



27-28 March 2008

# GLOBAL FORUM VII

ON International Investment

## POLICIES PROMOTING MNES LINKAGES IN HOST ECONOMIES: A COMPARISON BETWEEN BRAZIL AND MALAYSIA

*Giroud Axèle & Botelho Delane*

### **Breakfast Session 1: New frontiers in investment promotion**

This paper was submitted in response to a call for papers conducted by the organisers of the OECD Global Forum on International Investment. It is distributed as part of the official conference documentation and serves as background material for the relevant session in the programme. The views expressed in this paper do not necessarily represent those of the OECD or its member governments.

Global Forum on International Investment VII  
Paris, 27 & 28<sup>th</sup> March 2008

Best Practices in Promoting Investment for Development

Policies promoting MNEs linkages in host economies: A comparison  
between Brazil and Malaysia

Giroud Axèle  
(axele.giroud@mbs.ac.uk)  
and  
Botelho Delane  
(delane.botelho@fgv.br)

***Abstract:***

One important source of development and technology in-flow in developing and emerging host countries is related to the externalities resulting from the linkages that (small) local suppliers can forge with (large) multinational corporations - MNEs. Public policies and institutions (such as investment promotion agencies) can play a crucial role in promoting such linkages. The aim of our article is to evaluate, compare and contrast policies currently adopted by the Brazilian and Malaysian governments. Many governments worldwide have not yet considered implemented targeted policies to enhance inter-firm linkages from MNEs. This paper therefore contributes by highlighting good practice in the developing world. Both Brazil and Malaysia provide good cases of countries implementing linkage initiatives for development, such as Projeto Vinculos (promoted by United Nations Conference on Trade and Development) for Brazil, supplier development programs (promoted by MNEs and business associations) for both Brazil and Malaysia, or more widely a cluster-centred policy initiative as in the case of Malaysia. These policy initiatives are analyzed and discussed in relation to MNEs strategies and governments' developmental objectives in host developing economies. Policy recommendations are drawn, not only for Brazil and Malaysia, but for other developing economies wishing to enhance the potential developmental impact of foreign MNEs activities in their national boundaries.

# Policies promoting MNEs linkages in host economies: A comparison between Brazil and Malaysia

## Introduction

A key challenge for economic development often resides in the accumulation of technology and knowledge, and the capability enhancement of local companies in the country. This can be achieved by buying technology externally, by investing in firm's development programs, or by encouraging inter-firm linkages with firms that operate in high value-added activities and demonstrate high resources. In developing countries, multinational corporations (MNEs) are often perceived as benefiting from firm-specific advantages and resources superior to those possessed by locally-owned firms (Lall, 2004), and are also key providers for investment. Through their operations, MNEs have both direct and indirect impacts on the local economy. This paper considers MNEs' externalities following inter-firm linkages with local suppliers (often small and medium enterprises - SMEs). Governments worldwide have been liberalizing their investment policies, to progressively become more open towards foreign direct investment (FDI). In their effort to attract FDI, governments often pay more attention to FDI promotion than to policies aimed at enhancing the positive impact of MNEs through linkages' creation, yet public policies and institutions (such as investment promotion agencies) can play a crucial role in promoting such linkages.

We compare two countries, Brazil and Malaysia, and investigate the policies implemented by both governments towards MNEs and local firms' capability enhancement. Both countries have been major developing host for FDI, yet present interesting similarities and differences in their experience with MNEs. First, Malaysia and Brazil are key recipients within their respective regions. In 2006, FDI inflow in Malaysia reached \$ 6 billion, establishing the country as the second largest recipient for FDI within its Association of South East Asian Nations (ASEAN) region. Brazil attracted \$ 18.9 billion, the second largest recipient across the Latin American continent, behind Mexico. Second, their reliance on FDI varies significantly. For instance, the Transnationality index for Malaysia is higher than that of Brazil (23% against 16%), which indicates the greater reliance of the Malaysian economy on international activities (namely the position in the country's investment, value added and employment by MNEs). Malaysia is a *front-runner* with high FDI performance and high FDI potential, Brazil is categorized as *below-performance* given its low FDI performance despite its high FDI potential (UNCTAD, 2007: 14). Thus, both countries present characteristics of importance for the objectives of this paper. Malaysia's economic development is reliant upon MNEs, while Brazil could further develop its position as a FDI recipient.

We propose to take into consideration the role of MNEs in each country's development objectives, and present an in-depth analysis of the policies implemented by both governments. The data presented is the result of several field trips in both Brazil and Malaysia, examining the activities of MNEs and their linkages, and the policies adopted by the Brazilian and Malaysian government to promote such inter-firm linkages.

The aim of the article is to evaluate, compare and contrast policies currently adopted by the Brazilian and Malaysian governments. Many governments worldwide have not yet considered

implementing targeted policies to enhance inter-firm linkages from MNEs. This paper therefore contributes by highlighting good practice in the developing world. Both Brazil and Malaysia provide good cases of countries implementing linkage initiatives for development, such as Projeto Vinculos (promoted by United Nations Conference on Trade and Development - UNCTAD) for Brazil, supplier development programs (promoted by MNEs and business associations) for both Brazil and Malaysia, or more widely a cluster-centred policy initiative as in the case of Malaysia.

In the following section, we present the reasons why FDI is an important development tool for host developing economies. We then assess the current policy initiatives in Malaysia and Brazil, structuring the discussion around the need for government not only to promote FDI, but also to develop targeted policies to facilitate inter-firm relationships between MNEs and local firms. In the third section, we analyze both models and provide a discussion around the similarities and differences, and success of those policies before building some policy recommendations for other developing economies. The discussion considers other factors affecting linkages creations, in particular individual MNE's global strategies.

## **FDI, Economic Development Linkages and Government Policies**

MNEs have a substantial impact on host developing countries' economic development, ranging from impacting upon the country's balance of payments, the local investment rate and stock of capital, the employment level and local firms' competitiveness (Lall, 2002; Lall and Narula, 2004; Moran, 2006). For this reason, host governments carefully design policies firstly to attract foreign firms within their national borders, and secondly to try and maximise the positive impacts and spillovers from MNEs' presence in their country. MNEs may cover for market imperfections, such as bringing resources difficult to find in specific markets, transferring technology, management know-how and labour, providing access to international production networks and to major markets. Foreign firms have both a direct impact through their activities, and an indirect impact through activities that might be generated in the rest of the economy as a result of its operation. In this paper, we focus on government policies aimed at encouraging inter-firm linkages by MNEs with locally-owned firms in developing economies, and the development potential drawn from these linkages' creation.

MNEs operating in host economies develop a portfolio of linkages with numerous companies such as suppliers, customers, competitors and non-business institutions, also categorised as *backward*, *forward*, *horizontal* and *relations with non-business institutions* (see Table 1). Exchange of goods and services takes place either within organizations (MNEs' intra-organisational linkages) or amongst organizations (MNEs' inter-organisational linkages). Linkages creation is particularly beneficial for local firms in developing countries when close relationships are established and flow of information and knowledge occurs. Governments need to differentiate between the *extent* of linkages created (which can be assessed either in monetary terms or through the number of contracts and specific relationships) and the *depth* of linkages (that is the potential for technology and information sharing between firms, leading to increased benefit for the local firms).

\*\*\* Insert Table 1 Here \*\*\*

Some studies have pointed to the beneficial impact of MNEs through linkages (Javorcik Smarzynska, 2006; Meyer, 2004; Altenburg, 2001) while others remain cautious, pointing instead to the lack of evidence on the spillover potential (Görg and Greenaway, 2003). Disregarding the discussion on the positive and negative impact of MNEs through linkages, a key trend has been

for governments across the developing world to provide incentives aimed at attracting MNEs within their national borders (Young and Tavares, 2004; Moran, 2006; Chung and Beamish, 2005). In this context, a better understanding of that factors that lead to enhanced positive impact is essential, as much as comparing policies adopted by governments across the developing world as opposed to those of the developed world (Moran, 2006).

A number of factors have been analysed in the literature that suggest linkages potential will vary. Such factors include the economic development level of the host country and economic growth and the investment climate (Mirza and Freeman, 2007; Lall, 2002; Kelegama and Foley, 1999); the availability of appropriate local firms (Giroud, 03; Meyer, 2004) and in particular the level of technological capabilities and entrepreneurial potential of local firms; factors related to MNEs strategies and operations (Dickens, 2007; Iguchi, 2008; Jindra et al., 2008); the structure and type of the industry and potential for inter-industry fertilization (UNCTAD 2001: 137; Kugler, 2006); the type of government policies implemented [particularly in terms of attracting foreign firms (Moran, 2006; Han and Kim, 2003; Giroud, 2006; 2007)]. Given these factors, the challenge for governments aiming at enhancing benefits from MNEs linkages lies in the ability to not only attract, but also provide firm-level policies (for both MNEs and locally-owned firms), industrial policies, and policies enhancing the business environment as a whole.

#### *Existing Policies to Encourage Linkages*

Few comprehensive studies focus on government-related linkages policy (apart from Battat et al., 1996; UNCTAD, 2001; and Giroud 2007 focusing on East Asian economies). Yet, as mentioned previously, the type of inter-firm linkages vary depending upon the competitive environment, the technological environment and the facilitation measures provided by host governments. FDI-friendly policies have proliferated in the 1990s, in line with governments' efforts to create attractive policy environments, particularly in the developing world (Lall and Narula, 2004). Generally, governments develop FDI policies around three key objectives, namely attracting FDI, enhancing positive FDI impact, and addressing foreign investors' concerns to maintain or expand FDI levels. With the importance of technological capacity enhancement in host developing economies, governments tend to promote MNEs linkages with knowledge exchange potential (see Table 2).

\*\*\* Insert Table 2 Here \*\*\*

Linkage promotion policies are highly context specific and need to be adapted to the specific circumstances prevailing in each host economy (UNCTAD, 2001: xxiii). However, when focusing on linkages' development, governments must address three key challenge: firstly, to promote the competitive development of indigenous firms; secondly, to promote information exchange and raise awareness of foreign firms' requirements to local firms and of local firms' existence to foreign firms; and thirdly, it needs to address issues specific to foreign firms. Mandatory policies are not always the most effective means to MNEs' linkages. As an example, strict local content regulations were found to have a somewhat negative effect of FDI (Hackett and Srinivasan, 1998), notably because they do not stimulate procurement from locally-owned suppliers (Belderbos et al., 2001). This explains why a number of governments in the developing world have devised soft policy provisions, whereby MNEs do not operate under mandatory rules (for instance, encouraging supply linkages and inter-firm relations, as opposed to imposing specific levels of local procurement). Overall, governments use selected measures to attract

foreign investors and influence their activities on the one hand, and to create favourable business and investment environments, where inter-firm relations can be maximised.

## **MNEs' Linkages Policies: The Case of Malaysia and Brazil**

The information presented in this section is the result of several research trips conducted by both researchers in Malaysia and Brazil. Careful examination of FDI policies, and government attitude towards FDI was conducted. In the case of Malaysia, information was gathered over time, in parallel to field trips investigating MNEs linkages in the country. In the process, government officials were met on various occasions, both for policy discussion (directly in the Malaysian Industrial Development Authority - MIDA offices in Kuala Lumpur, with the latest trip conducted by a researcher in January 2008), by taking part in special events (such as the signing of memorandum of understanding between MNEs and local suppliers in Penang) or during expert meeting (organized by United Nations Industrial Development Organization - UNIDO in Bangkok in 2005). In the case of Brazil, twenty one experts from different organizations, including government, SMEs, MNEs, business development service (BDS) providers, academia, and international organizations such as UNCTAD were interviewed to endorse the analysis. Also, officials from the government and the private sector were met in two workshops organized by SEBRAE (Brazilian Micro and Small Business Support Service) and UNCTAD in 2007 in the cities of Recife and Brasília.

### *Malaysian Linkages Policies*

In this section, we discuss ways through which the Malaysian government encourages FDI linkages. We begin by pointing to the way FDI process has been facilitated, before debating specific policies aimed at deepening MNEs-local firms' linkages.

#### The Malaysian Master Plans

Over the past few decades, the Malaysian government has adapted its FDI policies to fit within its development plans and objectives. Malaysia has adopted successively export-orientated and import-substitution policies since its independence. Economic development strategies are implemented through the Malaysian Master Plans. The third Master Plan (IMP3) was launched in 2006, and provides the basis for development over 2006-2020 (<http://www.mida.gov.my>). The IMP3 aims at deepening linkages between manufacturing-related services, enhancing the development of industrial clusters, strengthening skills of the country's workforce, enhancing participation of local suppliers and service providers in the global supply chain. The development policies follow on from the cluster-based IMP2, which focused on selected industrial sectors. The common features that can be found in Malaysian policies since the 1980s are those of investment (and reinvestment) promotion, industrial linkages, export and training.

Focusing on FDI, the Malaysian government has strongly emphasised the possibilities of spillover generation by foreign firms. Policies adopted have aimed to maximise positive impacts of MNEs in various sectors, particularly by encouraging inter-firm linkages throughout the country and across sectors of activity, with particular emphasis on the manufacturing sector.

#### MIDA: Malaysian Industrial Development Authority

The Malaysian Industrial Development Authority is the most important governmental body overlooking industrial development and foreign direct investment. It represents the first portal for any FDI-related affairs. MIDA is one of the five agencies of the Ministry of International Trade and Industry (MITI), alongside the Small & Medium Industries Development Corporation

(SMIDEC), the Malaysian External Trade Development Corporation (MATRADE), the National Productivity Corporation (NPC) and The Malaysia Industrial Development Finance (MIDF). MIDA performs number of functions (as illustrated in Table 3), the important for this paper being its role in terms of welcoming FDI. All FDI agreements, and manufacturing licenses are granted by MIDA. The establishment of a single key government authority for investment facilitates the investment process. Approval for manufacturing license is granted within seven days. Malaysia is also a welcoming environment for MNEs, with no restrictions on foreign equity ownership or on profit repatriation, and facilitated employment of expatriate personnel.

\*\*\* Insert Table 3 Here \*\*\*

### Investment policies and incentives

Key investment policies have focused preliminary on infrastructure development. Table 4 shows the efforts towards developing transport infrastructure, as well as industrial parks, technology parks and dedicated government agencies to promote investment throughout the country.

\*\*\* Insert Table 4 Here \*\*\*

Incentives towards investment were launched in the Promotion of Investment Act (PIA, 1986), aiming at both local and foreign firms. Three types of activities are promoted by the Malaysian government: the first list is general, the second targets high-technology companies, and the third small-scale companies.

These incentives are offered generally to encourage investment, but also work in line with the industrial policy followed by the government, with for example an emphasis on the promotion of high-tech industries and research and development (R&D) activities. As well as targeting high-tech industries, the government wishes to attract high value-added activities. For instance, it provides incentives for firms to set up their operational headquarters (OHQ) in Malaysia<sup>1</sup>.

MNEs are also encouraged to develop local skills, mostly through investment tax allowances for companies that establish technical or vocational training institutions. The Human Resource Development Fund (HRDF) oversees and coordinates direct private sector participation in skills' development. The latest efforts have come through facilitation of expatriates assignments.

Following on the second Master Plan's effort for inter-firm linkage and cluster development, market-friendly, soft incentives and initiatives are in place to promote partnerships. In terms of backward linkages promotion, special programmes facilitating the collaboration between foreign investors and domestic suppliers are in place. These include tax incentives, specific institutional arrangements, vendor development schemes, subcontracting exchange schemes and information provision and exchange.

To enhance the position of Malaysia as a major centre for purchasing, the government offers tax incentives for firms willing to establish procurement centres in the country. The international procurement centres (IPCs) initiative targets firms undertaking purchasing and sale of raw materials, components and finished products locally and abroad.

Linkages are also fostered through its *Industrial Linkages Programme* (ILP). Both large buyers and small local vendors benefit from income tax reductions when they engage in activities that increase the quality of local vendors. The programme is complemented by initiatives such as the

---

<sup>1</sup> Key investment incentives include pioneer status, investment tax allowance, reinvestment allowance, incentives for high-technology industries, incentives for R&D, incentives for industrial training, incentives for strategic projects, and incentives for manufacturing related services (operational headquarters - OHQ, international procurement centre - IPC, and regional distribution centre -RDC).

*umbrella strategy* (whereby an *umbrella* firm with financial resources and expertise helps to coordinate the production and marketing of another firm) and the *Global Supplier Programme* (previously known as the *vendor development scheme* aiming at encouraging large firms to provide assistance to a local vendor).

### *Brazilian Linkages Policies*

In this section, we focus on Brazilian policies targeting FDI promotion and linkages creation.

#### The Real Plan

Policy competition to attract investment was “activated” in Brazil by the *Real Plan* in 1994, responsible for cutting inflation and bringing macroeconomic stability to the country. FDI inflows increased from US\$ 1.3 billions in 1993 to US\$ 32.8 billions in 2000, due to the commercial liberalization, privatization and deregulation processes carried out at that time. However, economical structural changes were not followed by articulated instruments of industrial policy (there was no explicit policy to attract FDI aiming at quantitative and qualitative changes in the national industrial structure to obtain competitive gains).

#### Investment Promotion: A multi-faceted structure

Today the institutional structure of FDI attraction in Brazil is represented by APEX (Trade and Investment Promotion Agency), an agency oriented mainly towards exports promotion, RENAI (National Network of Investment Information), which works as an information vehicle about investment opportunities in the country, and SIPRI (Investment and Technology Transfer Promotion System for Companies). The official Brazilian agency to promote investment was created in 2001 as InvesteBrasil. It was a public-private partnership maintained by the private sector (50%) and the government (50%), but it was closed down in 2004. So, today Brazil does not have a national investment promotion agency (IPA) that articulates the entire mechanism of promoting investment, which claims for new instruments that articulate the existing institutions and the recent industrial policy measures. The Ministry of Development, Industry and Foreign Trade (MDIC) has the main responsibility in the country to coordinate the competitiveness' policies to assist companies in general, although in practice other ministries, such as those of finance, science and technology, national integration and others, share such duties.

#### Investment policies and incentives

As in the case of Malaysia, foreign investment receives similar treatment to national investment, both administratively and legally. To overcome deficiencies in its infrastructure, the Brazilian government has initiated the Growth Acceleration Program (PAC), which is aimed at increasing the investment to GDP ratio from 20% to 25% in the future. This programme targets specific regions. In an effort to be more attractive to investment, the Innovation Law establishes incentives to innovation, to interaction between public and private sectors and to the concession of financial resources to the productive sector.

#### Policy Orientation for SMEs in Brazil

With around 10,000 resident MNE affiliates, Brazil possesses an enormous potential to create additional linkages, but most of SMEs still lacks capability and information to access this market, besides still dealing with high bureaucracy. Strong support has been given to strengthen SMEs. As an example, The General Law for Micro and Small Enterprises, starting in 2007, is the first national public policy (valid for all states in Brazil) that determines the unified payment of federal, state and municipal taxes..

The Permanent Forum of Micro-enterprises and Small Businesses, created in 2000 and strengthened in 2007 with the *Estatuto Nacional da Microempresa e da Empresa de Pequeno Porte*, is coordinated by MDIC, and has the role to guide and assist the formulation and coordination of the national policies that promote development for micro and small businesses. Brazilian Micro and Small Business Support Service (SEBRAE), along with Brazilian Development Bank (BNDES), are the two most important institutions to foster activities of SMEs in the country.

#### Policies and Programs to Promote Linkages

The Brazilian government established in 2004 a new policy for competitiveness, the Technology, Trade and Industrial Policy (*Política Industrial, Tecnológica e de Comércio Exterior* – PITCE). The lines of directions involve both horizontal policies (for all sectors of the economy) and vertical ones (for four specific sectors considered strategic for the development of the economy and international insertion of the country: pharmaceutical, software, capital goods and semiconductors). Those are capital-intensive sectors structured by large enterprises, rather than labour force sectors (which is the case of SMEs). The instruments of PITCE include mechanisms of credit access and investment attraction. Thus far this policy resulted in a broad array of initiatives, in various stages of planning and implementation. One of the actions PITCE has is the Local Productive Arrangements Program (*Programa de Arranjos Produtivos Locais*), in which there is the Program of Industrial Export Extension (*Programa de Extensão Industrial Exportadora* - PEIEx), driven to clusters of SMEs in any sector and value chain.

In Brazil, the composition of institutions to promote investment is quite complex, including national system of institutions, IPAs originated from state development banks, IPAs composed by government and private organizations, and private, non-profit organizations, as presented in Table 5. Most of SMEs are not able to supply to MNEs, so local capacity building and skill development constitute a major element in any business linkage program.

\*\*\* Insert Table 5 Here \*\*\*

The promotion of industry clusters in the country is one of the axes of the new economic and social development strategy of the Federal Government, which is the main government program today that might promote business linkages. As a consequence, the Program of Local Productive Arrangements has been included in the 2004-2007 Multi-year Plan, which brings together the policies and work of different government bodies.

Brazil set up eight free trade zones: the Manaus Free Trade Zone, located in the Amazon area, is the most extensively developed (the other zones are only free ports for import and export of goods), and benefits an area that corresponds to 25% of the national territory

There are also successful supplier development programs in Brazil. Two of them are in development in the states of Pará and Maranhão. The *Programa de Desenvolvimento de Fornecedores do Maranhão* started in 1999, with 78 companies participating, and now has almost 400 active companies, in sectors including manufacturing, construction, engineering, automation and services. Programs often appear to remain rather isolated initiatives, still missing a systematic approach to develop and maintain linkages. In addition, they target suppliers' capability development, as opposed to linking them directly with MNEs. .

To address this issue, UNCTAD has supported a project on "Promotion of inter-firm cooperation for the North-East of Brazil" (*Projeto Vinculos*) that aims at establishing and deepening demand oriented-business linkages between MNEs and local SMEs, in particular in the North-Eastern regions of Brazil. Eleven large corporations are helping upgrade over 80 local partners to meet safety, health and environment (SHE) and ISO 14001 standards. UNCTAD assists Brazil in developing institutional capacity and technical expertise for the creation of new, or the strengthening of existing, business linkages between local SMEs and MNEs. To achieve this goal, UNCTAD has cooperated with local development and investment promotion agencies, local BDS providers, foreign affiliates of MNEs, partner ministries and other stakeholders<sup>2</sup>.

#### *Assessment of Success, Strengths and Weaknesses of Both Models*

Because linkages policies are often related to and included within national competitive and industrial policies, it is often difficult to differentiate government initiatives. In both Malaysia and Brazil, strong support to SMEs' development was provided, as illustrated by existing governmental agencies and institutions. In both countries, MNEs receive similar national treatment in terms of investment, and governments have focused on strengthening selected clusters since the 1990s. One can differentiate the developmental objective, however, through FDI-related institutions.

While the Malaysian FDI policies are coordinated through one investment promotion agency only (MIDA), the approach is more complex and dispersed in Brazil. The key explanation for this lack of a concerted effort in Brazil lies in the smaller reliance on foreign firms for the overall economic performance of the country. Thus, while on the one hand Malaysia has developed refined FDI policies, it relies heavily on foreign firms for investment, while Brazil does not. In addition, Malaysia is a small country by comparison with Brazil. It has been very proactive in identifying specific sectors of activities upon which the economic development targets rest. In so doing, Malaysia has also made itself vulnerable, for instance, a large share of its export originate from the electronics sector, which is led in majority by foreign firms. In contrast, the Brazilian economy does not depend upon such a small number of sectors. MNEs also continue to dominate export in Malaysia, which is not the case in Brazil.

Some concerns exist in both countries. The emphasis on SME's technological and capability development is present, as well as the focus on training and skills development. There again, however, Malaysia is ahead in terms of integrating MNEs. Not only are MNEs involved in some of the training centres, they are also encourage to actively train their employees through a series of tax incentives. When applied to inter-firm linkages, this also means that MNEs are involved in training of domestic suppliers. The core MNE-local firms' linkages programme developed in Brazil was essential the result of an external body (UNCTAD), while in Malaysia, the government is pro-actively developing forums to facilitate relationships. Finally, Malaysia is also actively promoting FDI in high-value added activities, with potential for enhance knowledge transfer and sharing with local firms.

In the next section, we build upon the policy frameworks adopted in both Malaysia and Brazil, to point to some policy recommendations that could be applied in other developing economies, host to FDI.

---

<sup>2</sup> [http://www.unctad.org/en/docs/c3d85\\_en.pdf](http://www.unctad.org/en/docs/c3d85_en.pdf)

## **Discussion and Policy Recommendations**

### *Policy recommendations for Malaysia and Brazil*

Some lessons can be learnt by Malaysia and Brazil from each other.

In the case of Brazil, it needs to consolidate the Projeto Vínculos and existing supplier development programs. Initially, the Government could support, on a national or state level, through IPAs or BDS providers, the development of an information centre that provides information on the demands and requirements of MNEs and the (potential) capacity of local firms to supply according to the minimum standards required by the market. Second, enhanced coordination between various agencies is essential. This, however, needs to be linked to the developmental objectives of the country. FDI stocks and inward inflows do not automatically generate long-term beneficial effects, hence it is needed to target sectors and firms for linkages programs. This could be achieved by strengthening the role of APEX-Brazil as an IPA that articulates the national “system” of investment promotion. The simplified, well coordinated systems adopted by Malaysia can provide a useful template for Brazil.

Following the success of the Brazilian Association of Business Incubators and Science Parks (ANPROTEC), promoting project frequently associated with a university, NGO or government office, Brazil could consolidate existing successes, and use those incubators as useful starting points to develop MNEs-local firms’ linkages. The Business Incubators’ success experienced in Brazil also provides useful lessons for Malaysia. One of the key weaknesses of the Malaysian economy still lies in the lack of indigenous entrepreneurial activities, this could be overcome by bringing indigenous entrepreneurs into business development activities. SMEs’ programs already exist, but a specificity of the Brazilian model lies in the close cooperation between private and public institutions.

In turn, Brazil could usefully adopt similar inter-firm programs as those developed in Malaysia, and thereby facilitate technology and information sharing between local SMEs and larger MNEs. These programs have been implemented primarily in the manufacturing sector in Malaysia, while the Brazilian government could target other sectors such as civil construction.

Both countries are actively implementing policies towards labour skills enhancement. Malaysia critically lacks a large pool of skilled workers, and is still in the process of consolidating its training policies. Brazil, on the other hand, lacks management skills, mainly in the areas of environmental and quality management. MNEs can be involved in such training, as shown in the Malaysian Penang Development Centre. The advantage of promoting MNEs’ involvement is that needed skills can be identified faster. In Brazil, this could be achieved through IPAs, BDS providers such as SEBRAE, or business association, such as "Federação das Indústrias".

### *Further policy recommendations: Issues for all developing economies*

The impact and outcome of targeted linkages policies are difficult to assess, yet in developing countries, where the market does not work perfectly. Despite the difficulty in assessing the success of linkages policies, they are part of the overall support provided for firms’ development. Thus, we support governments’ intervention to enhance inter-firm linkages between MNEs and local firms. Comparing Brazil and Malaysia clarified the need for host developing economies to consider several factors that influence their approach to FDI and the potential benefit that can arise from MNEs’ linkages creation. Such factors include the size of the country (implementing policies is more complex in Brazil due to its size and diverse regional potential), the level of economic development and entrepreneurial potential (which means whether local firms have the

potential to learn from MNEs and absorb foreign knowledge), the model of economic development (MNE-led or not), the FDI experience (how long have MNEs been operated in the country).

The discussion on Malaysia and Brazil has pointed to two different development perspectives, Malaysia relying heavily on MNEs for development, Brazil less. In both cases, however, governments first need to clarify their development goals, before they develop FDI promotion policies. The initial target of government is to decide upon the priority sectors and types of activities needed to pursue the development strategy effectively (Stage 1 in Figure 1).

\*\*\*Insert Figure 1 Here\*\*\*

The development goal will lead to targeted industrial policies, while investment promotion and objectives will guide the government in developing strong locational advantages (in terms of infrastructure, factors of production etc.). Once these objectives are in place, targeted linkages policies can be consolidated, and aim at enhancing the beneficial outcome of MNEs' activities and interaction with local firms (Stage 3).

Overall, we would suggest local governments consider the following:

- Consider all key actors: MNEs, local SMEs, investment promotion institutions and the various providers of technological, educational and training, and financial services, IPAs, BDS providers and business associations;
- Build upon existing frameworks, and develop soft policies to promote MNEs-local firms linkages, voluntary policies are less cumbersome to foreign investors than mandatory ones and can lead to higher knowledge transfer and learning potential for local firms;
- Target appropriate skills;
- Match tax incentives with specific goals (in terms of training, targeted firm's activities, inter-firm umbrella programs, etc.);
- Simplify FDI bodies: The Malaysian MIDA oversees all FDI-related issues and strategies. This creates synergies between various governmental policies, ensures greater coordination amongst agencies, and avoids duplication;
- Promote public-private partnerships: The success of SEBRAE and IPAs, such as INDI and Pólo-RS, may be attributable also to their constitution and participation of the private sector;
- Increase learning potential: Projects like *Projeto Vínculos* are seen by some MNEs to have great potential of rendering SMEs more concerned about environmental and safety issues;
- Provide support to local firms' development, for instance through access to financial support or potential to increase managerial capacity. Both public and private banks might be helpful to provide credit, since the linkage contracts can act as a mechanism to reduce the risk of SMEs.

Finally, one can question whether good policies are sufficient to maximize linkages. The paper has focused on government policies, but we acknowledge that MNE strategies will also impact upon the linkage potential in host developing economies. Thus, factors such as competition faced vis-à-vis other developing hosts to attract and retain FDI (particularly in the case of Malaysia), the perception of foreign investors, the performance and capabilities of local firms or the level of MNE engagement, all influence the potential outcome of policies implemented by governments.

## Conclusions

To conclude, developing appropriate MNEs linkage policies is neither easy, nor automatic. Governments are facing initially the challenge of developing developmental goals, combined with the difficulty of identifying key sectors and companies that should be supported. According to UNCTAD (2001a), the single most important host country factor influencing linkage formation is the availability of local suppliers with competitive costs and quality. Local suppliers' development can be supported by special programmes, but their competitiveness is also dependent on a favourable enabling environment comprising broader policy, economic, social and cultural aspects. Therefore, the overall government policy of the country matters, not only FDI and industrial policies.

Adding to these challenges, governments also need to remain aware of alternative linkages, such as cross-border relationships created by international outsourcing, as these offer similar learning potential for local firms. International outsourcing offers the opportunity for local firms to learn from MNEs, even when they are not present in the host developing economy. In this case, more emphasis on promoting the external image of the country, as a provider of activities in the global marketplace becomes paramount.

The regional dimensions come into play when discussing linkages creation. In Southeast Asia, the presence of MNEs in neighbouring economies generates cross-border linkages potential. Regional-based industrial policies have been developed by ASEAN (for instance the ASEAN Free Trade Area increases the possibility to engage in cross-border sourcing, while the ASEAN Industrial Cooperation scheme promotes regional-wide MNEs' activities and relationships), and in this respect, Malaysia benefits from advantages not available to Brazil, given the narrower focus on MERCOSUR. The regional dynamics in terms of economic growth and potential, political stability and potential for cross-border trade and investment flows create opportunities.

In this paper, we have carefully analyzed two linkages policy systems in Asia and Latin America. This analysis was conducted by considering numerous factors that will determine the types of policies best adopted by individual developing country governments. The policy recommendations developed will, we hope, help other governments to refine their existing policy, and adopt an all inclusive approach, whereby linkages policies can not be adopted independently from the comprehensive developmental strategies, and appropriate related industrial policies.

## Bibliography:

- Altenburg, T. (2001). *Linkages and spill-overs between transnational corporations and small and medium-sized enterprises in developing countries: Opportunities and policies*. German Development Institute.
- Aya, O. (2004). Skills development and interfirm learning linkages under globalization: Lessons from the Indian automobile industry. *World Development*, 32(7), 1265-1288.
- Battat, J., Frank, I., & Shen, X. (1996). *Suppliers to multinationals: Linkages programs to strengthen local companies in developing countries*. Washington DC: Foreign Investment Advisory Service, The World Bank.
- Belderbos, R., Capannelli, G., & Fukao, K. (2001). Backward vertical linkages of foreign manufacturing affiliates: Evidence from Japanese multinationals. *World Development*, 29(1), 189-208.

- Blalock, G., & Veloso, F. M. (2007). Imports, productivity growth, and supply chain learning. *World Development*, 35(7), 1134-1151.
- Borenstein, E., De Gregorio, J., & Lee, J.-W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45(1), 115-135.
- Cantwell, J., & Iguchi, C. (2005). Effects of backward linkages to local suppliers' development path: The case of the Malaysian electrical and electronics industry. In A. Giroud, A. T. Mohr & D. Yang (Eds.), *Multinationals and Asia: Organizational and institutional relationships* (Vol. Chapter 4, pp. 54-71). London, New York: Routledge.
- Chung, C. C., & Beamish, P. W. (2005). The impact of institutional reforms on characteristics and survival of foreign subsidiaries in emerging economies. *Journal of Management Studies*, 42(1), 35-62.
- Dicken, P. (2007). *Global shift: Mapping the changing contours of the world economy* (5th ed.). London, Thousand Oaks, New Delhi: Sage Publications.
- Driffield, N., & Noor, A. H. M. (1999). Foreign direct investment and local input linkages in Malaysia. *Transnational Corporations*, 8(3), 1-24.
- Dunning, J. H. (1993). *Multinational enterprises and the global economy*. Wokingham: Addison-Wesley Publishing Company.
- Giroud, A. (2003). *Transnational corporations, technology and economic development: Backward linkages and knowledge transfer in South East Asia*. Cheltenham, Northampton: Edward Elgar.
- Giroud, A. (2006). Is government support really worth it? Developing backward linkages in Malaysia. In A. Tavares & A. A. C. Teixeira (Eds.), *Multinationals, clusters and innovation: Does public policy matter?* (pp. 179-198): Palgrave MacMillan.
- Giroud, A. (2007). Government policies towards FDI across East and Southeast Asia: A comparative review of business policies encouraging inter-firm relationships between MNEs and local firms', (Chapter 14, pp. 266-284) in Yeung, Henry W.-C. (Eds) *Handbook on Research in Asian Business*, Edward Elgar: Cheltenham.
- Giroud, A., & Mirza, H. (2006). Multinational enterprises and local input linkages in Southeast Asia. *Transnational Corporations*, 15(3), 1-32.
- Görg, H., & Greenaway, D. (2003). Much ado about nothing? Do domestic firms really benefit from foreign direct investment? *World Bank Research Observer*, 19, 171-197.
- Hackett, S. C., & Srinivasan, K. (1998). Are there spillovers from direct foreign investment? Evidence from panel data for Morocco. *Journal of Development Economics*, 42, 51-74.
- Han, H., & Kim, K. Y. (2003). FDI environments and policy competitiveness of Asia Pacific economies. *Journal of International and Area Studies*, 10(2), 1.
- Hansen, M. W., & Schaumburg-Müller, H. (Eds.). (2006). *Transnational corporations and local firms in developing countries - linkages and upgrading*. Copenhagen: Copenhagen Business School Press.
- Hoekman, B., & Smarzynska Javorcik, B. (Eds.). (2006). *Global integration and technology transfer*. Basingstoke, New York: Palgrave MacMillan, The World Bank.
- Inter-American Development Bank. (2005). *BNDES: CCLIP line and program to support micro, small, and medium-sized enterprises.*: Research report.
- Inter-American Development Bank. (2006). *Institutional capacities for small business policy development in Latin America and the Caribbean.*: Research Report.
- Iguchi, C. (2008). Determinants of backward linkages: The case of TNC subsidiaries in Malaysia. *Asian Business and Management*, 7(1), 53-74.

- Ivarsson, I., & Alvstam, C. G. R. (2005). Technology transfer from TNCs to local suppliers in developing countries: A study of ab volvo's truck and bus plants in Brazil, China, India, and Mexico. *World Development*, 33(8), 1325-1344.
- Javorcik Smarzynska, B. K. (2006). Does foreign direct investment increase the productivity of domestic firms? In search of spillovers through backward linkages. In B. Hoekman & B. Javorcik Smarzynska (Eds.), *Global integration and technology transfer* (Chapter 10, pp. 207-240). Basingstoke, New York: Palgrave MacMillan, The World Bank.
- Jindra B., Giroud, A. & J. Scott-Kennel (2008). Foreign subsidiaries' roles and vertical linkages: The missing link? A study of MNEs in Eastern Europe. *Journal of World Business*, Forthcoming.
- Jomo, K. S. (2001). *Southeast Asia's industrialization: Industrial policy, capabilities and sustainability*. Basingstoke, New York: Palgrave.
- Kelegama, S., & Foley, F. (1999). Impediments to promoting backward linkages from the garment industry in Sri Lanka. *World Development*, 27(8), 1445-1460.
- Kneller, R., & M., P. (2007). Industrial linkages and export spillovers from FDI. *The World Economy*, 30(1), 105-134.
- Kugler, M. (2006). Spillovers from foreign direct investment: Within or between industries? *Journal of Development Economics*, 80(2), 444-477.
- Lall, S. (2002). Linking FDI, technology development for capacity building and strategic competitiveness. *Transnational Corporations*, 11(3), 39-88.
- Lall, S., & Narula, R. (2004). Foreign direct investment and its role in economic development: Do we need a new research agenda. *The European Journal of Development Research*, 16(3), 445-462.
- Li, X., & Liu, X. (2005). Foreign direct investment and economic growth: An increasingly endogenous relationship. *World Development*, 33(3), 393-407.
- Lipsey, R. E., and Mucchielli, Jean-Louis. (2002). *Multinational firms and impacts on employment, trade and technology: New perspectives for a new century*. London, New York: Routledge.
- Meyer, K. (2004). Perspectives on multinational enterprises in emerging economies. *Journal of International Business Studies*, 35(4), 259-76.
- Mirza, H., & Freeman, N. J. (2007). Foreign direct investment in East Asia's transitional economies: Perspectives on development and transition. *International Business Review*, 16(2), 169-141.
- Moran, T. H. (2003). FDI and development: What is the role of international rules and regulations? *Transnational Corporations*, 12(2), 1-44.
- Moran, T. H. (2006). *Harnessing foreign direct investment: Policies for developed and developing countries*. Washington DC: Centre for Global Development.
- Morisset, J. (2003). *Does a country need a promotion agency to attract foreign direct investment? A small analytical model applied to 58 countries.*: World Bank Policy Research Working Paper, 3028.
- Morisset, J., & Andrews-Johnson, K. (2003). *The effectiveness of promotion agencies at attracting foreign investment*: World Bank Research Report.
- OECD. (2002). *Policy-based competition for FDI: The case of Brazil*, International conference on regional development and foreign investment. Fortaleza, Brazil.
- Rasiah, R. & R. Kumar. (2007). Foreign ownership, technological intensities and networks strength: Electronics firms in East Asia. In Shimizu, Y. (Ed). *Economic Dynamism of Asia in*

- the New millennium: From the Asian Crisis to a New Stage of Growth*. Singapore: World Scientific.
- Scott-Kennel, J. (2004). Foreign direct investment: A catalyst for local firm development? *The European Journal of Development Research*, 16(3), 624-652.
- Scott-Kennel, J. (2007). Foreign direct investment and local linkages: An empirical investigation. *Management International Review*, 47(1), 1-27.
- UNCTAD. (2001a). *World investment report 2001: Promoting linkages*. New York and Geneva: United Nations.
- UNCTAD. (2001b). *The world of investment promotion at a glance: A survey of investment promotion practices*. Geneva, New York: United Nations Conference on Trade and Development.
- UNCTAD. (2003). *World investment report 2003: FDI policies for development: National and international perspectives*. New York, Geneva: United Nations.
- UNCTAD. (2006a). *Promoting TNC-SME linkages to enhance the productive capacity of developing countries' firms: A policy perspective.*: United Nations Conference on Trade and Development.
- UNCTAD. (2006b). *A survey of support by investment promotion agencies to linkages*. United Nations Conference on Trade and Development.
- UNCTAD. (2007). *World investment report 2007: Transnational corporations, extractive industries and development*. New York, Geneva: United Nations.
- Young, S, & A. T. Tavares. (2004). Multilateral rules on FDI: Do we need them? Will we get them? A developing country perspective. *Transnational Corporations*, 13(1), 1-30.
- Yusuf, S., Altaf, M. A., & Nabeshima, K. (Eds.). (2004). *Global change and East Asian policy initiatives*. Washington D.C.: World Bank, Oxford University Press.

**Table 1 Linkages between foreign affiliates and local enterprises and organizations in host economies**

Form	Relationship of foreign affiliate to local enterprise			Relationship of foreign affiliate to non-business institution
	Backward (sourcing)	Forward (distribution)	Horizontal (co-operation in production)	
“Pure” market transaction	“Off-the-shelf” purchases	“Off-the-shelf” sales		
Short-term linkage	Once-for-all or intermittent purchases (on contract)	Once-for-all or intermittent sales (on contract)		
Longer-term linkage	Longer-term (contractual) arrangement for the procurement of inputs for further processing Subcontracting of the production of final or intermediate products	Longer-term (contractual) relationship with local distributor or end-customer Outsourcing from domestic firms to foreign affiliates	Joint projects with competing domestic firms	R & D contracts with local institutions such as universities and research centers Training programs for firms by universities Traineeships for students in firms
Equity relationship	Joint venture with supplier Establishment of new supplier-affiliate (by existing foreign affiliate)	Joint venture with distributor or end customer Establishment of new distribution affiliate (by existing foreign affiliate)	Horizontal joint venture Establishment of new affiliate (by existing foreign affiliate) for the production of same goods and services as it produces	Joint public-private R & D centers/training centers/universities
“Spillover”	Demonstration effects in unrelated firms <ul style="list-style-type: none"> <li>▪ Spillover on processes (incl. technology)</li> <li>▪ Spillover on product design</li> <li>▪ Spillover on formal and on tacit skills (shop-floor and managerial)</li> </ul> Effects due to mobility of trained human resources Enterprise spin-offs Competition effects			

Source: UNCTAD (2001: 131).

**Table 2 Mixed technology strategies towards inter-firm linkages**

Policy	Policy instrument	Condition
<ul style="list-style-type: none"> <li>- Promote linkages with domestic economy</li> <li>- Build local technological capabilities</li> <li>- Encourage deepening of MNE activity</li> </ul>	<ul style="list-style-type: none"> <li>- Business incubators</li> <li>- Information clearinghouses</li> <li>- Industrial parks</li> <li>- Supporting R&amp;D</li> <li>- Supporting joint ventures, licensing and collaboration</li> <li>- Supporting training of domestic labour force</li> </ul>	<ul style="list-style-type: none"> <li>- Institutions able to bargain with MNEs</li> <li>- Institutions able to plan strategically</li> <li>- Ability to integrate skills, financial markets, infrastructure and technological capability development</li> </ul>

Source: Adapted from Table IV.2 in UNCTAD (2003: 132).

**Table 3 Functions of the Malaysian Industrial Development Authority**

<p><b>PLANNING</b></p> <ul style="list-style-type: none"> <li>• Panning for industrial development</li> <li>• Recommend policies and strategies on industrial promotion and development</li> <li>• Formulation of strategies, programmes and initiatives for international economic cooperation</li> </ul>	<p><b>PROMOTION</b></p> <ul style="list-style-type: none"> <li>• Foreign Direct Investment</li> <li>• Domestic Investment</li> <li>• Cross Border Investment</li> <li>• Business matching through enterprise connect</li> <li>• Manufacturing services</li> </ul>
<p><b>FOLLOW-UP/MONITORING</b></p> <ul style="list-style-type: none"> <li>• Assist companies in the implementation and operation of their projects</li> <li>• Facilitate exchange &amp; co-ordination among institutions engaged in or connected with industrial development</li> <li>• Advisory services</li> </ul>	<p><b>EVALUATION</b></p> <ul style="list-style-type: none"> <li>• Manufacturing licenses</li> <li>• Tax incentives (including for R&amp;D, Hotel &amp; Tourism, Training &amp; Manufacturing related services)</li> <li>• Expatriate posts</li> <li>• Duty exemptions</li> <li>• OHQ, RDC &amp; IPC status</li> </ul>

Source: Presentation by Ms. Reta, Deputy Director, FDI Division, January 2008.

**Table 4 Key Linkages Policies in Malaysia and Brazil**

<b>Policies, Agencies and Tools</b>	<b>Malaysia</b>	<b>Brazil</b>
<b>Overall Policy Umbrella</b>	Development objectives and policies follow guidelines established in the 10-year Malaysian Master Plan	Technology, Trade and Industrial Policy (PITCE); <i>Estatuto Nacional da Microempresa e da Empresa de Pequeno Porte</i> , coordinated by Ministry of Development, Industry and Foreign Trade (MDIC)
<b>Infrastructure and Government Agencies</b>	<ol style="list-style-type: none"> <li>1. <b>Transport infrastructure:</b> easy access and provision of ports, airports, rail and road system</li> <li>2. <b>Industrial infrastructure:</b> 14 FTZs, over 200 industrial estates</li> <li>3. <b>Government agencies:</b> MIDA, State Economic Development Corporation (SEDC), Regional Development Authorities, Port Authorities and Municipalities</li> <li>4. <b>High-tech parks:</b> 3 technology parks, 1 biotechnology park, MSC Super Corridor, Cyberjaya</li> <li>5. <b>Training institutions:</b> 6 specialized training centers, 5 country-focused centers (France/Spain/Japan/UK/Germany)</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Infrastructure:</b> deficiencies increase the “Custo Brasil”. The Growth Acceleration Program (PAC) was created to have a strong impact in this area.</li> <li>2. <b>Government agencies:</b> Trade and Investment Promotion Agency (APEX), National Network of Investment Information (RENAI), Investment and Technology Transfer Promotion System for Companies (SIPRI).</li> <li>3. <b>Training institutions:</b> Brazilian Micro and Small Business Support Service (SEBRAE), National Industrial Training Service (SENAI) and Social Service of Industry (SESI).</li> <li>4. <b>High-tech parks:</b> Manaus Free Trade Zone, aerospace cluster (Sao Paulo), internet cluster (Recife)</li> </ol>
<b>Investment Incentives</b>	<ol style="list-style-type: none"> <li>1. <b>Promotion of investment act</b></li> <li>2. <b>Key targets:</b> <ul style="list-style-type: none"> <li>• Selected sectors (in resources-based and non resource-based industries and services)</li> <li>• High value-added activities</li> <li>• High-tech sectors</li> <li>• Skills development and expatriates</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Technology, Trade and Industrial Policy (mechanisms of credit access and investment attraction in sectors considered strategic for the development)</li> <li>2. Attraction Investment Program (promotion: APEX and MDIC; information and facilitation: <i>sala do investidor</i>, presidency)</li> </ol>
<b>Linkages Development</b>	<b>Soft Incentives</b> <ol style="list-style-type: none"> <li>1- IPC initiative</li> <li>2- ILP programme</li> <li>3- Umbrella strategy</li> <li>4- Global supplier programme</li> </ol>	<ol style="list-style-type: none"> <li>1- Supplier development programs, such as those in the states of Pará and Maranhão</li> <li>2- Projeto Vinculos – UNCTAD</li> <li>3- Local Productive Arrangements</li> </ol>

**Table 5 – Main categories of IPAs in Brazil = Some Examples**

<p style="text-align: center;"><b>National system of institutions</b></p> <ul style="list-style-type: none"> <li>• Investment Promotion Agency (APEX-Brasil)</li> <li>• Investment and Technology Transfer Promotion System for Companies (SIPRI)</li> </ul>	<p style="text-align: center;"><b>IPAs originated from state development banks</b></p> <ul style="list-style-type: none"> <li>• Agência de Fomento de Goiás (GoiásFomento)</li> <li>• Agência de Fomento do Rio Grande do Norte (AGN)</li> </ul>
<p style="text-align: center;"><b>IPAs composed by government and private organizations</b></p> <ul style="list-style-type: none"> <li>• Pernambuco Economic Development Agency (AD Diper)</li> <li>• Minas Gerais Industrial Development Institute (INDI)</li> <li>•</li> </ul>	<p style="text-align: center;"><b>Private, non-profit organizations</b></p> <ul style="list-style-type: none"> <li>• Development Agency of Rio Grande do Sul (Pólo-RS)</li> </ul>

Note: some of these organizations are development institutions with investment promotion functions.

**Figure 1 Stages towards Effective FDI Linkages Policies in Developing Economies**

