sup>, when large companies invest abroad, they enhance their competitiveness also within their domestic market. On the contrary, the renouncement of investing in a foreign country has deleterious effects on the competitiveness of a firm. However, it must be considered that delocalizing also has some considerable disadvantages on the local market, first and foremost who would suffer for such strategies are especially the subcontractors and the service companies of the area, especially the micro business, as well as the labour force (Paradisi, 2004 and Marcolini et al., 2004).

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<sup>24</sup> See Potter J., Proto A., Marchese M. (2010), *SMEs, Entrepreneurship and Local Development in the Marche Region, Italy*, OECD Local Economic and Employment Development (LEED) Working Papers 12, OECD.

M. Blim et al.<sup>25</sup> find that the structure of the industrial clusters based on the small enterprise may hinder the emergence of innovative forms of economic organizations, which are fundamental to succeed in the evolutionary global economy. A study made by the Bank of Italy<sup>26</sup> shows that already in 2011 the expansion of the Italian district model came to an end. The economy needs a reconstruction that is in line with the times towards an international division of labour (M. Blim et al., 2014).

Supporting and promoting incisively inward and outward FDIs represents a good expedient to enhance the growth of companies, beyond the intensification of the flow of knowledge through the local economy. In fact, the domestic market may benefit from the companies' internationalization if it is able to take advantage of the contamination of knowledge through the mean of collaboration. The cooperation is even more significant when it involves more areas and many entities because it stimulates the contamination of ideas and can set the basis for potential future innovation (J. Potter, 2010). As mentioned in the previous paragraph, the

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<sup>25</sup> See Blim M., Goffi G., *The long and the short of it: The value of the concept of the longue duree in the analysis of contemporary economic development and decline*, *Economia Marche - Journal of Applied Economics*, 33(1), 2004, 84–104.

<sup>26</sup> See Banca d'Italia (2012). *L'economia nelle Marche. Aggiornamento Congiunturale*. Banca d'Italia, Ancona.

Marche boasts a dense number of enterprises. However, this feature contrasts the low number of inward and outward FDIs.

### III.2.2. Outward Foreign Direct Investments from the Marche

The regional government is implementing a number of interventions with the aim of directly helping firms in their internationalisation projects, with particular attention to the SMEs considering their tangible difficulties in undertaking these strategies. It is estimated that in 2018 the support activities for the internationalisation promoted by the region account for 2,8 million Euros, registering a very strong increase with respect to the previous year (+211%) (Rapporto ICE 2018-2019). Among these measures, it is worth mentioning the activation of some collaborations between the regional government and third parties such as the Chambers of Trade or the Trade Associations. Furthermore, the Region is also supporting the creation and consolidation of some stable networks between those operators in order to face the challenges of the global market. The objective of this kind of measures is to help the local SMEs that want to expand their boundaries or consolidate their presence in the foreign markets through the concession of a grant. This financial support allows the purchase of services aimed

at assisting the internationalisation processes and are supplied by professionals of the Temporary Export Manager (TEM) (Rapporto ICE 2017-2018).

In addition to this, the so-called Voucher for the Internationalisation has had good results in the diffusion of the critical skills to foster the competitiveness on foreign markets. The vouchers consist in grants in forehead of a minimum agreement, whose amount depends in the case<sup>27</sup>. The Marche's firms demonstrated their enthusiasm in the initiative, being the region with the greatest number of vouchers distributed in Central Italy, with 174 beneficiaries, as a testimony of the increasing desire to grow abroad of the Marche's companies (Rapporto ICE 2017-2018).

In 2017, the Marche region has also implemented some actions in support of the internationalisation focusing on the area of health, nutrition and life quality, with particular attention on the Agrifood industry and on the promotion of tourism, cultural heritages and industries of creativity (Rapporto ICE 2017-2018).

The Marche is undergoing some internationalisation processes, where the medium-big companies undergo delocalisation strategies in order to find lower labour costs

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<sup>27</sup> In the current regulation, there are two types of Vouchers. The *early stage vouchers* consist in a grant amounting to € 10.000 in forehead of a 6 months agreement, worth at least € 13.000. The *advanced stage vouchers* are a new solution and consist in a € 15.000 grants, usable in view of a (at least) € 25.000 annual contract. In this latter case, there is the possibility to obtain an additional contribution equivalent to € 15.000 if in the fruition time of the TEM the firm achieves an increase of its exports of 15% (Rapporto ICE 2017-2018).

or foreign partners. As expected, the largest enterprises have undergone a greater opening towards international markets thanks to the more effective managerial functions they hold (G. Goffi, 2013). The largest part of the financial-fixed-assets is composed by acquisitions of controlling interests in other companies.

Observing the aggregate data, the Marche faces a difficult period if compared to the other regions of the same area. Table III.4 displays the growth rates for some significant indicators of FDI trends for the 2012-2017 period. Aggregate data regarding the central Italy and Italy as a whole present growing number of firms, while growth rates are negative for both the number of employees and turnover.

**Table III.4 – Growth rates of number of firms, number of employees and turnover for outward FDI in Central Italy, 2012-2017.**

	<b>Firms</b>	<b>Employees</b>	<b>Turnover</b>
<b>Central Italy</b>	<b>5%</b>	<b>-15%</b>	<b>-41%</b>
Tuscany	6%	-6%	8%
Umbria	10%	8%	32%
The Marche	7%	-55%	-69%
Lazio	4%	-10%	-44%
<b>Italy</b>	<b>5%</b>	<b>-9%</b>	<b>-12%</b>

Source: Data elaboration of Banca dati Reprint, R&P - Politecnico di Milano - ICE Agenzia.

The Marche follows a similar trend but its rate of decline is much stronger. In detail, during the five years taken into consideration, the Marche experienced an increase of 7% in the number of firms present abroad and this figure is in line with the central

Italy average. Nevertheless, the records registered for the number of employees and turnover are worrisome. The region observe in fact a strong decrease in the number of employees (-55%) and in turnover (-69%), registering the worst results for the area (for further details about outward FDIs by region see Appendix – Table 1).

Considering the number of enterprises located abroad, Asia and Oceania are the preferred destination for the Marche's firms (with 9.297 and 3.490 firms, respectively). However, the area where the highest turnover for FDIs come from is the Middle East (with 36.418 million euros) mainly thanks to the contribution of the electrical and household equipment sector (elaboration of Banca dati Reprint, Politecnico di Milano – ICE, 2015).

Taking into consideration the main enterprises for the manufactory sector, leader segment within the region, the growth of financial assets for the years 2017 and 2018 accounts 10.7%, whilst the Italian variation only accounts the 4.6% (Fondazione Aristide Merloni, 2019). According to *Rapporto ICE 2017-2018* there are 864 companies abroad with Marche's shareholders, which account 2.4% Italian foreign investments abroad. The manufacturing sector confirms its prominent role within the region also concerning its foreign direct investments performances: it holds the majority of shares for the quantity of firms (71% of the total), number of employees (68% of the total) and turnover (72% of the total). Wholesale and retail trade is at the second place, accounting for 24% of the total firms located abroad,

22% of the total people employed by Marche's firms abroad and 23% of turnover coming from outward FDIs. In detail, the manufacturing branch with more fortune abroad is the one that deals with electrical and household equipment (20% of the total Marche's firms performing outward FDIs, 29% of total employees and 38% of total turnover registered for Marche's FDIs) (elaboration of Banca dati Reprint, Politecnico di Milano – ICE, 2015).

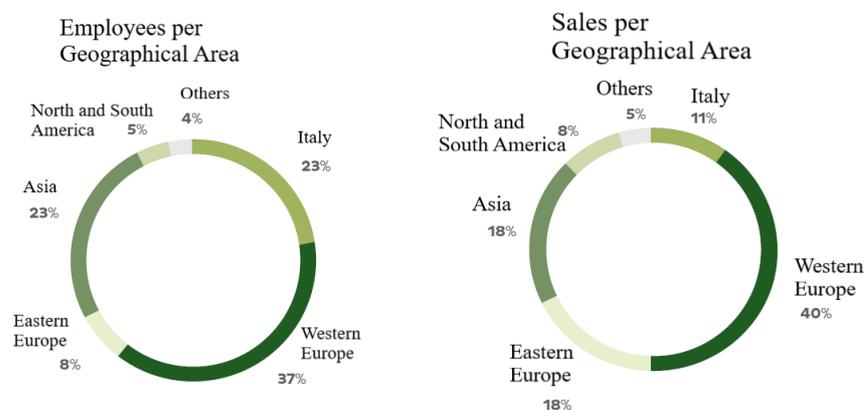
Looking at the Ranking of the Main Firms in the Marche for 2018 edited by Fondazione Aristide Merloni, at the first place for sales value lies Ariston Thermo S.p.a., with 1 648 million euros and a percentage growth, with respect to 2017, of 5%. This company can be considered the soundest of the territory and represents the most significant example of outward direct investments for the Marche. Indeed, it is a brilliant example of multinational enterprise born in Marche and spread all over the world.

Founded in 1930 in Fabriano, Ariston gradually grown until it became a leader in its sector. The company covers the so-called thermal comfort sector and it is present in different branches with leader brands, offering complex products and services. Its strength is high energy-efficiency and has a strong presence in Europe and in developing countries. In 2018, it has produced 8 million products and 34 million components, sold in more than 150 countries. It holds 66 operating companies and 5 Offices of Representation in 40 countries, the majority of which are in Italy,

France, Germany, Holland and Switzerland. The production sites are 26, located in 15 different nations but mainly concentrated in Italy (with 8 sites). The total number of employees is 6 800, whose 80% of managerial positions comes from local areas<sup>28</sup>.

As it is possible to observe in Figure III.5, the geographical areas where employees and sales comes from match. In fact, the portions for each zone are more or less the same in the two fields. Most of the employees and sales comes from Western Europe and Asia.

**Figure III.5 Employees and Sales per Geographical Area in Ariston Thermo.**



Source: [https://www.aristonthermo.com/media/files/4102\\_Il\\_Gruppo\\_-\\_ITA.pdf](https://www.aristonthermo.com/media/files/4102_Il_Gruppo_-_ITA.pdf)

<sup>28</sup> See [https://www.aristonthermo.com/media/files/4102\\_Il\\_Gruppo\\_-\\_ITA.pdf](https://www.aristonthermo.com/media/files/4102_Il_Gruppo_-_ITA.pdf)

It is also possible to notice that in Italy there are more employees than sales, maybe in relation to the fact that it is a small market and, at the same time, it is the nation where the governance of the group is concentrated. North and South America are the areas where Ariston Thermo is less present.

The 2018 has been an important year for the firm since it managed to gain market shares in many countries, strengthening its presence in the business world. Moreover, during the same year, Ariston Thermo set its own record through the realisation of the highest amount of investments in innovation and sustainability in its history. In this way, the company also improved its positioning in the market with a view to further developments.

Lastly, the firm underwent substantial organisational changes in some internal operations and functions in line with the international context, which requests collaboration and team working as determinant elements in the global competition.

### III.2.3. Inward Foreign Direct Investments towards the Marche

According to J. Potter et al. (2010), foreign investments have recently targeted the Marche, including technologically advanced sectors, but they still represent a small share of the economy. The reason for the scarce number of inward FDIs may be

individuated, among other factors, in the poor road and rail infrastructure, which besides representing a weighty constraint for the regional economy development, it discourages to an even greater extent the foreign direct investments (J. Potter et al., 2010).

Even in this case, an important contribution to encourage foreign firms to expand in the Marche may come from the regional government. On a regulatory and programmatic level, new promotional plans have been issued by the Region with the purpose of empowering the openness towards the internationalization process of the entire system. These programs aim at combining the drivers of internationalization, promotion, innovation and attraction of investments in an optical of system (Rapporto ICE 2017-2018). Moreover, the Region can promote its skilled labour force, the university system or the quality of life of the Marche to attract foreign investments and, more importantly, it may start supplying relationships by creating some sort of connection between multinational companies and local businesses (J. Potter, 2010). It is indeed important to consider that the attraction of investments is a complex operation. In the Marche a new way to promote inward FDIs has taken root. It consists with the promotion of original touristic experiences together with the experience of the productive system of excellence of the region, fusing together the economic field with the cultural sphere. With this purpose, the Marche government has activated financial instruments and plan of territorial marketing. A fundamental role for the territorial development is

conducted by the collaboration of the Region with the Agencies, which are public or private-in house organs.

Ultimately, since the MNEs' localization decisions are driven by national factors rather than regional characteristics, another possible solution to foster inward FDIs can be provided by the creation of a partnership between the Marche government and the national bodies in charge of dealing with the promotion and attractiveness of foreign investments (J. Potter et al., 2010).

The need for a significant change in the organizational structure is undeniable. To compete at high levels internationally, there is a great need to equip the governance with modern and adequate models. This does not mean abandoning the traditional model of family-owned businesses but the separation of the ownership from the management. Indeed, this latter role should be entrusted to competent professionals. For many of the Marche's firm, the very challenge will not be found in products or technologies but rather in the capacity to innovate their organization system. The alternative is leaving the company to others (D. Iacobucci, 2018).

*Rapporto ICE 2017-2018* counts 118 foreign invested companies in the Marche, which represents 0.9% of the Italian inward foreign investments. The European countries and North-America represent the primary areas of origins for the inward FDIs in the Marche.

The manufacturing has again proven itself to be the leading sector within the region, well exceeding the performances of the other ones. 40% of foreign enterprises that entered the Marche's market in fact operate in this sector, employing 81% and registering 79% of the turnover generated by the inward FDIs in the region. At the second place there is the whole sale and retail trade sector with 21% of firms, 8% employees and 11% turnover. The manufacturing industry that register the vast majority of turnover and employs most of employees of the Marche's inward FDIs scenario is the one operating in the electrical and household equipment industry (43% of employees and 49% turnover of the total inward FDIs of the Marche) (elaboration of Banca dati Reprint, Politecnico di Milano – ICE, 2015).

**Table III.5 - Growth rates of number of firms, number of employees and turnover for inward FDIs in Central Italy, 2012-2017.**

	<b>Firms</b>	<b>Employees</b>	<b>Turnover</b>
<b>Central Italy</b>	4%	-1%	-16%
Tuscany	13%	32%	25%
Umbria	1%	9%	66%
The Marche	8%	34%	42%
Lazio	0%	-11%	-25%
<b>Italy</b>	5%	10%	0%

Source: Data elaboration of Banca dati Reprint, R&P - Politecnico di Milano - ICE Agenzia.

The international presence in the Marche is growing as it is possible to observe in Table III.5. The presence foreign firms that performed FDIs in the region increases of 8% between 2012 and 2017, the number of employees and turnover face an even

higher growth: +34% and +42% respectively (for further details about outward FDIs by region see Appendix – Table 2). These figures may confirm the attractiveness of the entrepreneurial system of the region or the need of Italian firms to cede the activities to foreign investors. Northern America appears to be the main investor in the Marche for what concern turnover generated by FDIs, in particular the main American earnings derive from the electrical and household equipment industry.

In recent times, a number of Marche's enterprises is undergoing acquisitions from foreign groups. Among them, the latest important FDIs for the region regard iGuzzini Illuminazione (2018), Indesit (2014) and Poltrona Frau (2014). In the latter two cases, the local companies have been subject to the purchase of the majority of shares at the hands of U.S. companies<sup>29</sup>. In all three cases, the main reason for the divestiture is not due to a crisis situation but to factors regarding the market positioning and the governance model (D. Iacobucci, 2018).

The acquisition of iGuzzini Illuminazione is peculiar. Here, it possible to see the obtaining of 100% the shares by a Swedish group, the Fagerhult. Since the iGuzzini

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<sup>29</sup> In 2014, Indesit sold 60% of its shares to Whirlpool and Poltrona Frau sold 51.3% of its shares to Haworth.

case is the most recent and significant (in term of share's acquisition), this paragraph will take it as example of inward Foreign Direct Investment in the area. iGuzzini was founded in 1959 and has its headquarter in Recanati. The firm is leader in the lighting sector at international level and it is characterized by an excellent reputation and high brand awareness. In detail, the company deals with the design, the production and the commercialization of indoor and outdoor lighting solutions. In confirmation of its soundness, in the fiscal year 2017 the iGuzzini had 1300 employees and 232 million euros revenues, classifying in the top 10 of the ranking for regional firms edited by Fondazione Aristide Merloni every year. The buyer, Fagerhult, is one of the main European groups in the lighting sector and in 2017 had 500 million euros revenues. The biggest difference between the two companies lies in the growth speed since the Swedish firm thanks to the acquisition of many other firms and brand, managing to double its earnings from 2010 to today. Fagerhult group is listed on the Nasdaq of Stockholm. Its major shareholder is a financial investment group (Investment AB Latour), which is in turn listed on the Stockholm Stock Exchange and whose major shareholder is family Douglas (D. Iacobucci, 2018). It is clear that these two foreign companies hold managerial structure and governance model such that they perfectly fix the openness of the international market.

The 15<sup>th</sup> October 2018 Fimag (Finanziaria Mariano Guzzini, holding of the iGuzzini group) and Tipo (Tamburini Investment Partners) signed a letter of intent with Fagerhult regarding the acquisition of the totality of shares of iGuzzini<sup>30</sup>. This fact opened a *due diligence* phase where the two parties officially committed in the valuation of the deal, with the pledge of signing the definitive contracts for the acquisition by the end of 2018. It falls to the transferor the receiving of a significant portion of the Fagerhult shares. In other words, iGuzzini becomes stockholder of the combined entity. Moreover, the president (Adolfo Guzzini) and the CEO (Andrea Sasso) of iGuzzini will hold their position in the company and will assume important roles within the Top Management of Fagerhult as well. The strategic partnership between the firms will strengthen the competitive positioning of Fagerhult in the professional lighting market thanks to the expansion of its geographical presence and the significant complementarity of the product portfolios.

The aforementioned acquisition can be seen as the appearance on the market of a source of modernization for the territory. Fagerhult can bring a new point of view, for example in the management style. As underlined by Professor Iacobucci, the most important and urgent element that our economic system needs is innovation in

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<sup>30</sup> For press release see [https://cdn3.iguzzini.com/getmedia/35d32d2b-bc39-4df5-bbae-5290dfd3c5db/FIMAG-e-TIPO-firmano-una-lettera-di-intenti-per-la-cessione-della-iGuzzini-illuminazione\\_comunicato-stampa](https://cdn3.iguzzini.com/getmedia/35d32d2b-bc39-4df5-bbae-5290dfd3c5db/FIMAG-e-TIPO-firmano-una-lettera-di-intenti-per-la-cessione-della-iGuzzini-illuminazione_comunicato-stampa)

this very sphere and this FDI may potentially represent a first step in this evolution path. The entrance of structures companies such as Fagerhult can bring to the area the right insights in order to achieve that level of progress.

Often the public opinion sees the acquisition of a local company as a defeat, especially with the consequences of such measures on the society and on the employment. Examining this example, it emerges that FDI, when well-managed, can avoid those negative consequences. In fact, the trade unions felt satisfied after the meeting with the board of iGuzzini Illuminazione after the announcement of the acquisition. The decision regard the confirmation of all the current work contracts in perspective of an increase of the importance of the brand and the enhancement of the target market (Cronache Maceratesi, 2018).

## CONCLUSIONS

Multinational enterprises are one of the most appropriate depictions of the results of globalisation and play a fundamental role in the international commerce. They stand out for their capability to outperform domestic and foreign rivals thanks to intensive in capital, skilled labour, intellectual property and a relative technological superiority. For these reasons, they are often considered as source of progress for the host economies.

The paper aims at individuating the impact that foreign direct investments performed by multinationals have on local markets. Although many econometric researches have been performed in the field, the view of the academics about spillovers is not unanimous. Considering numerous empirical researches, it emerged that FDIs can have both positive and negative implications. The investigations show that inward FDIs give access to knowledge through technological spillovers and generate an increase in the firms' productivity if local companies are able to imitate MNEs' best practices. Moreover, multinationals may raise the demand of raw materials and thus increase domestic welfare. On the other hand, many are adverse to their presence mostly because their arrival often coincides with loss in profits and the market exit of local firms, which suffer the technology superiority of MNEs. Furthermore, when such phenomena spread on a larger scale, it may generate loss in national welfare and reduce the labour demand.

During the last decades, the global economy has experienced high growth rates in FDI flows and the European Union held a great concentration of multinationals' activities since the early 1990s. Nevertheless, Italy attracted decidedly less FDI compared to other EU countries and its main problems consist in the so-called country-effect e.g. characteristics such as the poor state of infrastructures or the factor costs, which deter foreign MNEs to locate their subsidiaries in Italy. However, empirical researches demonstrated that Italy benefits from MNE presence. In the 2017-2018 period, nearly the one half of subsidiaries of the industrial sector developed significant innovation and research contents within the country. Nonetheless, a negative competition effect due to the entry of MNEs with superior technological, managerial and organizational skills often implicates the market exit of local firms and affect the structure of the local production system. Meanwhile, Italian outward FDI are mainly concentrated in the manufacturing sector and aim at improving the products quality and accessing new technological competencies. However, the tendency towards the delocalisation of business activities or function is decreasing for Italian firms. Looking towards the future, the UE15 will remain the main localisation area for the next Italian outward FDI for both the industry and the service field.

Not every local enterprise has been able to move forward in a scenario where the openness to the international trading requires certain capabilities and organisational structures. The entrepreneurial system of the Marche, for instance, lacks of adequate competencies and visions, oriented to the modification of the economic behaviour of businesspeople.

The major players for the internationalisation path of the region are in fact the largest firms, which are able to reach higher levels of efficiency. The regional government is implementing a number of interventions with the aim of directly helping firms in their internationalisation projects, with particular attention to the SMEs, considering their tangible difficulties in undertaking these strategies.

Taking into consideration the fact that the EU market demand is slowly shrinking, the current opportunities come from the extra UE market segment but this remains inaccessible for the small operators, having regard to the difficulties that these entities undergo under this aspect.

Figures for outward FDIs are worrisome: if the number of firms present abroad register an increase, the number of employees and turnover underwent a sharp deterioration. On the other hand, inward FDIs presence in the Marche is growing. Foreign firms that performed FDIs in the region increases between 2012 and 2017 together with the number of employees and turnover that face even higher growth rates. These figures may confirm the attractiveness of the entrepreneurial system of the region or the need of Italian firms to cede the activities to foreign investors.

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## APPENDIX

*Appendix - Figure 1 Collection of 40 studies regarding horizontal productivity spillovers in developing, developed and transition economies.*

<i>Author</i>	<i>Country</i>	<i>Period</i>	<i>Data</i>	<i>Aggregation level<sup>a</sup></i>	<i>Result<sup>b</sup></i>
<i>Developing economies</i>					
1 Blomström and Persson (1983)	Mexico	1970	Cross-sectional	Industry	+
2 Blomström (1986)	Mexico	1970/1975	Cross-sectional	Industry	+
3 Blomström and Wolff (1994)	Mexico	1970/1975	Cross-sectional	Industry	+
4 Kokko (1994)	Mexico	1970	Cross-sectional	Industry	+
5 Kokko (1996)	Mexico	1970	Cross-sectional	Industry	+
6 Haddad and Harrison (1993)	Morocco	1985–89	Panel	Micro and industry	?
7 Kokko and others (1996)	Uruguay	1990	Cross-sectional	Micro	?
8 Blomström and Sjöholm (1999)	Indonesia	1991	Cross-sectional	Micro	+
9 Sjöholm (1999a)	Indonesia	1980–91	Cross-sectional	Micro	+
10 Sjöholm (1999b)	Indonesia	1980–91	Cross-sectional	Micro	+
11 Chuang and Lin (1999)	Taiwan	1991	Cross-sectional	Micro	+
12 Aitken and Harrison (1999)	Venezuela	1976–89	Panel	Micro	–
13 Kathuria (2000)	India	1976–89	Panel	Micro	?
14 Kokko and others (2001)	Uruguay	1988	Cross-sectional	Micro	?
15 Kugler (2001)	Colombia	1974–98	Panel	Industry	?
16 López-Córdova (2002)	Mexico	1993–99	Panel	Micro	–, ?
17 Görg and Strobl (2002c)	Ghana	1991–97	Panel	Micro	+
<i>Developed countries</i>					
18 Caves (1974)	Australia	1966	Cross-sectional	Industry	+
19 Globerman (1979)	Canada	1972	Cross-sectional	Industry	+
20 Liu and others (2000)	United Kingdom	1991–95	Panel	Industry	+
21 Driffield (2001)	United Kingdom	1989–92	Cross-sectional	Industry	+
22 Girma and others (2001)	United Kingdom	1991–96	Panel	Micro	?
23 Girma and Wakelin (2001)	United Kingdom	1980–92	Panel	Micro	?
24 Harris and Robinson (2004)	United Kingdom	1974–95	Panel	Micro	?
25 Girma and Wakelin (2002)	United Kingdom	1988–96	Panel	Micro	?

<i>Author</i>	<i>Country</i>	<i>Period</i>	<i>Data</i>	<i>Aggregation level<sup>a</sup></i>	<i>Result<sup>b</sup></i>
26 Haskel and others (2002)	United Kingdom	1973–92	Panel	Micro	+
27 Girma (2002)	United Kingdom	1989–99	Panel	Micro	?
28 Girma and Görg (2002)	United Kingdom	1980–92	Panel	Micro	?
29 Ruane and Ugur (2002)	Ireland	1991–98	Panel	Micro	+
28 Barrios and Strobl (2002)	Spain	1990–94	Panel	Micro	?
29 Dimelis and Louri (2002)	Greece	1997	Cross-sectional	Micro	+
30 Castellani and Zanfei (2002b)	France, Italy, Spain	1992–97	Panel	Micro	+ for Italy; – for Spain; ? for France
31 Keller and Yeaple (2003)	United States	1987–96	Panel	Micro	+
32 Görg and Strobl (2003)	Ireland	1973–96	Panel	Micro	+
<i>Transition economies</i>					
33 Djankov and Hoekman (2000)	Czech Republic	1993–96	Panel	Micro	–
34 Kinoshita (2001)	Czech Republic	1995–98	Panel	Micro	?
35 Bosco (2001)	Hungary	1993–97	Panel	Micro	?
36 Konings (2001)	Bulgaria	1993–97	Panel	Micro	–
	Poland	1994–97			?
	Romania	1993–97			–
37 Damijan and others (2001)	Bulgaria, Czech Republic, Estonia, Hungary, Poland, Romania, Slovakia, Slovenia	1994–1998	Panel	Micro	? or – + only for Romania
38 Li and others (2001)	China	1995	Cross-sectional	Industry	+
39 Smarzynska-Javorcik (forthcoming)	Lithuania	1996–2000	Panel	Micro	?
40 Zukowska-Gagelmann (2000)	Poland	1993–97	Panel	Micro	–

Source: Görg H, Greenaway D., Much Ado about Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment?, The World Bank Research Observer, Vol. 19(2), 2004, 177-178.

***Derivation of the theoretical model on the effects of subsidies in the host economy<sup>31</sup>.***

Assumptions:

- The host economy has two sectors: an agricultural one, which is perfectly competitive and hires unskilled labour only, and a manufacturing sector consisting of  $N$  industries, each of which is imperfectly competitive and hires unskilled and skilled labour. The price of the good and the wage for unskilled labour are then both equal to one.
- Skilled labour represents a scarce resource, which is used by relatively high-technology sectors, such as manufacturing.
- A single foreign firm in industry 1 contemplates locating production in the host country.
- There are  $l$  units of unskilled labour and  $k$  units of skilled labour in the host economy, where skilled labour earns wage  $z$ . Total agricultural output is  $x$ .
- To produce one unit of output, a domestic firm in industry  $i$  requires  $a_i$  units of unskilled labour and one unit of skilled labour. If the foreign firm in industry 1 chooses to produce in the host economy, it requires  $A_1$  unit of unskilled labour and  $D_1$  units of skilled labour per unit of output.
- The revenue function for the domestic firm in industry  $i$  is  $r^i(y_i, Y_i, \lambda_i(Y^d_1))$ , where  $y_i$  is the output of the domestic firm,  $Y_i$  is the output of the rival foreign firm,  $Y^d_1$  is the domestic output of foreign firm 1, and the function  $\lambda_i()$  captures productivity spillovers from foreign

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<sup>31</sup> From Hanson G. H., *Should Countries Promote Foreign Direct Investment?*, G-24 Discussion Paper 9, UNCTAD, Geneva, 2001, pp. 15-18.

firm 1's domestic production to domestic industry  $i$ .  $\lambda'_i$  may be positive or negative. The revenue function for the rival foreign firm in industry  $i$  is  $R_i(Y_i, y_i)$ .

Factor-market equilibrium for unskilled and skilled labour is captured in the following equation, respectively:

$$1 = x + \sum_i a_i y_i + A_1 Y_1$$

$$k = \sum_i y_i + D_1 Y_1$$

For domestic firm  $i$ , profit maximization implies the following first-order condition:

$$r_1^i - a_i - z = 0$$

If foreign firm 1 chooses to manufacture in the host economy, its output choice is defined by the following condition:

$$R_1^i - A_1 - D_1 z + s = 0$$

At this point, the model has all the elements to study the impact of a change in the production subsidy to foreign firm 1 on host-economy welfare. For this purposes, the relevant components of host-economy welfare are incomes to unskilled and skilled labour, profits to domestic firms, and the subsidy to foreign firm 1.

$$W = 1 + zk + \sum_i [r^i - (a_1 + z)y_i] - sY_1$$

Since  $k = \sum_i y_i + D_1 Y_1$  we obtain:

$$W = 1 + zD_1 Y_1 + \sum_i [r^i - a_i y_i] - sY_1$$

Totally differentiating the latter equation, we get:

$$\begin{aligned} dW &= dzD_1 Y_1 + zD_1 dY_1 \\ &+ \sum_i [r_1^i + r_2^i B'_i - a_i] dy_i \\ &+ \sum_i r_3^i \lambda'_i dY_1 - dsY_1 \end{aligned}$$

To simplify the equation, we define the strategic effect of own-industry changes in domestic output on domestic profit as  $\phi_i \equiv r_2^i B'_i \geq 0$ . Then we define the direct effect of the multinational productivity spillover on domestic profits by  $\beta_i \equiv r_3^i \lambda'_i$ .

Using the equation that describes the profit maximization for domestic firm  $i$ , we get that  $r_1^i - a_i = z$  and combining the equation that captures the factor-market equilibrium for skilled labour  $k = \sum_i y_i + D_1 Y_1$  we see that:

$$dk = 0 = \sum_i dy_i + D_1 dY_1$$

It is now possible to define the host economy welfare by applying the definition of the latter two equations and we finally obtain:

$$dW = (dzD_1 - ds)Y_1 + \sum_i \phi_i dy_i + dY_1 \sum_i \beta_i.$$

Appendix - Table 1 – Outward FDIs, detail by region.

Regions and macroareas	Number of Firms	Employees						Turnover					
	Units	Percentage Distribution					Units	Percentage Distribution					Million EUR
	2017	2000	2005	2008	2016	2017	2017	2000	2005	2008	2016	2017	2017
<b>North-western Italy</b>	<b>15.950</b>	<b>60,3</b>	<b>56,0</b>	<b>53,3</b>	<b>54,4</b>	<b>54,6</b>	<b>887.833</b>	<b>59,3</b>	<b>51,7</b>	<b>43,2</b>	<b>59,7</b>	<b>59,1</b>	<b>309.999</b>
Piedmont	3.304	20,7	22,5	18,4	20,6	20,5	333.632	25,7	23,9	15,0	32,3	31,6	165.589
Valle d'Aosta	27	0,0	0,0	0,0	0,0	0,0	187	0,0	0,0	0,0	0,0	0,0	63
Lombardy	11.809	39,0	32,8	34,1	33,2	33,4	543.994	32,9	26,9	27,7	26,8	26,9	140.940
Liguria	810	0,5	0,7	0,7	0,6	0,6	10.020	0,7	1,0	0,6	0,6	0,7	3.407
<b>North-eastern Italy</b>	<b>11.882</b>	<b>19,9</b>	<b>22,7</b>	<b>24,0</b>	<b>25,5</b>	<b>25,3</b>	<b>411.133</b>	<b>12,9</b>	<b>14,3</b>	<b>14,0</b>	<b>14,3</b>	<b>14,6</b>	<b>76.490</b>
Trentino-Alto Adige	853	0,9	1,0	1,0	1,4	1,4	22.445	0,6	0,6	0,6	1,0	1,0	5.135
Veneto	4.991	8,0	10,2	10,2	11,9	12,0	195.802	5,5	6,2	5,3	5,4	5,5	29.058
Friuli-Venezia Giulia	1.139	1,2	1,3	1,7	2,5	2,3	38.172	0,9	0,9	0,9	1,1	1,2	6.034
Emilia-Romagna	4.899	9,8	10,1	11,1	9,6	9,5	154.714	5,9	6,6	7,3	6,7	6,9	36.263
<b>Central Italy</b>	<b>6.099</b>	<b>17,9</b>	<b>18,3</b>	<b>19,8</b>	<b>17,2</b>	<b>17,2</b>	<b>279.618</b>	<b>26,6</b>	<b>31,9</b>	<b>40,9</b>	<b>24,5</b>	<b>24,6</b>	<b>129.130</b>
Tuscany	2.041	2,9	3,6	3,6	4,1	4,1	65.948	2,1	2,5	2,8	3,0	3,2	16.931
Umbria	385	0,2	0,5	0,5	0,6	0,6	9.035	0,1	0,2	0,2	0,3	0,3	1.401
Marche	864	2,1	3,3	2,6	1,3	1,3	21.654	1,1	1,5	1,3	0,6	0,6	3.042
Lazio	2.809	12,7	10,9	13,1	11,2	11,2	182.981	23,2	27,7	36,5	20,6	20,6	107.758
<b>Southern Italy</b>	<b>1.817</b>	<b>1,9</b>	<b>3,0</b>	<b>3,0</b>	<b>2,9</b>	<b>3,0</b>	<b>48.946</b>	<b>1,3</b>	<b>2,0</b>	<b>1,9</b>	<b>1,5</b>	<b>1,6</b>	<b>8.586</b>
Abruzzo	308	0,2	0,6	0,5	0,5	0,5	7.662	0,1	0,2	0,2	0,2	0,2	1.075
Molise	41	0,1	0,2	0,0	0,0	0,0	371	0,0	0,1	0,1	0,0	0,0	179
Campania	676	0,6	1,0	1,4	1,4	1,4	22.227	0,5	0,8	1,1	0,9	0,9	4.720
Apulia	314	0,5	0,7	0,7	0,6	0,6	10.076	0,2	0,3	0,2	0,2	0,3	1.348
Basilicata	53	0,0	0,0	0,1	0,1	0,1	1.498	0,0	0,0	0,0	0,0	0,0	99
Calabria	32	0,0	0,0	0,0	0,0	0,1	1.863	0,0	0,0	0,0	0,0	0,0	37
Sicily	314	0,3	0,2	0,2	0,2	0,3	4.549	0,2	0,1	0,1	0,1	0,1	741
Sardinia	79	0,1	0,2	0,1	0,0	0,0	700	0,1	0,5	0,1	0,1	0,1	385
<b>Total by Region</b>	<b>35.748</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>1.627.530</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>524.205</b>

Source: Rapporto ICE 2018, p. 261.

*Appendix - Table 2 – Inward FDIs, detail by region.*

Regions and macroareas	Number of Firms	Employees					Turnover						
	Units	Percentage Distribution					Units	Percentage Distribution					Million EUR
	2017	2000	2005	2008	2016	2017	2017	2000	2005	2008	2016	2017	2017
<b>North- western Italy</b>	<b>7.337</b>	<b>64,9</b>	<b>64,2</b>	<b>58,1</b>	<b>58,3</b>	<b>59,4</b>	<b>762.056</b>	<b>61,9</b>	<b>60,0</b>	<b>57,3</b>	<b>55,2</b>	<b>57,2</b>	<b>324.591</b>
Piedmont	1.117	16,8	13,3	11,5	9,0	8,9	114.777	13,2	7,6	7,8	7,2	7,3	41.640
Valle d'Aosta	18	0,3	0,5	0,2	0,2	0,2	1.991	0,2	0,3	0,2	0,1	0,1	656
Lombardy	5.901	45,5	48,3	44,0	47,0	48,1	617.484	46,6	49,9	46,7	45,1	46,8	265.522
Liguria	301	2,2	2,2	2,5	2,2	2,2	27.804	1,8	2,2	2,6	2,8	3,0	16.773
<b>North - eastern Italy</b>	<b>2.979</b>	<b>14,5</b>	<b>15,2</b>	<b>15,5</b>	<b>19,0</b>	<b>19,5</b>	<b>249.803</b>	<b>12,4</b>	<b>13,1</b>	<b>12,8</b>	<b>15,2</b>	<b>16,1</b>	<b>91.589</b>
Trentino-Alto Adige	572	1,6	1,8	1,8	1,6	1,6	20.675	1,2	1,2	1,4	1,4	1,4	7.787
Veneto	1.118	4,9	5,0	5,2	7,8	8,2	105.269	4,9	5,1	4,9	6,5	7,0	39.829
Friuli-Venezia Giulia	235	2,2	2,5	2,2	2,1	2,2	28.004	1,7	1,8	1,4	1,3	1,4	7.864
Emilia-Romagna	1.054	5,9	5,9	6,4	7,4	7,5	95.855	4,5	4,9	5,1	6,1	6,4	36.108
<b>Central Italy</b>	<b>1.958</b>	<b>13,8</b>	<b>15,0</b>	<b>21,1</b>	<b>18,1</b>	<b>16,5</b>	<b>212.177</b>	<b>20,3</b>	<b>22,8</b>	<b>26,1</b>	<b>24,5</b>	<b>22,4</b>	<b>127.460</b>
Tuscany	619	3,3	3,7	3,4	4,0	4,1	52.971	3,1	3,1	3,0	4,1	4,3	24.588
Umbria	74	0,8	0,7	0,7	0,5	0,5	6.714	0,8	1,1	1,2	0,5	0,5	3.037
Marche	118	0,5	0,5	0,6	1,2	0,7	9.425	0,3	0,3	0,3	0,8	0,5	2.650
Lazio	1.147	9,1	10,0	16,4	12,5	11,2	143.067	16,1	18,2	21,5	19,1	17,1	97.186
<b>Southern Italy</b>	<b>778</b>	<b>6,8</b>	<b>5,6</b>	<b>5,2</b>	<b>4,6</b>	<b>4,6</b>	<b>59.036</b>	<b>5,5</b>	<b>4,1</b>	<b>3,8</b>	<b>5,1</b>	<b>4,3</b>	<b>24.171</b>
Abruzzo	108	2,4	2,3	2,2	1,8	1,8	23.458	1,7	1,6	1,5	1,5	1,6	9.069
Molise	11	0,1	0,0	0,0	0,0	0,0	480	0,0	0,0	0,0	0,0	0,0	124
Campania	182	1,5	1,2	1,0	1,1	1,1	14.135	1,3	0,8	0,7	0,9	0,9	5.156
Apulia	139	1,1	0,8	0,8	0,6	0,6	8.298	1,0	0,7	0,6	0,4	0,4	2.460
Basilicata	77	0,8	0,1	0,1	0,0	0,0	601	0,8	0,1	0,1	0,0	0,0	247
Calabria	35	0,1	0,2	0,2	0,2	0,2	2.083	0,0	0,1	0,1	0,1	0,1	575
Sicily	155	0,3	0,3	0,4	0,5	0,5	6.313	0,2	0,5	0,4	0,9	0,9	5.048
Sardinia	71	0,5	0,7	0,5	0,3	0,3	3.668	0,4	0,4	0,4	1,3	0,3	1.493
<b>Total by Region</b>	<b>13.052</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>1.283.072</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>567.811</b>

Source: Rapporto ICE 2018, p. 260.