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Does FDI Have Positive Spillover Effects?: The Case of the Philippine Manufacturing Industry

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The Case of the Philippine Manufacturing Industry

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1. Introduction

Economic theory suggests that foreign direct investment (FDI) can generate positive spillovers to domestic firms in the host country. Since multinational corporations (MNCs) are an important source of international capital and technology, their entry can facilitate the transfer of technical and business know-how resulting in productivity gains and competitiveness among local firms. These spillover effects develop through best practice demonstration and diffusion, or through the creation of linkages with foreign and domestic firms becoming either suppliers or customers, or through the movement of experienced workers from foreign to local firms. The entry of MNCs may also increase competition and force domestic firms to imitate and innovate.

Domestic firms also benefit from spillovers and externalities associated with FDI through exports and/or international integration (Costa and de Queiroz 2002). MNCs have established global or regional production bases where domestic firms, particularly small and medium enterprises, can participate by serving as potential suppliers of outsourced parts or services. Participation in these networks can also provide domestic firms access to export markets. Global/regional production networks have increasingly grown in sectors such as automotive, machineries, electronics, and garments.

There are two broad classifications of technological spillovers from FDI to domestic firms: horizontal (within or intra industry) and vertical (inter industry) spillover effects. Horizontal spillover refers to the effect the presence of MNCs has on domestic firms in the same sector. Vertical spillovers from FDI occur as a result of the interaction between domestic and foreign firms that are not in the same industry. This may take place through backward or forward trade linkages between foreign and domestic firms. Backward linkages are created when MNCs source raw materials and intermediate products from domestic firms. Forward linkages are created through contacts between domestic and foreign firms.

The existing FDI literature shows an increasing number of studies examining the technology spillovers from FDI to domestic firms. However, the evidence that foreign presence generates positive productivity externalities remains limited since the empirical literature indicates mixed results. Many show significant positive spillover effects from FDI while some find no or statistically insignificant result from technology spillover. The diverse results may be attributed to differences in countries' ability to benefit from foreign investment reflecting varying levels of absorptive capacity and market structure.

To attract FDI inflows and generate the positive spillover effects from the presence of foreign firms, the Philippines liberalized its FDI policy and offered various foreign investment incentive measures. To date, however, there are only few studies that examine the productivity spillovers to domestic firms. Most studies focus on the impact of FDI on economic growth and on the determinants of FDI to the Philippines. There are hardly any empirical studies that explicitly apply quantitative analysis in evaluating whether FDI generates technology spillover from foreign to domestic firms.

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Due to the paucity of FDI firm-level panel data, it is difficult to measure or disentangle the contribution and different effects of FDI.

The paper will focus primarily on the Philippine manufacturing industry. Its main objective is to assess the spillover effects of FDI on domestic industry particularly on labor productivity and employment[2] and examine whether the presence of foreign firms generate positive spillover effects to domestic firms. After the introduction, section two of the paper will review the government's FDI strategies, policies and programs in terms of their effectiveness in improving the country's FDI performance particularly in comparison with its ASEAN neighbors. Section three will look at FDI flows, distribution and sources along with a comparative assessment of the country's performance vis-à-vis its ASEAN neighbors. It will also assess the potential effects of the country's free trade agreements (FTAs) on FDI using case studies on global/regional production network industries such as electronics and automotive. Section four will examine the effects of FDI using the 1988 and 1998 Census and Survey of Manufacturing Establishments on productivity and employment. Section five will summarize the paper's findings and implications and formulate policy recommendations to foster FDI contribution and positive spillovers to the domestic economy.

2. Brief Literature Survey and Overview of FDI Policies and Programs

2.1 Review of Selected FDI Literature in the Philippines

Most studies on FDI in the Philippine FDI during the early 1980s were critical of its impact on the economy. Looking at the period from 1945 to the 1970s, Lindsay and Valencia (1981) concluded that "the argument that foreign investment has made substantial contributions to the economic development of the Philippines is a weak one; significant costs and minor benefits are more the order of things". FDI's employment contribution was minimal simply because their presence in the economy was still not substantial. In terms of other economic contribution, the authors indicated that management training had been positive while capital inputs were negligible.

As the Philippines lagged behind its ASEAN neighbors in attracting FDI, studies during the late 1980s to the 1990s focused on the determinants of FDI, the impact of the level of industry protection on FDI along with the impact of FDI on exports. In earlier papers that examined FDI determinants, Lamberte (1993) found that a liberal legal framework is not enough to attract FDI in the country. It must be complemented by sound macroeconomic policies particularly in managing economic growth, foreign exchange and wages which were found statistically significant in the regression analysis done in the study. Based on a time series model, Subido (1974) showed that the rate of return was the most statistically significant variable that explained FDI to the Philippines.

Aldaba (1995) identified the factors that explain why the Philippines failed to capture its share of FDI flows in the region. Her empirical analysis showed positive relationship between FDI and the level of protection, stock of public investment, real gross domestic product and real effective exchange rate. Regarding the impact of FDI on exports, her results showed a highly significant negative relationship between exports and FDI flows from the US, Japan, and Europe. This indicated the anti-export orientation of FDI flows to the Philippines since these were mostly intended for the domestic market to substitute for imports. The high level of protection in the manufacturing industry encouraged protection-hopping and domestic-oriented FDI. FDI flows to the country were largely concentrated in highly protected industries such as chemicals, processed food, transport equipment, machinery and appliances, textiles and garments, basic metal products and petroleum and coal. This is confirmed by the significant positive relationship between effective protection rate and FDI.

[2] An assessment of the impact on exports would have been useful, however, this could not be included in the report due to data constraints on exports.

Miranda (1994) reviewed the employment effects of multinational enterprises over the period 1983 to 1988. He found that direct employment in foreign affiliates in all sectors was only less than 1% of total employment in both 1983 and 1988. The author indicated that there was an actual decline in direct employment because of the economic and political crisis in those periods. Mendoza and Inamura (1995) presented an analytical framework to measure the effects of US and Japanese FDI on the Philippine economy particularly the technological structure, amount of domestic production and imports, level of employment, wages and prices from 1982 to 1991. However, due to lack of data, the study was unable to come up with accurate estimates on the impact of FDI.

In a comprehensive FDI paper, Austria (2006b) assessed not only the impact of the country's FDI policies on FDI flows, trends and patterns; but most importantly, she also examined the channels through which FDI affects economic development. By examining the characteristics of FDI in the country supplemented by economic indicators such as exports, imports, and employment in the country; she concluded that though FDI made significant contribution to the country's development, its impact on technology transfer, productivity, domestic linkages, and employment are limited. The apparent lack of local suppliers and poor logistics and infrastructure have been the major impediments to FDI. The lack of local suppliers limited the channel by which technology can create spillover effects in the rest of the economy. Moreover, poor logistics and infrastructure limit FDI flows to industries with weak linkages with the rest of the economy. No backward linkages are created because FDI in the country is characterized mainly by export manufactures that are labor-intensive and highly import-dependent. Employment contribution also remained small as the percentage of direct employment in export zones to total employment registered less than one percent share throughout the 1990s.

In an earlier paper that looked at the determinants of total factor productivity (TFP) in the Philippines, Austria (2002) found mixed results on the role of FDI. A positive, but statistically insignificant relationship between FDI and TFP growth was found. On the other hand, with total FDI and manufacturing FDI as determinants yielded a significant positive effect of total FDI to TFP and a significant negative effect of manufacturing FDI on TFP growth. The author explained that to the extent that MNCs are oriented toward global rather than local profits, there may be less room for adaptation of technology to the local environment.

Other FDI studies have focused on the importance of creating an enabling environment and good investment climate to attract FDI with key factors such as macroeconomic fundamentals, infrastructure, governance and institutions (World Bank-ADB 2005, Booze Allen Hamilton 2007). CPBO (2003) identifies the factors discouraging FDI which include the high cost of doing business (electricity, wages, corruption, etc.) and high risks related policy inconsistency, political instabilities and peace and order.

FDI studies have also examined the impact of investment incentives on FDI flows. With increasing globalization, governments have competed in offering various investment incentives to influence the investors' location decisions. In earlier studies, statistical analyses conducted by Lamberte (1993) and Aldaba (1995) showed that changes in the investment incentives regime are ineffective in attracting FDI. Reside (2006) asserts that many of these incentives are 'redundant" since "market and resource seeking" FDI will come anyway without them. In examining the impact of various FDI incentives, Aldaba (2006) concluded that in the absence of fundamental factors such as economic conditions and political climate, tax incentives alone are not enough to generate a substantial effect on investment decisions of investors nor can they make up for the country's fundamental weaknesses. She noted that the country's complex investment incentive system combined with poor investment climate explain why the Philippines has performed badly in attracting FDI inflows relative to its neighbors.

2.2 Philippine Foreign Direct Investment Policy

Prior to the 1990s, Philippine foreign direct investment policy was characterized by a highly restrictive and complicated regulatory and investment incentive system. There were two government incentive-giving bodies that regulated foreign investments, the Board of Investments (BOI) and the Export Processing Zone Authority (EPZA, which later became Philippine Export Zone Authority or PEZA). The two government agencies implemented three different legislations governing foreign direct investments. BOI implemented the 1967 Investment Incentives Act and the 1968 Foreign Business Regulations Act while the EPZA was mandated to implement the 1972 Export Processing Zone Act.

Table 1: Chronology of FDI-Related Legislations

Year	Legislation	Description
1967	Investment Incentives Act	• restricted foreign ownership in non-pioneer industries up to forty (40) percent equity • ownership requirement rule was relaxed if the enterprise engaged in a pioneer activity or if it exported at least 70% of its production.
1968	Foreign Business Regulations Act	• required foreign investments that were not registered under the Investment Incentives Act and whose equity participation exceeded 30% equity to obtain prior authority from the BOI
1972	Export Processing Zone Act [PD 66]	• permitted foreign ownership up to 100% subject to the approval of EPZA
1979	Executive Order 567	• allowed the EPZA to designate a specific plant site of an industrial firm or a group of industrial firms as a special export processing zone which are entitled to the same incentives granted to the 4 government-owned regular zones
1987	Omnibus Investment Code	• simplified and consolidated previous investment laws
1991	Foreign Investment Act [RA 7042]	• liberalized existing regulations & allowed foreign equity participation up to 100% in all areas not specified in the Foreign Investment Negative List (FINL)
1992	Bases Conversion and Development Act (RA 7227)	• created the Bases Conversion and Development Authority (BCDA) and the Subic Bay Metropolitan Authority (SBMA) to adopt, prepare and implement a comprehensive development program for the conversion of the Clark and Subic military reservations into special economic zones
1993	Executive Order 8	• established the Clark Development Corporation (CDC), as the implementing arm of the BCDA for the Clark Special Economic Zone [the Supreme Court revoked these incentives in July 2005, stating that RA 7227 did not grant privileges to locators operating in Clark]
1994	Foreign Bank Liberalization	• allowed the establishment of ten new foreign banks
1995	Special Economic Zone Act [RA 7916]	• created the Philippine Economic Zone Authority (PEZA) to manage and operate government-owned zones and administer incentives to special economic zones
1996	Republic Act 8179	• further liberalized foreign investments & allowed greater foreign participation in areas that were previously restricted
2000	Retail Trade Liberalization Act [RA 8762]	• allowed foreign investors to enter the retail business and own them 100% as long as they put up a minimum of US$7.5 million equity
2000	General Banking Law [RA 8791]	• allowed foreign banks to own up to 100% of one locally-incorporated commercial or thrift bank during a 7-year window

The 1967 Investment Incentives Act restricted foreign ownership in non-pioneer industries up to forty (40) percent equity. The ownership requirement rule was relaxed if the enterprise is engaged in a pioneer activity[3] or if it exported at least seventy (70) percent of its production. Under the Foreign Business Regulations Act of 1968, foreign investments that were not registered under the Investment Incentives Act and whose equity participation exceeded thirty (30) percent equity required these enterprises to obtain prior authority from the BOI.

Subject to the approval of PEZA, the Export Processing Zone Act of 1972 permitted foreign ownership up to 100 percent, however, only the industries that were being promoted were allowed to be set up. In 1979, Executive Order No. 567 allowed the EPZA to designate a specific plant site of an industrial firm or a group of industrial firms as a special export processing zone which are entitled to the same incentives granted to the four government-owned regular zones located in Bataan, Baguio, Cavite, and Mactan. The limited success of these zones in the 1980s prompted the government to institute changes in its EPZ policies.

Towards the 1990s, the attitude and policy direction of the Philippines toward foreign direct investment changed considerably. Given the decline in commercial bank loans and foreign aid in the 1980s, the government realized the need to rely more on foreign direct investments to achieve sustainable economic growth. At the same time, the government recognized the need to expand exports and the potential economic contribution of FDI through the transfer of knowledge and experience. The nineties witnessed a policy shift as the Philippines adopted more open and flexible policies toward FDI. This was almost carried out simultaneously with the country's market-oriented reforms consisting of trade liberalization, privatization, and economic deregulation in the 1980s up to 1990s. The country accelerated the FDI liberalization process through the legislation of Republic Act 7042 or the Foreign Investment Act (FIA) in June 1991.

The FIA considerably liberalized the existing regulations by allowing foreign equity participation up to 100% in all areas not specified in the Foreign Investment Negative List (FINL) which originally consisted of three component lists: A, B, and C.

List A: consists of areas reserved for Filipino nationals by virtue of the Constitution or specific legislations like mass media, cooperatives or small-scale mining.

List B: consists of areas reserved for Filipino nationals by virtue of defense, risk to health moral, and protection of small and medium scale industries.

List C: consists of areas in which there already exists an adequate number of establishments to serve the needs of the economy and further foreign investments are no longer necessary.

Prior to this, 100% eligibility for foreign investment was subject to the approval of the Board of Investments. The FIA was expected to provide transparency by disclosing in advance, through the FINL, the areas where foreign investment is allowed or restricted. It also reduced the bureaucratic discretion arising from the need to obtain prior government approval whenever foreign participation exceeded 40%.

Over time, the negative list has been reduced significantly. In March 1996, RA 7042 was amended through the passing of RA 8179 which further liberalized foreign investments allowing greater foreign participation in areas that were previously restricted. This abolished List C which

[3] Pioneer projects are those which (i) engage in the manufacture, processing or production; and not merely in the assembly or packaging of goods, products, commodities or raw materials that have not been or are not being produced in the Philippines on a commercial scale; (ii) use a design, formula, scheme, method, process or system of production or transformation of any element, substance or raw materials into another raw material or finished goods which is new and untried in the Philippines; (iii) engage in the pursuit of agricultural, forestry, and mining activities considered as essential to the attainment of the national goal; and (iv) produce unconventional fuels or manufacture equipment which utilizes non conventional sources of energy. Non-pioneer projects include those that are engaged in common activities in the Philippines and do not make use of new technology.

limited foreign ownership in "adequately served" sectors. Currently, the FIA has two components Lists A and B covering sectors where foreign investment is restricted below 100%, those falling under the Constitution or those with restrictions mandated under various laws.

The mid-1990s witnessed the liberalization of the banking and retail trade sectors. The 1994 Foreign Bank Liberalization allowed the establishment of ten new foreign banks in the Philippines. With the legislation of the General Banking Law (RA 8791) in 2000, a seven-year window has been provided during which foreign banks may own up to 100 percent of one locally-incorporated commercial or thrift bank (with no obligation to divest later).

To develop international financial center operations in the Philippines and facilitate the flow of international capital into the country, foreign banks have been allowed to establish offshore banking units (OBUs). OBUs are subject to virtually no exchange control on their offshore operations and are not subject to tax on income they source from outside the Philippines. Only income from foreign currency transactions with local banks, including branches of foreign banks that are authorised by the *Bangko Sentral ng Pilipinas* to transact business with OBUs and Philippine residents is subject to a final tax of 10%. Non-residents are exempt from income tax on income they derive from transactions with OBUs.

Incentives have also been offered to multinationals that establish regional headquarters (RHQ) or a regional operating headquarters (ROHQ) in the Philippines.[4] Both RHQs and ROHQs are entitled to the following incentives: exemption from all taxes, fees, or charges imposed by a local government unit except real property tax on land improvements and equipment; tax and duty free importation of training materials and equipment; and direct importation of new motor vehicles, subject to the payment of the corresponding taxes and duties.

In March 2000, the passing of the Retail Trade Liberalization Act (Republic Act 8762) allowed foreign investors to enter the retail business and own them 100% as long as they put up a minimum of US$7.5 million equity. Singapore and Hong Kong have no minimum capital requirement while Thailand sets it at US$250,000. A lower minimum capitalization threshold ($250,000) is allowed to foreigners seeking full ownership of firms engaged in high-end or luxury products. R.A. 8762 also allowed foreign companies to engage in rice and corn trade.

While substantial progress has been made in liberalizing the country's FDI policy, certain significant barriers to FDI entry still remain The sectors with foreign ownership restriction include mass media, land ownership where foreign ownership is limited to 40%, natural resources, firms that supply to government-owned corporations or agencies (40%), public utilities (40%), and Build-Operate-Transfer (BOT) projects (40%). Details are discussed in Appendix A.

2.3 Tax Incentives and Other Fiscal Measures to Attract FDI

In the last two decades, the Philippines pursued changes in its investment incentive schemes in order to encourage FDI inflows (see Table 1). In 1987, a new Omnibus Investments Code was legislated to simplify and consolidate previous investment laws and added two new measures: income tax holiday for enterprises engaged in preferred areas of investment and labor expense allowance for

[4] An RHQ is a branch office that principally serves as a supervision, communications and coordination centre for the subsidiaries, branches or affiliates of a multinational company operating in the Asia-Pacific Region and other foreign markets. It is allowed to operate only as a cost centre, and may not participate in any manner in the management of any subsidiary or other branch office the multinational has in the Philippines, or to solicit or market any goods or services. An ROHQ is a branch office that is allowed to derive income in the Philippines by performing qualifying services to its affiliates, subsidiaries or branches in the Asia-Pacific Region (including the Philippines) and other foreign markets. The services it is able to render, however, are limited to general administration and planning, business planning and coordination, sourcing and procurement of raw materials and components, corporate finance advisory services, marketing control and sales promotion, training and personnel management, logistics services, research and development services and product development, technical support and maintenance, data processing and communication, and business development.

tax deduction purposes. Under the new Omnibus Investments Code, foreign and domestic investors may avail of fiscal and non-fiscal incentives provided they invest in preferred areas of investment identified annually in the Investment Priorities Plan (IPP). If the areas of investment are not listed in the IPP, they may still be entitled to incentives, provided:

- at least 50% of production is for exports, for Filipino-owned enterprises; and
- at least 70% of production is for export, for majority foreign-owned enterprises (more than 40% of foreign equity).

In the 1990s, several other laws containing investment incentive packages were legislated; the most important of which are RA 7227 known as the Bases Conversion and Development Act of 1992 and RA 7916 or the Special Economic Zone Act of 1995. RA 7227, or the Bases Conversion and Development Act of 1992, was enacted into law in March 1992 with the objective of accelerating the development of the former United States military bases into special economic zones. The Act created two administrative bodies, the Bases Conversion and Development Authority (BCDA) and the Subic Bay Metropolitan Authority (SBMA), tasked with adopting, preparing and implementing a comprehensive development program for the conversion of the Clark and Subic military reservations into special economic zones. The BCDA is mandated to oversee and implement the conversion and development of Clark and other military stations; while the SBMA is mandated to oversee the implementation of the development programs of the Subic Bay Naval Station and surrounding communities. In 1993, Executive Order No. 80 was issued establishing the Clark Development Corporation (CDC), as the implementing arm of the BCDA for the Clark Special Economic Zone. In July 2005, the Supreme Court revoked the incentives stating that RA 7227 did not grant privileges to locators operating in Clark.

In 1995, RA 7916 was legislated to shift the focus away from government EPZs towards private industrial zones. Focus has also shifted from the traditional EPZ in which firms must be 100 % export-oriented and engaged in recognized manufacturing activities towards industrial parks which allow all industries regardless of market orientation and a separate, fenced-in EPZ for wholly export-oriented firms. Republic Act 7916 also replaced the EPZA and created the Philippine Economic Zone Authority (PEZA) to manage and operate government-owned zones and administer incentives to special economic zones (ecozones). RA 7916 allowed greater private sector participation in zone development and management through the provision of incentives for private zone developers and operators. Zone developers are allowed to supply utilities to tenants by treating them as indirect exporters. Activities permitted within the economic zones have also been expanded.

Table 2: FDI Incentives by Type of Investment Regime

	Investment Regime	BOI OIC	PEZA	SBMA & CSEZ
	Income	4-8 years ITH	4-8 years ITH	No ITH
	Others	After ITH, payment of	After ITH, exemption	5% tax on