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Multinational Corporations, Technology Spillovers and Human Rights' Impacts on Developing Countries

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MULTINATIONAL CORPORATIONS, TECHNOLOGY SPILLOVERS AND HUMAN RIGHTS' IMPACTS ON DEVELOPING COUNTRIES

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ABSTRACT

This paper stems from the recognition that, in the current globalized world, the achievement of economic development goals is not necessarily accompanied by improved social conditions, or respect of people's human rights more generally. Through their internal resources and capabilities, which often exceed those of many developing countries, Multinational Corporations (MNCs) can either positively or negatively condition their route towards development. While there are reported cases of positive economic effects generated by MNCs operations in developing countries, there is also plenty of evidence about MNCs involvement in human rights' abuses in these countries. To date, no scholarly research has analysed the factors that favour a positive (negative) MNC effect on host developing countries, by looking jointly at economic and human rights' impacts. This paper is a first attempt to take into account and integrate evidence coming from two distinct streams of literature, which have so far poorly interacted – i.e. studies on MNCs' economic impact with a focus on technology spillovers; and studies on MNCs' human rights' impact on host developing countries.

Key words: Multinational corporations, development, human rights, technology spillovers.

JEL Codes: O1; O33; M14

1. INTRODUCTION

The world economy has been overtaken by one of the most severe global economic crises in history. While some of the advanced economies are recovering slowly, the Millennium Development Goals Report (2009) shows that poor inhabitants in developing countries are still suffering from the upheaval of the last year, stating that "economic hardship has pushed tens of millions of people into vulnerable employment and increased the number of those who, though employed, do not earn enough for themselves and their families to rise above the poverty line of $1.25 a day." (Ban Ki-moon, Secretary-General, United Nations). The current global scenario makes development goals both more difficult to achieve and even more important. The complexity is due to the fact that *development* includes both increasing national Gross Domestic Product (GDP), and achieving social justice and respect for human rights (HR).[1] As Nobel Prize winner Amartya Sen (2000: 3) comments: "development requires the removal of major sources of unfreedom: poverty as well as tyranny, poor economic opportunities as well as systematic social deprivation, neglect of public facilities as well as intolerance or over activity of repressive states". In his Nobel Prize lecture (2001), Joseph Stiglitz, also warns that academics have the responsibility "to ensure that the world of the future be one in which there is not only greater economic prosperity, but also more social justice". On the policy-side the United Nations Development Programme (UNDP) has put into practice this idea of development by mainstreaming the "rights-based approach" to development and recognizing that human rights and sustainable development are linked and complementary.[2]

Despite these encouragements and actions, the current globalized world, sadly, is one where the achievement of economic goals is not necessarily accompanied by improved social conditions, or respect of people's human rights more generally. For instance, in Nigeria, foreign oil corporations have brought the technologies to extract oil, but have contributed to destroying the Niger Delta eco-system, severely hampering the capacity of the local community (the Ogoni) to carry out their subsistence activities over the long term. This

[1] Human rights are universal and inalienable prerogatives inherent in every individual based on the mere fact of being a human being. They are enshrined in international agreements (e.g. the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights).

[2] UNPD (1998) Integrating Human Rights with Sustainable Human Development. http://hurilink.org/tools/UNDP_integrating_hr.pdf

violates their rights to health, to live in a generally satisfactory environment favourable to development, to dispose freely of their natural resources, to housing, food and life.[3] Similarly, large-scale investments in all-inclusive tourism industry in the Caribbean have created jobs and promoted modernization in the industry, but have also produced irreversible environmental damage to the coastal and marine environment (Stonich, 1998). Job creation and technology transfer has been achieved in Mexico through policies to attract foreign investment in the Northern frontier regions (Carrillo and Lara, 2004) but these benefits have also been accompanied by systematic labour rights' violations, whose severity is increasing over time (Meyer, 1998). The negative human rights' impacts observed in the three cases cited (and many others could be added) are irreversible or long-term in nature, and cannot be alleviated by injections of economic beneficial effects. Hence, to promote development processes it is crucial to *foresee* and *prevent* initiatives whose positive economic effects will be accompanied by negative impacts on human rights, and to *promote* those that are likely to bring positive effects in all directions simultaneously.

While a *prima facie* consideration is that states bear responsibility for promoting economic development and providing mechanisms able to guarantee human rights within their national territories, academic scholars of different disciplines and policy-makers are paying increased attention to the role of *private actors* in these processes. Private actors can be relatively powerful in contexts where state capacity is weak (Englehart, 2009) and their operations can significantly change the destiny of countries or regions. As recently stated by the High Commissioner for Human Rights, Navi Pillay, in addressing the Human Rights Council in June 2009 "[t]he private sector is an increasingly vital force in enabling the economic and social development that is so inextricably connected with human rights and security." (Pillay, 2009: 1) This is particularly true in the case of large Multinational Corporations (MNCs), whose internal resources and capabilities exceed those of many developing countries– either positively or negatively conditioning their route towards development.

While analysis of the relationship between MNCs and development is not novel *per se*, the impacts of MNC activities on economic and human rights are generally studied separately, with little account taken of their

[3] Social and Economic Rights Action Center and Center for Economic and Social Rights v. Nigeria, Comm.No. 155/96, ACHPR/COMM/A044/1, 27/5/02. This landmark case represents the first instance of the relationship between the environment and human rights has being clearly spelled out.

interaction (Meyer, 2004). On the one hand, economists have focused on the economic impacts of MNCs, i.e. on the degree to which MNCs generate positive spillovers in host countries, technology transfer and subsequent increases in the productivity of domestic firms. On the other hand, the focus of political scientists and law scholars has been the impact of MNCs on human rights, with economic impacts mostly taken for granted.[4] The lack of attention to the interaction between these impacts is unfortunate because it inevitably constrains our understanding of how MNCs can contribute to development, and the degree to which academic research is able to provide policy-makers and corporate managers with recommendations and tools that permit the achievement of both economic and social development goals.

This paper addresses this gap in the literature by making an appraisal of the existing studies about MNCs' economic (via technology transfer) and human rights' impact on host developing countries.
The aim of the paper is to take stock of the available empirical evidence, discuss its implications for policy-makers and corporate managers and to identify priorities for a new research agenda in this area of investigation. The paper is structured as follows: Section 2 summarises the salient research results of both economic and human rights studies of MNCs impact on host developing countries. Section 3 is an original review of the literature organized around key factors, which have been associated by both economic and human rights' scholars to either positive or negative impacts. Section 4 concludes by calling for a new research agenda in the study of MNCs' impact on developing countries and speculates on the implications that this research could have on both policy-makers and corporate managers.

2. THE INCONCLUSIVE EVIDENCE OF MNCs IMPACT ON HOST DEVELOPING COUNTRIES

Pre the 1970s many governments were sceptical about the degree to which Foreign Direct Investment (FDI) could play a positive role in their economies, and restrictions on such investment were common. Since the 1980s, FDI has increased steadily as a consequence of market liberalization policies and developing countries have experienced unprecedented levels of inward FDI –reflected in the ratio of FDI stock to GDP,

[4] For simplicity, in this paper, I will call "economists" scholars focusing on the economic impact of MNCs, including scholars of economic development, economic geography, innovation, international business, etc. In contrast, I will call "human rights scholars" those that have looked at the human rights' impact of MNCs, hence including law scholars and political scientists, among others.

which almost trebled between 1990 and 2005, from about 10 per cent to 27 per cent. Even during the current global crisis, which began in the second half of 2007, developing countries have seen continued growth in FDl inflows. The World Investment Report (UNCTAD, 2008) reports that the universe of MNCs is expanding and estimates that total sales of MNCs in 2007 were $31 trillion, a 21 per cent increase over 2006. Also, developing and transition economies saw FDI inflows in 2008 rise to record levels – reflecting the increasing importance of these economies as hosts for investment during the crisis. Although the forecasts for 2009 are not so positive, indicators of activity for the largest MNCs show that the impact of the crisis on them has been marginal, especially in industries with stable demand patterns (oil, tobacco, pharmaceuticals, retailing, utilities and consumer goods) (UNCTAD, 2009). Hence, while the global economic crisis has had a negative impact on most industries and countries, most MNCs have maintained their investments in developing countries, reinforcing their power over individuals and nation states (Ratner, 2001). In light of this, MNCs have attracted the attention of economic and human rights' scholars, who have given rise to a prolific area of research about MNCs' impact on host countries reaching highly controversial results, as discussed in the remainder of this section.

2.1 MNCs, technology transfer and technological spillovers

When a firm decides to invest abroad it is likely pursuing one of the following goals: entry to a particular foreign market (*market seeking* FDI); exploitation of natural resources, e.g. minerals, agricultural products, low cost, unskilled labour (*resource seeking* FDI); a more efficient division between labour and production (*efficiency seeking* FDI); and/or access to foreign technologies or other valuable strategic assets (*strategic asset seeking* FDI) (Dunning, 1993). While MNCs actively seek new investment opportunities abroad, developing country governments are making equally active efforts to attract them - often spending significant portions of their national budgets in the attempt to make their territories attractive locations for MNCs (e.g. through tax holidays and other fiscal incentives). During the crisis, the general trend in FDI policies has remained one of greater openness, including lower barriers to FDI and lower corporate income taxes (UNCTAD, 2009) – although the appropriateness of such openness is being debated in some countries (Sumner, 2008).

Current government interest in MNCs is based on the expectation that they will bring a number of (mostly economic) beneficial effects. With the increased acknowledgement that innovation is crucial for economic development and growth (e.g. Abramovitz, 1989; Fagerberg et al., 1994), governments perceive that one of the key advantages of attracting MNCs is that they represent an important channel of technology transfer.[5] Hence, one of the expected key beneficial effects of MNCs is the generation of technological spillovers (TS), defined here as positive externalities generated by the leakage of high quality knowledge from MNC subsidiaries to other firms in the host country, via the mobility of skilled labour, or the formation of backward/forward linkages with domestic firms, or imitation or demonstration effects.[6]

Despite this optimism, evidence on the generation of TS by MNCs in developing countries is widely considered to be inconclusive. Econometric studies have found evidence of positive spillovers for domestic firms (see among others, Kokko, 1994; Blomstrom et al., 1994 for Mexico; Sjoholm, 1999 for Indonesia; Javorcik, 2004b for Lithuania; Javorcik and Spatareanu, 2009 for the Chzec Republic) and the case case-study literature finds positive contributions of MNC subsidiaries on the upgrading processes in their suppliers, through direct and purposeful transfer of knowledge or training of the labour force (see among others, Albornoz and Yoguel, 2004 and Mc Dermott and Correidoira, 2009 for Argentina; Boehe, 2007 for Brazil; Giroud, 2007 for Malaysia and Vietnam). However, there is also evidence of insignificant or negative spillovers (see among others, Haddad and Harrison, 1993 for Morocco; Aitken and Harrison, 1991 for Venezuela; Djankov and Hoekman, 2000 and Stančík, 2007 for the Czech Republic; Bair and Gereffi, 2001 for Mexico; Agosin and Machado, 2005 for several developing countries covering Asia, Africa and Latin America). On the basis of this mixed evidence, several scholars warn that, although today's policy literature is filled with claims about positive spillovers from FDI, the evidence about their existence is sobering (Rodrik, 1999; Gorg and Greenaway, 2004; Javorcik and Spatareanu, 2005). Hence, Lipsey and Sjoholm (2005) suggest that searching for a universal relationship between FDI and spillovers is futile and what is

[5] Governments' expectation is based on the fact that most MNCs are technologically advanced firms. For instance, in 2002 the 700 largest R&D spending firms in the world – of which at least 98% are MNCs – accounted for close to half (46%) of the world's total R&D expenditure and more than two-thirds (69%) of the world's business R&D (UNCTAD, 2005, p. 151).

[6] There may be other types positive impacts generated by FDI such as the generation of new employment opportunities, wage and export spillovers. However, this paper only focuses on technological spillovers.

important is to understand what are the mediating factors required for the effective generation of FDI spillovers.

2.2 MNCs and human rights

Similarly inconclusive results can be found in the literature investigating the impact of MNCs on human rights in host developing countries. Meyer (1998) identifies two contrasting views: one inspired by Marxism and by the work of Stephen H. Hymer (1971), which argues that FDI undermines human rights and does not promote development. The other claims that MNCs lead to growing levels of gross domestic product, greater respect for human rights, and democratization (Spar, 1999). Advocates of the first view are persuaded by Hymer's idea that MNCs have an interest in maintaining or increasing their international power and to do so they keep down the poorest segments of the population to preserve the pools of cheap labour. It is believed that there is a degree of complicity with repressive states and regimes. MNCs have also been considered to take advantage of weak state capacity (and limited bargaining power) in some developing countries, to obtain access to resources and other valuable assets (see the paradigmatic case of the Angolan diamond industry in Guidolin and La Ferrara, 2007). There is plenty of evidence supporting this view. A landmark case is ITT's involvement in 1973, in subverting Allende's democratic government in Chile (Meyer, 1998). Other cases include the environmental disaster caused by Union Carbide in Bophal India in the 1980s (Meyer, 1998); and the complicity of mining MNCs in plundering resources, prolonging the war and condoning human rights' abuses in the Democratic Republic of Congo (Papaioannou, 2006). Based on this evidence organized civil society has become ideologically opposed to large MNCs; an example is the World Social Forum, which "stand[s] in opposition to a process of globalization commanded by the large multinational corporations and by the governments and international institutions at the service of those corporations interests, with the complicity of national governments" (http://www.forumsocialmundial.org.br).

However, there is another view that considers MNCs to be key actors in the improvement of human rights in developing countries. Howard Perlmutter (1969: 18) believed that certain types of MNCs would "make war less likely, on the assumption that bombing customers, suppliers and employees is in nobody's interest".

More recently, Stopford (1998: 19) suggested that "with regard to the environment, international big business is both the creator of pollution and the only resource available for its cleanup" adding that "MNCs' record on pollution pales in comparison with those of many local business and state-owned enterprises". And, Spar (1999) acknowledges that MNCs do not invest abroad to improve the conditions of developing economies, but to maximize their returns. She argues, however, that in doing so "multinationals may occasionally also advance the cause of human rights" as they bring capital, technologies, management techniques and managers "who frequently are eager to introduce social improvement alongside their financial investment" (Spar, 1999: 75). These contrasting positions on the relationships between MNCs and human rights reflect the fact that there are no conclusive empirical results. For instance Meyer (1998: 189) argues that "at the broadest levels, MNCs as a group have a net beneficial impact on rights," while adding that, a lower level, there is evidence of "human rights abuses by particular MNCs in particular Least Developed Countries." Also Letnes (2002) finds that the relationship between FDI and human rights is a complex one and that a simplistic universal relationship cannot be identified.

3. THE IMPORTANCE OF MEDIATING FACTORS

While no universally-accepted relationship between MNCs and development has been identified, economists and human rights' scholars do agree on the fact that the positive impact of MNCs on host economies depends on a number of **mediating factors** (see e.g. Smeets, 2008). Mediating factors can be conditions that are (a) **external** to the MNC (i.e. in the host country and the industry) (Section 3.1) or (b) **internal** to it (at the corporate or subsidiary levels) (Section 3.2), which are needed for there to be a positive impact of MNCs on host developing countries. The focus of this review is on factors that have been taken into consideration by both economists and human rights scholars and for which there is empirical evidence about their impact on developing countries.[7] Table 1 summarises the factors identified here and provides an overview of their impact as reflected by the dominant view of the literature on each factor.

[7] This review does not account for those factors which have been studied unilaterally by economists or by human rights' scholars. See Crespo and Fontoura (2007); Smeets (2008); Bell et al. (2008).

[TABLE 1 HERE]

3.1 External factors

3.1.1 Host country characteristics

Economists and human rights scholars by and large converge over three main country-level characteristics associated with a positive impact of MNCs on host economies. The first is the level of **social capability**, which reflects the level of general education and technical competence accumulated by the host country population, firms and institutions (Abramovitz, 1989). Economists have shown that a minimum threshold of social capabilities is required to access foreign technologies and absorb MNCs' technological spillovers (see among many others, Kokko, 1994; Kinoshita, 2001; Konings, 2001; Lall and Narula, 2004; Chudnovsky et al., 2008).[8] This is explained by the fact that, to be able to absorb, adapt and master foreign technologies and skills, local people, firms and institutions need to have accumulated a certain amount of capabilities (Bell and Pavitt, 1993). Human rights' scholars have never analysed this dimension explicitly, but there is some evidence to suggest that domestic firms with stronger absorptive capacities are better equipped to face MNCs' abuses of their dominant positions in domestic markets. One case is illustrated by Hall et al. (2007), who study the introduction of genetically modified (GM) seeds by MNCs in Brazil and the implications of this on local farmers. If we accept that the diffusion of GM seeds by MNC subsidiaries is a way to transfer technologies to developing countries,[9] Hall et al. (2007) show that only more sophisticated farmers were able to adapt their cropping system to the new technology, while subsistence farmers with weaker absorptive capacities suffered from marginalisation and exacerbation of their conditions. This in turn generated a negative social impact on the local communities, as subsistence agriculture is a way to maintain social control over poor areas.

The second factor is the host country's **state capacity**, conceived here as the state's power to enforce contracts and regulate markets (Besley and Persson, 2009), and to guarantee a strong and impartial legal system (Englehart, 2009). Economists consider this dimension to be relevant to the extent that it enforces

[8] At firm level, economists often use the term firm's absorptive capacity to indicate the strength of the firm's knowledge base, consistent with Cohen and Levinthal (1990).
[9] This is a highly debated topic. For an example of such a debate see Tait (2001).

Intellectual Property Rights (IPR) in order legally to appropriate the results of firms' innovative processes. Evidence on the impact of IPR on TS in developing countries suggests that strong IPR increase the probability of TS. For instance, case studies on transition economies (Sharp and Barz, 1997) suggest that MNCs are concerned about transferring technologies and know-how to countries where imitation is easy because of low IPR enforcement. Likewise, in a study on firms investing in Eastern Europe and the former Soviet Union, Javorcik (2004a) finds that, in countries with stronger IPR regimes, investors are more likely to engage in local production, as opposed to focusing solely on setting up distribution networks. This, in turn, suggests that in such countries the potential for generating spillovers is higher. In the same vein, a study on the Indian pharmaceutical industry by Feinberg and Majumdar (2001) suggests that weak IPR regimes may be associated with insignificant MNC spillovers effects – hinting in turn that strong IPR regimes could stimulate domestic firms to innovate and catch up with MNCs. Human rights scholars believe also that a strong legal system is crucial to regulate MNCs' operations in host countries and to inhibit human rights abuses (De Schutter, 2006; Eroglu, 2008, among others). This is corroborated by a recent econometric study by Englehart (2009), covering over 140 countries, which shows that the stronger the state's capacity the more protected will be its citizens from the depredations of non-state actors.

Finally, **civil society,** characterized by local NGOs, activist groups, and communities of people living close to MNCs' operations, is considered to be a crucial trigger of MNCs' greater respect of human rights (Gereffi et al., 2001; Calvano, 2007). Although the civil society factor is generally neglected by economists, anecdotal evidence suggest that local associations in host countries have been effecting in stimulating MNCs to form production linkages with local producers, producing trickle down effects within the host economy (see e.g. the 'Eat Jamaican' campaign in Jamaica's hotel industry).[10]

3.1.2 Industry-level characteristics

An intriguing aspect of the most recent literature is the contrasting results of economists and human rights' scholars' studies on the impact of some industry-level mediating factors on TS and HR respectively. One of these is the level of **industry competition** in the host country. On the one hand, the economists suggest that

[10] http://www.odi.org.uk/resources/download/2910.pdf

higher levels of competition in an industry, generate higher than expected TS from the MNC subsidiaries to the host country (see Wang and Blomstrom, 1992; Glass and Saggi, 1998; Blomstrom et al. 2001). This positive effect is considered to be based on the fact that increased competition may stimulate MNC headquarters to transfer higher quality technology to their subsidiaries, a condition that increases the potential for technological spillovers in the host country. On the other hand, highly competitive industries are associated with negative human rights impacts. Sama (2006) suggests that the MNCs in industries working under high competitive pressures, and which are in advanced stages of maturity or decline in their product life cycles, will be less likely to engage in self-regulating activities, especially in countries with weak state capacity. Spar (1998) supports this view, suggesting that, in the presence of oligopolies (as opposed to highly competitive markets), such as branded footwear (Nike, Reebok, etc.), compliance with codes of conduct is more likely to be part of a race for the top. She contends that in these cases human rights abuses by MNCs will be less likely.

There are also contrasting views on the effect of **technological intensity** (OECD, 1997) of the industry in which the MNC operates. On the one hand, while policy-makers actively encourage the inflow of FDI in high tech industries (UNCTAD, 2005), economists provide arguments supporting the view that, in developing countries, technological spillovers are more likely to occur in low-tech industries (e.g. textile, footwear, wood furniture, etc.). This is due to the fact that the gap between international and local technologies is likely to be low – a condition that facilitates the absorption of foreign knowledge by the host economy (see Kokko, 1994; Xiaoquin Fan, 2002; Alvarez and Molero, 2005). This explanation is based on the assumption that the level of technological sophistication of domestic firms in developing countries is low. However, there is evidence that when firms have accumulated significant technological capabilities the gap with foreign knowledge is likely to be low and spillovers are likely to occur also in high tech industries, as shown by Tsou and Liu (1994) on a study on Taipei, China. On the other hand, Blanton and Blanton (2009) suggest that low-tech industries are more likely to be characterized by low-skilled workers, and conclude that it is in this context that most labour rights abuses by MNCs occur. In contrast, high tech industries are less commonly associated with human rights violations. This association is however not due to the fact that foreign high tech investors commit less human rights abuses *per se*, but to the fact these investors seek production sites with very limited operational risks, which are able to guarantee a certain level of security, and where human rights' conditions are already quite good.

An area where the economists and human rights scholars agree is the **primary sector**. The former group argue that in this sector, especially in the extractive industries, technological spillovers are less likely to occur, compared to other industries, because "the scope for vertical linkages is often limited, due to the use of continuous production processes and the capital intensity of operations" (Lall and Narula, 2004: 453). Human rights scholars add that in this sector MNCs are most likely to violate human rights. For instance, Papionnaou (2006: 263) argues that "countries with abundant natural resources are more susceptible to violent conflicts... In this unending cycle of exploitation, conflicts and human rights violations a substantial number of MNCs have contributed to the maintenance of resource-based conflicts in various ways". Spar (1999) agrees that the primary sector is one where MNCs are more likely to abuse local communities' human rights, although she believes that it will be dependent to a large extent on the type of government and the degree to which it redistributes the gains obtained from the exploitation of natural resources.

3.2 Internal factors

3.2.1 MNC characteristics

An internal factor investigated widely by both economists and human rights' scholars is **MNC strategy** (Dunning, 1993). Scholars tend to agree that *resource-seeking* and *efficiency-seeking* investments are unlikely to generate positive impacts in terms of either TS or HR. In the former case, the evidence is in the same direction as for the primary sector, and shows that *resource-seeking* activities tend to be capital intensive and to provide fewer spillovers compared with other types of investments (Lall and Narula, 2004). Blanton and Blanton (2009) claim that this type of investment tends to operate in "silo" mode, showing little interest in establishing connections with local communities, thus increasing the chances of negative human rights' impacts. This is not just the case of the extractive industries mentioned above, as several sources report of alleged human rights violations also in the agricultural sector (e.g. banana plantations).

Economists have shown that *efficiency-seeking* FDI generates no spillover effects, especially when production is carried out in Export Processing Zones (EPZ)[11] (Kokko, 1994; Altenburg and Meyer-Stamer, 1999; Bair and Gereffi, 2001; Giuliani, 2008). On the side of human rights, Blanton and Blanton (2009) show that *efficiency-seeking* production in EPZ, and based on the search for low-skilled workers, is likely to result in human rights violations (see also Perman et al., 2004). And, relatedly, numerous studies report alleged human rights abuses by US corporations in the maquiladora zone (north of Mexico), especially with respect to labour and environmental rights (Meyer, 1998).

In contrast, *market-seeking* strategies are mostly associated with a significant degree of respect for human rights in host countries. This is due to the fact that MNCs do not want to run the risk of spoiling their reputation in the host country by committing human rights violations. Also, in industries that are susceptible to the scrutiny of a "spotlight" regime (Spar, 1998), such as those in which the brand or the image of the corporation is key to achievement of market leadership, the success of *market-seeking* strategies depends on the degree of social acceptance within the host society (Blanton and Blanton, 2009) – a condition that minimizes human rights' abuses. Evidence on TS from this strategy is mixed. If it does not involve production in the host economy, Lall and Narula (2004) posit that *market-seeking* investments are the least likely to generate spillovers in host countries, compared e.g. with efficiency-seeking strategies. In contrast, Giuliani (2008) finds that, when the MNC also has a production plant in the host country, knowledge spillovers are likely to occur.

Another MNC characteristics that has been studied by both economists and human rights' scholars is the **nationality of the parent company**. The conceptual claim underpinning these studies is that FDI from advanced countries (especially western countries) should be more likely to generate TS and to respect host country human rights. This is based on the presumption that advanced countries' corporations operate at the technological frontier and thus are better able to transfer higher quality knowledge. Likewise, firms from

[11] EPZ are typically (but not exclusively) associated with efficiency-seeking strategies, because EPZ respond to policies specifically designed by governments to attract MNCs that have an interest in minimizing their production costs, taking advantage of fiscal incentives and other facilities offered by the host country – including cheap and abundant labour force.

advanced countries should, in principle, be able to bring transparent management practices and respect of law, consistent with their home-based legal systems. However, there is no consensus in the literature on this mediating factor. Economists show that the activities of MNCs from advanced countries do produce positive spillover effects in some cases, but not in others. For instance, Buckley et al. (2007) find that FDI from outside China has higher spillover effects in high technology industries, than FDI from Hong-Kong, Macau and Taiwan. However, Abraham et al. (2007) find an opposite result. Javorcik et al. (2004), using data from Romania, find mixed results: FDI from the US and Asia generate spillovers, while FDI from EU has a negative effect, reducing domestic firms' productivity due to a competition effect. Human rights scholars have not explicitly explored MNC nationality as a mediating factor, but there is a large body of evidence showing differences in business ethics across countries and cultures (see e.g. Christie et al., 2003; Robertson et al., 2008). This literature has found evidence that culture matters in shaping the ethical behaviour of business managers, but evidence about whether certain types of MNC nationalities (and cultures) are more likely to lead to human rights abuses is scattered and inconclusive.

3.2.2 Characteristics of the MNC subsidiary

This is the area where the lack of research is biggest. Traditionally, subsidiaries have been considered to be passive branches of the MNC, with little scope for initiative and hence their impact on host countries has seldom been studied. This reflects the conventional view of MNCs as hierarchical corporations with subsidiaries tightly controlled by the headquarters. However, contemporary MNCs are adopting networked organizational structures, within which subsidiaries show considerable degrees of innovativeness, entrepreneurship and autonomy (Ghoshal and Bartlett, 1990; Birkinshaw et al., 1998). In this modern type of corporation, it is plausible that subsidiary managers take an active role in driving the impact of their operations on host countries. Thus, this is an area that requires investigation. Economists are beginning to focus on the fact that subsidiaries more likely generate TS are those that conduct more innovative activities at the local level (see e.g. Marin and Bell, 2006; Todo and Miyamoto, 2006; Castellani and Zanfei, 2007; Miozzo and Grimshaw, 2008), those that are more entrepreneurial (Marin and Giuliani, 2009 – see also Dimitratos et al. 2009 for a contribution on the UK). This is due to the consideration that subsidiaries where nothing valuable occurs internally - i.e. with no internal innovative or entrepreneurial activities - are unlikely to generate anything valuable for the local economy either. In addition, other studies show that subsidiaries that more autonomous or minority-owned by the headquarters are also more likely to embed with the local economy, generating significant spillover effects (Javorcik, 2004b ; Albornoz et al., 2005; Abraham et al., 2007). However, little work has so far looked at the role and characteristics of subsidiaries' managers, as most research takes the organization as a unit of analysis. Human rights' scholars have barely investigated the role played by subsidiaries, although Sama (2006) argues that this is a valid research area as subsidiaries' implementation of codes of conduct depends on the willingness and cultural predisposition of local managers.[12]

3.3 Taking stock

The literature review shows that despite the fact that studies in the area of economics and human rights on the impact of MNCs' activities on host countries tend to be separate, they do have some commonalities. They examine a common sets of external and internal mediating factors and they explore how these factors affect TS (in the case of economic studies) and HR. The literature review also highlights four possible scenarios (illustrated in Table 2), with which scholars have associated one or more mediating factors. The best case scenario is where MNCs contribute positively in terms of both TS and HR (Quadrant IV), that is, they generate positive spillover effects without undermining local population's human rights; the worst case scenario is where MNCs generate negative impacts in relation to both TS and HR (Quadrant I), that is, they do not generate spillover effects and at the same time they commit human rights' abuses in the host country. These two scenarios reflect two coherent behaviours of MNCs in the host country. The former reflects an active engagement of the MNC with the local context, possibly because a certain degree of commitment to building something important with the host economy and society is likely to be beneficial for the MNC as well (one such case might by Intel's investments in Costa Rica). The latter is where, MNCs display typical depredatory behaviour, operating as enclaves, and have very little interest in engaging with the local business and social communities (e.g. the case of MNCs in the extractive industry of several African countries). Two

[12] In a conceptual paper Arthaud-Day (2005) explores how different typologies of MNC-subsidiary relationships (i.e. multinational, transnational, international and global corporations) influence the likelihood that the local subsidiary adopts corporate codes of behaviour. However, declaration of compliance with codes of conduct has very little to say about human rights' impacts, as MNCs may adopt Social Corporate Responsibility initiatives in one area and at the same time violate human rights in another (Idemudia, 2009).

other scenarios are possible. One where MNCs' activities produce positive TS effects but generate a negative HR impact (Quadrant III). A paradigmatic example is the hotel industry in the Caribbean, which has brought new management techniques but at the same time has generated devastating environmental damages. The last scenario is where MNCs' activities produce negative TS effects, but have a positive HR impact on the host country (Quadrant II). This is typical of market-seeking subsidiaries that outcompete domestic firms, leading to a reduction of their market shares and of their levels of efficiency, but that at the same having no interest in spoiling their brand reputation by committing human rights' abuses.

Understanding what makes each scenario more likely to occur is a real challenge. This literature review has identified a number of factors around which there is a certain degree of consensus among scholars about what scenario they are most likely to produce, and factors for which no consensus is reached. For instance, among external factors, the strength of all country-level factors (i.e. social capabilities, state capacity and civil society) are associated with both the generation of TS and a positive HR impact. Likewise, among internal factors, resource and efficiency-seeking strategies have by and large been associated with both negative TS and HR impacts. In other cases, a consensus is not reached as scholars found opposite TS and HR impacts – as e.g. in the case of the level of industry competition. Cases where consensus is not reached are very intriguing because they suggest that policies designed to increase the level of one factor in order to maximise the likelihood of TS, will also expose the country to higher chances of human rights abuses. This is particularly troublesome given the fact that countries do typically design their policies to maximise the chances of economic returns, bearing no considerations to human rights' impacts. However, I shall leave speculations for the final conclusions.

[TABLE 2 HERE]

4. CONCLUSION

This paper stems from the recognition that, in the current globalized world, the achievement of economic development goals is not necessarily accompanied by improved social conditions, or respect of people's human rights more generally. Through their internal resources and capabilities, which often exceed those of many developing countries, MNCs can either positively or negatively condition their route towards development. While there are reported cases of positive economic effects generated by MNCs operations in developing countries, there is also evidence about MNCs involvement in human rights' abuses in these countries. However, to date, no scholarly research has analysed the factors that favour a positive (negative) MNC effect on host developing countries, by looking jointly at economic and human rights' impacts. This paper is a first attempt to take into account and integrate evidence coming from two distinct streams of literature, which have so far poorly interacted – i.e. studies on MNCs' economic impact with a focus on technology spillovers; and studies on MNCs' human rights' impact on host developing countries.

The paper has shown that, in spite of their poor interactions, both streams of literature have identified a common set of mediating factors (external and internal to the MNCs), which influence the impact of MNCs on developing countries. It highlights four possible scenarios with which scholars have associated one or more mediating factors: one in which MNCs generate technological spillovers and positive human rights' impacts; an opposite case scenario characterized by both negative spillover and human rights impacts; and two other mixed scenarios, where negative (positive) technological spillovers coexist with positive (negative) human rights' impacts. Each scenario has been associated with one or more mediating factors. Hence, for instance, strong state capacity is considered to be a condition that favours both the generation of technological spillovers and positive human rights impacts, whereas MNCs belonging to the primary sector are considered to generate few spillovers and to be likely to abuse human rights in host economies.

However, rather than being conclusive, these results are intended to spark debate and to pave the way for a totally new inter-disciplinary research agenda on this topic. First and foremost, research in this area should aim at developing a conceptual framework, which serves to explain MNC's likelihood to produce effects that fall into one of the four scenarios envisaged in this paper. As economic and human right's theories underpinning MNC behaviour have been poorly integrated so far, there is a need for more theory development in this area. Furthermore, far more empirical investigation is needed as the mediating factors identified here should not be considered decisive in terms of being associated with any of the four scenarios: they come from an array of very heterogeneous studies, research approaches and units of analysis, and in some cases their validity may be bound to the context of their research. Beyond those identified here, there may be other (internal and/or external) factors associated with any of scenarios described, which have not been previously studied. For instance, as shown in Section 3.2, there are certain characteristics of the MNC subsidiaries (and their management) about which very little is known in terms of their impact on host countries, and there are many reasons to believe they are worthy of more research attention. These include the type of governance within MNCs (e.g. centralized vs networked), the origin of the MNC (e.g. are MNC coming from emerging economies more likely to generate a negative TS-negative HR impacts, than MNC coming from advanced countries?), the skills and culture of local vs. Headquarters managers, among others. Also, the combined impact of two or more mediating factors has been rarely analysed. This is an area that certainly deserves more research, because it is likely that a given scenario is determined by the co-occurrence or sequence of different factors over time. In this sense, this paper hopes to open the ground to a new line of inter-disciplinary research.

Progress in this research area would be beneficial for both policy-makers and corporate managers. As concerns the former, understanding what drives MNCs' to behave in line with one of these four scenarios is of paramount importance for governments basing their development strategies on FDI. Hence, for instance, while governments (and/or other policy-making agencies) should aim to attract FDI that is likely to lead to a scenario of positive TS and HR impacts, they should be suspicious with respect to investments that are likely to lead to the worst case scenario – i.e. negative TS and HR impacts. However, governments (and/or other policy-making agencies) are likely to welcome investment associated with mixed scenarios (i.e. positive TS and negative HR impacts or vice versa), but should take actions to deal with its shortcomings. Awareness about what factors are most likely to be associated with any of the four scenarios also helps to monitor the impact of existing investments, as internal and external factors may change over time. To sum up, research in this area could provide insights and evidence that is needed to fine-tune FDI policies. It is in fact becoming widely accepted that FDI policies should not be simply designed to attract FDI, but should instead influence the behaviour of MNCs once they have settled down their operations in a host country (Marin, 2007). In this sense, research in this area would support policy-makers in mainstreaming human rights in FDI policies, and place them within a larger socio-economic strategy (Dussel Peters, 2008).

There is growing awareness among MNCs executives that respect for human rights is a fundamental and necessary part of practising good management (Brown and Woods, 2007). A 2006 survey of Global Fortune 500 companies found that nine out of ten companies responding to the survey reported having human rights principles or management practices in place.[13] After notable cases of MNCs, which have been publicly called to account for alleged human rights violations (e.g. Nestlé, Nike, Mattel), with consequent damage to their reputation and image vis a vis stakeholders, many companies are now integrating human rights considerations into their mainstream business decision making. As former CEO of Unilever, Mr. Patrick Cescau, argues "we have come to a point now where the agenda of sustainability and corporate responsibility is not only central to business strategy but has become a critical driver of business growth" (cited in Prahland, 2010: 19). In light of this, corporations need to more clearly understand where potential human rights challenges may lie in their evolving or future business projects, rather than reacting to individual challenges as they arise. In particular, anticipating potentially negative human rights impacts permits, first, to avoid stakeholders' resentment against the corporation, second, to reduce the cost that may be tied with stakeholders' legal actions, and third to develop institutional capacity to rights-sensitive business practices. To help companies undertake self-assessments of the human rights implications of their business in developing countries, John Ruggie, the UN Special Representative on the issue of Human Rights and Translational Corporations, calls for the development of a methodology for business' Human Rights Impact Assessment (HRIA).[14] Research in this context is therefore important to identify new factors that may be associated with negative human rights' impacts helps to inform and to refine HRIA methodologies.

[13] Human Rights Translated. A Business Reference Guide (2008), Castan Center for Human Rights Law, International Business Leaders Forum, and Office of the United Nations High Commissioner for Human Rights.
[14] Human Rights Council (2007) Human rights impact assessments- resolving key methodological questions, Fourth Session, A/HRC/4/74; International Business Leader Forum (2007) Guide to Human Rights Impact Assessment and Management, Road-Testing Draft.

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Table 1 Mediating factors and their impact

Field of study:	*Economics*		*Human Rights*	
	Impact	*Study*	*Impact*	*Study*
(A) External Factors				
1. Country- level				
1.a. Social capabilities	Positive	Kokko, 1994; Kinoshita, 2001; Konings, 2001; Lall and Narula, 2004; Chudnovsky et al., 2008	Positive	Hall et al., 2007
1.b. State capacity	Positive	Sharp and Barz, 1997; Javorcik, 2004a; Feinberg and Majumdar, 2001	Positive	De Schutter, 2006; Eroglu, 2008; Englehart, 2009
1.c. Civil society	Positive	(only anecdotal evidence)	Positive	Gereffi et al., 2001; Calvano, 2007
2. Industry-level				
2.a. Competition level	High level: Positive	Wang and Blomstrom, 1992; Glass and Saggi, 1998; Blomstrom et al., 2001;	High level: Negative	Sama, 2006
2.b. Technological intensity	Low tech: Positive	Kokko, 1994 Xiaoquin Fan, 2002 Alvarez and Molero, 2005	Low tech: Negative	Blanton and Blanton, 2009
	High tech: Positive	Tsou and Liu, 1994	High tech: Positive	Blanton and Blanton, 2009
2.c. Type of industry	Primary: Insignificant	Lall and Narula 2004	Primary: Negative	Papionnaou, 2006 Spar, 1999

(B) Internal factors				
1. MNCs- level				
1.a. MNCs' strategy	Natural R. seeking: Insignificant Efficiency seeking: Insignificant Market seeking: Mixed results	Lall and Narula 2004 Kokko, 1994 Altenburg, Meyer-Stamer, 1999 Bair and Gereffi, 2001 Giuliani, 2008	Natural R. seeking: Negative Efficiency seeking: Negative Market seeking: Positive	Blanton and Blanton, 2009 Perman et al., 2004 Meyer, 1998
1.b. Nationality of parent	From advanced countries: Positive	Buckley et al. 2007	From advanced countries: Mixed	Christie et al., 2003
	From advanced countries: Insignificant	Abraham et al., 2007; Javorcik et al., 2004	From developing countries: Mixed	Robertson et al., 2008
2. Subsidiary- level				
2.a. Internal capabilities	Absorptive and Innovative capacities/Entrepreneurship: Positive	Marin and Bell, 2006 Todo and Miyamoto, 2006 Castellani and Zanfei, 2007 Miozzo and Grimshaw, 2008	Managers' culture towards ethics: Positive	Sama, 2006
2.b. Other internal characteristics	Autonomy/Minority ownership: Positive	Javorcik, 2004b Albornoz et al., 2005 Abraham et al., 2007		

Table 2 Scenarios and mediating factors

Impact on Technological Spillovers (TS)	**Impact on Human Rights (HR)**	
	Negative	*Positive***
*Negative**	**<u>Scenario (I)</u>** *Mediating factors associated with this scenario:* - Primary industry - Resource-seeking strategies - Efficiency-seeking strategies	**<u>Scenario (II)</u>** *Mediating factors associated with this scenario:* - Market-seeking strategies (without production plants in the host country)
Positive	**<u>Scenario (III)</u>** *Mediating factors associated with this scenario:* - FDI in highly competitive industries - FDI in low- tech sectors	**<u>Scenario (IV)</u>** *Mediating factors associated with this scenario:* - Social capabilities; State capacity; Civil society - Market-seeking strategies (with production plants in the host country)

Note:

* Negative TS impact refers to the case in which the MNC does not generate TS or does generate negative TS.

**Positive HR impact refers to the case where there is no negative HR impact (i.e. no human rights' abuse).