



UNITED NATIONS  
UNIVERSITY

**UNU-MERIT**

**Working Paper Series**

**#2007-029**

Redefining Foreign Direct Investment Policy:  
A Two Dimensional Framework

Sergey Filippov & Ionara Costa



# **REDEFINING FOREIGN DIRECT INVESTMENT POLICY: A TWO DIMENSIONAL FRAMEWORK**

Sergey Filippov and Ionara Costa

## **Abstract**

Many countries in the world have adopted policies to attract foreign direct investment (FDI), placing the traditional focus on the maximisation of FDI flows, what can be labelled as a quantitative approach. Recently it has been argued that the FDI policy should be more selective, promoting good quality FDI inflows. The “quality” implies a certain level of technological intensity of activities and functions encompassed in an investment project, and therefore its potential impacts on host country’s development. Notwithstanding the importance of this new qualitative approach, a bias towards FDI flows has persisted. While they have received full attention, foreign-owned affiliates already established in an economy have been somehow neglected. This paper seeks to overcome this imbalance and proposes a new approach to FDI policy that incorporates both dimensions. Our main argument is that policy aiming to fostering the development and innovativeness of TNC affiliates can be more effective than the attraction of new affiliates.

**JEL classification:** F21, F23, O24, O38

**Key words:** foreign direct investment, multinational companies, foreign affiliates, public policy

**UNU-MERIT Working Papers**  
**ISSN 1871-9868**

**Maastricht Economic and social Research and training centre on Innovation and Technology,  
UNU-MERIT**

*UNU-MERIT Working Papers intend to disseminate preliminary results of research carried out at the Centre to stimulate discussion on the issues raised.*



## 1. INTRODUCTION

Foreign direct investment (FDI) is one of the main drivers of contemporary world economy and a key resource for economic growth. It implies strong economic interdependence of nations and contributes to ever increasing globalisation. In 2005, global FDI flows reached USD 916 billion, growing in 126 out of the 200 economies covered by the United Nations Conference on Trade and Development (UNCTAD, 2006c). According to Economist Intelligence Unit, global FDI inflows in 2007 are set to reach USD 1.5 trn.

The benefits of FDI argued by the academic literature and policymakers alike include capital investment, employment opportunities, generation of tax revenues, higher exports, and access to foreign technologies. As noted by Joseph Stiglitz (2000: 1076):

The argument for foreign direct investment ... is compelling. Such investment brings with it not only resources, but also technology, access to markets, and (hopefully) valuable training, an improvement in human capital. Foreign direct investment is also not as volatile – and therefore as disruptive – as the short-term flows that can rush into a country and, just as precipitously, rush out.

The role of FDI as vehicle for bringing foreign knowledge and technology into a host economy is essentially important since transnational corporations (TNCs) are the main agents of innovation process at the global level. For example, in 2005, 1000 most research and development (R&D)-spending TNCs headquartered in the European Union (EU) invested EUR 112.9 billion, and this figure was equal to EUR 257.7 billion for 1000 non-EU companies (EC, 2007). These numbers are set to grow.

Governments are keen to tap into the expected benefits provided by FDI, or rather presence of TNC affiliates, but since such benefits are not automatic, supplementary policies are strongly needed. Furthermore, these policies are essential in minimising potential negative impacts of FDI, which may include, *inter alia*, crowding out of domestic firms, repatriation of profits and environmental consequences.

In this paper we attempt to provide a new synthesis which integrates some previous contributions into a unified view and coherent policy framework. This policy framework implies two tasks: (1) to attract foreign investors in response to a host economy's short-term needs, and (2) to foster development and innovativeness of foreign affiliates in a host economy in the long run. In this line, foreign direct investment policy is understood as a set of policy measures conducted by a host country government with the purpose of shaping the economic environment to attract value adding FDI and to secure benefits of the local presence of TNCs in the long run.

Using this broad conceptual understanding of FDI policy as a departure point, the paper sketches the main challenges and policy instruments. It traces the evolution of FDI policy concept from its origin to the present by revising the extant literature on this issue, outlining research approaches and organising the existing debate in a conceptual framework.

The focal point of analysis of this paper is the first task of FDI policy (promotion of new FDI inflows), and policy instruments available in this respect. At the same time, we aim to lay the foundation for further research on the second task of FDI policy, i.e. promoting innovativeness within foreign affiliates in a host country. This task inevitably calls for coherence between FDI policy and innovation policy, which despite some notable exceptions (Andersson, 2005; UNCTAD, 2005) has been rarely addressed in the literature.

The paper is structured as follows. Section 2 lays the theoretical foundation for FDI, highlights new research issues and emphasises the need to rethink the FDI policy. Section 3

compares quantitative and qualitative approach to FDI policy. Section 4 describes introduces the notion of two dimensions of FDI policy. Finally, the Section 5 concludes.

## **2. THEORETICAL FOUNDATIONS AND NEW RESEARCH ISSUES IN FDI**

The academic and policy-oriented literature on FDI has a long history. The rise of the US TNCs after World War II (WWII) led to the formation of two distinctive strands of literature. The first strand, within the literature on international management and business, is the theory of firm internationalisation, originating from a series of seminal works (Penrose, 1959; Hymer, 1960/1976; Vernon, 1966; Caves, 1971; McManus, 1972; Buckley and Casson, 1976). John Dunning (1977) combined many of these contributions in his eclectic paradigm, or OLI model for analysing TNCs' internationalisation patterns and the strategic behaviour of TNCs. According to the eclectic paradigm, a firm must possess three advantages in order to internationalise: (1) Ownership Advantage: a firm must own or control unique mobile asset it wishes to exploit, (2) Location Advantage: a firm must be cost efficient to exploit its unique asset overseas in addition or instead of its home country, (3) Internalisation Advantage: it must be in firm's interest to control the asset itself rather the contracting out the use of the asset to an independent firm

In 1993 John Dunning expanded the application of the eclectic paradigm to classify four types of FDI according to TNCs' motivations for investing outside their home country. They are: (1) resource-seeking (seeking natural resources); (2) market-seeking (horizontal FDI, seeking new markets); (3) efficiency-seeking (vertical FDI, seeking to restructure existing production through rationalisation and places some parts of the value chain overseas); and (4) strategic assets seeking (seeking created assets).

Albeit this literature is very helpful for the purposes of our study, its focus is on TNCs as the proactive agents, while public policies of home and host governments are considered as parts of the business environments, hence, an exogenous factor.

The second strand of literature deals with the impact of FDI on a host economy, starting from a pioneering work of John Dunning (1958), a first comprehensive analysis of the consequences of inbound FDI for a host economy (the UK manufacturing). The main emphasis of this strand of literature has been placed on the role played by TNCs from developed countries towards industrialisation of developing countries (Moran, 1978; Evans, 1979; Lall, 1980, 1981). Thus, it is primarily associated with development economics. Although the focus of this literature is on the host economy, the role of active policies of host government does not always receive its full recognition.

In this paper we shall depart from these two bases perspectives and use an eclectic approach to argue about a comprehensive set of policy measure pursued by host governments in order to increase national welfare in the global race for FDI.

The current debate on FDI and its impacts has gained new elements, owing to the recent changes in the global economy such as global business restructuring, reengineering of global value chain and the emergence of networked economy, diffusion of information and communication technologies (ICT) and internationalisation of corporate R&D. These breathtaking developments have been coupled with a greater sophistication of public policies in a multifaceted international pattern. In the same way as TNCs requested governments to grant them entry into host economies, today, exposed to intra-country competition, governments are vying for TNCs by making them luring offers. Following the changing economic environment, the academic literature on TNCs and FDI has matured considerably, having made many research issues obsolete. Concurrently, new research issues have emerged, in particular, in relation to public policies on TNCs and FDI.

Sanjaya Lall (2000a) highlighted several research issues in this regard. For our analytical purposes we single out two of them. First, a main issue is the scope for effective policy on FDI and for bargaining between TNCs and host-country governments: with the greater policy liberalisation and signing international investment treaties, the power of host governments to intervene in the investment process or to promote industry has been significantly reduced. Second, changes in public policies at the end of the 20th century corresponded to the ever increasing role of technological change in the economic growth and development. Technological change is altering both national and corporate comparative advantages, shifting corporate activities, such as R&D, across the globe, and naturally, it has a profound impact on the FDI pattern, and calls for rethinking of FDI policies. A need for re-assessment of the FDI policy has also been expressed by OECD (2005: 2):

the traditional aims of foreign direct investment policy in terms of employment, exports and, to a lesser extent, import substitution still exist, but the overall emphasis is now much more on the contribution of foreign MNEs to the overall development and competitiveness of the local business sector.

The profound change in thinking about FDI and emergence of FDI policy<sup>1</sup> as a policy area rather than a piecemeal set of measures toward foreign investors reflects the growing awareness that not all types of FDI have the same impact on host economies. Presently, the general inclination within the extant body of literature on FDI policy is to equate FDI policy with FDI promotion (i.e. attraction of new FDI, or promotion of FDI inflows). Albeit FDI promotion is an important part of FDI policy, it is still only one side of the coin.

The flipside of the coin is policy measures towards FDI stock, i.e. foreign affiliates that are already established in a host economy, with the purpose of their evolution and strengthening their innovative performance in the long run. Foreign affiliates established in a host economy can be major players in the national economy, and increasingly so, in the national innovation system of a host economy. In many instances, they have a potential to contribute to strengthening of overall competitiveness of a host economy. Public policies should aim to help to develop this potential. Sadly, the issue of what happens to the stock of inward FDI in the long run has been largely overlooked by scholars and policy makers alike.

### **3. EVOLUTION OF FDI POLICY: FROM QUANTITATIVE TO QUALITATIVE APPROACH**

The current FDI policy can be understood as policy measures towards flows of foreign capital and foreign firms. Hence, it reflects the evolution of TNCs and their strategies. At the beginning of the 20th century, large firms from Europe and US started locating their manufacturing facilities overseas in order to overcome trade barriers. The trade barriers became important in the context of industrialisation. The Latin American countries were the prime case of policies of Import Substitution Industrialisation (ISI), and accumulated the largest stock of FDI in manufacturing in the pre-World War II period. These policies essentially targeted the amount of FDI inflows, aiming at its maximisation, hence they can be characterised as quantitative approach. This approach considers FDI as a source of capital and reflects the reality of internationalisation of manufacturing or resource-seeking activities, often highly labour- or capital-intensive. The essence of quantitative approach is captured in Ammar Siamwalla's (1975: 38) description of Thailand's Board of Investment strategy in the post-war period:

---

<sup>1</sup> Another term used in the literature is "investment policy", applying both to FDI and domestic investment. Investment policy may also imply a set of policy measures toward the outward investment. Hence, the term "FDI policy" is preferable as it helps to delineate scope of this policy area more clearly.

[Board of Investment] has never seriously asked the question: what industry NOT to promote. ... [I]t has issued promotion certificates<sup>2</sup>, regardless of whether they are mass consumption items (textiles) or luxury goods consumed by relatively few people (refrigerators and air conditioners), regardless of the minimum scale of operation (motor cars), regardless of the actual intentions of those who asked for and got the promotion certificates (petrochemicals), regardless of whether the industry is already firmly established and thus new investments in that industry would not be as risky as in the beginning (hotels and textiles mills in the late 1960s, cement) and regardless of efficiency (fertilizers) (cited in Amsden, 2001: 27).

Recently, many national investment promotion agencies have adopted selective targeting of foreign investors, according to the needs of the national economy. The selective targeting gave rise to a qualitative approach, albeit it is a broader conceptual understanding embracing the shift in the policy paradigm<sup>3</sup>. There is a growing awareness that not all types of FDI have the same impact on the host economy, and that more is not always synonymous to better. This idea has been recently expressed in several studies (Lall, 2000b and 2000c for East Asia; Katz, 2000 and Mortimore *et al.*, 2001 for Latin America). As Sanjaya Lall (2000c: 338) has put it:

it is important for countries to secure not just more, but also higher quality FDI. This means attracting more advanced MNC activities, oriented to international markets, providing advanced technology, using and creating sophisticated skills and taking the host economy into dynamic system of international production.

Qualitative approach puts stronger emphasis on knowledge-intensive activities, perceiving FDI as a source of knowledge and innovation. It implies a set of policy measures aimed at specific types of FDI that can bring a greater positive impact on the host economy. Qualitative approach underscores the quality of FDI rather than the quantity of FDI. As a rule, knowledge-intensive FDI, such investment in R&D, tend to be much less capital-intensive than investment in manufacturing. Nevertheless, this kind of FDI is expected to lead to stronger linkages with the host economy, faster growth of trade and stronger impact on the technological capabilities of local firms. Thus lower level of FDI flows is offset by higher value added of foreign affiliates. The most important differences between quantitative and qualitative approaches to FDI promotion are presented in Table 1.

Put table 1 here
------------------

Conventional statistic indicators measuring FDI (FDI flows as a percentage of GFCF and FDI stocks as a percentage of GDP) reflect the nature of quantitative approach. On the other hand, relevant indicators to measure the success of qualitative approach may include, *inter alia*:

---

<sup>2</sup> These promotion certificates entitled companies to favourable tax rates, duty exemptions and subsidised credit.

<sup>3</sup> It seems to be a general agreement in the traditional literature that benefits of FDI in terms of local technological development are restricted, mainly due to limited absorptive capacities of local firms (Cohen and Levinthal, 1989, 1990; Levinthal, 1990) and insufficient technological capabilities in the host economy (Lall, 1987; Kogut and Chang, 1991). In the same line, considering the side of MNCs, the aspect that limits the technological benefits from FDI is that mainly manufacturing activities are internationalised whereas innovative technological activities tend to be kept close to MNC headquarters (HQ).



- Technological and functional profile of a foreign affiliate (for manufacturing: high-tech and medium high-tech<sup>4</sup>; for services: knowledge-intensive services (KIS), high-technology (KIS)<sup>5</sup>);
- Human capital (number of jobs requiring tertiary education; number of employees holding PhD degree);
- Cooperation of foreign affiliates with actors in national innovation system such as number of partnerships, strategic alliances, research partnerships with universities);
- Patent applications by foreign affiliates (albeit it may not be a reliable indicator since most TNCs would prefer to apply for patents in the home country);
- The number of new product announcements (new products developed within foreign affiliates).

We hereby shall have an in-depth look into the FDI-led industrialisation as an example of quantitative approach and the recent developments of FDI policy, in line with qualitative approach.

### **3.1. FDI and Industrialisation: the more the better**

Internationalisation of big firms started in the interwar and early post-war periods; as they were increasingly conducting manufacturing activities overseas in order to overcome trade barriers, take advantages of the scale economies and seek new markets to expand their consumer base. Unsurprisingly, these developments raised the issue of control of foreign business entry by host governments (see Robinson, 1976 for a comprehensive overview). This was particularly the case for developing countries where FDI was perceived as a form of neo-colonialism, and therefore, detrimental to the national welfare. In developed countries FDI was not hailed either as governments tried to protect certain domestic infant industries by limiting presence of foreign investors, i.e. conducting the protectionist policy (Chang, 2002). These economic and political concerns led to adverse policies on foreign TNC and FDI in most countries. Government agencies screened each investment project and, in case when admission was granted, put “the price of admission” (Robinson, 1976). However, despite such adverse stance towards TNCs, concurrently, governments of developing countries considered that FDI flows might benefit the national development goals by providing capital and promoting industrialisation<sup>6</sup>.

In fact, FDI was considered not only as a source of capital, export capabilities and employment opportunities, but also the main channel of technology transfer (Stewart, 1979; Lall, 1980; Madeuf, 1984; Rosenberg and Frischtak, 1985). However, given that TNCs pursued mostly market-seeking strategy to overcome tariff barriers to trade and producing final goods already established in an their value chains, they were internationalising only manufacturing activities by establishing with a limited base for technological development. These affiliates are known in the academic literature as truncated miniature replica, truncated in response to specific TNC strategies and host country characteristics. The truncation,

---

<sup>4</sup> According to UN classification of economic activities, The International Standard of Industrial Classification of All Economic Activities – ISIC, ISIC Rev. 3: medium high tech industries 24x, 29, 31, 34, 352, 359, high tech industries: 2423, 30, 32, 33, 353. According to the EU classification of economic activities, General Name for Economic Activities in the European Union, NACE Rev. 1.1: medium high tech industries: 24, 29, 31, 34, 35, high tech industries: 30, 32, 33.

<sup>5</sup> According to NACE Rev. 1.1: knowledge intensive services (KIS): 61, 62, 64, 65 to 67, 70 to 74, 80, 85, 92, high-technology KIS: 64, 72, 73.

<sup>6</sup> Definition of what kind of FDI is beneficial to the national development goals is a tricky one. The epitome of negative impact of FDI on host economy is the *Maquiladora* in Northern Mexico set up by US TNCs. They were characterized by low wages, low investment in human capital, and low degree of networking with domestic firms. Nevertheless, *Maquiladora* created new jobs, improved levels of technological capabilities and improved productivity (Ellingstad, 1997).

however, was in line with host governments strategies of industrialisation that focused primarily on building up production capacity.

There were two distinctive approaches to industrialisation in which FDI played a crucial role, (1) Import substitution industrialisation (ISI) and (2) Export-oriented industrialisation (EOI). Import substitution industrialisation was adopted in the Latin American countries in 1930s in the wake of the Great Depression and became a dominant strategy in 1950s-1970s (Hirschman, 1971; Cardenas *et al.*, 2000). ISI is a trade and economic policy based on the assertion that a developing country should substitute imported goods with domestically produced substitutes, basically supporting the arguments of the infant industry protection. The industrialisation strategy was primarily focusing on the internal market, and it was meant to make the national economy less exposed to external shocks and increase foreign exchange reserves.

As an industrial development programme ISI included two distinct features: (1) regarding trade, imports were restricted, (2) regarding FDI, the national economy was generally open for investment. A range of policy instrument was used such as protective tariffs, import quotas, exchange rate control and subsidies to domestic infant industries and state-owned enterprises. Thus the ISI included three main actors, what Evans (1979) defined as the triple development alliance: state, local private capital and foreign TNCs. TNCs were attracted to establish manufacturing within ISI framework as they enjoyed the same degree of protective barriers to trade as the domestic firms did. The main criticism of the ISI is that it resulted in inefficient and uncompetitive industries, unable to export goods. Nonetheless, the ISI strategy generally managed to create production capacities for the domestic market. Particularly, the ISI strategy turned to be successful in the large Latin American countries – Argentina, Brazil and Mexico.

In contrast to the ISI, the export-oriented industrialisation strategy aimed not at a domestic market, but at boosting export capabilities of goods for which the nation had a comparative advantage. Wide open door policy implied opening domestic markets for foreign investors with a strong government support for exporting sectors. EOI was exemplified by Singapore's policies in 1960s, which have been mostly successful. In order to boost export, some countries established Export-Processing Zones (EPZs). They enabled firms locating in these free trade enclaves to import inputs duty free with an obligation to export all the output. The EOI implied a range on performance requirements levied on foreign affiliates in the host economy, primarily in terms of boosting export.

Other East Asian countries restricted FDI inflows and took a conscious control over national economies with the overall goal of developing local technological capabilities. In this respect South Korea is exemplary. In 1962 South Korea launched a series of five-year plans for economic development. The policy (easy access to financing and tax incentives) encouraged growth of large, family-controlled conglomerates (*chaebols*). These national champions became internationally competitive and able to export. Policy on FDI was rather restrictive. A number of sectors were closed of FDI, and those open required burdensome administrative processes. The switch from restriction and control to a more FDI-friendly approach took place in late 1990s.

As it has been noted, governments of many countries adopted adverse approach to FDI. Nevertheless, several countries classified as developed nowadays, conducted a comprehensive policies on FDI, exemplifying their effectiveness. For example, Canada actively promoted FDI, especially from the US, until the mid-1950s, among the widespread unanimity that benefits from FDI largely outweigh its cost. By 1970, the inward FDI stock was almost four times higher than the outward stock. A large number of affiliates of US

corporations were established in the economy and Canada held almost a quarter of the world's total stock of FDI. However, the perception of FDI started changing in 1960s, and following it, in 1973 the Parliament of Canada enacted the Foreign Investment Review Act that required obligatory review (screening) of FDI in all forms (both greenfield and acquisition), applying significant benefit test. Foreign Investment Review Agency was set up to conduct this policy. The adverse phase of FDI policy although was short-lived, and in mid-1980s Canada adopted less restrictive policies.

On the European continent, Ireland, a Celtic tiger, is an iconic example of a European country that benefited from actively courting and working with foreign TNCs. The first Irish programme for economic expansion introduced in 1958 launched infrastructural projects, removed protectionism, encouraged FDI and promoted exports. The reasons which proved to be attractive for FDI for efficiency-seeking FDI were low factor prices and favourable tax schemes, in particular, a low corporate tax. The Anglo-Irish free trade area agreement signed in 1965 and Ireland's accession to the European Economic Community in 1973 increased its de-facto market size, since goods produced in Ireland could be sold on other European markets, effectively overcoming their trade barriers. Ireland became a gateway to Europe for market-seeking FDI from outside. Ireland's policies have been focused, consistent and effective in terms of promoting FDI.

Overall, most governments in the period from 1950s till 1990s did allow FDI in their economies but imposed performance requirements with the purpose of achieving national development goals. Performance requirements are stipulations imposed on foreign investors requiring them to meet certain criteria in order to operate (to enter and expand) in the host economy. For ISI strategy, local content was the main performance requirement adopted, designed to induce producers (mostly in car manufacturing industry) to acquire parts and components from local suppliers. In exchange, foreign affiliates received tariff protection from imported products of a similar type and protection from newcomer TNCs and investment incentives. Apart from retaining and earning foreign currency governments expected enhancement of technological capabilities of domestic firms.

Within the EOI framework, export performance was the requirement. Foreign affiliates were obliged to export up to 100% of goods produced in the host country. The common feature of public policies both under ISI and EOI framework was the intention to promote technology transfer by the means of strengthening linkages between foreign affiliates and domestic firms.

As performance requirements, governments mandated local equity or joint venture requirements. These endeavours were mostly futile as the TNCs were reluctant to transfer the latest technologies to their affiliates and share them with local firms (OECD, 2005), or to license them. One may argue that performance requirements interfered with the investor's prerogative to run the investment and in many instances discouraged FDI. It is also claimed that they distorted trade by preventing import of certain goods and requiring export of other goods. The performance requirements came under political pressure in 1980s-1990s as their cost to TNCs started outweighing the benefits of presence in a host (developing) economy (Amsden, 2001).

Emergence of the new rules of the game at the international level outlawed many policy measures used by several developing countries for FDI-led industrialisation, creating a common ground for most countries' FDI policies. This liberalisation of rules on foreign investors became an important milestone in the FDI policy. In fact, UNCTAD identifies this broad liberalisation of FDI regimes as a first generation of investment promotion, followed later by active promotion and selective targeting.

### 3.2. Moving further: the qualitative approach to FDI Policy

By the mid-1980-1990s, following external pressure many host governments began softening their attitudes towards TNCs and liberalising their FDI regimes. India, the newcomer to the race for FDI, loosened control on FDI in 1991. Coincidentally, the liberalisation of FDI regime was coupled with the downfall of communism that took place in Eastern Europe and the Soviet Union. The widespread liberalisation of FDI regimes was in tune with the so-called Washington Consensus, a set of ten neo-liberal macroeconomic policy prescriptions proposed by the International Monetary Fund, World Bank and U.S. Treasury Department. These developments gave rise to a number of international investment agreements (IIAs) at the global, regional and bilateral levels.

Liberalisation of investment regimes implies abandoning many policy instruments and diminishing policy intervention into the national economy. Bureaucratic impediments to the entry of foreign investors have been reduced, as well as sectors open for FDI have been expanded. Since 1990 the number of regulatory changes favourable to FDI has been steadily increasing. UNCTAD (1999) identifies this broad liberalisation of FDI regimes as a first generation of present-day investment promotion.

Nevertheless, full liberalisation of international capital flows has never been completed, as restrictions to FDI are still considerable in some countries and sectors. Moreover, the liberalisation alone does not create complementary factors for TNCs, but only allows for easier operations within the host economy. Countries adhering to international investment agreements ensure a level playing field and in these circumstances they need to promote their identity and unique characteristics more strongly. This is the reason for emergence of more active FDI promotion, going beyond the pure liberalisation.

UNCTAD calls this the second generation of FDI promotion. The active promotion is based on the justification of policy intervention in the presence of a market failure. The main one is the asymmetric information, i.e. TNCs do not possess perfect information about investment opportunities worldwide, and hence TNC executives often make biased decisions. Many TNCs consider only a small number of potential locations for the FDI projects, while most countries are not even taken into consideration (IFC, 1997, p. 49)<sup>7</sup>.

A central feature of this type of FDI policy is the setting up an Investment Promotion Agency (IPA) or any other institutional body assigned with a task of promoting FDI. Establishment of the World Association of Investment Promotion Agencies (WAIPA) by UNCTAD in 1995 can be considered as a birth of the second generation of FDI promotion. In 2006 WAIPA included 204 national and sub-national IPAs from 152 countries. FDI promotion became a profession in itself; many employees at IPAs are not civil servants and often have a business background. A great body of literature has been dedicated to the functioning of IPA and their functions (Young *et al.*, 1994; IFC, 1997; Loewendahl, 2001; Wells and Wint, 2001). Depending on the goals and scope of IPAs their functions may include policy advocacy, competitive positioning, targeting strategy, image building, marketing, project handling, investment services and investor facilitation, and providing information to potential investors.

---

<sup>7</sup> The importance of active investment promotion is exemplified in the case the investment of 300 million US dollars by the US transnational microchip manufacturer Intel in Costa-Rica. CINDE, a private non-profit organisation, supported by the Costa Rican government, learned that Intel started a site selection process for its new assembly and testing plant and Costa Rica was not on the list of potential sites. CINDE started an active campaign and finally Costa Rica was included in the list at the end of 1995. The country became a competitor along with Argentina, Brazil, Chile, China, India, Indonesia, Korea, Mexico, Puerto Rico, Singapore, Taiwan, and Thailand. After a decision-making process at Intel and effective campaign by CINDE, Intel announced its choice of Costa Rica in November 1996.

Active promotion implies activities in various fields, which can be done either with or without specific targets. Defining specific targets for FDI promotion leads to selective targeting. It is based on the assumption that not types of inward FDI have the same impact on the host economy, i.e. FDI in specific sectors, functions and locations potentially bring more benefit. Peter Enderwick (2005) suggested that the targets for FDI promotion could be defined according to four criteria:

- the size of the firm;
- industry (higher value-added industry is preferred to lower valued-added one);
- business functions of an affiliate (higher value added functions are preferred to lower value added ones);
- form of entry mode (greenfield versus mergers and acquisitions).

The stage of selective targeting coincided with the ever increasingly internationalisation of corporate R&D that became a lucrative target of public policies. Selective targeting also includes marketing of regions and clusters with the ultimate aim to match the needs of the foreign investor.

The generations of FDI policy can be better defined as approaches to FDI promotion. The most important is the shift between active promotion and selective targeting. It represents a more profound change in thinking of FDI policy, a shift from quantitative to qualitative approach.

Several observations can be done in relation to the applicability of these approaches by host economies. First of all, countries at different levels of development may need to adopt different approaches. Quantitative approach is more likely to be pursued in countries with high unemployment and lack of capital; and qualitative approach is likely to be adopted in countries with substantial prior experience in attracting FDI<sup>8</sup>. Despite a traditional North-South focus of the academic literature, a qualitative approach is equally vital for developed countries (North-North focus). Relocation of industries from developed countries to developing ones forces the former to compete for higher value added FDI on the basis of qualitative approach. Secondly, these two conceptual approaches are not mutually exclusive. In practice it is hardly possible to draw a clear-cut division between them, and countries combine both in a mixed approach to FDI policy. Nevertheless this simple typology can be used for analytical purposes.

#### **4. TWO DIMENSIONS OF THE FDI POLICY**

In this paper we make a claim that FDI policy implies a wider policy area than solely FDI promotion. The role of a policy-maker is not only to attract foreign investors, but to make sure that foreign affiliates evolve and are embedded in a national economic system.

Fundamentally, the goal of preventing formation of enclaves of foreign affiliates in a host economy has been a concern of policy-makers for a long time. Policy measures which were used in the past included performance and local content requirements. Most of them became outlawed within the international framework on foreign investment. Hence, a

---

<sup>8</sup> Ireland, “Celtic Tiger, is a classic example of a country that has greatly benefited from FDI inflows. Following a financial crisis in 1956 Irish government re-formulated its policies and adopted an outward-looking strategy with the goal of using FDI for development. Albeit Irish IPA targeted certain industries, the overall strategy was based on quantitative approach. The year 2000 was a turning point. A report by Technology Foresight Expertise emphasized that Ireland’s comparative advantage as a low-cost location had eroded and the economy had to “move up the value chain”, it called for a focus of FDI policy. Following this report, a qualitative approach has been adopted. Among policy measures, a £ 560 million Technology Foresight Fund was launched to be used to establish Ireland as a location for world class research excellence in niche areas within ICT and biotechnology.

portfolio of policy measures became somewhat narrower. Moreover, embeddedness of foreign affiliates alone is not enough; they should assume new corporate functions over time, increasing their strategic status in a TNC network.

Put table 2 here

**4.1. FIRST DIMENSION OF FDI POLICY: ATTRACTION**

The first dimension of FDI policy is represented by traditional promotion of FDI flows into a host economy. Although, this goal has been on the policy agenda of most governments for a long time, it has been undergoing considerable changes within the last decennia.

The challenge of designing and conducting FDI policy is that it has to balance the interests of a host national economy and foreign TNCs. Designing of successful FDI promotion policy requires careful combination of incentives and conditionalities. In other words, a successful FDI promotion strategy has to make the country an attractive location for foreign TNCs and at the same time assure the conditions to benefit most from their investment in a host economy. In fact, in a more qualitative approach, FDI promotion should focus mainly on attracting and getting benefits from investment into specific sectors, areas or activities adding to national development goals. Moreover, under the current international legal framework on foreign investment, policy makers face additional challenge, as the menu of available explicit instruments of FDI policy, or policy instruments directly aimed at FDI, has been largely reduced. This is particularly the case for those instruments related to the establishment of restrictions and requirements for foreign investors.

It makes even more important to take into account other factors influencing the decision making process of TNCs, and which are outside of the explicit scope of FDI policy. These factors can be under other policy areas, such as trade, environmental, regional, and therefore are referred to as implicit policy instruments. The non-policy factors are also crucial; they are geographical location, climate, official language, culture. In order to design a successful FDI policy, both in terms of promotion of FDI flows and affiliate development, it is crucial that the explicit and implicit instruments are combined in a coherent manner.

It is worth mentioning that FDI policy instruments, as in any other policy area, can be split into codified and un-codified. Codified policy instruments are usually put on paper, i.e. consistently laid down in policy documents (laws, regulations and guidelines). Uncodified policy instruments stem from common practices used by governments, such as administrative and bureaucratic procedures.

Put table 3 here

Explicit policy instruments for FDI promotion can provide incentives to foreign TNCs investing in a country. Investment incentives fall into three categories: fiscal, financial and others. Fiscal incentives that are typically a product of formal legislation applying to all foreign and domestic investors alike which meet certain criteria, with the purpose of reducing tax burden on the investor. They include, *inter alia*, tax concessions, tax rebate, tax holidays, and tax credits, accelerated depreciation of plants and machinery, VAT exemption, reinvested allowance.

There is a variety of criteria and requirements upon which investment incentives can be granted. For instance, regarding time perspective, they can be permanent or temporary; they can be nation-wide or granted only to investors locating a manufacturing or business unit

in a particular region (in this case FDI policy should be coherent with regional policy). The standard indicators applied are minimum amount of investment, minimum number of newly created jobs (and specifically, highly skilled jobs), location in certain regions and so on. In case of corporate R&D centres, it may be required that results are to be applied in the manufacturing in a host country.

Fiscal incentives are popular in many countries, specifically in developing ones that have limited financial resources. Governments decrease the tax base, considering that presence of foreign affiliates will recoup income foregone for the budget. Developed countries tend to rely on financial incentives. Financial incentives are negotiated between TNCs and host governments separately in an ad-hoc basis and meant to provide direct financial assistance. As a rule, investment incentives are contingent on the TNC satisfying certain performance requirements set by a government and include government subsidies, loans and grants with specific purpose (export, job creation, etc), sovereign guarantee on investment credits, insurance.

Another form of investment incentive is neither fiscal nor financial means which would reduce the cost of investment. They include, *inter alia*, preferential provision of land or real estate to a foreign affiliate, preferential government contracts (such as procurement), customs free areas and special economic zones.

The evidence on the effectiveness of investment incentives is mixed. Empirical evidence and several surveys suggest that investment incentives have a limited role in TNCs' decision on investment location (Loewendahl, 2001; Morisset and Pirnia, 2002). TNCs themselves do not place availability of incentives at the top of selection criteria for an investment location. In the ranking of nineteen selection criteria for an investment location contained in Ernst and Young's European Attractiveness Survey, corporate taxation is at the sixth place and aid, subsidies and support measures from public authorities are at the sixteenth place (EY, 2006).

Despite challenged efficacy and relevance of investment incentives, countries increasingly employ them in the FDI policy framework. UNCTAD's (2001a) survey of investment incentives in over 45 countries from all regions of the world found out that nearly all countries offered incentives that targeted specific sectors.

Whereas this practice is widespread, some questions remain. First, there is the issue of whether a foreign TNC would have invested in a host country even without the incentive received. Second, a foreign TNC may receive incentive for an investment project which could have been made by a domestic firm. Furthermore, there are always administrative costs attached, created by bureaucracy managing the incentives. In case of financial incentives, a potential for corruption is created.

The biggest concern related to FDI is the so-called race to the bottom, when prospective locations undercut each other to attract FDI, losing in social welfare to a foreign TNC<sup>9</sup>. Government subsidies to a TNC per each created job raise legitimate questions whether host countries really win by granting investment incentives in order to receive a FDI project. The situation is even more worrisome when competition is unfolding among regions

---

<sup>9</sup> In the game theory such situation is known as the prisoner's dilemma (Dresher, 1961), a non-zero-sum game in which two players can cooperate with or defect the other player. Applying the prisoner's dilemma to FDI promotion, it might be said that the only concern of each prospective location (prisoner) is to maximise its own payoff by attracting as much FDI as possible, without any concern for the payoff of other locations. Offering generous investment incentives (defecting) dominates keeping investment incentives at the same level internationally (cooperating). In any situation playing defect will bring a greater payoff. The unique equilibrium for the prisoner's dilemma is a Pareto-suboptimal solution when both players opt to play defect even though each player's individual reward would be greater if they choose to cooperate.

within the same country (most likely to be in federations), undermining the overall bargaining power of the country. The case of Boeing is illustrative in this respect. In 2001 the corporation announced its decision to relocate its headquarters from Seattle. In response, more than 30 states submitted investment incentives proposals and were fiercely competing against each other. A similar case is Ford Motor Co. in Brazil. The global carmaker decided to launch a new assembly plant, Project Amazon, in Rio Grande do Sul. It was scheduled for completion in 2001. The economic crisis hit the Brazilian economy in 1999, resulting in turmoil on the market. Ford decided to terminate the project and relocate the plant site to another state. Several states started competing for project undercutting each other's offers, and finally Ford chose the north-east state of Bahia.

There has been a widespread consensus that investment incentives alone cannot substitute for national competitiveness and stable and attractive investment climate in a host economy. Nevertheless they do play a role when TNCs are choosing a location and all other factors are equal or have marginal differences between the short-listed locations.

As follows from above, explicit FDI policy instruments may add to the positive investment climate or correct market imperfections. In this regards, assessment of the impact of FDI policy instruments and especially effectiveness of investment incentives is crucial. It requires administrative capacity from government agencies. The main obstacles are the lack of a control group that could clarify what would have happened in the absence of the policy intervention; and that explicit policy instruments are often used in combination with each other that means that decomposition of the effects of each instrument is virtually impossible.

Explicit policy instruments such as investment incentives are not sufficient to attract and retain FDI. The attractiveness of a host economy depends on many factors, a whole range of policies and measures that belong to the jurisdiction of various ministries or government agencies. In general, the primary objective of these policy areas is not attraction of FDI as such but rather improvement of the economic situation in a country. They can be referred to as implicit policies. According to UNCTAD (1999), some of these policies shape an FDI-enabling framework.

Among the general factors affecting the attractiveness of a country as FDI location are sound macroeconomic policies such as liberal trade, favourable tax regime (the level of effective statutory tax rate on corporate income in particular), currency exchange rate system and so on. Other crucial factors include economic and political stability, rule of law, law-enforcement, protection of property and contractual rights and transparency. In fact, these are the kind of factors included in the calculation of investment risk indices, which are also considered by TNCs in their decision making process on FDI project locations (see, for instance, ratings by Standard and Poor's, Moody's, FITCH-IBCA).

Supply-side product development policies are important for all types of FDI, though with different degree of significance, depending on the nature and driving force of the FDI project. These policies provide essential physical and communication infrastructure, sites for industrial and commercial development, human capital and so on. Whereas they are crucial for asset-seeking FDI, important for market- and efficiency-seeking FDI, they can be less important for resource-seeking FDI. These policies become essential within the qualitative approach to FDI policy, and in particular for R&D-related FDI.

Supply-side product development policies work in cohesion with regional policy. A government may aim to develop particular regions lagging behind by investing in infrastructural projects there and improving economic position and investment attractiveness. This regional policy can be connected with explicit FDI promotion instruments, such as investment incentives for TNCs locating or expanding their affiliates in particular regions.



Other policy areas influencing TNCs' decisions include competition and SME policy, intellectual property right (IPR) regime (in particular, for R&D-intensive industries such as pharmaceuticals and biotechnologies), and environmental policy. The nexus FDI – industrial policy has also received considerable attention in the literature (ISI and EOI regimes as discussed above), in terms of strengthening industrial production capacities. Several authors (e.g. Andersson, 2005) suggested that presently policy-makers should shift the focus from FDI–industry nexus, to FDI-innovation one. It naturally highlights the importance of the second dimension of FDI policy, i.e. policy towards foreign affiliates. As Keith Pavitt and Parimal Patel (1999, p. 110) argue the technological competitiveness of firms (including foreign affiliates) inevitably depends on national system of innovation, and national systems of innovation inevitably depend on government policy.

#### **4.2. SECOND DIMENSION OF FDI POLICY: POLICY VIS-À-VIS FOREIGN AFFILIATES**

The second dimension of FDI policy implies policy measures towards foreign affiliates already established in a host economy. It can be described as “monitoring, assistance and follow-up” and implies that FDI policy should target TNC operation in the economy in the medium- and longer-term. This part of FDI policy has been quite often neglected, albeit it is increasingly drawing researchers' attention (e.g. Marin, 2007).

The idea that supports to foreign TNCs should extend beyond the initial attraction of a foreign investment has been embraced by some investment promotion agencies. They have established “aftercare” departments and designed “aftercare programmes”. Although it resembles the second dimension of the FDI policy, we argue that aftercare is rather a bridge between the two dimensions than a fully-fledged second dimension. Aftercare originates in the first dimension of FDI policy at the moment of completion of a FDI project and extends to the second dimension, i.e. beyond the FDI promotion. It lasts only for a certain time and directly connected to FDI projects mediated by an IPA.

The second dimension of FDI policy, in its turn, should not have any time limitations, and it should be a consistent set of measures towards all foreign affiliates. Although IPAs can provide aftercare to FDI projects they mediate, the biggest problem of working in the second dimension of FDI policy is the right identification of targets. Many IPAs even do not know exact number and coordinates of foreign affiliates based in the economy.

There are two main reasons to justify the extension of FDI policy from mere promotion to the second dimension, i.e. to foreign affiliates already located in a host economy.

1. Foreign affiliates are part and parcel of a national economy, yet they face different market failures than domestic firms do. It entails that policy-makers should take it into consideration when designing policy measures.

2. It has been widely acknowledged that TNCs tend to engage in sequential investment, i.e. they establish an affiliate with limited number of functions and scope of responsibilities and add new functions over some period of time. It implies that it might be an easier way to develop higher value added functions (such as R&D) within already established affiliates instead of trying to attract FDI in R&D by TNCs without prior presence in a host economy.

A host country government is somewhat restrained in the pursuing the second dimension of the FDI policy. It cannot treat foreign affiliate worse than domestic firms since it would violate the “national treatment” principle of the international legal framework

(GATT). The national treatment principle implies that a country extends to foreign investors treatment that is at least as favourable as the treatment that it accords to national investors in like circumstances. At the same time, a host country cannot treat foreign affiliates preferentially, since it would put domestic firms in a disadvantage position and contradict national interests. Nonetheless, public policy still matters. As it has been aforementioned, two main directions can be identified within the second dimension of the FDI policy – (1) embeddedness of foreign affiliates into a host economy and (2) foreign affiliate development.

#### 4.2.1. Foreign affiliates development

It has been agreed that internationalisation of firms is a complex and sequential process. The first studies on the topic of incremental investment appeared in the 1970s (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977). These studies are behavioural and explain gradual internationalisation through the lack of experimental knowledge of firms and a need to acquire it for its firm through own experience. This literature has its roots in the theory of the growth of the firm (Penrose, 1959), and the behavioural theory of the firm (Cyert and March, 1963). The basic assumption is that TNCs have imperfect information about foreign markets which inhibits international expansion. The (experimental) knowledge needed to operate in a new market is acquired through learning, or practical experience in a host country, i.e. operations of a foreign affiliate in a specific market<sup>10</sup>.

This strand of literature looked at the process of sequential investment through the eyes of TNC headquarters. New thinking about TNCs suggests that they cannot be considered anymore as a solid structures consisting of homogenous affiliates. They are rather dynamic networks consisting of heterogeneous units. Hence the new strand of literature emerged in the late 1980 which looked at the process of sequential investment from the position of affiliates and the role of foreign affiliates in general<sup>11</sup> (Birkinshaw, 1996; Birkinshaw and Hood, 1998; Papanastassiou and Pearce, 1999; Pearce, 1999). Scholars have labelled this process as subsidiary/affiliate evolution. Affiliates evolve over time by gaining or losing functions and responsibilities, reflecting their strategic positions within a corporate network. They can move up the value chain (upgrade functionally) from lower value added activities, such as manufacturing and sales to higher value added ones, such as R&D. At the same time, affiliate evolution is more complex than a functional upgrading, a flipside of the coin is widening of the scope of responsibilities of affiliate management.

Central to this changing nature of foreign affiliates is their changing role and position within the innovation process in a TNC. Foreign affiliates are more creative than it was the case in the past, now they are able to access local knowledge in a host environment and use for the benefit of the whole TNC network (Pearce, 1999). Once scholars detected the

---

<sup>10</sup> Original Jan Johanson's and Jan-Erik Vahlne's (1977) model has four stages – from stage 1 (no regular export activities) to stage 4 (foreign production / manufacturing unit) and reflects the internationalisation of firms in 1970s. The theory of internationalisation as a process lately received critique on the accounts of non-applicability in service industry, and explaining internationalisation mainly through market-seeking FDI. It implies that internationalisation of firms was primarily a strategy to capture new markets. The model developed in 1977 did not consider corporate strategies aimed at accessing local knowledge or expertise, for example. Since mid-1980s an increasing number of cases have been left unexplained by the models of incremental internationalisation as TNCs have been leapfrogging certain stages. Several concepts emerged suggesting much faster (or even immediate) internationalisation, such as born global (Oviatt and McDougall, 1994; Knight and Cavusgil, 1996; Madsen and Servais, 1997; Moen, 2001); international new ventures (Oviatt and McDougall, 1994, 1997); instant internationals (Litvak, 1990; McAuley, 1999; Preece *et al.*, 1999) and global start-ups (Oviatt and McDougall, 1994).

<sup>11</sup> This strand of literature mainly uses the term “subsidiary”, nevertheless, we stick to the term “affiliate” as more general one.

changing nature of foreign affiliates, their attention was drawn to drivers of affiliates evolution. The invaluable contribution comes from the seminal paper of Julian Birkinshaw and Neil Hood (1998), where three determinants are singled out, they are (1) affiliate-headquarters relations, (2) affiliate management initiative, (3) host country environment, including host country policies and a multitude of agents based in the host economy – domestic firms, other foreign affiliates and research institutes.

The literature on role and development of foreign affiliates tends to focus on internal determinants of TNC (i.e. on the first two determinants), and quite little attention is given to the latter determinant. In terms of public policy, it entails naturally that the general health of the national economy is beneficial for all economic agents based in it, including foreign affiliates.

Moreover, most policy factors are within implicit instruments of FDI policy, such as existence of knowledge networks, existence of highly-skilled human capital, provision of necessary infrastructure, presence of universities or other research centres. Explicit policy instruments in form of investment incentives seem not to play a crucial role in this case.

Although identification of policy mechanisms available to promote affiliates development is necessary, hardly any uniform policy prescription can be given. Nevertheless, recognition by policy-makers of importance of functional upgrading is pivotal. A comprehensive dialogue between policy-makers and foreign affiliates as well as TNC headquarters is necessary to address the issue. A host country government can be an advocate of the initiatives of functional upgrading undertaken by an affiliate at the level of TNC headquarters.

One of the examples is the story of Apple Computer, Inc. in Ireland. The company established a production factory in Cork in 1980. Now Apple Ireland has European Technical Support and AppleStore Centres on the campus. Apart from the manufacturing and call centre functions, Apple Ireland has business and R&D functions (software development and testing). One of the determinants of the success of the affiliate evolution was the efforts of IDA Ireland, the Irish investment promotion agency, which was intimately involved in the negotiations with top management at the Apple HQ in California.

Another example is the UK where the expansion by existing foreign affiliates accounts for over a quarter of all investment projects and almost two-thirds of new jobs created. The role of UK Trade & Investment's Investor Development network is essential. The mission of the network is to work with existing foreign affiliates to help them further develop their business in the UK.

#### **4.2.2. Embeddedness of foreign affiliates in a host country**

Embeddedness of foreign affiliates in a host country production and innovation system is another task within the second dimension of FDI policy. The issue as such is not new. Governments have been concerned about emergence of enclaves, i.e. foreign affiliates based in a host economy and having little or no linkages to other agents in the economy. While in the past government could try to induce foreign affiliates to share technologies and establish connections to domestic firms, this power of governments have been greatly reduced. In response, government have designed a range of soft policy initiatives, such as linkages programmes (UNCTAD, 2001b).

Embeddedness of foreign affiliates in a host economy is a particular case since foreign affiliates are traditionally regarded as parts of two systems – a global corporate network (a

web of TNC headquarters and affiliates) and a host economy (by forward and backward linkages). Emergence of the concept of national innovation system (NIS), encompassing a multitude of institutions, organisations and rules governing innovation (Lundvall, 1992; Nelson, 1993; Metcalfe, 1995; Edquist, 1997) led to the supposition that foreign affiliates are part of the host country innovation system.

It seems justifiable to look at the role of foreign affiliates in a host country innovation system considering the process of corporate R&D internationalisation (UNCTAD, 2005) and a changing role of affiliates in the knowledge-creation in a TNC network. Traditionally TNCs established technological laboratories at affiliates overseas in order to support manufacturing activities, to adapt already existing products to the special characteristics of the host market and to specific tastes and demands of consumers. This is an adaptive innovation to a product already existing in a corporation's value chain. Since affiliates fully depended on the headquarters regarding in terms of development of new products, academic literature refers to it as home-base exploiting (Kuemmerle, 1997), asset-exploiting (Dunning and Narula, 1995) or competence exploiting (Cantwell and Mudambi, 2005) technological activities.

More recently, a new trend has emerged. TNCs started evolving into heterarchical structures and the role of affiliates has undergone considerable changes. The competitive pressure to innovate faster forces TNCs to search for (technological) knowledge in various locations across the globe. This global change in the corporate strategies coupled with proliferation of ICT has resulted in ever increasing internationalisation of technological activities.

In this respect TNC affiliates overseas assume a more proactive role in the corporate innovation strategy. In an attempt to tap into the knowledge in specific locations TNCs establish R&D facilities which develop new products, create knowledge and competence to be used by the entire corporate network. These R&D facilities are not necessarily linked to manufacturing activities, and can stand alone. Literature refers to it as home-base augmenting (Kuemmerle, 1997), asset-seeking (Dunning and Narula, 1995), or competence-creating (Cantwell and Mudambi, 2005). The latter two terms are preferred to the former one, since knowledge and expertise created by affiliates are used later not only by the headquarters (home base), but by all other affiliates in the corporate network. This literature relates to a number of studies on centres of excellence in a corporate network (Birkinshaw, 1998; Taggart, 1998; Holm and Pedersen, 2000, Frost *et al.*, 2002). The knowledge-based view of a TNC entails reverse knowledge transfer (Håkanson and Nobel, 2000, 2001) within TNC, meaning that knowledge flows from affiliates to the headquarters (and vice versa).

As we pointed out, academic literature has traditionally studied involvement of foreign affiliates in the host economy and emphasised concerns over emergence of foreign manufacturing enclaves. This is a situation when foreign affiliates have very few or no linkages to the national production system. In the past the focus of embeddedness has been on the creation of industrial linkages and technology transfer. Hence the role of embeddedness was seen as a necessary precondition of a one-way flow of technology from foreign affiliates to domestic firms (in developing countries). FDI literature has suggested that linkages with foreign affiliates occur through several channels, such as backward linkages (with domestic suppliers of materials, services, machinery) and forward linkages (with customers). These linkages are supposed to generate technology spillovers. Ultimately, the host economy would contribute from job creation, competition on the market, industrial restructuring and trade integration.

Considering profound changes in the global economic system and emergence of new literature on innovation and TNC, we need to rethink the embeddedness of foreign affiliates in

a host economy. The idea is to look at embeddedness of foreign affiliates into a host country innovation system. Embeddedness into a host country innovation system is much more complex than embeddedness into a host country industrial system, and implies establishing and maintaining linkages with a multitude of actors – domestic firms, other foreign affiliates, and more importantly, academia. Two-directional (to and from affiliate) knowledge and innovation flows should substitute for one-directional spillovers. Knowledge flows in both directions; for instance, Dachs and Ebersberger (2006) examined the unconventional direction of knowledge flows – from a host economy (Austria) to foreign affiliates.

The positive impact is assessed in terms of human resources development, knowledge and competence creation. Hence, a good local infrastructure, a science base and a more skilled workforce are essential for embeddedness of foreign affiliates.

Promoting embeddedness of foreign affiliates in a host economy and its innovation system requires maintaining a network of contacts between management of foreign affiliates and domestic industry. This network may provide ideas for mergers, acquisitions and expansions, for instance.

Moreover, attraction of new suppliers is critical to service affiliates and to improve the efficiency of supply chains. This is why linkages programmes have been implemented in the Czech Republic (The Czech Supplier Development Programme), Ireland (National Linkage Programme), Singapore (Local Industry Upgrading Programme), Malaysia (Industrial Linkages Programme) and other countries. These programmes use tax incentives as carrots to encourage foreign affiliates to undertake initiatives to improve the quality of domestic suppliers. Moreover, the second dimension of FDI policy can be operationalised in cluster development programmes, e.g. “National Cluster Development Programme” in the Czech Republic and “Industry Cluster Development Programme” in New Zealand. Albeit these programmes may deliver positive results (e.g. Shannon Area in Ireland), the risk of failure is high. In many instances the market is more effective than public policies; the world’s most successful clusters – the Silicon Valley and Massachusetts Route 128 – were created by market forces.

Other programmes may include partnership schemes, tax free employment of (PhD) students in foreign affiliates, and technology commercialisation.

## **5. CONCLUDING REMARKS**

Relationship between governments and foreign TNCs has a century-long history, not only confined to FDI but to other forms of market entry. Whilst the primary motives for TNCs to enter new markets were access to natural resources, cost of inputs and a larger consumer base; for developing country governments the motivation to allow TNCs presence was FDI-led industrialisation, import substitution and export promotion. In order to achieve these goals, a variety of restrictive policy instruments was used.

Liberalisation of 1990s and emergence of the international legal framework made most hard policy instruments (e.g. local content, performance requirement) outlawed, nowadays policy makers are left with a menu of soft policy instruments (image building, investment incentives) and improvement of the overall investment climate. A restricted menu of policy instruments calls for more creativity in designing and implementing FDI policy.

At this period of time, FDI policy emerged as a coherent policy area. The main challenge is that the social and private interests should be balanced. Tax incentives competition in the race for FDI can be detrimental for the national economy. Whilst the

investment incentives may be a crucial factor for attracting manufacturing affiliates, attraction of affiliates engaged in higher value-added activities requires improvement of general economic situation and the sound national innovation system, as the investment incentives do not play a critical role in this case.

A contemporary focus of FDI policy is moving away from traditional foci such as FDI for industrialisation (within the ISI regime – Latin America, or within the EOI regime – South East Asia), FDI for industrial restructuring (transition economies of the Eastern Europe) or FDI for growth (China and India), towards the new one – FDI for innovation. In this respect the question of the future of FDI policy arises.

We propose that a greater role should be given to the second task of FDI policy – comprehensive policy initiative towards the foreign affiliates already established in the host economy. The paper has emphasized the importance of fostering innovative activities within the existing foreign affiliates, their integration into the national innovation system. Despite the growing awareness of this need, the issue remains greatly under-researched and constitutes a promising avenue for academic research. There is no uniform prescription to all countries in terms of policymaking, one-size-fits-all approach. Policy should be designed in each case specifically, taking into account specific characteristics of the host economy and its innovation system.

## REFERENCES

- Amsden, Alice (2001). *The rise of the rest. Challenges to the west from late-industrializing economies* (Oxford: Oxford University Press).
- Andersson, Thomas (2005). "Linking national science, technology and innovation policies with FDI policies", in *Globalization of R&D and Developing Countries. UNCTAD Expert Meeting*, Geneva, 24-26 January, pp. 175-192.
- Birkinshaw, Julian (1996). "How subsidiary mandates are gained and lost", *Journal of International Business Studies*, 27 (3), pp. 467-495.
- Birkinshaw, Julian (1998). "Foreign owned subsidiaries and regional development: the case of Sweden", in Julian Birkinshaw and Neil Hood, eds., *Multinational Corporate Evolution and Subsidiary Development* (London: Macmillan), pp. 268-298
- Birkinshaw, Julian and Hood, Neil (1998). "Multinational subsidiary evolution: capability and charter change in foreign-owned subsidiary companies", *Academy of Management Review*, 23 (4), pp.773-795.
- Buckley, Peter J. and Casson, Mark (1976). *The Future of the Multinational Enterprise* (London: Macmillan).
- Cantwell, John and Mudambi, Ram (2005). "MNE competence-creating subsidiary mandates", *Strategic Management Journal*, 26, pp. 1109-1128.
- Cárdenas, Enrique, Ocampo, José A. and Thorp, Rosemary, eds. (2000). *Industrialisation and the State in Latin America: the post-war years* (Basingstoke: Palgrave Macmillan).
- Caves, Richard E. (1971). "International corporations: the industrial economics of foreign investment", *Economica*, 38, pp. 1-27.
- Chang, Ha-Joon (2002). *Kicking away the ladder – development strategy in historical perspective* (London: Anthem Press)
- Cohen, Wesley and Levinthal, Daniel (1989). "Innovation and learning: the two faces of R&D", *Economic Journal*, 94, pp. 569-596.

- Cohen, Wesley and Levinthal, Daniel (1990). "Absorptive capacity: a new perspective on learning and innovation", *Administrative Science Quarterly*, 35 (1), pp. 128-152.
- Cyert, Richard M. and March, James G. (1963). *A Behavioural Theory of the Firm* (Englewood Cliffs, NJ: Prentice Hall).
- Dachs, Bernhard and Ebersberger, Bernd (2007). "Knowledge flows between multinational enterprises and national innovation systems: the case of Austria", in Teixeira, Aurora and Tavares, Ana Teresa, eds., *Multinationals, Clusters and Innovation. Does Public Policy Matter?* (New York: Palgrave Macmillan), pp. 13-26.
- Dresher, Melvin (1961). *Games of strategy: theory and applications* (Englewood Cliffs, NJ: Prentice Hall).
- Dunning, John H. (1958). *American Investment in British Manufacturing Industry* (London: George Allen and Unwin).
- Dunning, John H. (1977). Trade, location of economic activity and the MNE: a search for an eclectic approach. The international allocation of economic activity: *Proceedings of a Nobel Symposium held at Stockholm. P.H. a P.M. W.B. Olin* (London: Macmillan)
- Dunning, John H. (1993). *Multinational enterprises and the global economy* (Wokingham, England: Addison-Wesley).
- Dunning, John H. and Narula, Rajneesh (1995). "The R&D activities of foreign firms in the US", *International Studies of Management and Organisation*, 25 (1), pp. 39-44.
- EC [European Commission] (2007). *Monitoring Industrial Research: The 2006 EU Industrial R&D Investment Scoreboard* (Luxembourg: EC).
- Edquist, Charles, ed. (1997). *Systems of Innovation: Technologies, Institutions, and Organisations* (London: Pinter)
- Ellingstad, Marc (1997). "The maquiladora syndrome: central European prospects", *Europe-Asia Studies*, 49 (1), pp. 7-21.
- Enderwick, Peter (2005). "Attracting desirable FDI: theory and evidence", *Transnational Corporations*, 14 (2), pp. 93-119.
- Evans, Peter (1979). *Dependent Development: the Alliance of Multinational, State and Local Capital in Brazil* (Princeton, NJ: Princeton University Press).
- EY [Ernst and Young] (2006). *European attractiveness survey. Globalisation act II: Team Europe defends its goals*. Studio Ernst & Young
- Frost, Tony, Birkinshaw, Julian and Ensign, Prescott (2002). "Centres of excellence in multinational corporations", *Strategic Management Journal*, 23 (11), pp. 997-1018.
- Håkanson, Lars and Nobel, Robert (2000). "Technology characteristics and reverse technology transfer", *Management International Review*, 40, pp. 29-48.
- Håkanson, Lars and Nobel, Robert (2001). "Organization characteristics and reverse technology transfer", *Management International Review*, Special Issue, 41(4), pp. 392-420.
- Hedlund, Gunnar and Kverneland, Ådne (1985). "Are strategies for foreign markets changing? The case of Swedish investment in Japan", *International Studies of Management and Organization*, 15 (2), pp. 41-59.
- Hirschman, Albert O. (1971). *A Bias for Hope: Essays on Development and Latin America* (New Haven: Yale University Press).
- Holm, Ulf and Pedersen, Torben (2002). *The Emergence and Impact of MNC Centres of Excellence: A Subsidiary Perspectives* (London: McMillian).

Hymer, Stephen H. (1960/1976). *The International Operations of National Firms: A Study of Direct Foreign Investment* (Cambridge, MA: MIT Press).

IFC [International Finance Corporation] (1997). *Foreign Direct Investment* (Washington, DC: World Bank).

Johanson, Jan and Vahlne, Jan-Erik (1977). "The internationalisation process of the firm – a model of knowledge development and increasing foreign market commitments", *Journal of International Business Studies*, 8 (1), pp. 23-32.

Johanson, Jan and Wiedersheim-Paul, Finn (1975). "The internationalisation of the firm – four Swedish cases", *Journal of Management Studies*, 12 (3), pp. 305-22.

Katz, Jorge (2000). *Passado y presente del comportamiento tecnológico de América Latina. CEPAL/ECLA, Red de Reestructuración y Competitividad (Serie Desarrollo Productivo 75)*.

Knight, Gary A. and Cavusgil, S. Tamer (1996). "The born global firm: a challenge to traditional internationalisation theory", *Advances in International Marketing*, 8 (1), pp. 11-26.

Kogut, Bruce and Chang, Sea Jin (1991). "Technological capabilities and Japanese foreign direct investment in the United States", *The Review of Economics and Statistics*, 73 (3), pp. 401-413.

Kuemmerle, Walter (1997). "Building effective R&D capabilities abroad", *Harvard Business Review*, 75 (2), pp. 61-70.

Kuemmerle, Walter (1999). "Foreign direct investment in industrial research in the pharmaceutical and electronics industries – results from a survey of multinational firms", *Research Policy*, 28 (1-2), pp. 179-93.

Lall, Sanjaya (1980). "International technology market and developing countries", *Economic and Political Weekly*, Annual Number 1980 (February), pp. 311-332.

Lall, Sanjaya (1981). *Transnational corporation linkages in developing countries: the case of backward linkages via subcontracting*, United Nations Centre on Transnational Corporations, Technical Paper (New York, NY: United Nations).

Lall, Sanjaya (1987). *Learning to Industrialize: the Acquisition of Technological Capability by India* (London: Macmillan).

Lall, Sanjaya (2000a). FDI and development: research issues in the emerging context. *Centre for International Economic Studies. Policy Discussion Paper No. 0020*

Lall, Sanjaya (2000b). "Technological change and industrialisation in the Asian newly industrialising economies: achievements and challenges", in Linsu Kim and Richard R. Nelson, eds., *Technology, learning and innovation: experiences of newly industrialising economies* (Cambridge: Cambridge University Press), pp. 13-68.

Lall, Sanjaya (2000c). "The technological structure and performance of developing country manufactured exports, 1985-98", *Oxford Development Studies*, 28 (3), pp. 337-369.

Levinthal, Daniel (1990). "Absorptive capacity: a new perspective on learning and innovation", *Administrative Science Quarterly*, 35(1), pp. 128-152.

Litvak, Isaiah A. (1990). "Instant international: strategic reality for small high-technology firms in Canada", *Multinational Business*, 2 (1), pp. 1-12.

Loewendahl, Henry (2001). "A framework for FDI promotion", *Transnational Corporations*, 10 (1), pp.1-42.

Lundvall, Bengt-Åke, ed. (1992). *National systems of innovation: towards a theory of innovation and interactive learning* (London: Pinter)

Madeuf, Bernadette (1984). "International technology transfers and international technology payments: definitions, measurements and firms' behaviour", *Research Policy*, 13 (3), pp. 125-140.



- Madsen, Tage K. and Servais, Per (1997). "The internationalisation of born globals: an evolutionary process?", *International Business Review*, 6 (6), pp. 561-583.
- Marin, Anabel (2007). Thinking locally: New approaches to foreign direct investment, Science and Development Network Policy Brief, at <http://www.scidev.net/dossiers/index.cfm?fuseaction=policybrief&dossier=12&policy=134>
- McAuley, Andrew (1999). "Entrepreneurial instant exporters in the Scottish arts and crafts sector", *Journal of International Marketing*, 7 (4), pp. 67-82.
- McManus, John C. (1972). "The theory of the multinational firm", in Gilles Paquet, ed., *The Multinational Firm and the Nation State* (Toronto: Collier-Macmillan), pp. 66-93.
- Metcalfe, Stan (1995). "Technology systems and technology policy in an evolutionary framework", *Cambridge Journal of Economics*, 17 (1), pp. 25-46.
- Moen, Øystein (2001). "The born globals – a new generation of small European exporters", *International Marketing Review*, 19 (2), pp. 156-175.
- Moran, Theodore T. (1978). "Multinational corporations and dependency: a dialogue for dependentistas and non-dependentistas", *International Organization*, 32 (1), pp. 79-100.
- Morisset, Jacques and Pirnia, Neda (2002). "How tax policy and incentives affect foreign direct investment: a review", The World Bank working paper No.2509 (Washington, DC: The World Bank).
- Mortimore, Michael, Vergara, Sebastián and Katz, Jorge (2001). *La competitividad internacional y el desarrollo nacional: implicancias para la política de inversión extranjera directa en América Latina*. Serie Desarrollo Productivo 107 (Santiago de Chile: CEPAL/ECLA, Red de Inversiones y Estrategias Empresariales)
- Nelson, Richard R. (Ed.) (1993). *National innovation systems: a comparative study* (New York, NY and Oxford: Oxford University Press).
- OECD (2005). A policy framework for investment: investment promotion and facilitation. Background information in support of the APEC-OECD Seminar on "Working together on investment and development" (14-15.11.2005, Busan, Korea) (Paris: OECD).
- Oviatt, Benjamin M. and McDougall, Patricia P. (1994). "Toward a theory of international new ventures", *Journal of International Business Studies*, 25 (1), pp. 45-64.
- Oviatt, Benjamin M. and McDougall, Patricia P. (1997). "Challenges for internationalisation process theory: The case of international new ventures", *Management International Review*, 37 (2), pp. 85-99.
- Papanastassiou, Marina and Pearce, Robert (1999). *Multinationals, Technology and National Competitiveness* (Cheltenham: Edward Elgar).
- Pavitt, Keith and Patel, Parimal (1999). "Global corporations and national systems of innovation: who dominates whom?", in Daniele Archibugi, Jeremie Howells and Jonathan Michie, eds., *Innovation Policy in a Global Economy* (Cambridge: Cambridge University Press), pp. 94-119.
- Pearce, Robert (1999). "The evolution of technology in multinational enterprises: the role of creative subsidiaries", *International Business Review*, 8 (2), pp. 125-148.
- Penrose, Edith (1959). *The Theory of the Growth of the Firm* (New York, NY: John Wiley).
- Preece, Stephen B., Miles, Grant and Baetz, Mark C. (1999). "Explaining the international intensity and global diversity of early-stage technology-based firms", *Journal of Business Venturing*, 14 (3), pp. 259-281.
- Robinson, Richard D. (1976). *National Control of Foreign Business Entry* (New York, NY: Praeger).
- Rosenberg, Nathan and Frischtak, Claudio, eds. (1985). *International technology transfer* (New York, NY: Praeger).

- Siamwalla, Ammar (1975). "Stability, growth and distribution in the Thai economy: essays in honour of Khunying Suparb Yossundara", in Prateep Sondysuvan, ed., *Finance, trade and economic development in Thailand* (Bangkok: Sompong Press), pp. 21-48.
- Stewart, Frances (1979), "International technology transfer: issues and policy options", World Bank Staff Working Paper, No. 344 (Washington, DC: World Bank).
- Stiglitz, Joseph (2000). "Capital market liberalization, economic growth, and instability", *World Development*, 28 (6), pp. 1075-86.
- Taggart, James (1998). "Strategy shifts in MNC subsidiaries", *Strategic Management Journal*, 19 (7), pp. 663-681.
- UNCTAD (1999). World Investment Report 1999: foreign direct investment and the challenge of development (New York and Geneva: United Nations).
- UNCTAD (2001a). Tax incentives and FDI: a global survey (New York and Geneva: United Nations).
- UNCTAD (2001b). World Investment Report 2001. Promoting linkages (New York and Geneva: United Nations).
- UNCTAD (2005). World Investment Report 2005. Transnational corporations and the internationalization of R&D (New York and Geneva: United Nations).
- UNCTAD (2006c). World Investment Report 2006. FDI from developing and transition economies: implications for development (New York and Geneva: United Nations).
- Vernon, Raymond (1966). "International investment and international trade in the product cycle", *Quarterly Journal of Economics*, 82 (2), pp. 190-207.
- Wells, Louis and Wint, Alvint (2001). "Marketing a Country, Revisited", FIAS Occasional Paper, number 13 (Washington, DC: World Bank).
- Young, Stephen, Hood Neil and Wilson, Alan (1994). "Targeting policy as a competitive strategy for European inward investment agencies", *European Urban and Regional Studies*, 1 (2), pp. 143-159.
- Zanatta, Mariana, Costa, Ionara and Filippov, Sergey (2006). Foreign direct investment: key issues for promotion agencies, United Nations University policy brief, no. 10 (Tokyo: United Nations University Press).

**Table 1 - A comparison between quantitative and qualitative approaches to FDI policy**

	Quantitative approach	Qualitative approach
Source of host economy's comparative advantage	Comparative advantage is derived from factor endowments, cost of inputs into manufacturing activities CA = f(K, L, NR), where K – capital, L – labour, NR – natural resources	Comparative advantage is derived from created assets, inputs into knowledge-based activities CA = f(HK, KN, IF), where HK – human capital, KN – knowledge, IF – infrastructure
Focus of FDI promotion	Amount of inward FDI	Specific types of FDI projects (specific sectors and specific business functions)
Main techniques of FDI policy	Liberalisation of regulatory framework and adopting open-door approach	Targeting (size, investor, business functions, sector)
Overlap with other policy areas	Industrial Policy (FDI is a source of capital for industrial development)	Innovation Policy as a broad policy area (foreign affiliates are actors in the national innovation system; R&D-related FDI is a source of innovation in the host economy)
Body responsible for FDI policy and its primary role	Ministry for Economic and Industrial Development Investment Promotion Agency as an information kiosk	Investment Promotion Agency as an active player, a negotiator between a government and a TNC
Indicators of policy effectiveness	<ul style="list-style-type: none"> <li>- FDI flows as a percentage of gross fixed capital formation (GFCF)</li> <li>- FDI stocks as a percentage of gross domestic product (GDP)</li> <li>- employment of foreign affiliates</li> <li>- export generated by foreign affiliates</li> <li>- gross product of foreign affiliates</li> </ul>	<ul style="list-style-type: none"> <li>- R&amp;D-FDI flows as a percentage of the total gross domestic expenditure on R&amp;D (GERD) (or business enterprise R&amp;D (BERD))</li> <li>- number of R&amp;D affiliates set up in the host economy,</li> <li>- number of researchers employed,</li> <li>- number of patents applications by foreign affiliates</li> </ul>

Source: authors' elaborations

**Table 2 – Two dimensions of FDI policy in relation to qualitative and quantitative approaches**

	Dimension 1: Investment promotion	Dimension 2: Affiliates development
Quantitative Approach	Attraction of higher volume of inward FDI	Support to quantitative expansion of affiliates
Qualitative Approach	Selective attraction of special types of FDI	Support to qualitative development of affiliates - Embeddedness of foreign affiliates - Promoting innovativeness in foreign affiliates

Source: authors' elaborations

**Table 3 - A typology of FDI policy instruments**

	Explicit FDI policy instruments	Implicit FDI policy instruments
Codified	Fiscal incentives (usually laid down in Investment Incentive Act)	Competition policy IPR regime Education policy
Uncodified	Financial incentives (bargaining with TNCs)	Culture Institutions Level of bureaucracy (corruption)

Source: authors' elaborations

## **The UNU-MERIT WORKING Paper Series**

- 2007-01 *Developing science, technology and innovation indicators: what we can learn from the past* by Christopher Freeman & Luc Soete
- 2007-02 *The impact of innovation activities on productivity and firm growth: evidence from Brazil* by Micheline Goedhuys
- 2007-03 *Estimations of US debt dynamics: Growth cum debt and the savings glut in Kouri's model* by Thomas Ziese
- 2007-04 *States and Firms on the Periphery: The Challenges of a Globalizing World* by Gabriel R.G. Benito & Rajneesh Narula
- 2007-05 *How Do Consumers Make Choices? A Summary of Evidence from Marketing and Psychology* by Zakaria Babutsidze
- 2007-06 *Inter-firm Technology Transfer: Partnership-embedded Licensing or Standard Licensing Agreements?* by John Hagedoorn, Stefanie Lorenz-Orlean & Hans Kranenburg
- 2007-07 *The Behavior of the Maximum Likelihood Estimator of Dynamic Panel Data Sample Selection Models* by Wladimir Raymond, Pierre Mohnen, Franz Palm & Sybrand Schim van der Loeff
- 2007-08 *Location and R&D alliances in the European ICT industry* by Rajneesh Narula & Grazia D. Santangelo
- 2007-09 *How do social capital and government support affect innovation and growth? Evidence from the EU regional support programmes* by Semih Akcomak & Bas ter Weel
- 2007-10 *The Micro-Dynamics of Catch Up in Indonesian Paper Manufacturing: An International Comparison of Plant-Level Performance* by Michiel van Dijk & Adam Szirmai
- 2007-11 *Financial Constraint and R&D Investment: Evidence from CIS* by Amaresh K Tiwari, Pierre Mohnen, Franz C. Palm & Sybrand Schim van der Loeff
- 2007-12 *The Spatial Hierarchy of Technological Change and Economic Development in Europe* by Bart Verspagen
- 2007-13 *The origins and implications of using innovation systems perspectives in the design and implementation of agricultural research projects: Some personal observations* by Andy Hall
- 2007-14 *Technology supply chain or innovation capacity?: Contrasting experiences of promoting small scale irrigation technology in South Asia* by Andy Hall, Norman Clark and Guru Naik
- 2007-15 *Are firms that received R&D subsidies more innovative?* by Charles Bérubé & Pierre Mohnen

- 2007-16 *Foreign direct investment and firm level productivity. A panel data analysis* by Geoffrey Gachino
- 2007-17 *Technological spillovers from multinational presence towards a conceptual framework* by Geoffrey Gachino
- 2007-18 *Technological capability building through networking strategies within high tech industries* by Wim Vanhaverbeke, Bonnie Beerkens and Geert Duysters
- 2007-19 *External technology sourcing: the effect of uncertainty on governance mode choice* by Vareska van de Vrande, Wim Vanhaverbeke & Geert Duysters
- 2007-20 *Exploration and Exploitation in Technology-based Alliance Networks* by Wim Vanhaverbeke, Victor Gilsing, Bonnie Beerkens, Geert Duysters
- 2007-21 *ICT Externalities: Evidence from cross country data* by Huub Meijers
- 2007-22 *Knowledge Flows, Patent Citations and the Impact of Science on Technology* by Önder Nomaler & Bart Verspagen
- 2007-23 *R&D offshoring and technology learning in emerging economies: Firm-level evidence from the ICT industry* by Zhe Qu, Can Huang, Mingqian Zhang & Yanyun Zhao
- 2007-24 *The Environmental Porter Hypothesis: Theory, Evidence and a Model of Timing of Adoption* by Ben Kriechel & Thomas Zieseemer
- 2007-25 *Measuring the Effectiveness of R&D tax credits in the Netherlands* by Boris Lokshin & Pierre Mohnen
- 2007-26 *The productivity effects of internal and external R&D: Evidence from adynamic panel data model* by Boris Lokshin, René Belderbos & Martin Carree
- 2007-27 *National System of Innovations and the role of demand. A cross country comparison* by M. Abraham Garcia-Torres
- 2007-28 *The Global Challenges of the Knowledge Economy: China and the EU* by Can Huang and Luc Soete
- 2007-29 *Redefining Foreign Direct Investment Policy: A Two Dimensional Framework* by Sergey Filippov & Ionara Costa