Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages

By BEATA SMARZYNSKA JAVORCIK*

Many countries strive to attract foreign direct investment (FDI) hoping that knowledge brought by multinationals will spill over to domestic industries and increase their productivity. In contrast with earlier literature that failed to find positive intraindustry spillovers from FDI, this study focuses on effects operating across industries. The analysis, based on firm-level data from Lithuania, produces evidence consistent with positive productivity spillovers from FDI taking place through contacts between foreign affiliates and their local suppliers in upstream sectors. The data indicate that spillovers are associated with projects with shared domestic and foreign ownership but not with fully owned foreign investments. (*JEL* F2, O1, O3)

Policy makers in many developing and transition economies place attracting foreign direct investment (FDI) high on their agenda, expecting FDI inflows to bring much-needed capital, new technologies, marketing techniques, and management skills. While all of these potential benefits of FDI are viewed as important, particular emphasis is placed on the contribution of FDI to increasing productivity and competitiveness of the domestic industry. It is often hoped that technology transfer resulting from FDI will go beyond actual projects undertaken by foreign investors and, through knowledge spillovers, will benefit domestic firms.

Yet there is no evidence that positive externalities generated by foreign presence actually exist. As Dani Rodrik (1999) remarked, "today's policy literature is filled with extravagant claims about positive spillovers from FDI but the evidence is sobering." Indeed, the difficulties associated with disentangling different effects at play and data limitations have prevented researchers from providing conclusive evidence of positive externalities resulting from FDI. While recent firm-level studies have overcome many of the difficulties faced by earlier literature, the emerging message is not very optimistic.

The existing literature on this subject is of three kinds. First, there are case studies, which are often very informative and include a wealth of valuable information (see, for instance, Theodore H. Moran, 2001) but because they pertain to particular FDI projects or specific countries, they cannot be easily generalized. Then, there is a plethora of industry-level studies, most of which show a positive correlation between foreign presence and the average value added per worker in the sector. Because most of them rely on cross-sectional data, their disadvantage is the difficulty in establishing the direction of causality. It is possible that this positive association is caused by the fact that multinationals tend to locate in high-productivity industries rather than by genuine productivity spillovers. The positive correlation may also be a result of FDI

inflows forcing less productive domestic firms to exit and/or of multinationals increasing their share of host country market, both of which would raise the average productivity in the industry.[1] Finally, there is research based on firm-level panel data, which examines whether the productivity of domestic firms is correlated with the extent of foreign presence in their sector. Most of these studies, however, such as the careful analyses done by Mona Haddad and Ann E. Harrison (1993) on Morocco, Brian J. Aitken and Harrison (1999) on Venezuela, Simeon Djankov and Bernard Hoekman (2000) on the Czech Republic, and Jozef Konings (2001) on Bulgaria, Romania, and Poland, cast doubt on the existence of spillovers from FDI in developing countries. The researchers either fail to find a significant effect or produce evidence of negative horizontal spillovers, that is, the effect the presence of multinational corporations has on domestic firms in the same sector. The picture is more optimistic in the case of industrialized countries, as the recent work by Jonathan E. Haskel et al. (2002) and Wolfgang Keller and Stephen R. Yeaple (2003) provides convincing evidence of positive FDI spillovers in the United Kingdom and the United States, respectively.[2]

It is possible, though, that researchers have been looking for FDI spillovers in the wrong place. Since multinationals have an incentive to prevent information leakage that would enhance the performance of their local competitors, but at the same time may benefit from transferring knowledge to their local suppliers, spillovers from FDI are more likely to be vertical than horizontal in nature. In other words, spillovers

are most likely to take place through backward linkages, that is, contacts between domestic suppliers of intermediate inputs and their multinational clients, and thus they would not have been captured by the earlier studies.[3] It is also plausible that spillovers from multinational presence in upstream sectors exist thanks to provision of inputs that either were previously unavailable in the country or are technologically more advanced, less expensive, or accompanied by provision of complementary services. As Blomström et al. (2000) point out, hardly any empirical studies analyze vertical spillovers. The notable exceptions are recent papers by Garrick Blalock (2001) employing firm-level panel data from Indonesia and by Koen Schoors and Bartoldus van der Tol (2001) relying on cross-sectional enterprise-level information from Hungary, both of which provide evidence of positive FDI spillovers through backward linkages.[4]

The purpose of this study is twofold. First, it examines whether the productivity of domestic firms is correlated with the presence of multinationals in downstream sectors (potential customers) or upstream industries (potential suppliers of intermediate inputs). Detecting such effects would be consistent with the existence of vertical spillovers. The analysis improves over the recent literature by taking into account econometric problems that may have biased the results of earlier work. Namely, the semiparametric estimation method suggested by Steven G. Olley and Ariel Pakes (1996) is employed to account for endogeneity of input demand. Moreover, standard errors are corrected to take into account the fact that the measures of potential spillovers are industry specific while the observations in the data set are at the firm level. As Brent R. Moulton (1990) pointed out, failing to make such a correction will lead to a serious downward bias in the estimated errors, thus resulting in a spurious finding of statisti-

---

[1] The pioneering work on this issue done by Richard E. Caves (1974) focused on Australia. It was followed by studies looking at Mexico where, due to the large technological gap between foreign and domestic firms, the scope for spillovers may have been higher [see Magnus Blomström and Hakan Persson (1983); Blomström and Edward N. Wolff (1994); and the summary of studies on Mexican data by Blomström (1989)]. Note that the criticism regarding reverse causality does not apply to all industry-level research, as some studies looked at changes taking place between two points in time [Blomström (1986) on Mexico] or relied on panel data [Xiaming Liu et al. (2000) on the United Kingdom] and still concluded that there exist positive spillovers from FDI.

[2] For surveys of the literature on spillovers from FDI see Holger Görg and Eric Strobl (2001) and Robert E. Lipsey (2002).

[3] For a theoretical justification of spillovers through backward linkages, see Andrés Rodríguez-Clare (1996), James R. Markusen and Anthony J. Venables (1999), and Ping Lin and Kamal Saggi (2004). For case studies, see Moran (2001).

[4] Maurice Kugler (2000) also finds intersectoral technology spillovers from FDI in Colombia. However, he does not distinguish between different channels through which such spillovers may be occurring (backward versus forward linkages).

cal significance for the aggregate variable of interest.

Second, this study goes beyond the existing literature by shedding light on determinants of vertical spillovers. It examines whether benefits stemming from vertical linkages are related to the extent of foreign ownership in affiliates. Based on case studies and investor surveys, these factors have been conjectured to influence the reliance on local sourcing on the part of multinationals and thus the potential benefits of backward linkages, but to the best of our knowledge, their impact has not been systematically examined.[5]

The analysis is based on data from the annual enterprise survey conducted by the Lithuanian Statistical Office (2001). The survey coverage is extensive, as firms accounting for about 85 percent of output in each sector are included. The data constitute an unbalanced panel covering the period 1996–2000. Focusing on a transition economy such as Lithuania is very suitable for this project, as the endowment of skilled labor enjoyed by transition countries makes them a particularly likely place for productivity spillovers to manifest themselves.[6]

The findings can be summarized as follows. The empirical results are consistent with the existence of positive spillovers from FDI taking place through backward linkages, but there is no robust evidence of spillovers occurring through either the horizontal or the forward linkage channel. In other words, the productivity of Lithuanian firms is positively correlated with the extent of potential contacts with multinational customers but not with the presence of multinationals in the same industry or the existence of multinational suppliers of intermediate inputs. The magnitude of the effect is economically meaningful. A one-standard-deviation increase in the foreign presence in the sourcing sectors is associated with a 15-percent rise in output of each domestic firm in the supplying industry. The productivity effect is found to

originate from investments with joint foreign and domestic ownership but not from fully owned foreign affiliates, which is consistent with the evidence of a larger amount of local sourcing undertaken by jointly owned projects.

This study is structured as follows: Section I gives a brief overview of spillover channels. Section II discusses FDI inflows into Lithuania, the data, and the estimation strategy. The results are presented in Section III, and Section IV presents conclusions.

I. Overview of Spillover Channels

Spillovers from FDI take place when the entry or presence of multinational corporations increases the productivity of domestic firms in a host country and the multinationals do not fully internalize the value of these benefits. Spillovers may take place when local firms improve their efficiency by copying technologies of foreign affiliates operating in the local market either through observation or by hiring workers trained by the affiliates. Another kind of spillover occurs if multinational entry leads to more severe competition in the host country market and forces local firms to use their existing resources more efficiently or to search for new technologies (Blomström and Ari Kokko, 1998).

To the extent that domestic firms and multinationals operating in the same sector compete with one another, the latter have an incentive to prevent technology leakage and spillovers from taking place. This can be achieved through formal protection of their intellectual property, trade secrecy, paying higher wages to prevent labor turnover, or locating in countries or industries where domestic firms have limited imitative capacities to begin with.[7] This observation is consistent with the results of recent studies that failed to produce evidence of positive horizontal spillovers from FDI.

On the other hand, multinationals have no incentive to prevent technology diffusion to upstream sectors, as they may benefit from

---

[5] See the United Nations Centre on Transnational Organizations (UNCTC) (2001, Ch. 4) for a comprehensive review of this topic.

[6] For instance, during 1990–2000 the number of scientists and engineers in research and development activities per million people was equal to 2,031 in Lithuania, compared to 2,139 in Korea, 711 in Argentina, 168 in Brazil, and 154 in Malaysia (World Bank, 2003b).

[7] Several studies (Aitken et al., 1996; Sourafel Girma et al., 2001) have documented that foreign firms pay higher wages than domestic firms. Multinationals have also been found to be sensitive to the strength of intellectual property rights protection in host countries (see Javorcik, 2004).

improved performance of intermediate input suppliers. Thus, backward linkages—that is, contacts between multinational firms and their local suppliers—should be the most likely channel through which spillovers would manifest themselves. These spillovers may take place through (i) direct knowledge transfer from foreign customers to local suppliers;[8] (ii) higher requirements for product quality and on-time delivery introduced by multinationals, which provide incentives to domestic suppliers to upgrade their production management or technology;[9] and (iii) multinational entry increasing demand for intermediate products, which allows local suppliers to reap the benefits of scale economies.

Similarly, domestic firms may become more productive as a result of gaining access to new, improved, or less costly intermediate inputs produced by multinationals in upstream sectors (forward linkage channel). Sales of these inputs by multinationals may be accompanied by provision of complementary services that may not be available in connection with imports.

Anecdotal evidence confirms spillovers taking place through backward linkages in transition countries. For instance, after a Czech producer of aluminum alloy castings for the automotive industry signed its first contract with a multinational customer, the staff from the multinational would visit the Czech firm's premises for two days each month over an extended period to work on improving the quality control system. Subsequently, the Czech firm applied these improvements to its other production lines (not serving this particular customer)

and reduced the number of defective items produced.[10]

The results of a recent enterprise survey conducted in Latvia by the World Bank (2003a) are consistent with our expectation of positive spillovers taking place through backward linkages but are ambiguous with respect to the intraindustry effect. The evidence from Latvia is particularly relevant as, besides being neighboring countries, Lithuania and Latvia share many similarities in terms of their history and economic conditions. The survey demonstrated that a majority of multinationals are engaged in local sourcing—82 percent of those interviewed had at least one Latvian supplier of intermediate inputs, and on average, 47 percent of intermediate inputs purchased by foreign firms came from Latvian producers. Thirty-three percent of Latvian firms supplying multinationals reported receiving assistance from their customers. As far as horizontal spillovers are concerned, one-third of Latvian firms stated that they have benefited from the presence of foreign firms in their sector (15 percent through sourcing inputs from multinationals, 14 percent by learning about new technologies, and 9 percent by learning about new marketing strategies). At the same time, 41 percent of survey respondents reported that foreign entry increased competition in their industry, with 29 percent of firms admitting to having lost market share to foreign firms. As Aitken and Harrison (1999) pointed out, knowledge spillovers within an industry may be counterbalanced by the competition effect; that is, as domestic firms lose market share to foreign entrants, they experience lower productivity since their fixed costs are spread over a smaller market. Thus, the reported increase in competition levels due to foreign entry is consistent with the lack of intraindustry spillovers found in the current analysis.

Different types of FDI projects may have different implications for vertical spillovers. For instance, it has been argued that affiliates established through mergers and acquisitions or joint ventures are likely to source more locally than those taking the form of greenfield projects (UNCTC, 2001). While the latter have to put time and effort into developing local linkages,

---

[8] As numerous case studies indicate (see Moran), multinationals often provide technical assistance to their suppliers in order to raise the quality of their products or facilitate innovation. They help suppliers with management training and organization of the production process, quality control, purchase of raw materials, and even finding additional customers. Note that the existence of linkages does not necessarily guarantee that spillovers take place, nor does the fact that multinationals may charge for services provided preclude the presence of spillovers. Spillovers take place when foreign affiliates are unable to extract the full value of the resulting productivity increase through direct payment or lower prices they pay for intermediates sourced from the local firm.

[9] For instance, many multinationals require their suppliers to obtain International Standards Organization (ISO) quality certifications.

[10] Source: Interview with company management conducted by the author in the Czech Republic in May 2003.

the former can take advantage of the supplier relationships of the acquired firm or its local partners. Empirical evidence to support this view has been found for Japanese investors (Rene Belderbos et al., 2001) and for Swedish affiliates in Eastern Europe (UNCTC, 2000). Unfortunately, in the data set used here it is impossible to distinguish among the three types of foreign investment. However, to the extent that full foreign ownership is a proxy for greenfield projects, it is expected that fully owned foreign affiliates will tend to rely more on imported inputs, while investment projects with shared domestic and foreign ownership will tend to source more locally.[11] This hypothesis is supported by the survey mentioned above, which showed that while over half of partially owned foreign affiliates operating in Latvia purchased their intermediate inputs locally, the same was true of only 9 percent of fully owned foreign subsidiaries (World Bank, 2003a). Similarly, the results of a study of the largest exporters in Hungary (Istvan Janos Toth and Andras Semjen, 1999) indicate that foreign affiliates with larger shares of foreign equity tend to purchase fewer inputs from Hungarian companies. In sum, it is expected that larger spillovers are associated with partially rather than fully owned foreign projects.

II. Data and Estimation Strategy

A. *Foreign Direct Investment in Lithuania*

Like other former Soviet Republics, Lithuania had been virtually closed to foreign investment until 1990, when it regained its independence and began the process of transition to a market economy. The first stage of the privatization process, starting in 1991, offered limited opportunities for foreign investors. It was not until 1997 that FDI inflows into Lithuania increased significantly, as a result of the second stage of the privatization program. As illustrated in Figure 1, FDI inflows peaked in 1998, when 60 percent of shares of *Lietuvas*
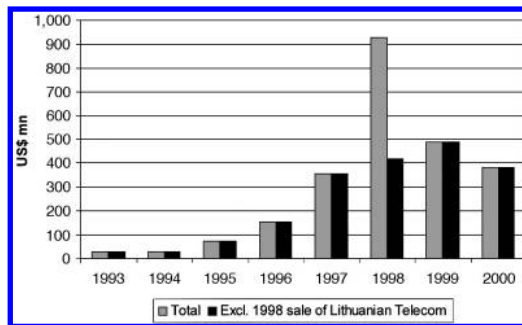

FIGURE 1. NET FDI INFLOWS INTO LITHUANIA

Telekomas (Lithuanian Telecom), the fixed-line monopoly operator, were sold to Amber Teleholdings, a consortium of Swedish Telia and Finnish Sonera [European Bank for Reconstruction and Development (EBRD), 2001].[12] Due to its late start, Lithuania has attracted less FDI than have other Central and Eastern Europe countries (CEECs). Cumulative FDI inflows during the period 1993–2000 reached US$694 per capita, placing Lithuania seventh among CEECs, above Slovenia, Bulgaria, and Romania. In terms of the value of cumulative FDI inflows per capita, Lithuania ranks eighth, above Estonia and Slovenia (see Table 1).

As far as sectoral distribution of FDI is concerned, 44 percent of the FDI stock in 1996 was in manufacturing. After large inflows into the telecommunications and financial sectors, this figure decreased to 32 percent in 2000. Within manufacturing, food products, beverages, and tobacco attracted the largest share of investment (12 percent of total FDI stock), followed by textiles and leather products (4 percent) and refined petroleum and chemicals (4 percent). Electrical machinery, optical instruments, and wood products also received significant foreign investments [Organization for Economic Cooperation and Development (OECD), 2000]. A detailed distribution of FDI stock in 2000 within the two-digit manufacturing sectors, calculated on the basis of the data set used in the study, is presented in the first column in Table 2.

---

[11] There may exist greenfield projects undertaken jointly by foreign and local entities but in that case they should be lumped together with joint ventures, as the participation of a local company brings access to domestic suppliers. This classification will, however, be problematic in the case of full acquisitions undertaken by foreigners.

[12] Note that the large jump in FDI inflows due to this transaction does not affect the results of this paper, as only manufacturing sectors are included in the econometric analysis.

TABLE 1—FDI INFLOWS INTO CEECs, 1993–2000

Panel A	FDI inflow (millions of US$)							
	1993	1994	1995	1996	1997	1998	1999	2000
Czech Republic	654	878	2,568	1,435	1,286	3,700	6,313	4,987
Hungary	2,350	1,144	4,519	2,274	2,167	2,037	1,977	1,646
Estonia	162	214	201	150	266	581	305	387
Latvia	45	214	180	382	521	357	348	410
Poland	1,715	1,875	3,659	4,498	4,908	6,365	7,270	9,341
Slovak Republic	199	270	236	351	174	562	354	2,052
Lithuania	**30**	**31**	**73**	**152**	**355**	**926**	**486**	**379**
Slovenia	113	117	150	173	334	216	107	136
Bulgaria	40	105	90	109	505	537	806	1,002
Romania	94	341	419	263	1,215	2,031	1,041	1,037

Panel B	FDI inflows 2000		FDI inflows 1993–2000	
	As percent of GDP	Per capita (US$)	Value (mn US$)	Per capita (US$)
Czech Republic	9.7	485	21,822	2,124
Hungary	3.5	163	18,113	1,790
Estonia	7.5	283	2,268	1,656
Latvia	5.7	173	2,456	1,036
Poland	5.9	242	39,631	1,025
Slovak Republic	10.4	380	4,198	777
Lithuania	**3.4**	**108**	**2,432**	**694**
Slovenia	0.7	68	1,345	676
Bulgaria	7.9	123	3,194	393
Romania	2.7	46	6,441	287

Note: CEECs = Central and Eastern European countries; FDI = foreign direct investment.
Sources: FDI figures—IMF (2003). GDP and population data—World Bank (2003b).

Lithuania's population, gross domestic product (GDP), and, not surprisingly, FDI inflows are concentrated in three principal cities: Vilnius, Kaunas, and Klaipeda. At the beginning of 2000, Vilnius accounted for 60.5 percent of the country's total FDI, with the other two cities accounting for 10.5 and 11.6 percent, respectively. Direct investment in manufacturing sectors is concentrated around Klaipeda, while the bulk of FDI inflows into wholesale and retail trading are found in the capital city of Vilnius (OECD, 2000, 2001).

B. *Data Description*

The data used in this study come from the annual enterprise survey conducted by the Lithuanian Statistical Office. The survey coverage is extensive, as firms accounting for about 85 percent of output in each sector are included in the sample. The Lithuanian enterprise data have been praised for their high quality and reliability.[13] The data constitute an unbalanced panel covering the period 1996–2000. The number of firms per year varies from a low of twelve thousand in 1996 to a high of twenty-one thousand in 1999. Due to financial constraints in some years, the Statistical Office was forced to reduce the scope of the exercise. In each year, however, the same sampling technique was used.

This study focuses on manufacturing firms (sectors 15–36 in *Nomenclature générale des activités économiques dans les Communautés européennes,* NACE), which lowers the sample size to 2,500 to 4,000 firms per year. The number of observations is further reduced by deleting those with missing values, zero sales, zero employment, and observations failing to satisfy

---

[13] A recent study examining the quality of data collected by statistical offices ranked Lithuania second among 20 transition economies (see Misha Belkindas et al., 1999).

TABLE 2—DISTRIBUTION OF FIRMS WITH FOREIGN CAPITAL BY INDUSTRY IN 2000

Code	Sector	Distribution of FDI across sectors[a] (percent)	Domestic firms (1)	Firms with foreign capital[b] (2)	All firms (3)	(2)/(3) * 100	Horizontal	Backward	Forward
15	Food products and beverages	19.6	396	50	446	11.2	26.6	1.5	4.8
17	Textiles	12.5	74	30	104	28.8	39.7	13.7	1.7
18	Wearing apparel	1.9	172	43	215	20.0	33.5	2.7	25.6
19	Leather and leather products	0.1	19	3	22	13.6	6.6	6.8	15.3
20	Wood and wood products, except furniture	4.2	382	43	425	10.1	34.3	12.5	8.4
21	Pulp, paper, and paper products	2.3	17	6	23	26.1	39.4	17.2	10.9
22	Publishing, printing, and recorded media	0.2	204	12	216	5.6	7.0	3.5	18.3
24	Chemicals and chemical products	10.7	44	17	61	27.9	20.9	7.4	3.7
25	Rubber and plastic products	3.8	111	25	136	18.4	31.4	11.0	10.9
26	Other nonmetallic mineral products	7.4	141	17	158	10.8	35.3	3.1	6.8
27	Basic metals	0.6	6	3	9	33.3	50.3	16.7	4.3
28	Fabricated metal products	0.7	156	24	180	13.3	10.7	8.4	22.3
29	Machinery and equipment	1.1	94	12	106	11.3	23.2	6.9	15.3
30	Office machinery and computers	0.0	8	2	10	20.0	8.0	6.3	22.5
31	Electrical equipment and apparatus	1.2	37	4	41	9.8	65.3	7.1	15.0
32	Radio, television, and communication equipment	4.3	24	5	29	17.2	32.2	14.4	17.0
33	Medical, precision, and optical instruments	0.8	42	7	49	14.3	23.8	11.9	18.7
34	Motor vehicles	0.8	9	1	10	10.0	59.8	4.4	12.6
35	Other transport equipment	7.6	39	8	47	17.0	71.5	0.2	13.1
36	Furniture	0.6	154	20	174	11.5	9.7	6.9	14.5
	Total	80.4	2,129	332	2,461	13.5	31.5	8.1	13.1

[a] Shares do not add up to 100 percent since NACE 16 (tobacco) and NACE 23 (manufacturing of refined petroleum products), which account for 0.9 and 18.7 percent of FDI stock, are not included in the table.

[b] Foreign share of at least 10 percent of total capital.

other basic error checks. Moreover, two sectors—tobacco (NACE 16) and manufacturing of refined petroleum products (NACE 23)—are excluded, since the small number of firms makes it impossible to apply the Olley-Pakes technique (discussed below) to these industries. Thus, the final sample size varies between 1,918 and 2,711 firms in a given year. The sectoral distribution of firms in the last year of the sample is presented in Table 2.

The data set contains information on foreign ownership, sales, inventories, employment, fixed assets, input costs, investment, location, and share of exports in total sales. Firms with foreign capital participation are defined as firms

in which the share of subscribed capital (equity) owned by foreign investors is equal to at least 10 percent. More than 12 percent, or 1,414 of the total of 11,630 observations, meet this definition.

Lithuania and other transition countries of Eastern Europe are suitable objects for an analysis of FDI spillovers because of their high endowment of skilled labor, which makes them particularly likely locations for productivity spillovers. On the downside, the brief duration of the panel makes it more difficult to detect the presence of spillovers. Extending the panel to earlier years would not mitigate this problem because of limited FDI presence during the

early 1990's. Further, a high level of aggregation in the industry classification (NACE two-digit) and the fact that the data set pertains to firms rather than plants also works against finding a significant spillover effect.

C. *Estimation Strategy*

To examine the correlation between firm productivity and FDI in the same industry or other sectors, an approach similar to that taken by earlier literature is followed and several variations of the following equation are estimated

(1)

$$\ln Y_{ijrt} = \alpha + \beta_1 \ln K_{ijrt} + \beta_2 \ln L_{ijrt} + \beta_3 \ln M_{ijrt}$$
$$+ \beta_4 \; Foreign \; Share_{ijrt} + \beta_5 \; Horizontal_{jt}$$
$$+ \beta_6 \; Backward_{jt} + \beta_7 \; Forward_{jt}$$
$$+ \alpha_t + \alpha_r + \alpha_j + \varepsilon_{ijrt}.$$

Y_{ijrt} stands for the real output of firm i operating in sector j and region r at time t, which is calculated by adjusting the reported sales for changes in inventories of finished goods and deflating the resulting value by the Producer Price Index for the appropriate two-digit NACE sector. K_{ijrt}, capital, is defined as the value of fixed assets at the beginning of the year, deflated by the simple average of the deflators for five NACE sectors: machinery and equipment; office, accounting, and computing machinery; electrical machinery and apparatus; motor vehicles, trailers, and semi-trailers; and other transport equipment. Since in the data set it is impossible to distinguish between skilled and unskilled workers, labor is expressed in terms of efficiency units, which are computed by dividing the wage bill by the minimum wage (L_{ijrt}).[14] M_{ijrt}, materials, are equal to the value of material inputs adjusted for changes in material inventories, deflated by an intermediate inputs deflator calculated for each sector based on the input-output matrix and deflators for the relevant industries. Finally, *Foreign Share*$_{ijrt}$ mea-

sures the share of firm's total equity owned by foreign investors.

Turning to proxies for spillovers, *Horizontal*$_{jt}$ captures the extent of foreign presence in sector j at time t and is defined as foreign equity participation averaged over all firms in the sector, weighted by each firm's share in sectoral output.[15] In other words,

(2) $Horizontal_{jt}$

$$= \left[\sum_{i \text{ for all } i \in j} Foreign \; Share_{it} * Y_{it} \right] \Big/ \sum_{i \text{ for all } i \in j} Y_{it}.$$

Thus, the value of the variable increases with the output of foreign investment enterprises and the share of foreign equity in these firms.

Backward$_{jt}$ is a proxy for the foreign presence in the industries that are being supplied by sector j. It is intended to capture the extent of potential contacts between domestic suppliers and multinational customers. It is defined following Blalock, and Schoors and van der Tol as:[16]

(3) $Backward_{jt} = \sum_{k \text{ if } k \neq j} \alpha_{jk} \; Horizontal_{kt}$

where α_{jk} is the proportion of sector j's output supplied to sector k taken from the 1996 input-output matrix at the two-digit NACE level. The proportion is calculated excluding products supplied for final consumption but including imports of intermediate products.[17] As the formula

---

[14] This approach was pioneered by Zvi Griliches and Vidar Ringstad (1971) and more recently used by James Tybout et al. (1991). Note that defining employment as the number of workers yields similar results.

[15] This definition is analogous to that in Aitken and Harrison, who use employment as weights. Schoors and van der Tol as well as Blalock employ output weights but do not take into account the share of foreign equity, treating as foreign total output of firms with at least 10 or 20 percent foreign equity, respectively.

[16] To illustrate the meaning of the variable, suppose that the sugar industry sells half of its output to jam producers and half to chocolate producers. If no multinationals are producing jam but half of all chocolate production comes from foreign affiliates, the *Backward* variable will be calculated as follows: $\frac{1}{2} * 0 + \frac{1}{2} * \frac{1}{2} = 0.25$.

[17] Since relationships between sectors may change over time (although a radical change is unlikely), using multiple input-output matrices would be ideal. Unfortunately, input-output matrices for later years are unavailable. Similarly, while employing a matrix excluding imports would be preferable, such a matrix does not exist. Thus, the results should be interpreted with these two caveats in mind.

indicates, inputs supplied within the sector are not included, since this effect is already captured by the *Horizontal* variable.[18] The greater the foreign presence in sectors supplied by industry j and the larger the share of intermediates supplied to industries with a multinational presence, the higher the value of the variable.

The *Forward* variable is defined as the weighted share of output in upstream (or supplying) sectors produced by firms with foreign capital participation. As only intermediates sold in the domestic market are relevant to this study, goods produced by foreign affiliates for exports (X_{it}) are excluded. Thus, the following formula is used:

$$(4) \quad Forward_{jt}$$

$$= \sum_{m \text{ if } m \neq j} \sigma_{jm} \left[\left[\sum_{i \text{ for all } i \in m} Foreign\ Share_{it} \right. \right.$$

$$\left. \left. * (Y_{it} - X_{it}) \right] \middle/ \left[\sum_{i \text{ for all } i \in m} (Y_{it} - X_{it}) \right] \right]$$

where σ_{jm} is the share of inputs purchased by industry j from industry m in total inputs sourced by sector j. For the same reason as before, inputs purchased within the sector are excluded. The value of the variable increases with the share of foreign affiliates in the (domestically sold) output of upstream sectors.

The proxies for horizontal and vertical linkages are time-varying sector-specific variables. While the coefficients taken from the input-output table remain fixed, changes in level of foreign investment and firm output are observed during the period in question. Table 2 lists the values of all three measures in the last year of the sample, 2000.

There is significant variation across sectors and time in all variables. For instance, the value of *Horizontal* ranges from 71.5 percent in other transport equipment and 65 percent in electrical equipment and apparatus to 6.6 percent in leather and leather products. The average value increases from almost 12 percent in 1996 to over 31 percent in 2000. Similarly, the value of

the *Backward* variable rises from 3.6 percent in 1996 to 6 percent in 1998 and 8.1 percent in 2000. The highest value is registered in pulp, paper, and paper products (17 percent), basic metals (16.7 percent), and radio, TV, and communications equipment (14.4 percent), while the lowest (0.2 percent) is in manufacturing other transport equipment. The *Forward* proxy ranges from 25.6 percent in manufacturing wearing apparel to 1.65 percent in manufacturing textiles. Again, the *Forward* variable increases over time, from 3.3 percent in the first year to 13.1 percent in the last year. See Tables 3 and 4 for more details on summary statistics.

Figures 2 through 4 present changes in the value of all spillover variables in each sector between 1996 and 2000. It is worth noting that seven industries registered a rise in the *Backward* measure of more than 5 percentage points, while a further 10 sectors experienced an increase of more than 2 percentage points. The largest change was observed in textiles, pulp and paper, and wood, as well as rubber and plastics. In the case of the *Horizontal* variable, the changes were even more pronounced, with 13 industries experiencing an increase of over 10 percentage points, and motor vehicles leading the ranking. Apparel, metal products, and office machinery, on the other hand, saw the greatest change in the *Forward* measure.

In an exploratory regression, the model described above is estimated using ordinary least squares (OLS) with White's correction for heteroskedasticity. A firm's output is the dependent variable, and explanatory variables include capital, labor, materials, foreign equity share, and proxies for FDI spillovers operating through horizontal, backward, and forward channels. Since knowledge externalities from the foreign presence may take time to manifest themselves, two specifications are employed: one with contemporaneous and one with lagged spillover variables. The estimation is performed on the full sample and on the sample of domestic firms only.[19] The model includes fixed effects for years (4), industries (19), and regions (9). The results in Table 5 indicate that firms with foreign capital tend to be more productive than purely Lithuanian firms. And, more

---

[18] Including the share of intermediates supplied within the sector in the *Backward* measure does not change the conclusions with respect to the correlation between firm productivity and foreign presence in the sourcing sectors.

[19] Domestic firms are defined as those with less than 10 percent foreign equity.

TABLE 3—SUMMARY STATISTICS

	Summary statistics for levels			Summary statistics for first differences		
	Number of observations	Mean	Standard deviation	Number of observations	Mean	Standard deviation
ln *Y*	11,630	13.5	2.0	6,853	0.01	0.6
ln *L*	11,630	6.1	1.8	6,853	−0.06	0.6
ln *K*	11,630	12.0	2.4	6,853	0.26	0.7
ln *Materials*	11,630	12.3	2.5	6,853	−0.02	1.1
ln *Gross Investment*	8,262	10.6	2.4	3,765	−0.04	1.8
Foreign share	11,630	7.8	23.0	6,853	0.42	9.1
Exports share	9,762	21.1	34.0	5,757	−1.20	22.6
Horizontal	11,630	19.7	12.3	6,853	3.99	4.7
Backward	11,630	4.9	3.9	6,853	1.05	1.1
Backward (fully foreign owned)	11,630	1.9	2.0	6,853	0.41	0.6
Backward (partially foreign owned)	11,630	3.0	2.5	6,853	0.64	1.1
Backward (concentrated)	11,630	1.9	2.1	6,853	0.37	0.8
Backward (competitive)	11,630	2.9	3.0	6,853	0.68	1.1
Forward	11,630	6.9	5.5	6,853	2.38	2.6
ln *Demand*	11,630	18.9	1.4	6,853	0.06	0.1
H4	11,630	576.9	844.4	6,853	−8.03	209.3

TABLE 4—ADDITIONAL SUMMARY STATISTICS FOR SPILLOVER VARIABLES

Year	Number of industries	*Horizontal*		*Backward*		*Forward*	
		Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
1996	20	11.85	12.92	3.62	3.05	3.29	2.42
1997	20	17.32	15.70	5.17	4.03	4.27	2.83
1998	20	21.95	15.58	6.02	4.59	6.16	3.14
1999	20	28.93	19.93	7.72	4.93	8.81	4.27
2000	20	31.46	19.20	8.13	5.00	13.08	6.70

important for the purpose of this study, we find a significant and positive coefficient on both *Backward* and *Horizontal* variables in all four specifications. The coefficients on lagged values appear be larger and (in the case of *Backward*) of higher statistical significance. The third spillover variable, *Forward*, does not appear to be statistically significant. In sum, the results are consistent with productivity spillovers from FDI both taking place within industries and flowing from multinational customers to their domestic suppliers.

To be more confident about isolating the effects of productivity spillovers, we must control for other factors that may influence firm productivity. If multinational entry decreases industry concentration, leading to more competition and forcing domestic firms to improve

their efficiency, this situation may still be regarded as a broadly defined spillover effect. Since, however, our interest is primarily knowledge transfer, it would be useful to separate the two phenomena. Thus, the Herfindahl index (*H4*) is included as a proxy for the level of industry concentration.[20] Further, foreign entry into downstream sectors may increase demand for intermediate products which in turn will

[20] The index is defined as the sum of the squared market shares of the four largest producers in a given sector, and its value may range from 0 to 10,000. As pointed out by Stephen Nickell (1996), predictions of the theoretical literature on the impact of competition on productivity are ambiguous. In his empirical analysis, however, he finds evidence of competition being positively correlated with productivity growth.
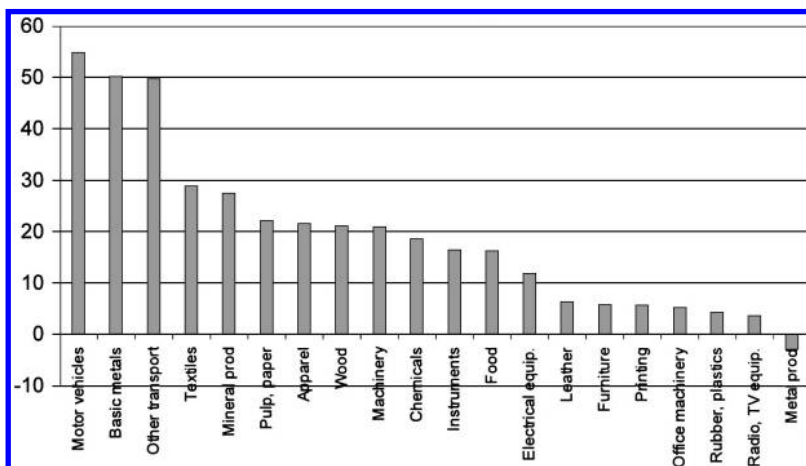
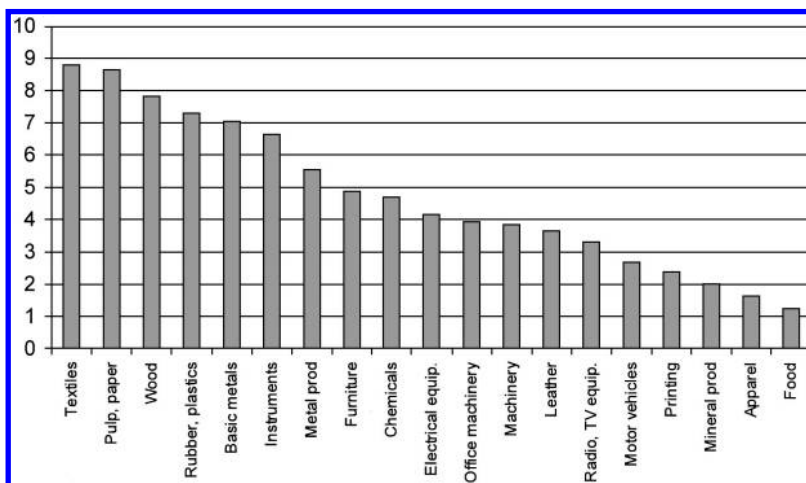FIGURE 2. CHANGE IN HORIZONTAL MEASURE 1996–2000

FIGURE 3. CHANGE IN BACKWARD MEASURE 1996–2000

allow local suppliers to reap the benefits of scale economies. To separate this effect, the regression includes the demand for intermediates calculated based on information on sourcing patterns from the input-output (IO) matrix and the value of production in using sectors.[21] A positive correlation between demand for inter-mediates (*Demand*) and firm productivity is anticipated.

Several econometric concerns need to be addressed in the analysis. The first is the omission of unobserved variables. There may exist firm-, time-, and region-specific factors unknown to the econometrician but known to the firm that may affect the correlation between firm productivity and foreign presence. Examples of these variables include high-quality management in a particular firm or better infrastructure in a given region. This problem is addressed by following Haskel et al. (2002) and using time differencing

---

[21] More precisely, $Demand_{jt} = \sum_k a_{jk} * Y_{kt}$ where a_{jk} is the IO matrix coefficient indicating that in order to produce one unit of good k, a_{jk} units of good j are needed. Y_{kt} stands for industry k output deflated by an industry-specific deflator.
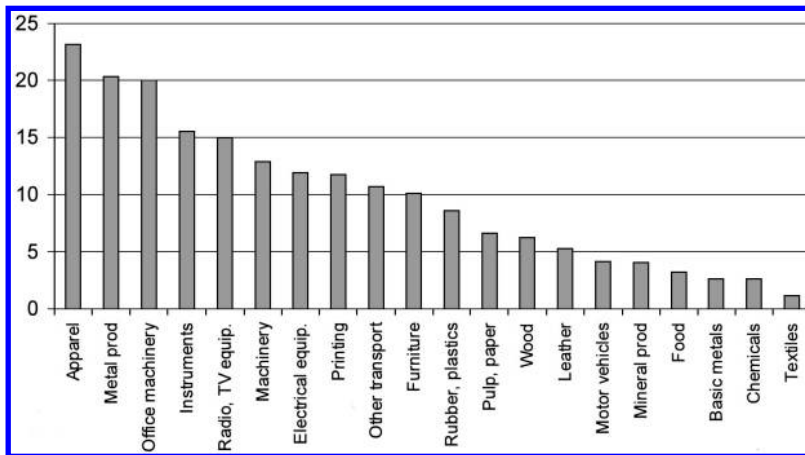
FIGURE 4. CHANGE IN FORWARD VARIABLE 1996–2000

TABLE 5—OLS WITH LAGGED AND CONTEMPORANEOUS SPILLOVER VARIABLES

	All firms	Domestic	All firms	Domestic
Foreign share	0.0025***		0.0025***	
	(0.0002)		(0.0003)	
Backward	0.0105**	0.0086*		
	(0.0048)	(0.0051)		
Backward lagged			0.0173***	0.0177***
			(0.0060)	(0.0066)
Forward	−0.0030	0.0001		
	(0.0024)	(0.0027)		
Forward lagged			−0.0029	−0.0007
			(0.0040)	(0.0044)
Horizontal	0.0029**	0.0040***		
	(0.0013)	(0.0014)		
Horizontal lagged			0.0038*	0.0046**
			(0.0021)	(0.0023)
Intercept	5.2323***	5.2082***	5.1599***	5.1582***
	(0.0805)	(0.0876)	(0.1007)	(0.1108)
Number of observations	11,630	10,216	8,214	7,118
R^2	0.93	0.92	0.93	0.92

Notes: Robust standard errors are presented in parentheses. The dependent variable is ln firm output. Each regression includes ln capital stock, ln effective employment, and ln materials as well as industry, region, and year fixed effects.
   * Significant at the 10-percent level.
   ** Significant at the 5-percent level.
   *** Significant at the 1-percent level.

as well as a full set of fixed effects for year, industry, and region. In addition to removing any fixed firm-specific unobservable variation, differencing will remove fixed regional and industrial effects, such as infrastructure and technological opportunity. Time, industry, and regional dummy variables, on the other hand, will control for unobservables that may be driving changes in, for instance, attractiveness of a particular region or industry.[22] Thus the specification becomes

---

[22] In this case the fixed effect for region *r* captures not just the fact that region *r* is an attractive business location but also the fact that its attractiveness is changing over time.

$$(5) \quad \Delta \ln Y_{ijrt} = \delta_1 \Delta \ln K_{ijrt} + \delta_2 \Delta \ln L_{ijrt}$$

$$+ \delta_3 \Delta \ln M_{ijrt} + \delta_4 \Delta \, Foreign \, Share_{ijrt}$$

$$+ \delta_5 \Delta \, Horizontal_{jt} + \delta_6 \Delta \, Backward_{jt}$$

$$+ \delta_7 \Delta \, Forward_{jt} + \delta_8 \Delta \, H4_{jt}$$

$$+ \delta_9 \Delta \ln Demand_{jt} + \alpha_t$$

$$+ \alpha_r + \alpha_j + \varepsilon_{ijrt}.$$

The above model is estimated in first, second, and fourth differences. The examination of longer differences gives relatively more weight to more persistent changes in the variables of interest and hence reduces the influence of noise. Its disadvantage is that longer time differences reduce the size of the sample. As a compromise, the above-mentioned sets of differences are employed but only the relationship between contemporaneous changes in FDI and firm-level total factor productivity is considered, because adding lags would seriously strain the time span of the data set.

Second, Moulton showed that in the case of regressions performed on micro units yet including aggregated market (or in this case industry) variables, the standard errors from OLS will be underestimated. As Moulton demonstrated, failing to take this into account leads to a serious downward bias in the estimated errors, resulting in spurious findings of statistical significance for the aggregate variable of interest. To address this issue, the standard errors are corrected for a correlation between observations belonging to the same industry in a given year (in other words, standard errors are clustered for all observations in the same industry and year).

Finally, it has been argued that the use of OLS is inappropriate when estimating productivity, since this method treats labor and other inputs as exogenous variables. Griliches and Jacques Mairesse (1995) have made a case that inputs should be considered endogenous since they are chosen by firm based on its productivity, which is observed by the producer but not by the econometrician. Not taking into account the endogeneity of input choices may bias the estimated coefficients. Since the focus of this paper is on firm productivity, the

consistency of the estimates is crucial for the analysis.

Therefore, we employ the semiparametric estimation procedure suggested by Olley and Pakes, which allows for firm-specific productivity difference exhibiting idiosyncratic changes over time. Following Olley and Pakes, it is assumed that at the beginning of every period a firm chooses variable factors and a level of investment, which together with the current capital value determine the capital stock at the beginning of the next period. The capital accumulation equation is given by

$$(6) \qquad k_{it+1} = (1 - \delta)k_{it} + i_{it}$$

where k stands for capital, i for investment, and δ for the rate of depreciation.

Consider the following Cobb-Douglas production function model:

$$(7) \qquad y_{it} = \alpha + \beta_l * l_{it} + \beta_k * k_{it}$$

$$+ \beta_m * m_{it} + \omega_{it} + \eta_{it}$$

where y_{it}, l_{it}, and m_{it} denote the logarithm of output, labor, and material inputs, respectively, and subscripts i and t stand for firm and time. ω_{it} denotes productivity, and η_{it} stands for either measurement error or a shock to productivity that is not forecastable during the period in which labor can be adjusted. Both ω_{it} and η_{it} are unobserved. The difference is that ω_{it} is a state variable in the firm's decision problem and thus affects the input demand, while η_{it} does not. Labor and materials are assumed to be freely variable inputs. Capital is a fixed factor and is affected only by the distribution of ω conditional on information at time $t - 1$ and past values of ω. The fact that input choices are determined in part by the firm's beliefs about ω_{it} gives rise to simultaneity bias. The positive correlation between ω_{it} and inputs used in period t will cause an OLS estimation that does not take into account unobserved productivity differences to provide upwardly biased estimates of the coefficients on variable inputs.

The insight of the Olley-Pakes method is that the observable characteristics of the firm can be modeled as a monotonic function of the

TABLE 6—COMPARISON OF COEFFICIENTS FROM OLS AND OLLEY-PAKES REGRESSIONS

Sector code	15	17	18	19	20	21	22	24	25
Panel A—Coefficients from Olley-Pakes Regressions									
Number of observations in Stage I	1,150	271	498	68	828	66	610	174	311
ln(labor)	0.3395***	0.3823***	0.6211***	0.3201***	0.3658***	0.1420*	0.4380***	0.2633***	0.3843***
ln(materials)	0.5036***	0.4356***	0.2312***	0.5256***	0.4797***	0.5272***	0.3391***	0.4601***	0.4748***
ln(capital)	0.1002***	0.0176	0.0221	0.0547*	0.0679***	0.1427***	0.0862***	0.1625***	0.0444***
Sum of coefficients	0.94	0.84	0.87	0.90	0.91	0.81	0.86	0.89	0.90
Panel B—Coefficients from OLS Regressions									
ln(labor)	0.4114***	0.4500***	0.7357***	0.3318***	0.4558***	0.2655***	0.5048***	0.3072***	0.4360***
ln(materials)	0.5180***	0.4816***	0.2483***	0.5490***	0.4862***	0.6103***	0.3864***	0.5277***	0.5118***
ln(capital)	0.0396***	0.0028	−0.0003	0.0038	0.0214***	0.0420	0.0512***	0.0730***	0.0357**
Sum of coefficients	0.97	0.93	0.98	0.88	0.96	0.92	0.94	0.91	0.98
change in l coefficient	−	−	−	−	−	−	−	−	−
change in m coefficient	−	−	−	−	−	−	−	−	−
change in k coefficient	+	+	+	+	+	+	+	+	+

productivity of the firm. Since the investment decision depends on the capital stock and on firm productivity,

$$(8) \qquad i_{it} = i_{it}(\omega_{it}, k_{it})$$

by inverting the above equation, one can express unobserved productivity ω_{it} as a function of observable investment and capital and thus control for ω_{it} in estimation[23]

$$(9) \qquad \omega_{it} = h_{it}(i_{it}, k_{it}).$$

By substituting (9) into (7), the equation to be estimated in the first stage of the procedure is obtained:

$$(10) \qquad y_{it} = \alpha + \beta_l * l_{it} + \beta_k * k_{it}$$
$$+ \beta_m * m_{it} + h(i_{it}, k_{it}) + \eta_{it}.$$

The functional form of $h(\cdot)$ is not known. Therefore, the β_k coefficient cannot be estimated at

this stage. A partially linear model including a third-order polynomial expansion in capital and investment to approximate the form of the $h(\cdot)$ is estimated. From this stage, the consistent estimates of the coefficients on labor and material inputs as well as the estimate of the third-order polynomial in i_{it} and k_{it} (referred to as ψ_{it}) are obtained:

$$(11) \qquad \psi_{it} = \alpha + \beta_k * k_{it} + h(i_{it}, k_{it}).$$

Thus,

$$(12) \qquad h(i_{it}, k_{it}) = \psi_{it} - \beta_k * k_{it}.$$

The second step of the estimation procedure considers the expectation of $y_{it+1} - \beta_m * m_{it+1} - \beta_l * l_{it+1}$

$$(13) \quad E[y_{it+1} - \beta_m * m_{it+1} - \beta_l * l_{it+1} | k_{it+1}]$$
$$= \alpha + \beta_k * k_{it+1} + E[\omega_{it+1} | \omega_{it}]$$
$$\equiv \beta_k * k_{it+1} + g(\omega_{it}).$$

Assuming that ω_{it} follows a first-order Markov process, one can rewrite ω_{it+1} as a function of ω_{it}, letting ξ_{it+1} be the innovation in ω_{it+1}. Using (9) and (12), equation (13) becomes a function of i_{it} and k_{it}

---

[23] Provided that $i_{it} > 0$, it is possible to show that investment is strictly increasing in ω_{it} and thus (8) can be inverted.

<center>TABLE 6—<i>Continued.</i></center>

26	27	28	29	30	31	32	33	34	35	36
Panel A—*Continued.*										
364	22	465	256	23	84	68	117	23	100	400
0.4478***	0.6059**	0.3917***	0.4885***	0.7412***	0.4651***	0.2845***	0.3791***	0.2739*	0.5015***	0.4003***
0.4804***	0.5703**	0.4475***	0.3851***	0.3394***	0.4374***	0.3833***	0.5275***	0.3497***	0.2769***	0.4460***
0.0307***	−0.0922***	0.0528***	0.0455**	−0.1521***	−0.0167	0.0132	0.0510	0.0850	0.0945***	0.0737***
0.96	1.08	0.89	0.92	0.93	0.89	0.68	0.96	0.71	0.78	0.92
Panel B—*Continued.*										
0.5134***	0.7614***	0.3970***	0.5261***	0.6215***	0.4296***	0.3429***	0.4704***	0.2542**	0.5233***	0.4567***
0.4804***	0.2807***	0.4910***	0.4364***	0.2122**	0.5189***	0.4611***	0.5311***	0.3531***	0.3158***	0.5030***
−0.0375***	−0.0606	0.0258**	−0.0617***	−0.1084	−0.0527	0.0862	−0.0339	0.1322**	0.0326	−0.0123
0.96	0.98	0.91	0.90	0.73	0.90	0.89	0.97	0.74	0.87	0.95
−	−	−	−	+	+	−	−	+	−	−
0	+	−	−	+	−	−	−	−	−	−
+	−	+	+	−	+	−	+	−	+	+

    * Significant at the 10-percent level.
    ** Significant at the 5-percent level.
    *** Significant at the 1-percent level.

$$(14) \quad y_{it+1} - \beta_m * m_{it+1} - \beta_l * l_{it+1}$$
$$= \beta_k * k_{it+1} + g(\psi_{it} - \beta_k * k_{it})$$
$$+ \xi_{it+1} + \eta_{it+1}$$

where g is a third-order polynomial of $\psi_{it} - \beta_k * k_{it}$. This is the equation to be estimated in the second stage of the procedure. Only in this stage it is possible to obtain consistent estimates of β_k. Since the capital in use in a given period is assumed to be known at the beginning of the period and ξ_{it+1} is mean independent of all variables known at the beginning of the period, ξ_{it+1} is mean independent of k_{it+1}. A nonlinear least-squares method is used to estimate the above equation.

A production function with the Olley-Pakes correction is estimated for each industry separately. From the estimation, the measure of total factor productivity, which is the difference between the actual and predicted output

$$(15) \quad tfp_{it} = y_{it} - \beta_l * l_{it} - \beta_k * k_{it} - \beta_m * m_{it}$$

is recovered and used in the estimation of the basic model.[24]

The Olley-Pakes correction appears to be working quite well. If the procedure successfully corrects for biases, one would expect to find a decrease in coefficients on labor and material inputs and an increase in the capital coefficient relative to the OLS results. Table 6 presents a comparison of the estimation results from both methods. The material and labor coefficients move in the predicted direction in 17 cases each, while the magnitude of the capital coefficient increases in 16 of 20 cases.

III. Estimation Results from a Model in Differences

A. *Baseline Specification*

A model estimated in first differences produces findings consistent with domestic firms benefiting from the foreign presence in sectors they supply. The first two columns of Table 7 contain the results for the full sample and the subsample of domestic firms, respectively. Owing to space constraints, the coefficients on inputs are not reported. In both regressions, a

---

[24] While the Olley-Pakes method also allows for controlling for firm exit, this option is not utilized here since,

unfortunately, the data set does not allow for distinguishing between firm exit from the sample due to liquidation and firm exit due to not being included in the group of enterprises surveyed in a given year.

TABLE 7—RESULTS FROM OLS AND OLLEY-PAKES REGRESSIONS

Panel A—Regressions in First Differences

	All	Domestic	Olley-Pakes method	
			All	Domestic
Foreign share	0.0006		0.0009	
	(0.0007)		(0.0007)	
Backward	0.0382***	0.0360***	0.0407**	0.0347*
	(0.0101)	(0.0103)	(0.0163)	(0.0193)
Forward	−0.0050	−0.0073**	−0.0060	−0.0118*
	(0.0033)	(0.0034)	(0.0055)	(0.0063)
Horizontal	−0.0003	−0.0006	−0.0019	−0.0022
	(0.0013)	(0.0013)	(0.0025)	(0.0024)
*H*4	0.0000	0.0000	0.0001***	0.0001***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Demand	0.6103***	0.6752***	0.3699	0.5341*
	(0.1945)	(0.1929)	(0.2934)	(0.2806)
Number of observations	6,853	5,916	3,765	3,084
R^2	0.49	0.49	0.08	0.08

Panel B—Regressions in Second Differences

	All	Domestic	Olley-Pakes method	
			All	Domestic
Foreign share	0.0008		0.0003	
	(0.0007)		(0.0006)	
Backward	0.0321***	0.0301**	0.0539***	0.0523***
	(0.0120)	(0.0125)	(0.0101)	(0.0113)
Forward	−0.0079*	−0.0088	−0.0061	−0.0039
	(0.0047)	(0.0055)	(0.0060)	(0.0073)
Horizontal	0.0015	0.0013	0.0024	0.0012
	(0.0021)	(0.0022)	(0.0026)	(0.0027)
*H*4	0.0000	0.0000	0.0000	0.0001
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Demand	0.3527*	0.3911**	0.2464	0.4137
	(0.1869)	(0.1872)	(0.2970)	(0.3003)
Number of observations	4,551	3,923	2,379	1,920
R^2	0.62	0.61	0.09	0.09

Panel C—Regressions in Fourth Differences

	All	Domestic	Olley-Pakes method	
			All	Domestic
Foreign share	0.0015		0.0006	
	(0.0010)		(0.0008)	
Backward	0.0232**	0.0256**	0.0590***	0.0706***
	(0.0105)	(0.0111)	(0.0080)	(0.0087)
Forward	−0.0027	0.0026	0.0004	0.0192***
	(0.0067)	(0.0040)	(0.0067)	(0.0041)
Horizontal	0.0103***	0.0114***	0.0108***	0.0078***
	(0.0013)	(0.0015)	(0.0011)	(0.0012)
*H*4	0.0002**	0.0003***	0.0000	0.0003***
	(0.0001)	(0.0000)	(0.0001)	(0.0000)
Demand	−0.2196*	−0.2344*	−0.3966***	−0.3806***
	(0.1133)	(0.1305)	(0.1007)	(0.1132)
Number of observations	1,135	964	833	681
R^2	0.70	0.69	0.06	0.06

Notes: Standard errors in parentheses have been corrected for clustering for each industry in each year. In the regressions without the Olley-Pakes correction, the dependent variable is Δ ln firm output and the right-hand side includes Δ ln capital stock, Δ ln labor, and Δ ln materials. In models employing the Olley-Pakes procedure, the dependent variable is Δ ln total factor productivity. All regressions include industry, region, and year fixed effects.

   * Significant at the 10-percent level.
  ** Significant at the 5-percent level.
 *** Significant at the 1-percent level.

positive and significant coefficient on the proxy for spillovers through backward linkages can be found. The third and fourth columns present the results from the regressions with the Olley-Pakes correction.[25] Again the estimations produce a positive and significant coefficient on the *Backward* variable in both the full sample and the subsample of domestic firms. The size of the coefficients is similar across columns and is slightly larger in the case of the full sample. The magnitude of the effect is economically meaningful. A one-standard-deviation increase in the foreign presence in the sourcing sectors (that is, an increase of 4 percentage points in the backward variable) is associated with a 15-percent rise in output of each domestic firm in the supplying industry.[26]

There is little evidence of spillovers taking place through the other channels. The coefficient on the *Horizontal* variable does not appear to be statistically significant, which is consistent with the existing literature that fails to find a positive intraindustry effect in developing countries (for example, Aitken and Harrison; Djankov and Hoekman; Konings). The *Forward* variable, on the other hand, bears a negative sign but appears to be statistically significant in only two regressions.

As for the other control variables, there is no indication of a positive association between changes in foreign equity share and productivity growth. Similar to Aitken and Harrison, the results indicate that *Foreign Share* is positively correlated with productivity *levels* (recall the results from Table 5) but not with *growth rates,* suggesting that foreign firms may be investing in the most productive domestic enterprises.[27] Further, a positive coefficient is found on the

demand in downstream sectors, indicating the existence of procyclical productivity effects. Finally, the data suggest a positive correlation between industry concentration and productivity growth, but the results are statistically significant in only two cases.[28]

To check the robustness of the results, a model in second and fourth differences is estimated next. Since the sample covers only five years of data, the latter is the longest difference that can be employed. A positive and significant coefficient on the *Backward* variable is found in all specifications, which again constitutes evidence consistent with productivity spillovers taking place through contacts between domestic firms and their foreign customers in downstream sectors. There is no indication of the other type of vertical spillovers, as the *Forward* variable appears to be insignificant in the majority of cases. As for intrasectoral spillovers, only the results on the long differences suggest their existence. These results should, however, be treated with caution as they are based on a small number of observations. The reduction in the sample size may also be responsible for the change in the sign of demand from downstream sectors, which, in the fourth-difference specification, appears to be negatively correlated with firm productivity.[29]

B. *Full Versus Partial Foreign Ownership*

Next consider the hypothesis that backward linkages associated with partially owned foreign projects lead to greater spillovers than linkages associated with wholly owned foreign affiliates because of different propensities to engage in local sourcing. To examine this question, two measures of backward linkages are calculated for the two types of foreign investments. The proxy for fully owned foreign projects is defined as

[25] The number of observations is lower in these regressions, as the Olley-Pakes procedure can be applied only to firms reporting positive gross investment in a given year.

[26] The calculation is based on the coefficient from the regression with the Olley-Pakes correction estimated on the subsample of domestic firms (Panel A, column 4).

[27] This conclusion is supported by the findings obtained by Djankov and Hoekman (2000). Note that Aitken and Harrison (1999) also report a similar pattern of results in their analysis of Indonesian data (p. 617, footnote 12). As an additional check, we experimented with including an indicator variable for the cases when the foreign share increases from under 50 percent to above 50 percent (thus giving the foreign investor majority ownership), but it did not appear to be statistically significant.

[28] This finding would be consistent with Schumpeterian-style argument that more monopolistic firms can more readily fund research and development expenditure because they face less market uncertainty and have a larger and more stable cash flow (see Robert C. Levin et al., 1985).

[29] Note that this change is not due to multicolinearity with the *Backward* variable, as the correlation between the two is 0.3.

TABLE 8—SHARE OF FOREIGN OWNERSHIP AND PRODUCTIVITY SPILLOVERS

| | Regressions in first differences | | | |
| | | | Olley-Pakes Method | |
	All	Domestic	All	Domestic
Foreign share	0.0006		0.0010	
	(0.0007)		(0.0007)	
Backward (*Partial Ownership*)	0.0444***	0.0394***	0.0499***	0.0401**
	(0.0085)	(0.0096)	(0.0146)	(0.0190)
Backward (*Full Ownership*)	0.0040	0.0154	0.0020	0.0090
	(0.0110)	(0.0133)	(0.0171)	(0.0223)
Forward	−0.0053*	−0.0074**	−0.0066	−0.0121*
	(0.0030)	(0.0032)	(0.0053)	(0.0062)
Horizontal	−0.0009	−0.0009	−0.0025	−0.0026
	(0.0012)	(0.0012)	(0.0024)	(0.0023)
H4	0.0000	0.0000	0.0001***	0.0001***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Demand	0.6181***	0.6817***	0.3794	0.5427**
	(0.1778)	(0.1825)	(0.2810)	(0.2698)
Number of observations	6,853	5,916	3,765	3,084
R^2	0.49	0.49	0.08	0.08
F-stat (*BKFO = BKPO*)	12.01	2.91	6.41	1.68
Prob $F > 0$	0.00	0.09	0.01	0.20

Notes: Standard errors in parentheses have been corrected for clustering for each industry in each year. In the regressions without the Olley-Pakes correction, the dependent variable is Δ ln firm output and the right-hand side includes Δ ln capital stock, Δ ln labor, and Δ ln materials. In models employing the Olley-Pakes procedure, the dependent variable is Δ ln total factor productivity. All regressions include industry, region, and year fixed effects. *BKFO* = *Backward* (*Full Ownership*); *BKPO* = *Backward* (*Partial Ownership*).

   * Significant at the 10-percent level.
  ** Significant at the 5-percent level.
 *** Significant at the 1-percent level.

(16) $Backward\ (Full\ Ownership)_{jt}$

$$= \sum_{k \text{ if } k \neq j} \alpha_{jk} * \left[\left[\sum_{i \text{ for all } i \in k} WOS_{it} \right. \right.$$

$$\left. * Foreign\ Share_{it} * Y_{it} \right]$$

$$\div \left. \sum_{i \text{ for all } i \in k} Y_{it} \right]$$

where *WOS* is a dummy for wholly owned subsidiaries. It is equal to one for firms with the share of foreign capital equal to at least 99 percent.[30] The measure for partially owned in-

vestments (those with foreign capital participation above 10 but below 99 percent) is defined in an analogous manner.

The results shown in Table 8 support the hypothesis. A significant and positive correlation is found between changes in output of domestic firms and backward linkages associated with partially foreign-owned projects but not wholly foreign-owned affiliates. The difference between the magnitudes of the two coefficients is statistically significant in three out of four cases (in the case of the full sample, at the 1-percent level). These findings are consistent with the observation that projects owned jointly by domestic and foreign entities are more likely to source locally, thus creating greater scope for spillovers to firms operating in upstream sectors.

The other variables exhibit patterns similar to those observed in the previous table. The only exception is the *Forward* measure, which appears to be negative and statistically significant in three out of four cases, suggesting that for-

[30] There are 342 observations pertaining to fully owned foreign affiliates and a further 35 observations for firms with foreign capital share between 99 and 100 percent. Together they constitute 27 percent of all observations pertaining to firms with foreign capital participation.

eign presence in upstream sectors has a negative impact on the performance of local firms in using industries. This finding is similar to that obtained by Schoors and van der Tol (2001). A possible explanation is that after buying out domestic firms in supplying sectors, foreign owners upgrade production facilities and manufacture more sophisticated products that are then sold at a higher price. Local firms in using sectors that purchase these inputs may have limited ability to benefit from their higher technological content but are forced to bear the higher cost.

Another reason why the extent of foreign ownership may matter for spillovers is the control over company operations. For instance, foreign owners may be more inclined to import intermediate inputs (for example, due to their familiarity with foreign suppliers) but may be in better position to do so in enterprises where they have majority ownership. Thus, as a robustness check, a model comparing the effect of minority- versus majority-owned foreign investments on spillovers through backward linkages was estimated. Since no significant difference between vertical spillovers from the two types of projects was found, the results are not reported here.

To conclude, the findings are consistent with the observation that domestic capital participation in FDI projects lowers foreign investors' costs of using local suppliers and thus results in more local sourcing and greater productivity spillovers to domestic producers of intermediate inputs.

C. Robustness Checks

This section describes three additional extensions and robustness checks. First, it is conceivable, though not very likely, that the results on the effect of backward linkages are driven by the level of concentration in purchasing industries (which may be correlated with foreign presence) rather than genuine knowledge spillovers from FDI. For instance, both domestic and foreign enterprises operating in concentrated sectors may have more resources to provide assistance to their suppliers, although at the same time may be less inclined to do so. On the other hand, firms in competitive industries may have fewer resources to support their suppliers but may have a greater incentive to transfer

knowledge to downstream sectors in order to obtain higher quality or less expensive inputs. Thus, *ex ante,* the effect of concentration is ambiguous.

To eliminate the alternative explanation driven by the above arguments, a model is estimated testing whether a differential effect of foreign presence in the two types of downstream industries exists. The U.S. Department of Justice definition of concentrated sectors (those with the Herfindahl index for the largest four firms exceeding 1,800) is employed to calculate separate measures of *Backward* for concentrated and competitive industries.[31] The results, presented in Table 9, indicate that foreign presence in both types of upstream industries leads to positive spillovers to supplying sectors. The *Backward* variable is statistically significant seven out of eight times—the only exception being the case of spillovers from concentrated industries in the regression with the Olley-Pakes correction estimated on the subsample of domestic firms. In all four models, there is no statistically significant difference between the magnitude of the backward linkage effect for the two types of sectors, suggesting that the level of concentration in upstream sectors is not a concern in the model.

Second, the motivation for undertaking FDI is likely to affect the extent of local sourcing by foreign subsidiaries. It has been suggested that domestic-market-oriented foreign affiliates tend to purchase more inputs locally than their export-oriented counterparts (Tilman Altenburg, 2000; UNCTC, 2000). Exporting affiliates that are part of international production networks are more likely to be dependent on the global sourcing policies of their parent company and thus may have less freedom to choose their own suppliers. Moreover, quality and technical requirements associated with goods targeted for the domestic market may be lower, so local suppliers may find it easier to serve multinationals focused on the domestic

---

[31] The following seven sectors fall into the concentrated category: NACE 24 (chemicals and chemical products), NACE 27 (basic metals), NACE 30 (office machinery and computers), NACE 31 (electrical equipment and apparatus), NACE 32 (radio, TV, and communications equipment), NACE 34 (motor vehicles), and NACE 35 (other transport equipment).

TABLE 9—CONCENTRATION IN DOWNSTREAM SECTORS AND PRODUCTIVITY SPILLOVERS

| | Regressions in first differences | | | |
| | All | Domestic | Olley-Pakes Method | |
			All	Domestic
Foreign share	0.0006		0.0009	
	(0.0007)		(0.0007)	
Backward (Concentrated)	0.0394***	0.0360***	0.0401**	0.0258
	(0.0131)	(0.0126)	(0.0187)	(0.0193)
Backward (Competitive)	0.0379***	0.0360***	0.0409**	0.0383*
	(0.0107)	(0.0108)	(0.0187)	(0.0214)
Forward	−0.0050	−0.0073**	−0.0059	−0.0115*
	(0.0033)	(0.0033)	(0.0054)	(0.0061)
Horizontal	−0.0003	−0.0006	−0.0019	−0.0020
	(0.0013)	(0.0013)	(0.0025)	(0.0024)
H4	0.0000	0.0000	0.0001***	0.0001***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Demand	0.6158***	0.6754***	0.3684	0.5099*
	(0.2210)	(0.2203)	(0.3107)	(0.3032)
Number of observations	6,853	5,916	3,765	3,084
R^2	0.49	0.49	0.08	0.08
F-stat (*BK Concentrated = BK Competitive*)	0.02	0.00	0.00	0.33
Prob *F* > 0	0.90	1.00	0.97	0.57

Notes: Standard errors in parentheses have been corrected for clustering for each industry in each year. In the regressions without the Olley-Pakes correction, the dependent variable is Δ ln firm output and the right-hand side includes Δ ln capital stock, Δ ln labor, and Δ ln materials. In models employing the Olley-Pakes procedure, the dependent variable is Δ ln total factor productivity. All regressions include industry, region, and year fixed effects. *BK = Backward*.

    * Significant at the 10-percent level.
    ** Significant at the 5-percent level.
    *** Significant at the 1-percent level.

market. On the other hand, if multinationals serving global markets impose more stringent cost and quality requirements and thus necessitate greater adjustments and larger productivity improvements on the part of local suppliers, one may expect more spillovers to be associated with exporting multinationals. This effect would be reinforced by the fact that multinationals serving global markets may possess superior technologies, creating greater opportunities for learning by local suppliers. In summary, the theoretical predictions regarding the relationship between export orientation of multinationals and spillovers are ambiguous.

To examine whether the export orientation of foreign affiliates matters for spillovers, two separate measures of backward linkages are calculated: one for affiliates focused mostly on exporting and one for foreign firms targeting the domestic market. The former variable is defined as follows:

$$(17) \quad Backward\ (Export\text{-}Oriented)_{jt}$$

$$= \sum_{k\ \text{if}\ k \neq j} \alpha_{jk} * \left[\left[\sum_{i\ \text{for all}\ i \in k} Export\text{-}Oriented_{it} \right.\right.$$

$$\left.\left. * Foreign\ Share_{it} * Y_{it} \right]\right.$$

$$\left. \div \sum_{i\ \text{for all}\ i \in k} Y_{it} \right]$$

where $Export\text{-}Oriented_{it}$ is equal to one if the share of output exported by firm i is above 50 percent and zero otherwise. The measure for domestic-market-oriented foreign affiliates is defined analogously. The results (not reported here) suggest that both types of foreign affiliates are associated with spillovers to upstream sectors. While the magnitude of the coefficient on

domestic-market-oriented affiliates is larger in three out of four cases, the difference between the two coefficients is not statistically significant. The same exercise was performed for two additional cutoff points, 66 and 90 percent of output exported, but only in regressions estimated with the Olley-Pakes correction on the subsample of domestic firms was the coefficient on *Backward* (*Domestic-Market-Oriented*) significantly larger than the coefficient on the measure of spillovers associated with exporting affiliates. Thus, there is some indication of domestic-market-oriented FDI projects being correlated with greater productivity spillovers to their local suppliers, but the evidence is not very robust.

Finally, to correct for potential biases in coefficients on variable factor inputs, the share of foreign capital as well as other sectoral variables (*Horizontal*, *Backward*, *Forward*, *H*4, and *Demand*) was included in the first stage of the Olley-Pakes procedure. Thus, for each of the exercises presented in Tables 7 through 9, a separate Olley-Pakes procedure with the relevant spillover measures added to the first stage was estimated. The results from this estimation, however, led to exactly the same conclusions as those presented here, and are, therefore, not included in the paper. A likely reason why this modification did not produce significant changes to the results is that investment, which enters the first stage of the Olley-Pakes procedure in the polynomial form, picks up most of the effect foreign entry and presence have on firm behavior.

IV. Conclusions

In contrast to earlier literature, which focused on intraindustry spillovers from FDI, this study tests for productivity spillovers taking place through backward linkages (contacts between foreign affiliates and their domestic suppliers) and forward linkages (interactions between foreign suppliers of intermediate inputs and their domestic customers). The analysis, based on a firm-level panel data set from Lithuania, addresses econometric issues that may have biased the findings of earlier research, such as endogeneity of input demand and correction of standard errors to account for the fact that, while observations pertain to firms, the variables of interest are at the industry level.

The results are consistent with the presence of productivity spillovers taking place through backward linkages. They suggest that a one-standard-deviation increase in the foreign presence in downstream sectors is associated with a 15-percent rise in output of each domestic firm in supplying industries. Productivity benefits are found to be associated with partially but not fully owned foreign projects, which is in line with the evidence suggesting a larger extent of local sourcing undertaken by the former type of FDI. Finally, as was the case with the earlier firm-level studies of developing countries, no evidence of intrasectoral spillovers is found. Nor is there any indication of spillovers stemming from multinational presence in sectors supplying intermediate inputs.

Certainly more research is needed to fully understand the effect of FDI on host countries. In particular, it would be useful to confirm the findings of this paper using data that allow for identification of individual firms as suppliers to multinationals rather than relying on input-output matrices to measure interactions between sectors. Moreover, it would be interesting to learn more about host country and investor characteristics that determine the extent of spillovers operating through different channels. It is to be hoped that improved data availability will allow researchers to examine these questions in the future.

REFERENCES

Aitken, Brian J. and Harrison, Ann E. "Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela." *American Economic Review*, June 1999, *89*(3), pp. 605–18.

Aitken, Brian; Harrison, Ann E. and Lipsey, Robert E. "Wages and Foreign Ownership: A Comparative Study of Mexico, Venezuela and the United States." *Journal of International Economics*, May 1996, *40*(3–4), pp. 345–71.

Altenburg, Tilman. "Linkages and Spillovers between Transnational Corporations and Small and Medium-sized Enterprises in Developing Countries: Opportunities and Best Policies," in UNCTAD, *TNC-SME linkages for development: Issues-experiences-best practices*. New York: United Nations, 2000, pp. 3–61.

Belderbos, Rene; Capannelli, Giovanni and Fukao, Kyoji. "Backward Vertical Linkages of Foreign Manufacturing Affiliates: Evidence from Japanese Multinationals." *World Development*, January 2001, *29*(1), pp. 189–208.

Belkindas, Misha; Dinc, Mustafa and Ivanova, Olga. "Statistical Systems Need Overhaul in Transition Economies." *Transition*, August 1999, *10*(4), pp. 22–24.

Blalock, Garrick. "Technology from Foreign Direct Investment: Strategic Transfer through Supply Chains." Paper presented at the Empirical Investigations in International Trade Conference at Purdue University, November 9–11, 2001 (part of doctoral research at Haas School of Business, University of California, Berkeley).

Blomström, Magnus. "Foreign Investment and Productive Efficiency: The Case of Mexico." *Journal of Industrial Economics*, September 1986, *35*(1), pp. 97–110.

_____. *Foreign investment and spillovers*. London: Routledge, 1989.

Blomström, Magnus and Kokko, Ari. "Multinational Corporations and Spillovers." *Journal of Economic Surveys*, July 1998, *12*(2), pp. 1–31.

Blomström, Magnus; Kokko, Ari and Zejan, Mario. *Foreign direct investment: Firm and host country strategies*. London: Macmillan Press, 2000.

Blomström, Magnus and Persson, Hakan. "Foreign Investment and Spillover Efficiency in an Underdeveloped Economy: Evidence from the Mexican Manufacturing Industry." *World Development*, June 1983, *11*(6), pp. 493–501.

Blomström, Magnus and Wolff, Edward N. "Multinational Corporations and Productivity Convergence in Mexico," in William J. Baumol, Richard R. Nelson, and Edward N. Wolff, eds., *Convergence of productivity: Cross-national studies and historical evidence*. Oxford: Oxford University Press, 1994, pp. 263–84.

Caves, Richard E. "Multinational Firms, Competition and Productivity in Host-Country Markets." *Economica*, May 1974, *41*(162), pp. 176–93.

Djankov, Simeon and Hoekman, Bernard. "Foreign Investment and Productivity Growth in Czech Enterprises." *World Bank Economic Review*, January 2000, *14*(1), pp. 49–64.

European Bank for Reconstruction and Development (EBRD). *Lithuania investment profile 2001*. London: EBRD, 2001.

Girma, Sourafel; Greenaway, David and Wakelin, Katharine. "Who Benefits from Foreign Direct Investment in the UK?" *Scottish Journal of Political Economy*, May 2001, *48*(2), pp. 119–33.

Görg, Holger and Strobl, Eric. "Multinational Companies and Productivity Spillovers: A Meta-Analysis." *Economic Journal*, November 2001, *111*(475), pp. 723–39.

Griliches, Zvi and Mairesse, Jacques. "Production Functions: The Search for Identification." National Bureau of Economic Research (Cambridge, MA) Working Paper No. 5067, March 1995.

Griliches, Zvi and Ringstad, Vidar. *Economies of scale and the form of the production function*. Amsterdam: North-Holland, 1971.

Haddad, Mona and Harrison, Ann E. "Are There Positive Spillovers from Direct Foreign Investment? Evidence from Panel Data for Morocco." *Journal of Development Economics*, October 1993, *42*(1), pp. 51–74.

Haskel, Jonathan E.; Pereira, Sonia C. and Slaughter, Matthew J. "Does Inward Foreign Direct Investment Boost the Productivity of Domestic Firms?" National Bureau of Economic Research (Cambridge, MA) Working Paper No. 8724, January 2002.

International Monetary Fund (IMF). *International financial statistics database*. Washington, DC: IMF, 2003.

Javorcik, Beata Smarzynska. "The Composition of Foreign Direct Investment and Protection of Intellectual Property Rights: Evidence from Transition Economies." *European Economic Review*, February 2004, *48*(1), pp. 39–62.

Keller, Wolfgang and Yeaple, Stephen R. "Multinational Enterprises, International Trade and Productivity Growth: Firm Level Evidence from the United States." National Bureau of Economic Research (Cambridge, MA) Working Paper No. 9504, February 2003.

Konings, Jozef. "The Effects of Foreign Direct Investment on Domestic Firms." *Economics of Transition*, November 2001, *9*(3), pp. 619–33.

Kugler, Maurice. "The Diffusion of Externalities from Foreign Direct Investment: Theory Ahead of Measurement." Discussion Papers in Economics and Econometrics (University of Southampton, UK) No. 23, 2000.

Levin, Richard C.; Cohen, Wesley M. and Mowery, David C. "R&D Appropriability, Opportunity, and Market Structure: New Evidence on Some Schumpeterian Hypotheses." *American Economic Review*, May 1985, (*Papers and Proceedings*), *75*(2), pp. 20–24.

Lin, Ping and Saggi, Kamal. "Multinational Firms and Backward Linkages: A Survey and a Simple Model." Unpublished manuscript, Lingnan University and Southern Methodist University, 2004.

Lipsey, Robert E. "Home and Host Country Effects of FDI." National Bureau of Economic Research (Cambridge, MA) Working Paper No. 9293, October 2002.

Lithuanian Statistical Office. *Survey of Lithuanian firms*. Vilnius, 2001.

Liu, Xiaming; Siler, Pamela; Wang, Chengqi and Wei, Yingqi. "Productivity Spillovers from Foreign Direct Investment: Evidence from UK Industry Level Panel Data." *Journal of International Business Studies*, 3rd Qtr. 2000, *31*(3), pp. 407–25.

Markusen, James R. and Venables, Anthony J. "Foreign Direct Investment as a Catalyst for Industrial Development." *European Economic Review*, February 1999, *43*(2), pp. 335–56.

Moran, Theodore H. *Parental supervision: The new paradigm for foreign direct investment and development*. Washington, DC: Institute for International Economics, 2001.

Moulton, Brent R. "An Illustration of a Pitfall in Estimating the Effects of Aggregate Variables on Micro Units." *Review of Economics and Statistics*, May 1990, *72*(2), pp. 334–38.

Nickell, Stephen. "Competition and Corporate Performance." *Journal of Political Economy*, August 1996, *104*(4), pp. 724–46.

Olley, Steven G. and Pakes, Ariel. "The Dynamics of Productivity in the Telecommunications Equipment Industry." *Econometrica*, November 1996, *64*(6), pp. 1263–97.

Organization for Economic Cooperation and Development (OECD). "Lithuania: Foreign Direct Investment Impact and Policy Analysis." Paris: OECD, 2000.

_____. "Reviews of Foreign Direct Investment: Lithuania." Paris: OECD, 2001.

Rodríguez-Clare, Andrés. "Multinationals, Linkages, and Economic Development." *American Economic Review*, September 1996, *86*(4), pp. 852–73.

Rodrik, Dani. "The New Global Economy and Developing Countries: Making Openness Work." Overseas Development Council (Baltimore, MD) Policy Essay No. 24, 1999.

Schoors, Koen and van der Tol, Bartoldus. "The Productivity Effect of Foreign Ownership on Domestic Firms in Hungary." Paper presented at the International Atlantic Economic Conference in Philadelphia, PA, October 11–14, 2001.

Toth, Istvan Janos and Semjen, Andras. "Market Links and Growth Capacity of Enterprises in A Transforming Economy: The Case of Hungary," in Istvan Janos Toth and Andras Semjen, eds., *Market links, tax environment and financial discipline of Hungarian enterprises*. Budapest: Institute of Economics, Hungarian Academy of Sciences, 1999, pp. 1–37.

Tybout, James; de Melo, Jaime and Corbo, Vittorio. "The Effects of Trade Reforms on Scale and Technical Efficiency." *Journal of International Economics*, November 1991, *31*(3–4), pp. 231–50.

United Nations Centre on Transnational Corporations (UNCTC). *The competitiveness challenge: Transnational corporations and industrial restructuring in developing countries*. New York: United Nations, 2000.

_____. *World investment report. Promoting linkages*. New York: United Nations, 2001.

World Bank. "Developing Knowledge Intensive Sectors, Technology Transfers, and the Role of FDI." Foreign Investment Advisory Service, 2003a.

_____. *World development indicators database*. Washington, DC: World Bank, 2003b.

This article has been cited by:

1. Sanjay Kumar, Manish Duhan, Abid Haleem, Zude Zhou. 2016. Evaluation of factors important to enhance productivity. *Cogent Engineering* **3**, 1145043. [CrossRef]

2. Mico Apostolov. 2016. Cobb–Douglas production function on FDI in Southeast Europe. *Journal of Economic Structures* **5**. . [CrossRef]

3. Manuchehr Irandoust. 2016. Structural changes, FDI, and economic growth: evidence from the Baltic states. *Journal of Economic Structures* **5**:1. . [CrossRef]

4. Feride Gönel, Tolga Aksoy. 2016. Revisiting FDI-led growth hypothesis: the role of sector characteristics. *The Journal of International Trade & Economic Development* **25**:8, 1144-1166. [CrossRef]

5. Zoryana Olekseyuk. 2016. Modeling of FDI in business services: Additional effects in case of Ukraine's European integration. *The Journal of International Trade & Economic Development* **25**:7, 1010-1043. [CrossRef]

6. Tilo F. Halaszovich, Sarianna M. Lundan. 2016. The moderating role of local embeddedness on the performance of foreign and domestic firms in emerging markets. *International Business Review* **25**:5, 1136-1148. [CrossRef]

7. Estefania Santacreu-Vasut, Kensuke Teshima. 2016. Foreign employees as channel for technology transfer: Evidence from MNC's subsidiaries in Mexico. *Journal of Development Economics* **122**, 92-112. [CrossRef]

8. Parviz Asheghian. 2016. GDP growth determinants and foreign direct investment causality: the case of Iran. *The Journal of International Trade & Economic Development* **25**:6, 897-913. [CrossRef]

9. Zaheer Khan, Yong Kyu Lew, Pervaiz Akhtar. 2016. The influence of industrial policy and national systems of innovation on emerging economy suppliers' learning capability. *Industry and Innovation* **23**:6, 512-530. [CrossRef]

10. Ziliang Deng, Ruey-Jer Bryan Jean, Rudolf R. Sinkovics. 2016. Polarizing Effects of Early Exporting on Exit. *Management International Review* . [CrossRef]

11. Hyun-Hoon Lee, John Ries. 2016. Aid for Trade and Greenfield Investment. *World Development* **84**, 206-218. [CrossRef]

12. Chaewoon Oh, Shunji Matsuoka. 2016. Complementary approaches to discursive contestation on the effects of the IPR regime on technology transfer in the face of climate change. *Journal of Cleaner Production* **128**, 168-177. [CrossRef]

13. Cassandra C. Wang, Aiqi Wu. 2016. Geographical FDI knowledge spillover and innovation of indigenous firms in China. *International Business Review* **25**:4, 895-906. [CrossRef]

14. Jaap W. B. Bos, Bertrand Candelon, Claire Economidou. 2016. Does knowledge spill over across borders and technology regimes?. *Journal of Productivity Analysis* **46**:1, 63-82. [CrossRef]

15. Harald Badinger, Peter Egger. 2016. Productivity Spillovers Across Countries and Industries: New Evidence From OECD Countries. *Oxford Bulletin of Economics and Statistics* **78**:4, 501-521. [CrossRef]

16. Fukunari Kimura, Tomohiro Machikita, Yasushi Ueki. 2016. Technology transfer in ASEAN countries: some evidence from buyer-provided training network data. *Economic Change and Restructuring* **49**:2-3, 195-219. [CrossRef]

17. Marshall S. Jiang, Oana Branzei, Jun Xia. 2016. DIY: How internationalization shifts the locus of indigenous innovation for Chinese firms. *Journal of World Business* . [CrossRef]

18. Andrea Filippetti, Marion Frenz, Grazia Ietto-Gillies. 2016. The impact of internationalization on innovation at countries' level: the role of absorptive capacity. *Cambridge Journal of Economics* bew032. [CrossRef]

19. Karolien Lenaerts, Bruno Merlevede. 2016. Supply chain fragmentation, input–output tables and spillovers from foreign direct investment. *Economic Systems Research* **28**:3, 315-332. [CrossRef]

20. Murat Üngör. 2016. Did the rising importance of services decelerate overall productivity improvement of Turkey during 2002–2007?. *Journal of Economic Policy Reform* **19**:3, 238-261. [CrossRef]

21. Liesbeth Colen, Damiaan Persyn, Andrea Guariso. 2016. Bilateral Investment Treaties and FDI: Does the Sector Matter?. *World Development* **83**, 193-206. [CrossRef]

22. Janis Nikolaus Kluge. 2016. Foreign direct investment, political risk and the limited access order. *New Political Economy* 1-19. [CrossRef]

23. Yasuyuki Todo, Petr Matous, Hiroyasu Inoue. 2016. The strength of long ties and the weakness of strong ties: Knowledge diffusion through supply chain networks. *Research Policy* . [CrossRef]

24. Eugen Kováč, Krešimir Žigić. 2016. Persistence of Monopoly, Innovation, and R & D Spillovers. *Research in Economics* . [CrossRef]

25. Muhammad Ali, Uwe Cantner, Ipsita Roy. 2016. Knowledge spillovers through FDI and trade: the moderating role of quality-adjusted human capital. *Journal of Evolutionary Economics* . [CrossRef]

26. Saul Estrin, Milica Uvalic. 2016. Foreign Direct Investment in the Western Balkans: What Role Has it Played During Transition?. *Comparative Economic Studies* . [CrossRef]

27. Zhenxing (Eddie) Mao, Yang Yang. 2016. FDI spillovers in the Chinese hotel industry: The role of geographic regions, star-rating classifications, ownership types, and foreign capital origins. *Tourism Management* **54**, 1-12. [CrossRef]

28. Keun Lee, Kineung Choo, Minho Yoon. 2016. Comparing the productivity impacts of knowledge spillovers from network and arm's length industries: findings from business groups in Korea. *Industrial and Corporate Change* **25**:3, 407-427. [CrossRef]

29. Christopher Turnbull, Sizhong Sun, Sajid Anwar. 2016. Trade liberalisation, inward FDI and productivity within Australia's manufacturing sector. *Economic Analysis and Policy* **50**, 41-51. [CrossRef]

30. Boliang Zhu. 2016. MNCs, Rents, and Corruption: Evidence from China. *American Journal of Political Science* . [CrossRef]

31. PAITOON WIBOONCHUTIKULA, CHAYANON PHUCHAROEN, NUCHIT PRUEKTANAKUL. 2016. SPILLOVER EFFECTS OF FOREIGN DIRECT INVESTMENT ON DOMESTIC MANUFACTURING FIRMS IN THAILAND. *The Singapore Economic Review* **61**:02, 1640028. [CrossRef]

32. Yuandi Wang, Lutao Ning, Jian Li, Martha Prevezer. 2016. Foreign Direct Investment Spillovers and the Geography of Innovation in Chinese Regions: The Role of Regional Industrial Specialization and Diversity. *Regional Studies* **50**, 805-822. [CrossRef]

33. Cristina Jude, Monica Ioana Pop Silaghi. 2016. Employment effects of foreign direct investment: New evidence from Central and Eastern European countries. *International Economics* **145**, 32-49. [CrossRef]

34. Valbona Zeneli. 2016. Corruption, Foreign Direct Investment, and International Marketing in the Western Balkans. *Thunderbird International Business Review* **58**:3, 277-291. [CrossRef]

35. Nadiah Abd Hamid, Aimi Farhanah Jailani, Rohaya Md Noor, Mastora Yahya. 2016. Tax Incentive for Islamic Housing Loans in Malaysia. *Procedia - Social and Behavioral Sciences* **219**, 255-264. [CrossRef]

36. Andrew Jia Yi Kam. 2016. Death of linkages in host countries? A firm-level study on the channels of productivity spillovers in the Malaysian manufacturing sector. *Asian-Pacific Economic Literature* **30**:1, 65-79. [CrossRef]

37. Mico Apostolov. 2016. Effects of foreign direct investments. Evidence from Southeast Europe. *Cuadernos de Economía* **39**:110, 99-111. [CrossRef]

38. Syeda Tamkeen Fatima. 2016. Productivity spillovers from foreign direct investment: evidence from Turkish micro-level data. *The Journal of International Trade & Economic Development* **25**, 291-324. [CrossRef]

39. William Sheng Liu, Frank Wogbe Agbola, Janet Ama Dzator. 2016. The impact of FDI spillover effects on total factor productivity in the Chinese electronic industry: a panel data analysis. *Journal of the Asia Pacific Economy* **21**, 217-234. [CrossRef]

40. Hezron Makundi, Huib Huyse, Patrick Develtere. 2016. Cooperation between China and Tanzania on ICT: fish, fishing tackle or fishing skills?. *Journal of Chinese Economic and Business Studies* **14**:2, 129-149. [CrossRef]

41. Olov H.D. Isaksson, Markus Simeth, Ralf W. Seifert. 2016. Knowledge spillovers in the supply chain: Evidence from the high tech sectors. *Research Policy* **45**, 699-706. [CrossRef]

42. Sai Ding, Puyang Sun, Wei Jiang. 2016. The Effect of Import Competition on Firm Productivity and Innovation: Does the Distance to Technology Frontier Matter?. *Oxford Bulletin of Economics and Statistics* **78**:10.1111/obes.2016.78.issue-2, 197-227. [CrossRef]

43. Jianhuan Huang, Xudong Chen, Bihong Huang, Xiaoguang Yang. 2016. Economic and environmental impacts of foreign direct investment in China: A spatial spillover analysis. *China Economic Review* . [CrossRef]

44. Junichi Nishimura, Hiroyuki Okamuro. 2016. Knowledge and rent spillovers through government-sponsored R&D consortia. *Science and Public Policy* **43**:2, 207-225. [CrossRef]

45. Jorge Thompson Araujo, Ekaterina Vostroknutova, Konstantin M. Wacker, Mateo ClavijoOverview 1-32. [CrossRef]

46. Sunny Bose, Sanjit Kumar Roy, Abhay Kumar Tiwari. 2016. Measuring customer-based place brand equity (CBPBE): an investment attractiveness perspective. *Journal of Strategic Marketing* 1-18. [CrossRef]

47. Pierre Blanchard, Claude Mathieu. 2016. Multinationals and domestic firms in France: who gains from knowledge spillovers?. *Review of Agricultural, Food and Environmental Studies* . [CrossRef]

48. Zhixi Wan, Brian Wu. 2016. When Suppliers Climb the Value Chain: A Theory of Value Distribution in Vertical Relationships. *Management Science* . [CrossRef]

49. Chin Hee Hahn, Kazunobu Hayakawa, Tadashi Ito. 2016. Managers' nationalities and FDI's productivity: evidence from Korean firm-level data. *Industrial and Corporate Change* dtw007. [CrossRef]

50. Jia-Ting Wang, Qing-Feng Cao, Tian-Ye Chen, Xuan Wang. 2016. An Empirical Study on the Technical Efficiency of Foreign Direct Investment in China with Environmental Constraints. *The Chinese Economy* **49**:2, 94-104. [CrossRef]

51. Delia Baghdasaryan, Lisbeth Funding la Cour, Cédric Schneider. 2016. Which Companies Benefit from Liberalization? a Study of the Influence of Initial Productivity. *Journal of Industry, Competition and Trade* **16**, 101-125. [CrossRef]

52. Richard B. Nyuur, Daniel F. Ofori, Yaw A. Debrah. 2016. The Impact of FDI Inflow on Domestic Firms' Uptake of CSR Activities: The Moderating Effects of Host Institutions. *Thunderbird International Business Review* **58**:10.1002/tie.2016.58.issue-2, 147-159. [CrossRef]

53. Binyam A. Demena, Peter A. G. van Bergeijk. 2016. A META-ANALYSIS OF FDI AND PRODUCTIVITY SPILLOVERS IN DEVELOPING COUNTRIES. *Journal of Economic Surveys* n/a-n/a. [CrossRef]

54. Maja Barac, Rafael Moner-Colonques. 2016. INTERNATIONALIZATION STRATEGIES IN OLIGOPOLY WITH HETEROGENEOUS FIRMS. *Bulletin of Economic Research* n/a-n/a. [CrossRef]

55. Petr Pavlínek, Pavla Žížalová. 2016. Linkages and spillovers in global production networks: firm-level analysis of the Czech automotive industry. *Journal of Economic Geography* **16**, 331-363. [CrossRef]

56. Konstantin M. Wacker, Philipp Grosskurth,, Tabea Lakemann. 2016. Foreign Direct Investment, Terms of Trade, and Quality Upgrading: What Is So Special about South Asia?. *Asian Development Review* **33**, 28-55. [CrossRef]

57. Jianming Yao, Ziliang Deng. 2016. Dynamic resource integration optimisation of global distributed manufacturing: an embeddedness–interaction perspective. *International Journal of Production Research* 1-15. [CrossRef]

58. Qiang (Steven) Lu, Chinmay Pattnaik, Mengze Shi. 2016. Spillover effects of marketing expertise on market performance of domestic firms and MNEs in emerging markets. *Management Decision* **54**, 107-129. [CrossRef]

59. Mauricio Jenkins, Ronald Arce. 2016. Do backward linkages in export processing zones increase dynamically? Firm-level evidence from Costa Rica. *Journal of Business Research* **69**, 400-409. [CrossRef]

60. Caroline Paunov, Valentina Rollo. 2016. Has the Internet Fostered Inclusive Innovation in the Developing World?. *World Development* **78**, 587-609. [CrossRef]

61. Roger Smeets, Albert de Vaal. 2016. Intellectual Property Rights and the productivity effects of MNE affiliates on host-country firms. *International Business Review* **25**, 419-434. [CrossRef]

62. Firat Demir, Li Su. 2016. Total Factor Productivity, Foreign Direct Investment, and Entry Barriers in the Chinese Automotive Industry. *Emerging Markets Finance and Trade* **52**, 302-321. [CrossRef]

63. Marek Vokoun. 2016. Innovation behaviour of firms in a small open economy: the case of the Czech manufacturing industry. *Empirica* **43**, 111-139. [CrossRef]

64. Nimesh Salike. 2016. Role of human capital on regional distribution of FDI in China: New evidences. *China Economic Review* **37**, 66-84. [CrossRef]

65. Yaqin Su, Zhiqiang Liu. 2016. The impact of foreign direct investment and human capital on economic growth: Evidence from Chinese cities. *China Economic Review* **37**, 97-109. [CrossRef]

66. Junjie Hong, Xiaonan Sun, Wei Huang. 2016. Local Institutions, Foreign Direct Investment and Productivity of Domestic Firms. *Review of Development Economics* **20**:10.1111/rode.2016.20.issue-1, 25-38. [CrossRef]

67. Qing Liu, Larry D. Qiu, Zhigang Li. 2016. Foreign Acquisitions in China and Multinationals' Global Market Strategy. *Review of Development Economics* **20**:10.1111/rode.2016.20.issue-1, 87-100. [CrossRef]

68. Jens Matthias Arnold, Beata Javorcik, Molly Lipscomb, Aaditya Mattoo. 2016. Services Reform and Manufacturing Performance: Evidence from India. *The Economic Journal* **126**:10.1111/ecoj.2016.126.issue-590, 1-39. [CrossRef]

69. Hanna Hottenrott, Sascha Rexhäuser, Reinhilde Veugelers. 2016. Organisational change and the productivity effects of green technology adoption. *Resource and Energy Economics* **43**, 172-194. [CrossRef]

70. Liugang Sheng, Dennis Tao Yang. 2016. Expanding export variety: The role of institutional reforms in developing countries. *Journal of Development Economics* **118**, 45-58. [CrossRef]

71. Agnieszka Gehringer. 2016. Knowledge externalities and sectoral interdependences: Evidence from an open economy perspective. *Technological Forecasting and Social Change* **102**, 240-249. [CrossRef]

72. Alessandra Perri, Enzo Peruffo. 2016. Knowledge Spillovers from FDI: A Critical Review from the International Business Perspective. *International Journal of Management Reviews* **18**:10.1111/ijmr.2016.18.issue-1, 3-27. [CrossRef]

73. Byeongwoo Kang. 2016. What best transfers knowledge? Capital, goods, and labor in East Asia. *Economics Letters* . [CrossRef]

74. Arjen H. L. Slangen. 2016. The Comparative Effect of Subnational and Nationwide Cultural Variation on Subsidiary Ownership Choices: The Role of Spatial Coordination Challenges and Penrosean Growth Constraints. *Economic Geography* **92**:2, 145. [CrossRef]

75. Aneta Bobenič Hintošová, Zuzana Kubíková. 2016. The effect of the degree of foreign ownership on firms' performance. *Review of Economic Perspectives* **16**. . [CrossRef]

76. Badi H. Baltagi, Peter H. Egger, Michaela Kesina. 2016. Firm-Level Productivity Spillovers in China's Chemical Industry: A Spatial Hausman-Taylor Approach. *Journal of Applied Econometrics* **31**:1, 214-248. [CrossRef]

77. Yoo Jung HaForeign Direct Investment (FDI) and Indigenous Firms' Innovation: The Moderating Effect of Environmental Dynamism 112-129. [CrossRef]

78. Zvezdan VukanovićThe Conceptual Foundation, Common Motivation, Major Benefits/Disadvantages, and Importance of FDI on Economic Growth and Development 95-105. [CrossRef]

79. Zvezdan VukanovićA Multidimensional Codifying of FDI Technological and Productivity Spillover Absorption Capacity and Threshold Effects 137-143. [CrossRef]

80. Anders C. Johansson, Xunan Feng. 2015. The state advances, the private sector retreats? Firm effects of China's great stimulus programme. *Cambridge Journal of Economics* bev075. [CrossRef]

81. Zhenzhen Xie, Jiatao Li. 2015. Demand Heterogeneity, Learning Diversity and Innovation in an Emerging Economy. *Journal of International Management* **21**, 277-292. [CrossRef]

82. Eliane Choquette, Philipp Meinen. 2015. Export Spillovers: Opening the Black Box. *The World Economy* **38**:10.1111/twec.2015.38.issue-12, 1912-1946. [CrossRef]

83. Bryan MERCURIO, Daria KIM. 2015. Foreign Direct Investment in the Pharmaceutical Industry: Why Singapore and not Hong Kong. *Asian Journal of Comparative Law* **10**, 235-257. [CrossRef]

84. Kevin H. Zhang. 2015. Macro- and Micro-Drivers of Manufacturing Performance of China. *The Chinese Economy* **48**, 399-412. [CrossRef]

85. Cristina Jude. 2015. Technology Spillovers from FDI. Evidence on the Intensity of Different Spillover Channels. *The World Economy* n/a-n/a. [CrossRef]

86. Jian Wang, Xiao Wang. 2015. Benefits of foreign ownership: Evidence from foreign direct investment in China. *Journal of International Economics* **97**, 325-338. [CrossRef]

87. Giuseppe Francesco Gori, Renato Paniccià. 2015. A structural multisectoral model with new economic geography linkages for Tuscany. *Papers in Regional Science* **94**, S175-S196. [CrossRef]

88. Sergio Mariotti, Marco Mutinelli, Marcella Nicolini, Lucia Piscitello. 2015. Productivity Spillovers from Foreign Multinational Enterprises to Domestic Manufacturing Firms: To What Extent Does Spatial Proximity Matter?. *Regional Studies* **49**, 1639-1653. [CrossRef]

89. Boryana V. Dimitrova, Bert Rosenbloom, Trina Larsen Andras. 2015. Do Retail Foreign Direct Investment Restrictions Affect Retail Channel Structure?. *Journal of Marketing Channels* **22**, 265-278. [CrossRef]

90. Steve Loris Gui-Diby, Mary-Françoise Renard. 2015. Foreign Direct Investment Inflows and the Industrialization of African Countries. *World Development* **74**, 43-57. [CrossRef]

91. Karolien Lenaerts, Bruno Merlevede. 2015. Firm size and spillover effects from foreign direct investment: the case of Romania. *Small Business Economics* **45**, 595-611. [CrossRef]

92. Ali Salim, Mohammad Reza Razavi, Masoud Afshari-Mofrad. 2015. Foreign direct investment and technology spillover in Iran: The role of technological Capabilities of subsidiaries. *Technological Forecasting and Social Change* . [CrossRef]

93. Martin Falk. 2015. The Relationship Between FDI Through Backward Linkages and Technological Innovations of Local Firms: Evidence for Emerging Economies. *Eastern European Economics* **53**, 424-438. [CrossRef]

94. Vasanthakumar N. Bhat. 2015. Water and Its Effect on Business Productivity: A Cross-Country Analysis. *Water Resources Management* **29**, 4007-4020. [CrossRef]

95. Xiao Wang. 2015. Trade credit, international trade costs and exports: cross-country firm-level evidence. *Applied Economics Letters* **22**, 993-998. [CrossRef]

96. Mahmoud Arayssi, Ali Fakih. 2015. Institutions and development in MENA region: evidence from the manufacturing sector. *International Journal of Social Economics* **42**, 717-732. [CrossRef]

97. Konstantin M. Wacker. 2015. Do Multinationals Deteriorate Developing Countries' Export Prices? The Impact of FDI on Net Barter Terms of Trade. *The World Economy* n/a-n/a. [CrossRef]

98. Giacomo Zanello, Xiaolan Fu, Pierre Mohnen, Marc Ventresca. 2015. THE CREATION AND DIFFUSION OF INNOVATION IN DEVELOPING COUNTRIES: A SYSTEMATIC LITERATURE REVIEW. *Journal of Economic Surveys* n/a-n/a. [CrossRef]

99. Hulya Ulku, Mehmet Teoman Pamukcu. 2015. The impact of R&D and knowledge diffusion on the productivity of manufacturing firms in Turkey. *Journal of Productivity Analysis* **44**, 79-95. [CrossRef]

100. C. Fritz Foley, Kalina Manova. 2015. International Trade, Multinational Activity, and Corporate Finance. *Annual Review of Economics* **7**, 119-146. [CrossRef]

101. Yoo Jung Ha, Axèle Giroud. 2015. Competence-creating subsidiaries and FDI technology spillovers. *International Business Review* **24**, 605-614. [CrossRef]

102. Zaheer Khan, Yong Kyu Lew, Rudolf R. Sinkovics. 2015. The mirage of upgrading local automotive parts suppliers through the creation of vertical linkages with MNEs in developing economies. *Critical perspectives on international business* **11**, 301-318. [CrossRef]

103. Ying Ge, Huiwen Lai, Susan Chun Zhu. 2015. Multinational price premium. *Journal of Development Economics* **115**, 181-199. [CrossRef]

104. Geert Dhaene, Koen Jochmans. 2015. Split-panel Jackknife Estimation of Fixed-effect Models. *The Review of Economic Studies* **82**, 991-1030. [CrossRef]

105. Azusa Fujimori, Takahiro Sato. 2015. Productivity and technology diffusion in India: The spillover effects from foreign direct investment. *Journal of Policy Modeling* **37**, 630-651. [CrossRef]

106. Jaan Masso, Kärt Rõigas, Priit Vahter. 2015. Foreign market experience, learning by hiring and firm export performance. *Review of World Economics* . [CrossRef]

107. Murali D. R. ChariAn Integrated Model of Upgrading and Catchup by Emerging Economy Firms 327-349. [CrossRef]

108. Victor Z. Chen, Sedat AybarIs Springboard FDI Strategy Effective? Evidence from Turkish Acquisitions 503-528. [CrossRef]

109. Rosanna Pittiglio, Filippo Reganati, Edgardo Sica. 2015. Do Multinational Enterprises Push up the Wages of Domestic Firms in the Italian Manufacturing Sector?*. *The Manchester School* **83**:10.1111/manc.2015.83.issue-3, 346-378. [CrossRef]

110. Sebastian Benz, Mario Larch, Markus Zimmer. 2015. Trade in ideas: outsourcing and knowledge spillovers. *International Economics and Economic Policy* **12**, 221-237. [CrossRef]

111. Badi H. Baltagi, Peter H. Egger, Michaela Kesina. 2015. Sources of productivity spillovers: panel data evidence from China. *Journal of Productivity Analysis* **43**, 389-402. [CrossRef]

112. Saurav Pathak, André Laplume, Emanuel Xavier-Oliveira. 2015. Inbound foreign direct investment and domestic entrepreneurial activity. *Entrepreneurship & Regional Development* **27**, 334-356. [CrossRef]

113. Tinh Doan, David Maré, Kris Iyer. 2015. Productivity spillovers from foreign direct investment in New Zealand. *New Zealand Economic Papers* 1-27. [CrossRef]

114. Holger Görg, Adnan Seric. 2015. Linkages with Multinationals and Domestic Firm Performance: The Role of Assistance for Local Firms. *The European Journal of Development Research* . [CrossRef]

115. Augusto de la Torre, Tatiana Didier, Alain Ize, Daniel Lederman, Sergio L. SchmuklerThe Changing Patterns of Financial Integration in Latin America and the Caribbean 153-196. [CrossRef]

116. Reza Ghazal, Muhamed Zulkhibri. 2015. Determinants of innovation outputs in developing countries. *Journal of Economic Studies* **42**, 237-260. [CrossRef]

117. Daniel Sakyi, Richmond Commodore, Eric Evans Osei Opoku. 2015. Foreign Direct Investment, Trade Openness and Economic Growth in Ghana: An Empirical Investigation. *Journal of African Business* **16**, 1-15. [CrossRef]

118. Carol Newman, John Rand, Theodore Talbot, Finn Tarp. 2015. Technology transfers, foreign investment and productivity spillovers. *European Economic Review* **76**, 168-187. [CrossRef]

119. Chunlai Chen. 2015. Do Inland Provinces Benefit from Coastal Foreign Direct Investment in China?. *China & World Economy* **23**:10.1111/cwe.2015.23.issue-3, 22-41. [CrossRef]

120. Noor Aini Khalifah, Salmah Mohd Salleh, Radziah Adam. 2015. FDI productivity spillovers and the technology gap in Malaysia's electrical and electronic industries. *Asian-Pacific Economic Literature* **29**:10.1111/apel.2015.29.issue-1, 142-160. [CrossRef]

121. Claudiu Tiberiu Albulescu, Matei Tămăşilă. 2015. Exploring the role of FDI in enhancing the entrepreneurial activity in Europe: a panel data analysis. *International Entrepreneurship and Management Journal* . [CrossRef]

122. Cui Hu, Zhaoyuan Xu, Naomitsu Yashiro. 2015. Agglomeration and productivity in China: Firm level evidence. *China Economic Review* **33**, 50-66. [CrossRef]

123. Michael Hübler. 2015. A theory-based discussion of international technology funding. *Environmental Economics and Policy Studies* **17**, 313-327. [CrossRef]

124. Riccardo Crescenzi, Luisa Gagliardi, Simona Iammarino. 2015. Foreign multinationals and domestic innovation: Intra-industry effects and firm heterogeneity. *Research Policy* **44**, 596-609. [CrossRef]

125. Sanjaya Kumar Malik. 2015. Conditional technology spillovers from foreign direct investment: evidence from Indian manufacturing industries. *Journal of Productivity Analysis* **43**, 183-198. [CrossRef]

126. Fan Xia, Gordon Walker. 2015. How much does owner type matter for firm performance? Manufacturing firms in China 1998-2007. *Strategic Management Journal* **36**:10.1002/smj.2015.36.issue-4, 576-585. [CrossRef]

127. Nadia Doytch, Ronald U Mendoza, Charles I Siriban. 2015. Does Mining FDI Crowd in Other Investments? Investigation of FDI Intersectoral Linkages. *Comparative Economic Studies* . [CrossRef]

128. Piers Thompson, Wenyu Zang. 2015. Foreign direct investment and the SME sector. *International Journal of Entrepreneurial Behavior & Research* **21**, 50-75. [CrossRef]

129. Kiyoyasu Tanaka, Yoshihiro Hashiguchi. 2015. Spatial Spillovers from Foreign Direct Investment: Evidence from the Yangtze River Delta in China. *China & World Economy* **23**:10.1111/cwe.2015.23.issue-2, 40-60. [CrossRef]

130. Minjung Kim. 2015. Productivity spillovers from FDI and the role of domestic firm's absorptive capacity in South Korean manufacturing industries. *Empirical Economics* **48**, 807-827. [CrossRef]

131. Zaheer Khan, Yong Kyu Lew, Rudolf R. Sinkovics. 2015. International Joint Ventures as Boundary Spanners: Technological Knowledge Transfer in an Emerging Economy. *Global Strategy Journal* **5**:10.1002/gsj.2015.5.issue-1, 48-68. [CrossRef]

132. B. S. Javorcik. 2015. Does FDI Bring Good Jobs to Host Countries?. *The World Bank Research Observer* **30**, 74-94. [CrossRef]

133. Art Durnev, Ruben Enikolopov, Maria Petrova, Veronica Santarosa. 2015. Politics, instability, and composition of international investment flows. *Journal of Corporate Finance* **30**, 299-324. [CrossRef]

134. Andrea Ascani, Luisa Gagliardi. 2015. Inward FDI and local innovative performance. An empirical investigation on Italian provinces. *Review of Regional Research* **35**:1, 29-47. [CrossRef]

135. The East African Community . [CrossRef]

136. Andrew Jones, Mark Cook. 2015. The spillover effect from FDI in the English Premier League. *Soccer & Society* **16**:1, 116-139. [CrossRef]

137. Albert Guangzhou Hu. 2015. Innovation and Economic Growth in East Asia: An Overview. *Asian Economic Policy Review* **10**:10.1111/aepr.2015.10.issue-1, 19-37. [CrossRef]

138. Hiau Looi Kee. 2015. Local intermediate inputs and the shared supplier spillovers of foreign direct investment. *Journal of Development Economics* **112**, 56-71. [CrossRef]

139. Leonardo Iacovone, Beata Javorcik, Wolfgang Keller, James Tybout. 2015. Supplier responses to Walmart's invasion in Mexico. *Journal of International Economics* **95**, 1-15. [CrossRef]

140. Rosanna Pittiglio, Filippo Reganati. 2015. Multinational Enterprises, Technological Intensity and Firm Survival. Evidence from Italian Manufacturing and Services Firms. *Atlantic Economic Journal* **43**:1, 87. [CrossRef]

141. Michael Jakob, Jan Christoph Steckel, Christian Flachsland, Lavinia Baumstark. 2015. Climate finance for developing country mitigation: blessing or curse?. *Climate and Development* **7**, 1-15. [CrossRef]

142. Sourafel Girma, Yundan Gong, Holger Görg, Sandra Lancheros. 2015. Estimating direct and indirect effects of foreign direct investment on firm productivity in the presence of interactions between firms. *Journal of International Economics* **95**, 157-169. [CrossRef]

143. Paul C. Cheshire, Christian A. L. Hilber, Ioannis Kaplanis. 2015. Land use regulation and productivity —land matters: evidence from a UK supermarket chain. *Journal of Economic Geography* **15**, 43-73. [CrossRef]

144. Thi Ngoc Thuyen Truong, Juthathip Jongwanich, Eric D. Ramstetter. 2015. Productivity spillovers from foreign multinationals and trade protection: firm-level analysis of Vietnamese manufacturing. *Asian-Pacific Economic Literature* **29**:2, 30. [CrossRef]

145. Andrea Filippetti, Daniele Archibugi 419. [CrossRef]

146. Natalya Smith, Ekaterina Thomas. 2015. Socio-Institutional Environment and Innovation in Russia. *Journal of East-West Business* **21**:3, 182. [CrossRef]

147. Tomohiro Machikita, Yasushi Ueki. 2015. Measuring and Explaining Innovative Capability: Evidence from Southeast Asia. *Asian Economic Policy Review* **10**:10.1111/aepr.2015.10.issue-1, 152-173. [CrossRef]

148. Chia-Hui Lu, Yu Pang. 2015. An anatomy of China's eco-efficiency gains: the role of FDI. *Asia-Pacific Journal of Accounting & Economics* 1. [CrossRef]

149. D. Curzi, V. Raimondi, A. Olper. 2015. Quality upgrading, competition and trade policy: evidence from the agri-food sector. *European Review of Agricultural Economics* **42**:2, 239. [CrossRef]

150. Roberto Antonietti, Raffaello Bronzini, Giulio Cainelli. 2015. Inward greenfield FDI and innovation. *Economia e Politica Industriale* **42**:1, 93. [CrossRef]

151. L. Pérez-Villar, A. Seric. 2015. Multinationals in Sub-Saharan Africa: Domestic linkages and institutional distance. *International Economics* **142**, 94. [CrossRef]

152. Mi Lin, Yum K. Kwan. 2015. FDI Spatial Spillovers in China. *The World Economy* n/a. [CrossRef]

153. Oleksandr Shepotylo, Volodymyr Vakhitov. 2015. Services liberalization and productivity of manufacturing firms. *Economics of Transition* **23**:10.1111/ecot.2015.23.issue-1, 1-44. [CrossRef]

154. Grazia Ietto-Gillies 125. [CrossRef]

155. Natalya Smith, Ekaterina ThomasInnovation in Emerging Economies: The Spillover Effects of Foreign Direct Investment and Institutions in Russia 146-172. [CrossRef]

156. Ziko Konwar, Frank McDonald, Chengang Wang, Yingqi WeiDo Foreign Ownership Modes Matter for FDI Spillovers? 243-261. [CrossRef]

157. Thanousorn Vongpraseuth, Chang Gyu Choi. 2015. Globalization, foreign direct investment, and urban growth management: Policies and conflicts in Vientiane, Laos. *Land Use Policy* **42**, 790-799. [CrossRef]

158. Anna M. Ferragina, Fernanda Mazzotta. 2014. FDI spillovers on firm survival in Italy: absorptive capacity matters!. *The Journal of Technology Transfer* **39**, 859-897. [CrossRef]

159. Luosha Du, Ann Harrison, Gary Jefferson. 2014. FDI Spillovers and Industrial Policy: The Role of Tariffs and Tax Holidays. *World Development* **64**, 366-383. [CrossRef]

160. Olga Kuzmina, Natalya Volchkova, Tatiana Zueva. 2014. Foreign direct investment and governance quality in Russia. *Journal of Comparative Economics* **42**, 874-891. [CrossRef]

161. Juan Carlos Leiva, Joaquín Alegre, Ricardo Monge. 2014. The Influence of Entrepreneurial Learning in New Firms' Performance: A Study in Costa Rica. *Innovar* **24**, 129-140. [CrossRef]

162. Julia Hautz, Michael Mayer, Christian Stadler. 2014. Macro-Competitive Context and Diversification: The Impact of Macroeconomic Growth and Foreign Competition. *Long Range Planning* **47**, 337-352. [CrossRef]

163. Facundo Albornoz, Matthew A. Cole, Robert J.R. Elliott, Marco G. Ercolani. 2014. The environmental actions of firms: Examining the role of spillovers, networks and absorptive capacity. *Journal of Environmental Management* **146**, 150-163. [CrossRef]

164. Xiaoying Xie. 2014. China's Property-Liability Insurance Market: Characteristics, Trends and Efficiency by Ownership. *The Journal of Risk Management* **25**:3, 143-194. [CrossRef]

165. Boqiong Yang, Stephan Brosig, Jianguo ChenEnvironmental Impact of Foreign vs. Domestic Capital Investment in China 45-72. [CrossRef]

166. Boqiong Yang, Jun Yang, Qiran ZhaoEnvironmental Impact of Foreign Direct Investment toward Host Countries 21-43. [CrossRef]

167. Natasha Agarwal, Chris Milner, Alejandro Riaño. 2014. Credit constraints and spillovers from foreign firms in China. *Journal of Banking & Finance* **48**, 261-275. [CrossRef]

168. Katja Zajc Kejžar, Nina Ponikvar. 2014. Job Destruction and Productivity Gains in Heterogeneous Incumbent Firms: Comparing the Effects of Imports and Inward Foreign Direct Investment. *Emerging Markets Finance and Trade* **50**, 154-173. [CrossRef]

169. Iliana Olivié, Aitor Pérez. 2014. How to deal with the "black box" of foreign investment and development? A case study in the Dominican Republic and a methodological proposal. *Canadian Journal of Development Studies / Revue canadienne d'études du développement* **35**, 539-559. [CrossRef]

170. Alexandre Simons. 2014. How does technology transfer affect backward linkages? A motivating example theoretical analysis. *Economic Modelling* **42**, 94-105. [CrossRef]

171. Lourenço S. Paz. 2014. Inter-industry Productivity Spillovers: An Analysis Using the 1989–1998 Brazilian Trade Liberalisation. *The Journal of Development Studies* **50**, 1261-1274. [CrossRef]

172. Kevin Honglin Zhang. 2014. How does foreign direct investment affect industrial competitiveness? Evidence from China. *China Economic Review* **30**, 530-539. [CrossRef]

173. Keith Head, Ran Jing, Deborah L. Swenson. 2014. From Beijing to Bentonville: Do multinational retailers link markets?. *Journal of Development Economics* **110**, 79-92. [CrossRef]

174. Chiara Franco, John P. Weche Gelübcke. 2014. The Death of German Firms: What Role for Foreign Direct Investment?. *The World Economy* n/a-n/a. [CrossRef]

175. Yonghun Jung, Seong-Hoon Lee. 2014. Electrification and productivity growth in Korean manufacturing plants. *Energy Economics* **45**, 333-339. [CrossRef]

176. Zeb Aurangzeb, Thanasis Stengos. 2014. The role of Foreign Direct Investment (FDI) in a dualistic growth framework: A smooth coefficient semi-parametric approach. *Borsa Istanbul Review* **14**, 133-144. [CrossRef]

177. Arijit Mukherjee, Chiranjib Neogi. 2014. Vertical technology transfer and the welfare implications of patent protection. *Research in Economics* **68**, 239-247. [CrossRef]

178. Geoffrey G. Gachino. 2014. Foreign Investment and Technological Spillovers in Kenya: Extent and Mode of Occurrence. *South African Journal of Economics* **82**:10.1111/saje.2014.82.issue-3, 422-442. [CrossRef]

179. Cheryl Xiaoning Long, Galina Hale, Hirotaka Miura. 2014. Productivity Spillovers from FDI in the People's Republic of China: A Nuanced View. *Asian Development Review* **31**, 77-108. [CrossRef]

180. Tsu-Lung Chou, Jung-Ying Chang, Te-Chuan Li. 2014. Government Support, FDI Clustering and Semiconductor Sustainability in China: Case Studies of Shanghai, Suzhou and Wuxi in the Yangtze Delta. *Sustainability* **6**, 5655-5681. [CrossRef]

181. Nadide Sevil Tülüce, İbrahim Doğan. 2014. The Impact of Foreign Direct Investments on SMEs' Development. *Procedia - Social and Behavioral Sciences* **150**, 107-115. [CrossRef]

182. Julia Kubny, Hinrich Voss. 2014. Benefitting from Chinese FDI? An assessment of vertical linkages with Vietnamese manufacturing firms. *International Business Review* **23**, 731-740. [CrossRef]

183. Maria Bas. 2014. Does services liberalization affect manufacturing firms' export performance? Evidence from India. *Journal of Comparative Economics* **42**, 569-589. [CrossRef]

184. Ronald Bachmann, Daniel Baumgarten, Joel Stiebale. 2014. Foreign direct investment, heterogeneous workers and employment security: Evidence from Germany. *Canadian Journal of Economics/Revue canadienne d'économique* **47**:10.1111/caje.2014.47.issue-3, 720-757. [CrossRef]

185. Satomi Kimino, Nigel Driffield, David Saal. 2014. Spillovers from FDI and local networks. *Multinational Business Review* **22**, 176-193. [CrossRef]

186. Lin Chen, Changyuan Luo. 2014. FDI, market signal and financing constraints of firms in China. *The Journal of International Trade & Economic Development* **23**, 579-599. [CrossRef]

187. Ki-Dong Lee, Seok-Joon Hwang. 2014. Regional heterogeneity and location choice of FDI in Korea via agglomeration and linkage relationships. *Journal of the Asia Pacific Economy* **19**, 464-487. [CrossRef]

188. Eddie C.M. Hui, Ka Kwan Kevin Chan. 2014. Foreign direct investment in China's real estate market. *Habitat International* **43**, 231-239. [CrossRef]

189. Claudio A. C. Paiva, Gustavo S. Cortes. 2014. On the Irrelevance of Mercosur: Evidence From Foreign Direct Investment. *Latin American Business Review* **15**, 291-314. [CrossRef]

190. Werner Baer, Peri Silva. 2014. Mercosul: Its Successes and Failures During Its First Two Decades. *Latin American Business Review* **15**, 193-208. [CrossRef]

191. Csilla Lakatos, Tani Fukui. 2014. The Liberalization of Retail Services in India. *World Development* **59**, 327-340. [CrossRef]

192. Bijun Wang, Rui Mao, Qin Gou. 2014. Overseas Impacts of China's Outward Direct Investment. *Asian Economic Policy Review* **9**:10.1111/aepr.2014.9.issue-2, 227-249. [CrossRef]

193. References 169-183. [CrossRef]

194. Significance of Mergers and Acquisitions 5-17. [CrossRef]

195. Vlad Manole, Mariana Spatareanu. 2014. Foreign direct investment spillovers and firms' access to credit. *Applied Financial Economics* **24**, 801-809. [CrossRef]

196. Giuliano Conti, Alessia Lo Turco, Daniela Maggioni. 2014. Spillovers through backward linkages and the export performance of business services. Evidence from a sample of Italian firms. *International Business Review* **23**, 552-565. [CrossRef]

197. Stefano Federico. 2014. Industry Dynamics and Competition from Low-Wage Countries: Evidence on Italy. *Oxford Bulletin of Economics and Statistics* **76**:10.1111/obes.2014.76.issue-3, 389-410. [CrossRef]

198. Yuyuan Wen. 2014. The spillover effect of FDI and its impact on productivity in high economic output regions: A comparative analysis of the Yangtze River Delta and the Pearl River Delta, China. *Papers in Regional Science* **93**, 341-365. [CrossRef]

199. Qing Liu, Ruosi Lu, Chao Zhang. 2014. Entrepreneurship and spillovers from multinationals: Evidence from Chinese private firms. *China Economic Review* **29**, 95-106. [CrossRef]

200. In Hyeock Lee, Eunsuk Hong, Laixiang Sun. 2014. Inward Foreign Direct Investment and Domestic Entrepreneurship: A Regional Analysis of New Firm Creation in Korea. *Regional Studies* **48**, 910-922. [CrossRef]

201. Michael Hübler, Alexander Glas. 2014. The Energy-Bias of North–South Technology Spillovers: A Global, Bilateral, Bisectoral Trade Analysis. *Environmental and Resource Economics* **58**, 59-89. [CrossRef]

202. Chrysovalantou Milliou. 2014. Location for Foreign Direct Investment in Vertically Related Markets. *Review of International Economics* **22**:10.1111/roie.2014.22.issue-2, 326-341. [CrossRef]

203. Kyoji Fukao, Victoria Kravtsova, Kentaro Nakajima. 2014. How important is geographical agglomeration to factory efficiency in Japan's manufacturing sector?. *The Annals of Regional Science* **52**, 659-696. [CrossRef]

204. Joseph A Clougherty, Klaus Gugler, Lars Sørgard, Florian W Szücs. 2014. Cross-border mergers and domestic-firm wages: Integrating "spillover effects" and "bargaining effects". *Journal of International Business Studies* **45**:4, 450-470. [CrossRef]

205. Staša Tkalec, Marjan Svetličič. 2014. Can cooperation with the BRICs and other Growth Markets help EU member states exit the crisis?. *Post-Communist Economies* **26**, 176-200. [CrossRef]

206. Jue Wang, Yingqi Wei, Xiaming Liu, Chengang Wang, Hua Lin. 2014. Simultaneous Impact of the Presence of Foreign MNEs on Indigenous Firms' Exports and Domestic Sales. *Management International Review* **54**, 195-223. [CrossRef]

207. Joel Rodrigue. 2014. Multinational production, exports and aggregate productivity. *Review of Economic Dynamics* **17**, 243-261. [CrossRef]

208. Juan Carlos Leiva, Joaquín Alegre, Ricardo Monge. 2014. Los emprendedores surgidos de las empresas multinacionales de inversión extranjera directa: un estudio exploratorio en Costa Rica. *Estudios Gerenciales* **30**, 124-133. [CrossRef]

209. Bruno Merlevede, Koen Schoors, Mariana Spatareanu. 2014. FDI Spillovers and Time since Foreign Entry. *World Development* **56**, 108-126. [CrossRef]

210. Qiaowei Shen, Ping Xiao. 2014. McDonald's and KFC in China: Competitors or Companions?. *Marketing Science* **33**, 287-307. [CrossRef]

211. MICHELLE L. WASHINGTON, ZANETA CHAPMAN. 2014. ENTREPRENEURIAL ACTIVITY AS AN EXTERNALITY OF INWARD FOREIGN DIRECT INVESTMENT IN EMERGING ECONOMIES: PANEL DATA FROM ARGENTINA, BRAZIL, COLOMBIA AND SOUTH AFRICA. *Journal of Developmental Entrepreneurship* **19**, 1450004. [CrossRef]

212. Abdoul' Ganiou Mijiyawa. 2014. Reforming Property Rights Institutions in Developing Countries: Can FDI Inflows Help?. *The World Economy* **37**:10.1111/twec.2014.37.issue-3, 410-433. [CrossRef]

213. Danny T. Wang, Wendy Y. Chen. 2014. Foreign direct investment, institutional development, and environmental externalities: Evidence from China. *Journal of Environmental Management* **135**, 81-90. [CrossRef]

214. Claudiu Tiberiu Albulescu, Matei Tămăşilă. 2014. The Impact of FDI on Entrepreneurship in the European Countries. *Procedia - Social and Behavioral Sciences* **124**, 219-228. [CrossRef]

215. Ana Cuadros, Maite Alguacil. 2014. Productivity Spillovers Through Foreign Transactions: The Role of Sector Composition and Local Conditions. *Emerging Markets Finance and Trade* **50**, 75-88. [CrossRef]

216. E. Giuliani, C. Macchi. 2014. Multinational corporations' economic and human rights impacts on developing countries: a review and research agenda. *Cambridge Journal of Economics* **38**, 479-517. [CrossRef]

217. Dietmar Harhoff, Elisabeth Mueller, John Van Reenen. 2014. What are the Channels for Technology Sourcing? Panel Data Evidence from German Companies. *Journal of Economics & Management Strategy* **23**:10.1111/jems.2014.23.issue-1, 204-224. [CrossRef]

218. B. S. Javorcik, Y. Li. 2014. Global Retail Chains and the Supplying Industries: Evidence from Romania. *CESifo Economic Studies* . [CrossRef]

219. Ben Shepherd. 2014. Export and FDI premia among services firms in the developing world. *Applied Economics Letters* **21**, 176-179. [CrossRef]

220. Stefanie A. Haller. 2014. Do Domestic Firms Benefit from Foreign Presence and Import Competition in Irish Services Sectors?. *The World Economy* **37**:10.1111/twec.2014.37.issue-2, 219-243. [CrossRef]

221. Alessandra Perri, Ulf Andersson. 2014. Knowledge outflows from foreign subsidiaries and the tension between knowledge creation and knowledge protection: Evidence from the semiconductor industry. *International Business Review* **23**, 63-75. [CrossRef]

222. Cheng Zhang, Bingnan Guo, Jianke Wang. 2014. The different impacts of home countries characteristics in FDI on Chinese spillover effects: Based on one-stage SFA. *Economic Modelling* **38**, 572-580. [CrossRef]

223. Bernhard Michel, François Rycx. 2014. Productivity Gains and Spillovers from Offshoring. *Review of International Economics* **22**:10.1111/roie.2014.22.issue-1, 73-85. [CrossRef]

224. Camilla Mastromarco, Léopold Simar. 2014. EFFECT OF FDI AND TIME ON CATCHING UP: NEW INSIGHTS FROM A CONDITIONAL NONPARAMETRIC FRONTIER ANALYSIS. *Journal of Applied Econometrics* n/a-n/a. [CrossRef]

225. Rob van Tulder, Andrea da RosaMultinationals and Small- and Medium-Sized Enterprises (SMEs): A linkages perspective on inclusive development strategies 203-227. [CrossRef]

226. Solmaz Filiz Karabag, Marco Chi Keung Lau, Farrukh Suvankulov. 2014. Determinants of firm competitiveness: case of the Turkish textile and apparel industry. *The Journal of The Textile Institute* **105**, 1-11. [CrossRef]

227. Gary H. Jefferson, Miao Ouyang. 2014. FDI spillovers in China: why do the research findings differ so much?. *Journal of Chinese Economic and Business Studies* **12**, 1-27. [CrossRef]

228. Sorin M.S. Krammer. 2014. Assessing the relative importance of multiple channels for embodied and disembodied technological spillovers. *Technological Forecasting and Social Change* **81**, 272-286. [CrossRef]

229. Yongjin Wang, Yanling Wang, Kunwang Li. 2014. Judicial quality, contract intensity and exports: Firm-level evidence. *China Economic Review* **31**, 32. [CrossRef]

230. Tidiane Kinda. 2014. The Quest for Non-Resource-Based FDI: Do Taxes Matter?. *IMF Working Papers* **14**, 1. [CrossRef]

231. Richard Baldwin, Frédéric Robert-Nicoud. 2014. Trade-in-goods and trade-in-tasks: An integrating framework. *Journal of International Economics* **92**, 51-62. [CrossRef]

232. Aristidis P. Bitzenis, Vladimir P. Žugić. 2014. FDI Motives in the Serbian Manufacturing Sector. *Journal of East-West Business* **20**, 1-24. [CrossRef]

233. Hak-Seon Lee. 2014. Foreign Direct Investment and the Demand for Protection in a Network of Producers and Consumers: The U.S. Case, 1982–1996. *Journal of Transnational Management* **19**, 38-61. [CrossRef]

234. Yanqing Jiang. 2014. Spatial Distribution of Foreign Direct Investment and Productivity Growth in Less Developed Regions of China. *American Journal of Industrial and Business Management* **04**, 644-656. [CrossRef]

235. Suyanto, Ruhul Salim, Harry Bloch. 2014. Which firms benefit from foreign direct investment? Empirical evidence from Indonesian manufacturing. *Journal of Asian Economics* **33**, 16. [CrossRef]

236. Chiara F. Del Bo. 2014. Foreign and Spatial Spillovers in the European Electricity Sector. *Symphonya. Emerging Issues in Management* . [CrossRef]

237. 2014. *Japanese journal of comparative economics* **51**, 2_1-2_29. [CrossRef]

238. Dolores Añón Higón, Miguel Manjón-AntolínInternational R&D Spillovers, TFP and Institutional Distance 267-280. [CrossRef]

239. Randolph Luca Bruno, Maria CipollinaThe Impact of Foreign Direct Investment on Economic Performance in the Enlarged Europe: A Meta-Regression Analysis 228-250. [CrossRef]

240. Meng Song, Nigel Driffield, Jun DuInward Investment, Technology Transfer and Innovation: Direct Evidence from China 151-173. [CrossRef]

241. Bruno Cirillo, Giovanni ValentiniInternational Open Innovation: Taking Stock and Moving Forward 19-46. [CrossRef]

242. Fernando Merino. 2013. Capital structure of foreign affiliates and the investment decision: two questions to consider. *Journal of Business Economics and Management* **14**, S470-S492. [CrossRef]

243. Daniel Lederman, Julián Messina, Samuel Pienknagura, Jamele RigoliniForeign Direct Investment, Multinational Corporations, and Innovation 121-140. [CrossRef]

244. Lili Chen. 2013. Technology Spillover and Market Competition of Foreign Firms in China. *China Economic Policy Review* **02**, 1350009. [CrossRef]

245. Richard Baldwin, Toshihiro Okubo. 2013. Networked FDI: Sales and Sourcing Patterns of Japanese Foreign Affiliates. *The World Economy* n/a-n/a. [CrossRef]

246. Olivier N. Godart, Holger Görg, David Greenaway. 2013. Domestic multinationals, foreign affiliates, and labour demand elasticities. *Review of World Economics* **149**, 611-630. [CrossRef]

247. Ziliang Deng, Rod Falvey, Adam Blake. 2013. Quantifying Foreign Direct Investment Productivity Spillovers in China: A Computable General Equilibrium Model. *Asian Economic Journal* **27**:10.1111/asej.2013.27.issue-4, 369-389. [CrossRef]

248. Miroslav Šipikal, Milan Buček. 2013. The role of FDIs in regional innovation: Evidence from the automotive industry in Western Slovakia. *Regional Science Policy & Practice* n/a-n/a. [CrossRef]

249. Dany Bahar, Ricardo Hausmann, Cesar A. Hidalgo. 2013. Neighbors and the evolution of the comparative advantage of nations: Evidence of international knowledge diffusion?. *Journal of International Economics* . [CrossRef]

250. Matthias Bürker, Chiara Franco, G. Alfredo Minerva. 2013. Foreign ownership, firm performance, and the geography of civic capital. *Regional Science and Urban Economics* **43**, 964-984. [CrossRef]

251. Faqin Lin, Chao Zhang, Lin Wang. 2013. Vertical Spillover Effects of Multinationals on Chinese Domestic Firms via Supplier-Customer Relationships. *China & World Economy* **21**:10.1111/cwe.2013.21.issue-6, 37-57. [CrossRef]

252. Stephen Roper, Priit Vahter, James H. Love. 2013. Externalities of openness in innovation. *Research Policy* **42**, 1544-1554. [CrossRef]

253. Duc Anh Dang. 2013. How foreign direct investment promote institutional quality: Evidence from Vietnam. *Journal of Comparative Economics* **41**, 1054-1072. [CrossRef]

254. Sourafel Girma, David Greenaway. 2013. 'Who Benefits from Foreign Direct Investment in the United Kingdom?' more than 10 Years on. *Scottish Journal of Political Economy* **60**:10.1111/sjpe.2013.60.issue-5, 575-577. [CrossRef]

255. Chunlai Chen, Yu Sheng, Christopher Findlay. 2013. Export Spillovers of FDI on China's Domestic Firms. *Review of International Economics* **21**:10.1111/roie.2013.21.issue-5, 841-856. [CrossRef]

256. Shujin Zhu, Xiaolan Fu. 2013. Drivers of Export Upgrading. *World Development* **51**, 221-233. [CrossRef]

257. Yanling Wang. 2013. Foreign Acquisition, Domestic Acquisition and Plant Survival. *International Journal of the Economics of Business* **20**, 307-324. [CrossRef]

258. Masami Ishida, Tomohiro Machikita, Yasushi Ueki. 2013. How export and import platforms drive industry upgrading: five facts about emerging multinationals from southeast Asia. *Asian Journal of Technology Innovation* **21**, 4-24. [CrossRef]

259. C. Imbriani, R. Pittiglio, F. Reganati, E. Sica. 2013. How Much do Technological Gap, Firm Size, and Regional Characteristics Matter for the Absorptive Capacity of Italian Enterprises?. *International Advances in Economic Research* . [CrossRef]

260. Vito Amendolagine, Amadou Boly, Nicola Daniele Coniglio, Francesco Prota, Adnan Seric. 2013. FDI and Local Linkages in Developing Countries: Evidence from Sub-Saharan Africa. *World Development* **50**, 41-56. [CrossRef]

261. Saurav Pathak, Emanuel Xavier-Oliveira, André O. Laplume. 2013. Influence of intellectual property, foreign investment, and technological adoption on technology entrepreneurship. *Journal of Business Research* **66**, 2090-2101. [CrossRef]

262. Chiara F. Del Bo. 2013. FDI spillovers at different levels of industrial and spatial aggregation: Evidence from the electricity sector. *Energy Policy* **61**, 1490-1502. [CrossRef]

263. Olivier N. Godart, Holger Görg. 2013. Suppliers of multinationals and the forced linkage effect: Evidence from firm level data. *Journal of Economic Behavior & Organization* **94**, 393-404. [CrossRef]

264. Delfim Gomes Neto, Francisco José Veiga. 2013. Financial globalization, convergence and growth: The role of foreign direct investment. *Journal of International Money and Finance* **37**, 161-186. [CrossRef]

265. Victoria Kravtsova. 2013. Productivity change and externalities: empirical evidence from Hungary. *International Review of Applied Economics* 1-24. [CrossRef]

266. Delia Baghdasaryan, Lisbeth la Cour. 2013. Competition, ownership and productivity. A panel analysis of Czech firms. *Journal of Economics and Business* **69**, 86-100. [CrossRef]

267. E. Han Kim, Yao Lu. 2013. Corporate governance reforms around the world and cross-border acquisitions. *Journal of Corporate Finance* **22**, 236-253. [CrossRef]

268. Akinori Tomohara, Kazuhiko Yokota. 2013. Who Gains from Foreign Direct Investment-Induced Technology Spillovers? Horizontal and Vertical Linkages. *Australian Economic Review* **46**:10.1111/aere.v46.3, 312-324. [CrossRef]

269. Zhenzhen Xie, Jiatao Li. 2013. Internationalization and Indigenous Technological Efforts of Emerging Economy Firms: The Effect of Multiple Knowledge Sources. *Journal of International Management* **19**, 247-259. [CrossRef]

270. Daniel Lederman, Taye Mengistae, Lixin Colin Xu. 2013. Microeconomic consequences and macroeconomic causes of foreign direct investment in southern African economies. *Applied Economics* **45**, 3637-3649. [CrossRef]

271. Yongbok Jeon, Byung Il Park, Pervez N. Ghauri. 2013. Foreign direct investment spillover effects in China: Are they different across industries with different technological levels?. *China Economic Review* **26**, 105-117. [CrossRef]

272. Alex Eapen. 2013. FDI spillover effects in incomplete datasets. *Journal of International Business Studies* **44**:7, 719-744. [CrossRef]

273. Robert E. Lipsey, Fredrik Sjöholm, Jing Sun. 2013. Foreign Ownership and Employment Growth in a Developing Country. *Journal of Development Studies* **49**, 1133-1147. [CrossRef]

274. Jože P. Damijan, Matija Rojec, Boris Majcen, Mark Knell. 2013. Impact of firm heterogeneity on direct and spillover effects of FDI: Micro-evidence from ten transition countries. *Journal of Comparative Economics* **41**, 895-922. [CrossRef]

275. Po-Lu Chen. 2013. Modes of Foreign Direct Investment and Intellectual Property Rights Protection: Wholly-owned or Joint Venture? Firm-level Evidence from Taiwanese Multinational Manufacturing Enterprises. *Review of International Economics* **21**:10.1111/roie.2013.21.issue-3, 549-561. [CrossRef]

276. Thomas Gall, Marc Schiffbauer, Julia Kubny. 2013. DYNAMIC EFFECTS OF FOREIGN DIRECT INVESTMENT WHEN CREDIT MARKETS ARE IMPERFECT. *Macroeconomic Dynamics* 1-35. [CrossRef]

277. Yong Wang. 2013. Fiscal decentralization, endogenous policies, and foreign direct investment: Theory and evidence from China and India. *Journal of Development Economics* **103**, 107-123. [CrossRef]

278. Beata S. Javorcik, Yue Li. 2013. Do the biggest aisles serve a brighter future? Global retail chains and their implications for Romania. *Journal of International Economics* **90**, 348-363. [CrossRef]

279. Jason Dedrick, Kenneth L. Kraemer, Eric Shih. 2013. Information Technology and Productivity in Developed and Developing Countries. *Journal of Management Information Systems* **30**, 97-122. [CrossRef]

280. Joseph P.H. Fan, Stuart L. Gillan, Xin Yu. 2013. Innovation or imitation?. *Journal of Multinational Financial Management* **23**, 208-234. [CrossRef]

281. Zhang Qin-lin, Ju Xiao-fengAdjustment of patent law and the independent innovation 1854-1860. [CrossRef]

282. Yongchang Qiang. 2013. How does OFDI affect trade development in developing countries?. *Journal of Chinese Economic and Foreign Trade Studies* **6**, 85-90. [CrossRef]

283. G. B. Navaretti, A. J. Venables. 2013. Multinationals and industrial policy. *Oxford Review of Economic Policy* **29**, 361-382. [CrossRef]

284. Joseph P.H. Fan, Stuart L. Gillan, Xin Yu. 2013. Property rights, R&D spillovers, and corporate accounting transparency in China. *Emerging Markets Review* **15**, 34-56. [CrossRef]

285. M. Nathan, H. Overman. 2013. Agglomeration, clusters, and industrial policy. *Oxford Review of Economic Policy* **29**, 383-404. [CrossRef]

286. Rita Almeida, Ana M. Fernandes. 2013. Explaining local manufacturing growth in Chile: the advantages of sectoral diversity. *Applied Economics* **45**, 2201-2213. [CrossRef]

287. Sergio Mariotti, Marcella Nicolini, Lucia Piscitello. 2013. Vertical linkages between foreign MNEs in service sectors and local manufacturing firms. *Structural Change and Economic Dynamics* **25**, 133-145. [CrossRef]

288. Sucharita Ghosh, Camilla Mastromarco. 2013. Cross-border Economic Activities, Human Capital and Efficiency: A Stochastic Frontier Analysis for OECD Countries. *The World Economy* **36**, 761-785. [CrossRef]

289. Juan Alcacer, Joanne Oxley. 2013. Learning by supplying. *Strategic Management Journal* n/a-n/a. [CrossRef]

290. Valeria Gattai. 2013. International outsourcing versus FDI under contractual incompleteness. *International Review of Economics* **60**, 157-186. [CrossRef]

291. T. Harding, B. S. Javorcik. 2013. Investment Promotion and FDI Inflows: Quality Matters. *CESifo Economic Studies* **59**, 337-359. [CrossRef]

292. Johannes Urpelainen. 2013. Promoting International Environmental Cooperation Through Unilateral Action: When Can Trade Sanctions Help?. *Global Environmental Politics* **13**, 26-45. [CrossRef]

293. Jennifer P. Poole. 2013. Knowledge Transfers from Multinational to Domestic Firms: Evidence from Worker Mobility. *Review of Economics and Statistics* **95**, 393-406. [CrossRef]

294. Deborah L. Swenson. 2013. Book review. *Journal of International Economics* **90**, 234-235. [CrossRef]

295. O. Falck, C. Guenther, S. Heblich, W. R. Kerr. 2013. From Russia with love: the impact of relocated firms on incumbent survival. *Journal of Economic Geography* **13**, 419-449. [CrossRef]

296. Juan Carluccio, Thibault Fally. 2013. Foreign entry and spillovers with technological incompatibilities in the supply chain. *Journal of International Economics* **90**, 123-135. [CrossRef]

297. Petrit Gashi, Iraj Hashi, Geoff Pugh. 2013. Export behaviour of SMEs in transition countries. *Small Business Economics* . [CrossRef]

298. Daniel Lederman. 2013. International trade and inclusive growth: a primer. *Indian Growth and Development Review* **6**, 88-112. [CrossRef]

299. Massimo G. Colombo, Annalisa Croce, Samuele Murtinu. 2013. Ownership structure, horizontal agency costs and the performance of high-tech entrepreneurial firms. *Small Business Economics* . [CrossRef]

300. Nigel Driffield, Chris Jones. 2013. Impact of FDI, ODA and Migrant Remittances on Economic Growth in Developing Countries: A Systems Approach. *The European Journal of Development Research* **25**:2, 173-196. [CrossRef]

301. Zhe Qu, Can Huang, Mingqian Zhang, Yanyun Zhao. 2013. R&D offshoring, technology learning and R&D efforts of host country firms in emerging economies. *Research Policy* **42**, 502-516. [CrossRef]

302. Chiara F. Del Bo. 2013. Productivity in electricity generation: The role of firm ownership and regional institutional quality. *International Review of Applied Economics* **27**, 237-264. [CrossRef]

303. Vrinda Kadiyali, Renáta Kosová. 2013. Inter-industry employment spillovers from tourism inflows. *Regional Science and Urban Economics* **43**, 272-281. [CrossRef]

304. Serguey Braguinsky, Sergey Mityakov. 2013. Foreign corporations and the culture of transparency: Evidence from Russian administrative data. *Journal of Financial Economics* . [CrossRef]

305. Ronald B. Davies. 2013. The Silver Lining of Red Tape. *Journal of Public Economics* . [CrossRef]

306. Eric Rugraff. 2013. Why are spillovers through backward linkages from multinational corporations in the Czech motor industry still limited?. *Post-Communist Economies* **25**, 82-98. [CrossRef]

307. Zuzana Iršová, Tomáš Havránek. 2013. Determinants of Horizontal Spillovers from FDI: Evidence from a Large Meta-Analysis. *World Development* **42**, 1-15. [CrossRef]

308. Boqiong Yang, Stephan Brosig, Jianguo Chen. 2013. Environmental Impact of Foreign vs. Domestic Capital Investment in China. *Journal of Agricultural Economics* **64**:10.1111/jage.2013.64.issue-1, 245-271. [CrossRef]

309. Chiara Franco. 2013. Exports and FDI motivations: Empirical evidence from U.S. foreign subsidiaries. *International Business Review* **22**, 47-62. [CrossRef]

310. Yanling Wang. 2013. Exposure to FDI and new plant survival: evidence in Canada. *Canadian Journal of Economics/Revue canadienne d'économique* **46**, 46-77. [CrossRef]

311. Francisco García, Byungchae Jin, Robert Salomon. 2013. Does inward foreign direct investment improve the innovative performance of local firms?. *Research Policy* **42**, 231-244. [CrossRef]

312. D. Aykut, M.A. KoseCollateral Benefits of Financial Globalization 279-298. [CrossRef]

313. Suyanto, Ruhul Salim. 2013. Foreign direct investment spillovers and technical efficiency in the Indonesian pharmaceutical sector: firm level evidence. *Applied Economics* **45**, 383-395. [CrossRef]

314. S. Kalemli-Ozcan, C. Villegas-SanchezRole of Multinational Corporations in Financial Globalization 321-331. [CrossRef]

315. Tomohiro Machikita, Yasushi Ueki. 2013. Knowledge transfer channels to Vietnam for process improvement. *Management Decision* **51**, 954-972. [CrossRef]

316. L. Alfaro, M.S. JohnsonForeign Direct Investment and Growth 299-309. [CrossRef]

317. Imen Daoud Naanaa, Fethi Sellaouti. 2013. The Role of Foreign Presence in the Technology Transfer. *International Journal of Trade, Economics and Finance* 364-371. [CrossRef]

318. B.S. JavorcikInternational Technology Transfer and Foreign Direct Investment 311-319. [CrossRef]

319. Arijit Mukherjee, Yingyi Tsai. 2013. Multi-sourcing as an entry deterrence strategy. *International Review of Economics & Finance* **25**, 108-112. [CrossRef]

320. Leo Guzmán Anaya. 2013. Inter-Industry Productivity Spillovers from Japanese and US FDI in Mexico's Manufacturing Sector. *Technology and Investment* **04**, 236-243. [CrossRef]

321. Michael Pflüger, Uwe Blien, Joachim Möller, Michael Moritz. 2013. Labor Market Effects of Trade and FDI – Recent Advances and Research Gaps. *Jahrbücher für Nationalökonomie und Statistik* **233**:1. . [CrossRef]

322. Laura Alfaro, Andrew CharltonGrowth and the Quality of Foreign Direct Investment 162-204. [CrossRef]

323. Ichiro Iwasaki, Péter Csizmadia, Miklós Illéssy, Csaba Makó, Miklós Szanyi. 2012. The Nested Variable Model of FDI Spillover Effects: Estimation Using Hungarian Panel Data. *International Economic Journal* **26**, 673-709. [CrossRef]

324. Jong-Wha Lee, Kwanho Shin. 2012. Welfare implications of international financial integration. *Japan and the World Economy* **24**, 235-245. [CrossRef]

325. Phillip H. Kim, Mingxiang Li. 2012. Injecting demand through spillovers: Foreign direct investment, domestic socio-political conditions, and host-country entrepreneurial activity. *Journal of Business Venturing* . [CrossRef]

326. Jean-Louis Combes, Tidiane Kinda, Patrick Plane. 2012. Capital flows, exchange rate flexibility, and the real exchange rate. *Journal of Macroeconomics* **34**, 1034-1043. [CrossRef]

327. Jan Hanousek, Evžen Kočenda, Michal Mašika. 2012. Firm efficiency: Domestic owners, coalitions, and FDI. *Economic Systems* **36**, 471-486. [CrossRef]

328. Axèle Giroud, Björn Jindra, Philipp Marek. 2012. Heterogeneous FDI in Transition Economies – A Novel Approach to Assess the Developmental Impact of Backward Linkages. *World Development* **40**, 2206-2220. [CrossRef]

329. Torfinn Harding, Beata S. Javorcik. 2012. Foreign Direct Investment and Export Upgrading. *Review of Economics and Statistics* **94**, 964-980. [CrossRef]

330. Maria Cipollina, Giorgia Giovannetti, Filomena Pietrovito, Alberto F. Pozzolo. 2012. FDI and Growth: What Cross-country Industry Data Say. *The World Economy* **35**:10.1111/twec.2012.35.issue-11, 1599-1629. [CrossRef]

331. Jung Won Sonn, Dongheon Lee. 2012. Revisiting the branch plant syndrome: Review of literature on foreign direct investment and regional development in Western advanced economies. *International Journal of Urban Sciences* **16**, 243-259. [CrossRef]

332. Hui Peng, Bonghan Kim. 2012. Provincial Output Spillovers in China: Global Vector Autoregressive Approach. *China & World Economy* **20**:10.1111/cwe.2012.20.issue-6, 55-81. [CrossRef]

333. Judy Hsu, Ya-Ping Chuang. 2012. International technology spillovers and innovation: Evidence from Taiwanese high-tech firms. *The Journal of International Trade & Economic Development* 1-15. [CrossRef]

334. Sui Yining, Huang Yaning, Sun Chenhui, Zhang DixinCompetitive Mechanism of FDI and Time-lag of Spillovers 71-74. [CrossRef]

335. Tomas Havranek, Zuzana Irsova. 2012. Survey Article: Publication Bias in the Literature on Foreign Direct Investment Spillovers. *Journal of Development Studies* **48**, 1375-1396. [CrossRef]

336. Alessandra Perri, Ulf Andersson, Phillip C. Nell, Grazia D. Santangelo. 2012. Balancing the trade-off between learning prospects and spillover risks: MNC subsidiaries' vertical linkage patterns in developed countries. *Journal of World Business* . [CrossRef]

337. Suyanto, Harry Bloch, Ruhul A. Salim. 2012. Foreign Direct Investment Spillovers and Productivity Growth in Indonesian Garment and Electronics Manufacturing. *Journal of Development Studies* **48**, 1397-1411. [CrossRef]

338. Erik van der Marel. 2012. Trade in Services and TFP: The Role of Regulation. *The World Economy* no-no. [CrossRef]

339. Mihaela Göndör, Paula Nistor. 2012. Fiscal Policy and Foreign Direct Investment: Evidence from some Emerging EU Economies. *Procedia - Social and Behavioral Sciences* **58**, 1256-1266. [CrossRef]

340. Ellen R. McGrattan. 2012. Transition to FDI openness: Reconciling theory and evidence. *Review of Economic Dynamics* **15**, 437-458. [CrossRef]

341. Chidambaran G. Iyer. 2012. Foreign firms, Indian multinationals and spillovers in the Indian pharmaceutical industry. *Indian Growth and Development Review* **5**, 131-150. [CrossRef]

342. Yingqi Wei, Xiaming Liu, Chengang Wang, Jue Wang. 2012. Local sourcing of multinational enterprises in China. *International Journal of Emerging Markets* **7**, 364-382. [CrossRef]

343. J. P. H. Fan, T. J. Wong, T. Zhang. 2012. Institutions and Organizational Structure: The Case of State-Owned Corporate Pyramids. *Journal of Law, Economics, and Organization* . [CrossRef]

344. Deborah L. Swenson, Huiya Chen. 2012. Multinational Exposure and the Quality of New Chinese Exports. *Oxford Bulletin of Economics and Statistics* no-no. [CrossRef]

345. Shih-Ying Wu, Mei-Jane Teng. 2012. Fiscal decentralization and multinational firms' ownership: evidence from China. *Economics of Governance* **13**, 237-262. [CrossRef]

346. Ping Li, Wen-zhe SuThe technology progress effects of outward foreign direct investment: Evidence from China 1720-1725. [CrossRef]

347. Ziliang Deng, Rod Falvey, Adam Blake. 2012. Trading market access for technology? Tax incentives, foreign direct investment and productivity spillovers in China. *Journal of Policy Modeling* **34**, 675-690. [CrossRef]

348. Evangelia Desli, Pavlos Gkasis, Persefoni Tsaliki. 2012. An alternative approach to the monitoring of technological diffusion via foreign direct investment: evidence from the Greek manufacturing sector. *International Review of Applied Economics* **26**, 687-707. [CrossRef]

349. Ayse Kaya, James T. Walker. 2012. The legitimacy of foreign investors. *Multinational Business Review* **20**, 266-295. [CrossRef]

350. Laura Alfaro,, Maggie Xiaoyang Chen. 2012. Surviving the Global Financial Crisis: Foreign Ownership and Establishment Performance. *American Economic Journal: Economic Policy* **4**:3, 30-55. [Abstract] [View PDF article] [PDF with links]

351. Alec Zuo, David K. Round. 2012. The impact of foreign direct investment on domestic supplier industries within Chinese provinces. *Journal of the Asia Pacific Economy* **17**, 383-398. [CrossRef]

352. Adelheid Holl, Rafael Pardo, Ruth Rama. 2012. Comparing Outsourcing Patterns in Domestic and FDI Manufacturing Plants: Empirical Evidence from Spain. *European Planning Studies* **20**, 1335-1357. [CrossRef]

353. Annalisa Croce, José Martí, Samuele Murtinu. 2012. The impact of venture capital on the productivity growth of European entrepreneurial firms: 'Screening' or 'value added' effect?. *Journal of Business Venturing* . [CrossRef]

354. Xiaolan Fu. 2012. Foreign Direct Investment and Managerial Knowledge Spillovers through the Diffusion of Management Practices. *Journal of Management Studies* **49**:10.1111/joms.2012.49.issue-5, 970-999. [CrossRef]

355. Kunal Dasgupta. 2012. Learning and knowledge diffusion in a global economy. *Journal of International Economics* **87**, 323-336. [CrossRef]

356. Elsadig Musa Ahmed. 2012. Are the FDI inflow spillover effects on Malaysia's economic growth input driven?. *Economic Modelling* **29**, 1498-1504. [CrossRef]

357. Roberto Álvarez, Holger Görg. 2012. Multinationals as Stabilisers? Economic Crisis, Access to Finance, and Employment Growth. *Journal of Development Studies* **48**, 847-863. [CrossRef]

358. JOTA ISHIKAWA, EIJI HORIUCHI. 2012. Strategic Foreign Direct Investment in Vertically Related Markets*. *Economic Record* **88**:10.1111/ecor.2012.88.issue-281, 229-242. [CrossRef]

359. Diego Sánchez-Ancochea. 2012. A Fast Herd and a Slow Tortoise?. *Studies in Comparative International Development* **47**, 208-230. [CrossRef]

360. Keith Pilbeam, Neringa Oboleviciute. 2012. Does Foreign Direct Investment Crowd In or Crowd Out Domestic Investment? Evidence from the European Union. *The Journal of Economic Asymmetries* **9**, 89-104. [CrossRef]

361. Banri Ito, Naomitsu Yashiro, Zhaoyuan Xu, XiaoHong Chen, Ryuhei Wakasugi. 2012. How do Chinese industries benefit from FDI spillovers?. *China Economic Review* **23**, 342-356. [CrossRef]

362. Xinpeng Xu, Yu Sheng. 2012. Are FDI spillovers regional? Firm-level evidence from China. *Journal of Asian Economics* **23**, 244-258. [CrossRef]

363. Victor Zitian Chen, Jing Li, Daniel M. Shapiro. 2012. International reverse spillover effects on parent firms: Evidences from emerging-market MNEs in developed markets. *European Management Journal* **30**, 204-218. [CrossRef]

364. Isaac Oluwajoba Abereijo, Matthew Oluwagbemiga Ilori, Phillip A. Olomola. 2012. Forms of technological spillovers from multinational companies to small and medium food companies in Nigeria. *Journal of Technology Management in China* **7**, 152-163. [CrossRef]

365. Yanling Wang. 2012. Openness and Productivity: The Role of Imports, FDI and International Telecommunications. *Latin American Journal of Economics* **49**:10.7764/LAJE.49.1, 125-145. [CrossRef]

366. Luca Grilli, Samuele Murtinu. 2012. Do public subsidies affect the performance of new technology-based firms? The importance of evaluation schemes and agency goals. *Prometheus* 1-15. [CrossRef]

367. Tidiane Kinda. 2012. Foreign ownership, sales to multinationals and firm efficiency: the case of Brazil, Morocco, Pakistan, South Africa and Vietnam. *Applied Economics Letters* **19**, 551-555. [CrossRef]

368. Balázs Szent-Iványi, Gábor Vigvári. 2012. Spillovers from foreign direct investment in Central and Eastern Europe. *Society and Economy* **34**, 51-72. [CrossRef]

369. Alex Eapen. 2012. Social structure and technology spillovers from foreign to domestic firms. *Journal of International Business Studies* **43**:3, 244-263. [CrossRef]

370. Anusha Chari, Wenjie Chen, Kathryn M E Dominguez. 2012. Foreign Ownership and Firm Performance: Emerging Market Acquisitions in the United States. *IMF Economic Review* **60**:1, 1-42. [CrossRef]

371. Marcela Miozzo, Mo Yamin, Pervez N. Ghauri. 2012. Strategy and structure of service multinationals and their impact on linkages with local firms. *The Service Industries Journal* 1-21. [CrossRef]

372. Pao-Li Chang, Chia-Hui Lu. 2012. Risk and the technology content of FDI: A dynamic model. *Journal of International Economics* **86**, 306-317. [CrossRef]

373. M. Bas, A. Berthou. 2012. The Decision to Import Capital Goods in India: Firms' Financial Factors Matter. *The World Bank Economic Review* . [CrossRef]

374. Rajneesh Narula, Nigel Driffield. 2012. Does FDI Cause Development? The Ambiguity of the Evidence and Why it Matters. *The European Journal of Development Research* **24**:1, 1-7. [CrossRef]

375. Axèle Giroud. 2012. Mind the Gap: How Linkages Strengthen Understanding of Spillovers. *The European Journal of Development Research* **24**:1, 20-25. [CrossRef]

376. I. T. Kandilov, A. Leblebicioglu. 2012. Trade Liberalization and Investment: Firm-level Evidence from Mexico. *The World Bank Economic Review* **26**, 320-349. [CrossRef]

377. Siwage Dharma Negara, Latif Adam. 2012. Foreign Direct Investment and Firms' Productivity Level Lesson Learned from Indonesia. *ASEAN ECONOMIC BULLETIN* **29**, 116. [CrossRef]

378. Yih-Luan Chyi, Yee-Man Lai, Wen-Hsien Liu. 2012. Knowledge spillovers and firm performance in the high-technology industrial cluster. *Research Policy* . [CrossRef]

379. M. Kugler, E. Verhoogen. 2012. Prices, Plant Size, and Product Quality. *The Review of Economic Studies* **79**, 307-339. [CrossRef]

380. Puman Ouyang, Shihe Fu. 2012. Economic growth, local industrial development and inter-regional spillovers from foreign direct investment: Evidence from China. *China Economic Review* **23**:2, 445. [CrossRef]

381. Tomohiro Machikita, Yasushi Ueki. 2012. Impacts of incoming knowledge on product innovation: technology transfer in auto-related industries in developing economies. *Asian Journal of Technology Innovation* **20**, 9-27. [CrossRef]

382. Catherine McAuliffe, Sweta Chaman Saxena, Masafumi Yabara. 2012. The East African Community: Prospects for Sustained Growth. *IMF Working Papers* **12**, 1. [CrossRef]

383. Torfinn Harding, Beata S. Javorcik. 2011. Roll Out the Red Carpet and They Will Come: Investment Promotion and FDI Inflows*. *The Economic Journal* **121**, 1445-1476. [CrossRef]

384. Xun Cao, Aseem Prakash. 2011. Growing exports by signaling product quality: Trade competition and the cross-national diffusion of ISO 9000 quality standards. *Journal of Policy Analysis and Management* **30**:10.1002/pam.v30.1, 111-135. [CrossRef]

385. Xiaolan Fu. 2011. Processing Trade, FDI and the Exports of Indigenous Firms: Firm-Level Evidence from Technology-Intensive Industries in China. *Oxford Bulletin of Economics and Statistics* **73**:10.1111/obes.2011.73.issue-6, 792-817. [CrossRef]

386. Cosmina Lelia Voinea, Hans Van Kranenburg. 2011. Colocation Patterns of Foreign-Owned Firms in a Small Open Economy: Evidence from the Netherlands. *European Planning Studies* **19**, 2047-2072. [CrossRef]

387. Bin Guo, Xiaoling Chen. 2011. How does FDI influence industry-level knowledge production efficiency in China?. *Asian Journal of Technology Innovation* **19**, 263-277. [CrossRef]

388. Xiaolan Fu, Jing Zhang. 2011. Technology transfer, indigenous innovation and leapfrogging in green technology: the solar-PV industry in China and India. *Journal of Chinese Economic and Business Studies* **9**, 329-347. [CrossRef]

389. Bahar Bayraktar Saglam, Selin Sayek. 2011. MNEs and wages: The role of productivity spillovers and imperfect labor markets. *Economic Modelling* **28**, 2736-2742. [CrossRef]

390. Fabienne Fortanier, Selwyn J. V. Moons. 2011. Foreign Investors in The Netherlands: Heterogeneous Employment and Productivity Effects. *De Economist* . [CrossRef]

391. Lingyun Huang, Xiaming Liu, Lei Xu. 2011. Regional Innovation and Spillover Effects of Foreign Direct Investment in China: A Threshold Approach. *Regional Studies* 1-14. [CrossRef]

392. Chun-Hung Lin, Chia-Ming Lee, Chih-Hai Yang. 2011. Does foreign direct investment really enhance China's regional productivity?. *The Journal of International Trade & Economic Development* 1-28. [CrossRef]

393. Paolo Figini, Holger Go¨rg. 2011. Does Foreign Direct Investment Affect Wage Inequality? An Empirical Investigation. *The World Economy* **34**:10.1111/twec.2011.34.issue-9, 1455-1475. [CrossRef]

394. Alexandros Ragoussis. 2011. The investment development path in space. *Review of World Economics* **147**, 527-541. [CrossRef]

395. Andreas Waldkirch. 2011. Comparative advantage FDI? A host country perspective. *Review of World Economics* **147**, 485-505. [CrossRef]

396. Beata S. Javorcik, Mariana Spatareanu. 2011. Does it matter where you come from? Vertical spillovers from foreign direct investment and the origin of investors. *Journal of Development Economics* **96**, 126-138. [CrossRef]

397. Sanja Samirana Pattnayak, Shandre M. Thangavelu. 2011. Linkages and technology spillovers in the presence of foreign firms. *Journal of Economic Studies* **38**, 275-286. [CrossRef]

398. Sophocles N. Brissimis, Manthos D. Delis. 2011. Bank-level estimates of market power. *European Journal of Operational Research* **212**, 508-517. [CrossRef]

399. Yasuyuki Todo, Weiying Zhang, Lei-An Zhou. 2011. Intra-industry Knowledge Spillovers from Foreign Direct Investment in Research and Development: Evidence from China's "Silicon Valley". *Review of Development Economics* **15**:10.1111/rode.2011.15.issue-3, 569-585. [CrossRef]

400. Lamia Ben Hamida. 2011. FDI and spillovers in the Swiss services/construction industry. *Critical perspectives on international business* **7**, 224-249. [CrossRef]

401. Xiaolan Fu, Carlo Pietrobelli, Luc Soete. 2011. The Role of Foreign Technology and Indigenous Innovation in the Emerging Economies: Technological Change and Catching-up. *World Development* **39**, 1204-1212. [CrossRef]

402. Tomas Havranek, Zuzana Irsova. 2011. Estimating vertical spillovers from FDI: Why results vary and what the true effect is. *Journal of International Economics* . [CrossRef]

403. Xiaolan Fu, Yundan Gong. 2011. Indigenous and Foreign Innovation Efforts and Drivers of Technological Upgrading: Evidence from China. *World Development* **39**, 1213-1225. [CrossRef]

404. Fabian Barthel, Matthias Busse, Robert Osei. 2011. The Characteristics and Determinants of FDI in Ghana. *The European Journal of Development Research* **23**:3, 389-408. [CrossRef]

405. Xinpeng Xu, Yu Sheng. 2011. Productivity Spillovers from Foreign Direct Investment: Firm-Level Evidence from China. *World Development* . [CrossRef]

406. Feng Helen Liang, Dean XuKnowledge network and innovation activities by MNC subsidiaries: The effects of internal and external knowledge resources 388-393. [CrossRef]

407. Meghana Ayyagari, Asli Demirgüç-Kunt, Vojislav Maksimovic. 2011. Firm Innovation in Emerging Markets: The Role of Finance, Governance, and Competition. *Journal of Financial and Quantitative Analysis* 1-70. [CrossRef]

408. Xi Yang, Yang Yao. 2011. Environmental Compliance and Firm Performance: Evidence from China*. *Oxford Bulletin of Economics and Statistics* no-no. [CrossRef]

409. Sofiane Ghali, Sami Rezgui. 2011. FDI Contribution to Technical Efficiency in the Tunisian Manufacturing Sector: Evidence from Micro-panel Data. *International Economic Journal* **25**, 319-339. [CrossRef]

410. Aljaž Kunčič, Marjan Svetličič. 2011. Who's Who in Foreign Direct Investment Promotion. *Eastern European Economics* **49**, 66-88. [CrossRef]

411. Jan Hanousek, Evžen Kočenda, Mathilde Maurel. 2011. Direct and indirect effects of FDI in emerging European markets: A survey and meta-analysis. *Economic Systems* . [CrossRef]

412. Lee Branstetter, Kamal Saggi. 2011. Intellectual Property Rights, Foreign Direct Investment and Industrial Development*. *The Economic Journal* no-no. [CrossRef]

413. Giovanni Pica, José V. Rodríguez Mora. 2011. Who's afraid of a globalized world? Foreign Direct Investments, local knowledge and allocation of talents. *Journal of International Economics* . [CrossRef]

414. Hoi Quoc Le, Richard Pomfret. 2011. Technology spillovers from foreign direct investment in Vietnam: horizontal or vertical spillovers?. *Journal of the Asia Pacific Economy* **16**, 183-201. [CrossRef]

415. Vassilis Monastiriotis, Rodrigo Alegria. 2011. Origin of FDI and Intra-Industry Domestic Spillovers: The Case of Greek and European FDI in Bulgaria. *Review of Development Economics* **15**:10.1111/rode.2011.15.issue-2, 326-339. [CrossRef]

416. Holger Görg, Aoife Hanley, Eric Strobl. 2011. Creating Backward Linkages from Multinationals: Is there a Role for Financial Incentives?. *Review of International Economics* **19**:10.1111/roie.2011.19.issue-2, 245-259. [CrossRef]

417. Jens M. Arnold, Beata S. Javorcik, Aaditya Mattoo. 2011. Does services liberalization benefit manufacturing firms?. *Journal of International Economics* . [CrossRef]

418. GALINA HALE, CHERYL LONG. 2011. ARE THERE PRODUCTIVITY SPILLOVERS FROM FOREIGN DIRECT INVESTMENT IN CHINA?. *Pacific Economic Review* **16**:10.1111/paer.2011.16.issue-2, 135-153. [CrossRef]

419. K.-M. Nam. 2011. Learning through the international joint venture: lessons from the experience of China's automotive sector. *Industrial and Corporate Change* . [CrossRef]

420. Hanna Pesola. 2011. Labour Mobility and Returns to Experience in Foreign Firms*. *Scandinavian Journal of Economics* no-no. [CrossRef]

421. PEDRO S. MARTINS. 2011. PAYING MORE TO HIRE THE BEST? FOREIGN FIRMS, WAGES, AND WORKER MOBILITY. *Economic Inquiry* **49**:10.1111/ecin.2011.49.issue-2, 349-363. [CrossRef]

422. Igor Filatotchev, Xiaohui Liu, Jiangyong Lu, Mike Wright. 2011. Knowledge spillovers through human mobility across national borders: Evidence from Zhongguancun Science Park in China. *Research Policy* **40**, 453-462. [CrossRef]

423. Tor Eriksson, Mariola Pytlikova. 2011. Foreign ownership wage premia in emerging economies. *Economics of Transition* **19**:10.1111/ecot.2011.19.issue-2, 371-395. [CrossRef]

424. E. Atalay, A. Hortacsu, J. Roberts, C. Syverson. 2011. Network structure of production. *Proceedings of the National Academy of Sciences* **108**, 5199-5202. [CrossRef]

425. Guoqing Zhao, Zhongyuan Zhang. 2011. Does method selection matter? A new look at FDI and human capital in Chinese high-tech industries. *Frontiers of Economics in China* **6**, 36-54. [CrossRef]

426. Beata S. Javorcik, Çağlar Özden, Mariana Spatareanu, Cristina Neagu. 2011. Migrant networks and foreign direct investment. *Journal of Development Economics* **94**, 231-241. [CrossRef]

427. Christina Hallin, Christine Holmström Lind. 2011. Revisiting the external impact of MNCs: An empirical study of the mechanisms behind knowledge spillovers from MNC subsidiaries. *International Business Review* . [CrossRef]

428. Ragnhild Balsvik. 2011. Is Labor Mobility a Channel for Spillovers from Multinationals? Evidence from Norwegian Manufacturing. *Review of Economics and Statistics* **93**, 285-297. [CrossRef]

429. SOUMYANANDA DINDA, ARIJIT MUKHERJEE. 2011. International Outsourcing, Tax, and Patent Protection. *Journal of Public Economic Theory* **13**:10.1111/jpet.2011.13.issue-1, 139-154. [CrossRef]

430. Qian Gu, Jane W Lu. 2011. Effects of inward investment on outward investment: The venture capital industry worldwide 1985–2007. *Journal of International Business Studies* **42**:2, 263-284. [CrossRef]

431. Xiaolan Fu, Christian Helmers, Jing Zhang. 2011. The two faces of foreign management capabilities: FDI and productive efficiency in the UK retail sector. *International Business Review* . [CrossRef]

432. Haiyang Zhang, Tetsushi Sonobe. 2011. Business Incubators in China: An Inquiry into the Variables Associated with Incubatee Success. *Economics: The Open-Access, Open-Assessment E-Journal* **5**, 1. [CrossRef]

433. Priit Vahter. 2011. Does FDI Spur Productivity, Knowledge Sourcing and Innovation by Incumbent Firms? Evidence from Manufacturing Industry in Estonia. *The World Economy* **34**:8, 1308. [CrossRef]

434. Michael Hübler. 2011. Technology diffusion under contraction and convergence: A CGE analysis of China. *Energy Economics* **33**, 131-142. [CrossRef]

435. Lee Branstetter, Ray Fisman, C. Fritz Foley, Kamal Saggi. 2011. Does intellectual property rights reform spur industrial development?#. *Journal of International Economics* **83**, 27-36. [CrossRef]

436. Jan Hagemejer, Marcin Kolasa. 2011. Internationalisation and Economic Performance of Enterprises: Evidence from Polish Firm-level Data. *The World Economy* **34**:10.1111/twec.2011.34.issue-1, 74-100. [CrossRef]

437. Pervez N. Ghauri, Rebecca FirthThe Impact of Foreign Direct Investment on Local Firms: Western Firms in Emerging Markets 379-405. [CrossRef]

438. Jean-Louis Combes, Patrick Plane, Tidiane Kinda. 2011. Capital Flows, Exchange Rate Flexibility, and the Real Exchange Rate. *IMF Working Papers* **11**, 1. [CrossRef]

439. Hyuk Hwang Kim, June Dong Kim. 2010. Productivity Spillover Effect of Foreign Direct Investment into Korea. *Journal of East Asian Economic Integration* **14**:2, 21-46. [CrossRef]

440. Liqun Zhou, Liangke Xia. 2010. How R&D investments influence TFP growth: Evidence from China's large and medium-sized industrial enterprises. *Frontiers of Economics in China* **5**, 537-558. [CrossRef]

441. Joachim Jarreau, Sandra Poncet. 2010. What Chinese Provinces Export Matter for Their Income and Export Performance. *Asia-Pacific Journal of Accounting & Economics* **17**, 279-297. [CrossRef]

442. Sajid Anwar, Lan Phi Nguyen. 2010. Absorptive capacity, foreign direct investment-linked spillovers and economic growth in Vietnam. *Asian Business & Management* **9**, 553-570. [CrossRef]

443. L. Iacovone, G. A. Crespi. 2010. Catching up with the technological frontier:Micro-level evidence on growth and convergence. *Industrial and Corporate Change* **19**, 2073-2096. [CrossRef]

444. Kazunobu Hayakawa, Tomohiro Machikita, Fukunari Kimura. 2010. GLOBALIZATION AND PRODUCTIVITY: A SURVEY OF FIRM-LEVEL ANALYSIS. *Journal of Economic Surveys* no-no. [CrossRef]

445. Katja Zajc Kejžar. 2010. The role of foreign direct investment in the host-country firm selection process: firm-level evidence from Slovenian manufacturing. *Review of World Economics* . [CrossRef]

446. Dilip K. Das. 2010. Financial globalization: a macroeconomic angle. *Journal of Financial Economic Policy* **2**, 307-325. [CrossRef]

447. Patrik Karpaty, Richard Kneller. 2010. Demonstration or congestion? Export spillovers in Sweden. *Review of World Economics* . [CrossRef]

448. Yang Hui-li, Jiang Zhen-huan, Gong XiaoEmpirical research on the backward technology spillover effects of foreign direct investment based on global value chain 798-803. [CrossRef]

449. Renáta Kosová. 2010. Do Foreign Firms Crowd Out Domestic Firms? Evidence from the Czech Republic. *Review of Economics and Statistics* **92**, 861-881. [CrossRef]

450. Anabel Marin, Subash Sasidharan. 2010. Heterogeneous MNC subsidiaries and technological spillovers: Explaining positive and negative effects in India. *Research Policy* **39**, 1227-1241. [CrossRef]

451. James E. Rauch. 2010. Development through synergistic reforms. *Journal of Development Economics* **93**, 153-161. [CrossRef]

452. Yanling Wang. 2010. FDI and productivity growth: the role of inter-industry linkages. *Canadian Journal of Economics/Revue canadienne d'économique* **43**, 1243-1272. [CrossRef]

453. Salvador Barrios, Holger Görg, Eric Strobl. 2010. Spillovers through backward linkages from multinationals: Measurement matters!. *European Economic Review* . [CrossRef]

454. ALEXANDER HIJZEN, TOMOHIKO INUI, YASUYUKI TODO. 2010. DOES OFFSHORING PAY? FIRM-LEVEL EVIDENCE FROM JAPAN. *Economic Inquiry* **48**, 880-895. [CrossRef]

455. Roger Smeets, Yingqi Wei. 2010. Productivity Effects of United States Multinational Enterprises: The Roles of Market Orientation and Regional Integration. *Regional Studies* **44**, 949-963. [CrossRef]

456. Ilke Van Beveren. 2010. TOTAL FACTOR PRODUCTIVITY ESTIMATION: A PRACTICAL REVIEW. *Journal of Economic Surveys* no-no. [CrossRef]

457. Canfei He, Junsong Wang. 2010. Geographical agglomeration and co-agglomeration of foreign and domestic enterprises: a case study of Chinese manufacturing industries. *Post-Communist Economies* **22**, 323-343. [CrossRef]

458. Anabel Marin, Martin Bell. 2010. The local/global integration of MNC subsidiaries and their technological behaviour: Argentina in the late 1990s. *Research Policy* **39**, 919-931. [CrossRef]

459. Xiaohui Liu, Jiangyong Lu, Igor Filatotchev, Trevor Buck, Mike Wright. 2010. Returnee entrepreneurs, knowledge spillovers and innovation in high-tech firms in emerging economies. *Journal of International Business Studies* **41**:7, 1183-1197. [CrossRef]

460. Biswajit Banerjee, Mariusz Jarmuzek. 2010. Economic Growth and Regional Disparities in the Slovak Republic. *Comparative Economic Studies* **52**:3, 379-403. [CrossRef]

461. Macrofinancial Linkages . [CrossRef]

462. Matthew T. Cole, Ronald B. Davies. 2010. Strategic tariffs, tariff jumping, and heterogeneous firms. *European Economic Review* . [CrossRef]

463. Zhongxiu Zhao, Kevin Honglin Zhang. 2010. FDI and Industrial Productivity in China: Evidence from Panel Data in 2001-06. *Review of Development Economics* **14**:10.1111/rode.2010.14.issue-3, 656-665. [CrossRef]

464. M. Brahmbhatt, A. Hu. 2010. Ideas and Innovation in East Asia. *The World Bank Research Observer* **25**, 177-207. [CrossRef]

465. Ronald U. Mendoza. 2010. Trade-induced Learning and Industrial Catch-up*. *The Economic Journal* **120**:10.1111/ecoj.2010.120.issue-546, F313-F350. [CrossRef]

466. Céline Azémar, Rodolphe Desbordes. 2010. Short-run Strategies for Attracting Foreign Direct Investment. *World Economy* **33**:10.1111/twec.2010.33.issue-7, 928-957. [CrossRef]

467. Timothy C. Ford, Jonathan C. Rork. 2010. Why buy what you can get for free? The effect of foreign direct investment on state patent rates. *Journal of Urban Economics* **68**, 72-81. [CrossRef]

468. S. Mariotti, L. Piscitello, S. Elia. 2010. Spatial agglomeration of multinational enterprises: the role of information externalities and knowledge spillovers. *Journal of Economic Geography* **10**, 519-538. [CrossRef]

469. Xiaowen Tian. 2010. Managing FDI technology spillovers: A challenge to TNCs in emerging markets. *Journal of World Business* **45**, 276-284. [CrossRef]

470. Kazuyuki Motohashi, Yuan Yuan. 2010. Productivity impact of technology spillover from multinationals to local firms: Comparing China's automobile and electronics industries. *Research Policy* **39**, 790-798. [CrossRef]

471. Marcella Nicolini, Laura Resmini. 2010. FDI spillovers in new EU member states. *Economics of Transition* **18**:10.1111/ecot.2010.18.issue-3, 487-511. [CrossRef]

472. Nauro F Campos, Yuko Kinoshita. 2010. Structural Reforms, Financial Liberalization, and Foreign Direct Investment. *IMF Staff Papers* **57**, 326-365. [CrossRef]

473. Alberto Behar, Phil Manners. 2010. Distance to Growing Markets and Sub-Saharan African Exports*. *African Development Review* **22**:10.1111/afdr.2010.22.issue-2, 316-330. [CrossRef]

474. Eric Rugraff. 2010. Foreign Direct Investment (FDI) and Supplier-Oriented Upgrading in the Czech Motor Vehicle Industry. *Regional Studies* **44**, 627-638. [CrossRef]

475. Cesare Imbriani, Rosanna Pittiglio, Filippo ReganatiOutward FDI and home-country performance: Evidence from Italian manufacturing and service firms 75-82. [CrossRef]

476. Alla Lileeva. 2010. The benefits to domestically owned plants from inward direct investment: the role of vertical linkages. *Canadian Journal of Economics/Revue canadienne d'économique* **43**:10.1111/caje.2010.43.issue-2, 574-603. [CrossRef]

477. Yuriy Gorodnichenko,, Jan Svejnar,, Katherine Terrell. 2010. Globalization and Innovation in Emerging Markets. *American Economic Journal: Macroeconomics* **2**:2, 194-226. [Abstract] [View PDF article] [PDF with links]

478. Shunsuke Managi, Samuel Mulenga Bwalya. 2010. Foreign direct investment and technology spillovers in sub-Saharan Africa. *Applied Economics Letters* **17**, 605-608. [CrossRef]

479. Denvil Duncan, Klara Sabirianova Peter. 2010. Does labour supply respond to a flat tax?. *Economics of Transition* **18**:10.1111/ecot.2010.18.issue-2, 365-404. [CrossRef]

480. BEATA S. JAVORCIK, KAMAL SAGGI. 2010. TECHNOLOGICAL ASYMMETRY AMONG FOREIGN INVESTORS AND MODE OF ENTRY. *Economic Inquiry* **48**:10.1111/ecin.2010.48.issue-2, 415-433. [CrossRef]

481. RAGNHILD BALSVIK. 2010. Multinationals' Mode of Entry in the Presence of Upstream Spillovers. *Economica* **77**:10.1111/ecca.2010.77.issue-306, 334-351. [CrossRef]

482. Greigory Mordue. 2010. Unanticipated Outcomes: Lessons from Canadian Automotive FDI Attraction in the 1980s. *Canadian Public Policy* **36**, S1-S29. [CrossRef]

483. Marco Ferretti, Adele Parmentola. 2010. FDI knowledge spillovers and host government policies: the Iranian experience. *European Business Review* **22**, 175-194. [CrossRef]

484. Maggie Xiaoyang Chen, Michael O. Moore. 2010. Location decision of heterogeneous multinational firms. *Journal of International Economics* **80**, 188-199. [CrossRef]

485. Miguel Fuentes, Diego Saravia. 2010. Sovereign defaulters: Do international capital markets punish them?#. *Journal of Development Economics* **91**, 336-347. [CrossRef]

486. Laura Alfaro, Areendam Chanda, Sebnem Kalemli-Ozcan, Selin Sayek. 2010. Does foreign direct investment promote growth? Exploring the role of financial markets on linkages#. *Journal of Development Economics* **91**, 242-256. [CrossRef]

487. Eric Rugraff. 2010. Strengths and weaknesses of the outward FDI paths of the Central European countries. *Post-Communist Economies* **22**, 1-17. [CrossRef]

488. Meghana Ayyagari, Renáta Kosová. 2010. Does FDI Facilitate Domestic Entry? Evidence from the Czech Republic. *Review of International Economics* **18**:10.1111/roie.2010.18.issue-1, 14-29. [CrossRef]

489. Florentina Constantin, Giovanna de Giusti, Giuseppe Tattara. 2010. Strategies of Italian Firms in Romania: Evidence from Selected Case Studies. *Transition Studies Review* **16**, 829-847. [CrossRef]

490. Naotaka Sawada. 2010. Technology Gap Matters on Spillover. *Review of Development Economics* **14**:10.1111/rode.2010.14.issue-1, 103-120. [CrossRef]

491. MICHAEL HÜBLER, ANDREAS KELLER. 2010. Energy savings via FDI? Empirical evidence from developing countries. *Environment and Development Economics* **15**, 59. [CrossRef]

492. Yama Temouri, Nigel L Driffield, Dolores Añón Higón. 2010. German Outward FDI and Firm Performance. *Applied Economics Quarterly* **56**, 31-50. [CrossRef]

493. Ann Harrison, Andrés Rodríguez-ClareTrade, Foreign Investment, and Industrial Policy for Developing Countries* 4039-4214. [CrossRef]

494. Guoqing Zhao, Zhongyuan Zhang. 2010. Uncovering the Relationship between FDI, Human Capital and Technological Progress in Chinese High-technology Industries. *China & World Economy* **18**:10.1111/cwe.2010.18.issue-1, 82-98. [CrossRef]

495. Jan Fagerberg, Martin Srholec, Bart VerspagenInnovation and Economic Development 833-872. [CrossRef]

496. Wolfgang KellerInternational Trade, Foreign Direct Investment, and Technology Spillovers 793-829. [CrossRef]

497. Yan Zhang, Haiyang Li, Yu Li, Li-An Zhou. 2010. FDI spillovers in an emerging market: the role of foreign firms' country origin diversity and domestic firms' absorptive capacity. *Strategic Management Journal* n/a-n/a. [CrossRef]

498. M. Ayhan Kose, Eswar Prasad, Kenneth Rogoff, Shang-Jin WeiFinancial Globalization and Economic Policies* 4283-4359. [CrossRef]

499. Wenying Fu, Javier Revilla Diez. 2010. Knowledge spillover and technological upgrading: The case of Guangdong province, China. *Asian Journal of Technology Innovation* **18**, 187-217. [CrossRef]

500. Kazuhiko Yokota, Akinori Tomohara. 2010. Modeling FDI-Induced Technology Spillovers. *The International Trade Journal* **24**, 5-34. [CrossRef]

501. Filip Abraham, Jozef Konings, Veerle Slootmaekers. 2010. FDI spillovers in the Chinese manufacturing sector. *Economics of Transition* **18**:10.1111/ecot.2009.18.issue-1, 143-182. [CrossRef]

502. J. Jabar, C. SoosayAn assessment of technology transfer in Malaysian manufacturers and the impact on performance and innovativeness 983-989. [CrossRef]

503. James Rauchgrowth and international trade 116-123. [CrossRef]

504. Sandra PoncetInward and Outward FDI in China 112-134. [CrossRef]

505. Deborah L. SwensonMultinationals and Trade Linkages 165-183. [CrossRef]

506. Irene Brambilla, Galina Hale, Cheryl Long. 2009. Foreign Direct Investment and the Incentives to Innovate and Imitate*. *Scandinavian Journal of Economics* **111**:10.1111/sjoe.2009.111.issue-4, 835-861. [CrossRef]

507. Massimo G. Colombo, Luca Grilli, Samuele Murtinu, Lucia Piscitello, Evila Piva. 2009. Effects of international R&D alliances on performance of high-tech start-ups: a longitudinal analysis. *Strategic Entrepreneurship Journal* **3**:10.1002/sej.v3:4, 346-368. [CrossRef]

508. Natalia Ramondo. 2009. Foreign Plants and Industry Productivity: Evidence from Chile. *Scandinavian Journal of Economics* **111**:10.1111/sjoe.2009.111.issue-4, 789-809. [CrossRef]

509. Beata S. Javorcik, Mariana Spatareanu. 2009. Tough Love: Do Czech Suppliers Learn from their Relationships with Multinationals?*. *Scandinavian Journal of Economics* **111**:10.1111/sjoe.2009.111.issue-4, 811-833. [CrossRef]

510. Jingjing Yang, Helian Xu, Chengang Wang, Mingyong Lai, Yingqi Wei. 2009. Productivity spillovers from foreign direct investment in Chinese industries. *Journal of Chinese Economic and Business Studies* **7**, 429-446. [CrossRef]

511. Gábor Békés, Jörn Kleinert, Farid Toubal. 2009. Spillovers from Multinationals to Heterogeneous Domestic Firms: Evidence from Hungary. *World Economy* **32**:10.1111/twec.2009.32.issue-10, 1408-1433. [CrossRef]

512. Rachel Griffith, Stephen Redding, Helen Simpson. 2009. TECHNOLOGICAL CATCH-UP AND GEOGRAPHIC PROXIMITY. *Journal of Regional Science* **49**:10.1111/jors.2009.49.issue-4, 689-720. [CrossRef]

513. Steven Poelhekke, Frederick van der Ploeg. 2009. FOREIGN DIRECT INVESTMENT AND URBAN CONCENTRATIONS: UNBUNDLING SPATIAL LAGS. *Journal of Regional Science* **49**:10.1111/jors.2009.49.issue-4, 749-775. [CrossRef]

514. Ricardo A. López, Jens Südekum. 2009. VERTICAL INDUSTRY RELATIONS, SPILLOVERS, AND PRODUCTIVITY: EVIDENCE FROM CHILEAN PLANTS. *Journal of Regional Science* **49**:10.1111/jors.2009.49.issue-4, 721-747. [CrossRef]

515. Peter Enderwick. 2009. Responding to global crisis: the contribution of emerging markets to strategic adaptation. *International Journal of Emerging Markets* **4**, 358-374. [CrossRef]

516. Jens Matthias Arnold, Beata S. Javorcik. 2009. Gifted kids or pushy parents? Foreign direct investment and plant productivity in Indonesia#. *Journal of International Economics* **79**, 42-53. [CrossRef]

517. Wen Xiao, Gao-bang Lin, Jin-song HeFDI, independent innovation and economic growth: Evidences from the interprovincial experience of China 916-924. [CrossRef]

518. Mantian Xue, Shudong Zhao. 2009. Influence of export on innovation activities of domestic enterprises. *Frontiers of Economics in China* **4**, 449-460. [CrossRef]

519. María C. Latorre, Oscar Bajo-Rubio, Antonio G. Gómez-Plana. 2009. The effects of multinationals on host economies: A CGE approach. *Economic Modelling* **26**, 851-864. [CrossRef]

520. Klaus E Meyer, Evis Sinani. 2009. When and where does foreign direct investment generate positive spillovers? A meta-analysis. *Journal of International Business Studies* **40**:7, 1075-1094. [CrossRef]

521. Carlo Altomonte, Enrico Pennings. 2009. Domestic plant productivity and incremental spillovers from foreign direct investment. *Journal of International Business Studies* **40**:7, 1131-1148. [CrossRef]

522. Garrick Blalock, Daniel H Simon. 2009. Do all firms benefit equally from downstream FDI? The moderating effect of local suppliers' capabilities on productivity gains. *Journal of International Business Studies* **40**:7, 1095-1112. [CrossRef]

523. Xiaming Liu, Chengang Wang, Yingqi Wei. 2009. Do local manufacturing firms benefit from transactional linkages with multinational enterprises in China?. *Journal of International Business Studies* **40**:7, 1113-1130. [CrossRef]

524. Nuno Crespo, Maria Paula Fontoura, Isabel Proença. 2009. FDI spillovers at regional level: Evidence from Portugal. *Papers in Regional Science* **88**:10.1111/pirs.2009.88.issue-3, 591-607. [CrossRef]

525. YANLING WANG. 2009. IS NORTH-SOUTH TRADE-RELATED TECHNOLOGY DIFFUSION REGIONAL?. *Contemporary Economic Policy* **27**:10.1111/coep.2009.27.issue-3, 402-412. [CrossRef]

526. Jože P. Damijan, José de Sousa, Olivier Lamotte. 2009. Does international openness affect the productivity of local firms?. *Economics of Transition* **17**:10.1111/ecot.2009.17.issue-3, 559-586. [CrossRef]

527. Sunny Li Sun. 2009. Internationalization Strategy of MNEs from Emerging Economies: The Case of Huawei. *Multinational Business Review* **17**, 129-156. [CrossRef]

528. Xiaolan Fu, Yundan Gong. 2009. International and Intranational Technological Spillovers and Productivity Growth in China *. *Asian Economic Papers* **8**, 1-23. [CrossRef]

529. Bin Qiu, Shuai Yang, Peijiang Xin, Berna Kirkulak. 2009. FDI technology spillover and the productivity growth of China's manufacturing sector. *Frontiers of Economics in China* **4**, 209-227. [CrossRef]

530. JOTA ISHIKAWA, YOICHI SUGITA, LAIXUN ZHAO. 2009. Corporate Control, Foreign Ownership Regulations and Technology Transfer. *Economic Record* **85**:10.1111/ecor.2009.85.issue-269, 197-209. [CrossRef]

531. DANI RODRIK. 2009. INDUSTRIAL POLICY: DON'T ASK WHY, ASK HOW. *Middle East Development Journal* **01**, 1-29. [CrossRef]

532. Davin Chor. 2009. Subsidies for FDI: Implications from a model with heterogeneous firms. *Journal of International Economics* **78**, 113-125. [CrossRef]

533. Can Huang, Naubahar Sharif. 2009. Manufacturing dynamics and spillovers: The case of Guangdong Province and Hong Kong, Macau, and Taiwan (HKMT). *Research Policy* **38**, 813-828. [CrossRef]

534. Slavo Radosevic. 2009. Research and Development, Competitiveness and European Integration of South Eastern Europe. *Europe-Asia Studies* **61**, 621-650. [CrossRef]

535. Xiaowen Tian, Shuanglin Lin. 2009. FDI Technology Spillovers Within And Across Industries: Evidence From China. *Journal of Asia Business Studies* **3**, 29-36. [CrossRef]

536. Adam Blake, Ziliang Deng, Rod Falvey. 2009. How does the productivity of foreign direct investment spill over to local firms in Chinese manufacturing?. *Journal of Chinese Economic and Business Studies* **7**, 183-197. [CrossRef]

537. Grazia D. Santangelo. 2009. MNCs and linkages creation: Evidence from a peripheral area. *Journal of World Business* **44**, 192-205. [CrossRef]

538. Björn Jindra, Axèle Giroud, Joanna Scott-Kennel. 2009. Subsidiary roles, vertical linkages and economic development: Lessons from transition economies. *Journal of World Business* **44**, 167-179. [CrossRef]

539. M Ayhan Kose, Eswar Prasad, Kenneth Rogoff, Shang-Jin Wei. 2009. Financial Globalization: A Reappraisal. *IMF Staff Papers* **56**, 8-62. [CrossRef]

540. Faith Hatani. 2009. The logic of spillover interception: The impact of global supply chains in China. *Journal of World Business* **44**, 158-166. [CrossRef]

541. Štěpán Jurajda, Katherine Terrell. 2009. Regional unemployment and human capital in transition economies 1. *Economics of Transition* **17**:10.1111/ecot.2009.17.issue-2, 241-274. [CrossRef]

542. Federica Saliola, Antonello Zanfei. 2009. Multinational firms, global value chains and the organization of knowledge transfer. *Research Policy* **38**, 369-381. [CrossRef]

543. Sailesh Tanna. 2009. The impact of foreign direct investment on total factor productivity growth. *Managerial Finance* **35**, 297-311. [CrossRef]

544. Jürgen Bitzer, Holger Görg. 2009. Foreign Direct Investment, Competition and Industry Performance. *World Economy* **32**:10.1111/twec.2009.32.issue-2, 221-233. [CrossRef]

545. Philippe Aghion, Richard Blundell, Rachel Griffith, Peter Howitt, Susanne Prantl. 2009. The Effects of Entry on Incumbent Innovation and Productivity. *Review of Economics and Statistics* **91**, 20-32. [CrossRef]

546. Sadayuki Takii. 2009. Multinationals, Technology Upgrading, and Wages in Urban and Rural Indonesia. *Review of Development Economics* **13**:10.1111/rode.2009.13.issue-1, 151-163. [CrossRef]

547. Holger Görg, Michael Henry, Eric Strobl, Frank Walsh. 2009. Multinational companies, backward linkages, and labour demand elasticities. *Canadian Journal of Economics/Revue canadienne d'économique* **42**:10.1111/caje.2009.42.issue-1, 332-348. [CrossRef]

548. Robert Stehrer, Julia Woerz. 2009. 'Attract FDI!' — A universal golden rule? Empirical evidence for OECD and selected non-OECD countries. *The European Journal of Development Research* **21**:1, 95-111. [CrossRef]

549. Yusheng PengForeign direct investment and SOE performance in China: Ecvidence from the Third Industrial Census 105-127. [CrossRef]

550. Marouane ALAYA, Dalila NICET-CHENAF, Eric ROUGIER. 2009. À quelles conditions les IDE stimulent-ils la croissance ?. *Mondes en développement* **148**, 119. [CrossRef]

551. Jun Du, Sourafel Girma. 2009. The Effects of Foreign Acquisition on Domestic and Export Markets Dynamics in China. *World Economy* **32**:10.1111/twec.2009.32.issue-1, 164-177. [CrossRef]

552. Muqiang Zheng, Mingchang ZhongSpillover Effects and Technology Innovation in Local Firms: Evidence from China 543-546. [CrossRef]

553. Mariusz Jarmuzek, Biswajit Banerjee. 2009. Anatomy of Regional Disparities in the Slovak Republic. *IMF Working Papers* **09**, 1. [CrossRef]

554. J MARKUSEN, N TROFIMENKO. 2009. Teaching locals new tricks: Foreign experts as a channel of knowledge transfers. *Journal of Development Economics* **88**, 120-131. [CrossRef]

555. B. S. Javorcik, M. Spatareanu. 2009. Liquidity Constraints and Firms' Linkages with Multinationals. *The World Bank Economic Review* **23**, 323-346. [CrossRef]

556. Facundo Albornoz, Matthew A. Cole, Robert J. R. Elliott, Marco G. Ercolani. 2009. In Search of Environmental Spillovers. *World Economy* **32**:10.1111/twec.2009.32.issue-1, 136-163. [CrossRef]

557. Anne Plunket. 2009. Firms' inventiveness and localized vertical R&D spillovers. *Journal of Innovation Economics* **4**, 147. [CrossRef]

558. Ayhan Kose, Eswar Prasad, Kenneth Rogoff, Shang-Jin Wei. 2009. Financial globalization: A reappraisal. *Panoeconomicus* **56**, 143-197. [CrossRef]

559. Laura Alfaro, Sebnem Kalemli-Ozcan, Selin Sayek. 2009. FDI, Productivity and Financial Development. *World Economy* **32**:10.1111/twec.2009.32.issue-1, 111-135. [CrossRef]

560. Lorenzo Casaburi, Valeria Gattai, G. Alfredo MinervaFirms' International Status and Heterogeneity in Performance: Evidence from Italy 151-187. [CrossRef]

561. YASUYUKI TODO, SATOSHI SHIMIZUTANI. 2008. OVERSEAS R&D ACTIVITIES AND HOME PRODUCTIVITY GROWTH: EVIDENCE FROM JAPANESE FIRM-LEVEL DATA*. *The Journal of Industrial Economics* **56**:10.1111/joie.2008.56.issue-4, 752-777. [CrossRef]

562. Joseph Francois, Julia Woerz. 2008. Producer Services, Manufacturing Linkages, and Trade. *Journal of Industry, Competition and Trade* **8**, 199-229. [CrossRef]

563. Johannes Van Biesebroeck. 2008. Governments at the bidding table. *New Zealand Economic Papers* **42**, 213-232. [CrossRef]

564. Nigel Driffield, Jun Du, Sourafel Girma. 2008. Optimal geographic diversification and firm performance: evidence from the U.K. *Journal of Productivity Analysis* **30**, 145-154. [CrossRef]

565. Eric Rugraff. 2008. Are the FDI policies of the Central European countries efficient?. *Post-Communist Economies* **20**, 303-316. [CrossRef]

566. Joshua Abor, Simon Harvey. 2008. Foreign direct investment and employment: host country experience. *Macroeconomics and Finance in Emerging Market Economies* **1**, 213-225. [CrossRef]

567. John S. Ahlquist, Aseem Prakash. 2008. The influence of foreign direct investment on contracting confidence in developing countries. *Regulation & Governance* **2**:10.1111/rego.2008.2.issue-3, 316-339. [CrossRef]

568. Sjoerd Beugelsdijk, Roger Smeets, Remco Zwinkels. 2008. The impact of horizontal and vertical FDI on host's country economic growth. *International Business Review* **17**, 452-472. [CrossRef]

569. Ruth Rama. 2008. Foreign investment innovation: a review of selected policies. *The Journal of Technology Transfer* **33**, 353-363. [CrossRef]

570. Oleg Badunenko, Daniel J. Henderson, Valentin Zelenyuk. 2008. Technological Change and Transition: Relative Contributions to Worldwide Growth During the 1990s*. *Oxford Bulletin of Economics and Statistics* **70**:10.1111/obes.2008.70.issue-4, 461-492. [CrossRef]

571. Matthias Busse, Jos Luis Groizard. 2008. Foreign Direct Investment, Regulations and Growth. *World Economy* **31**:10.1111/twec.2008.31.issue-7, 861-886. [CrossRef]

572. Xiaohui Liu, Huan Zou. 2008. The impact of greenfield FDI and mergers and acquisitions on innovation in Chinese high-tech industries. *Journal of World Business* **43**, 352-364. [CrossRef]

573. R. Smeets. 2008. Collecting the Pieces of the FDI Knowledge Spillovers Puzzle. *The World Bank Research Observer* **23**, 107-138. [CrossRef]

574. B. S. Javorcik. 2008. Can Survey Evidence Shed Light on Spillovers from Foreign Direct Investment?. *The World Bank Research Observer* **23**, 139-159. [CrossRef]

575. N. Bandelj. 2008. Economic objects as cultural objects: discourse on foreign investment in post-socialist Europe. *Socio-Economic Review* **6**, 671-702. [CrossRef]

576. Sea Jin Chang, Dean Xu. 2008. Spillovers and competition among foreign and local firms in China. *Strategic Management Journal* **29**:10.1002/smj.v29:5, 495-518. [CrossRef]

577. Rita Almeida, Ana Margarida Fernandes. 2008. Openness and Technological Innovations in Developing Countries: Evidence from Firm-Level Surveys. *Journal of Development Studies* **44**, 701-727. [CrossRef]

578. Gustavo Crespi, Chiara Criscuolo, Jonathan Haskel. 2008. Productivity, exporting, and the learning-by-exporting hypothesis: direct evidence from UK firms. *Canadian Journal of Economics/Revue canadienne d'économique* **41**:10.1111/caje.2008.41.issue-2, 619-638. [CrossRef]

579. Elisa Giuliani. 2008. Multinational Corporations and Patterns of Local Knowledge Transfer in Costa Rican High-Tech Industries. *Development and Change* **39**:10.1111/dech.2008.39.issue-3, 385-407. [CrossRef]

580. Deborah L. Swenson. 2008. Multinationals and the creation of Chinese trade linkages. *Canadian Journal of Economics/Revue canadienne d'économique* **41**, 596-618. [CrossRef]

581. Sourafel Girma, Yundan Gong. 2008. FDI, Linkages and the Efficiency of State-Owned Enterprises in China. *Journal of Development Studies* **44**, 728-749. [CrossRef]

582. C. Altomonte, I. Colantone. 2008. Firm heterogeneity and endogenous regional disparities. *Journal of Economic Geography* **8**, 779-810. [CrossRef]

583. C. Pietrobelli, F. Saliola. 2008. Power relationships along the value chain: multinational firms, global buyers and performance of local suppliers. *Cambridge Journal of Economics* **32**, 947-962. [CrossRef]

584. YANLING WANG, CHIA-WEN CHAO. 2008. âSPILLOVERSâ AND PRODUCTIVITY: THE CASE OF THE TAIWANESE HIGH-TECH FIRMS. *Contemporary Economic Policy* **26**:10.1111/ coep.2008.26.issue-2, 248-258. [CrossRef]

585. Vasilios Kosteas. 2008. Foreign direct investment and productivity spillovers: a quantile analysis. *International Economic Journal* **22**, 25-41. [CrossRef]

586. Timothy C. Ford, Jonathan C. Rork, Bruce T. Elmslie. 2008. Foreign Direct Investment, Economic Growth, and the Human Capital Threshold: Evidence from US States*. *Review of International Economics* **16**, 96-113. [CrossRef]

587. Sourafel Girma, Holger Görg, Mauro Pisu. 2008. Exporting, linkages and productivity spillovers from foreign direct investment. *Canadian Journal of Economics/Revue canadienne d'économique* **41**, 320-340. [CrossRef]

588. M AMITI, B SMARZYNSKAJAVORCIK. 2008. Trade costs and location of foreign firms in China. *Journal of Development Economics* **85**, 129-149. [CrossRef]

589. Z LIU. 2008. Foreign direct investment and technology spillovers: Theory and evidence. *Journal of Development Economics* **85**, 176-193. [CrossRef]

590. B JAVORCIK, M SPATAREANU. 2008. To share or not to share: Does local participation matter for spillovers from foreign direct investment?#. *Journal of Development Economics* **85**, 194-217. [CrossRef]

591. Chengqi Wang, Zhongxiu Zhao. 2008. Horizontal and vertical spillover effects of foreign direct investment in Chinese manufacturing. *Journal of Chinese Economic and Foreign Trade Studies* **1**, 8-20. [CrossRef]

592. Y. Wei, X. Liu, C. Wang. 2008. Mutual productivity spillovers between foreign and local firms in China. *Cambridge Journal of Economics* **32**, 609-631. [CrossRef]

593. Simon Davies, James Davey. 2008. A Regional Multiplier Approach to Estimating the Impact of Cash Transfers on the Market: The Case of Cash Transfers in Rural Malawi. *Development Policy Review* **26**, 91-111. [CrossRef]

594. Yuko Kinoshita, Nauro F. Campos. 2008. Foreign Direct Investment and Structural Reforms: Evidence From Eastern Europe and Latin America. *IMF Working Papers* **08**, 1. [CrossRef]

595. Eswar Prasad, Marco Terrones, M. Ayhan Kose. 2008. Does Openness to International Financial Flows Raise Productivity Growth?. *IMF Working Papers* **08**, 1. [CrossRef]

596. Kazuhiko YokotaSpillovers and Linkages between Local and Foreign Plants 225-254. [CrossRef]

597. jørn rattsø, hildegunn e. stokke. 2007. A GROWTH MODEL FOR SOUTH AFRICA. *The South African Journal of Economics* **75**, 616-630. [CrossRef]

598. Léopold Simar, Valentin Zelenyuk. 2007. Statistical inference for aggregates of Farrell-type efficiencies. *Journal of Applied Econometrics* **22**:10.1002/jae.v22:7, 1367-1394. [CrossRef]

599. Mary Amiti, Jozef Konings. 2007. Trade Liberalization, Intermediate Inputs, and Productivity: Evidence from Indonesia. *American Economic Review* **97**:5, 1611-1638. [Abstract] [View PDF article] [PDF with links]

600. Davide Castellani, Antonello Zanfei. 2007. Multinational companies and productivity spillovers: is there a specification error?. *Applied Economics Letters* **14**, 1047-1051. [CrossRef]

601. László Halpern, Balázs Muraközy. 2007. Does distance matter in spillover?. *The Economics of Transition* **15**:10.1111/ecot.2007.15.issue-4, 781-805. [CrossRef]

602. Aseem Prakash, Matthew Potoski. 2007. Investing Up: FDI and the Cross-Country Diffusion of ISO 14001 Management Systems. *International Studies Quarterly* **51**:10.1111/isqu.2007.51.issue-3, 723-744. [CrossRef]

603. S. Girma, Y. Gong, H. Gorg. 2007. Foreign Direct Investment, Access to Finance, and Innovation Activity in Chinese Enterprises. *The World Bank Economic Review* **22**, 367-382. [CrossRef]

604. G BLALOCK, P GERTLER. 2007. Welfare gains from Foreign Direct Investment through technology transfer to local suppliers#. *Journal of International Economics* . [CrossRef]

605. Ronald B. Davies, Christopher J. Ellis. 2007. Competition in taxes and performance requirements for foreign direct investment. *European Economic Review* **51**, 1423-1442. [CrossRef]

606. Jonathan E Haskel, Sonia C Pereira, Matthew J Slaughter. 2007. Does Inward Foreign Direct Investment Boost the Productivity of Domestic Firms?. *Review of Economics and Statistics* **89**, 482-496. [CrossRef]

607. D DEMEKAS, B HORVATH, E RIBAKOVA, Y WU. 2007. Foreign direct investment in European transition economies—The role of policies#. *Journal of Comparative Economics* **35**, 369-386. [CrossRef]

608. Nicole Madariaga, Sandra Poncet. 2007. FDI in Chinese Cities: Spillovers and Impact on Growth. *The World Economy* **30**:10.1111/twec.2007.30.issue-5, 837-862. [CrossRef]

609. Nigel Driffield, James H Love. 2007. Linking FDI motivation and host economy productivity effects: conceptual and empirical analysis. *Journal of International Business Studies* **38**:3, 460-473. [CrossRef]

610. X LIU, T BUCK. 2007. Innovation performance and channels for international technology spillovers: Evidence from Chinese high-tech industries. *Research Policy* **36**, 355-366. [CrossRef]

611. John H. Dunning, Fabienne Fortanier. 2007. Multinational Enterprises and the New Development Paradigm: Consequences for Host Country Development. *Multinational Business Review* **15**, 25-46. [CrossRef]

612. P LIN, K SAGGI. 2007. Multinational firms, exclusivity, and backward linkages. *Journal of International Economics* **71**, 206-220. [CrossRef]

613. Nuno Crespo, Maria Paula Fontoura. 2007. Determinant Factors of FDI Spillovers – What Do We Really Know?. *World Development* **35**, 410-425. [CrossRef]

614. Jun Du, Sourafel Girma. 2007. Finance and Firm Export in China. *Kyklos* **60**:10.1111/kykl.2007.60.issue-1, 37-54. [CrossRef]

615. Eva Dantas, Elisa Giuliani, Anabel Marin. 2007. The persistence of 'capabilities' as a central issue in industrialization strategies: How they relate to MNC spillovers, industrial clusters and knowledge networks. *Asian Journal of Technology Innovation* **15**, 19-43. [CrossRef]

616. International Monetary Fund. 2007. Vietnam: Selected Issues. *IMF Staff Country Reports* **07**, 1. [CrossRef]

617. Richard Kneller, Mauro Pisu. 2007. Industrial Linkages and Export Spillovers from FDI. *The World Economy* **30**:10.1111/twec.2007.30.issue-1, 105-134. [CrossRef]

618. Francisco M. Veloso. 2006. UNDERSTANDING LOCAL CONTENT DECISIONS: ECONOMIC ANALYSIS AND AN APPLICATION TO THE AUTOMOTIVE INDUSTRY. *Journal of Regional Science* **46**:10.1111/jors.2006.46.issue-4, 747-772. [CrossRef]

619. Yasuyuki Todo, Koji Miyamoto. 2006. Knowledge Spillovers from Foreign Direct Investment and the Role of Local R&D Activities: Evidence from Indonesia. *Economic Development and Cultural Change* **55**:10.1086/edcc.2006.55.issue-1, 173-200. [CrossRef]

620. Camilla Jensen. 2006. Foreign Direct Investment and economic transition: Panacea or pain killer?. *Europe-Asia Studies* **58**, 881-902. [CrossRef]

621. M KUGLER. 2006. Spillovers from foreign direct investment: Within or between industries?. *Journal of Development Economics* **80**, 444-477. [CrossRef]

622. Yushi Yoshida, Hiro Ito. 2006. How Do the Asian Economies Compete With Japan in the US Market? Is China Exceptional? A Triangular Trade Approach. *Asia Pacific Business Review* **12**, 285-307. [CrossRef]

623. Y Wei, X Liu. 2006. Productivity spillovers from R&D, exports and FDI in China's manufacturing sector. *Journal of International Business Studies* **37**:4, 544-557. [CrossRef]

624. Valentin Zelenyuk, Vitaliy Zheka. 2006. Corporate Governance and Firm's Efficiency: The Case of a Transitional Country, Ukraine. *Journal of Productivity Analysis* **25**, 143-157. [CrossRef]

625. L BRANSTETTER. 2006. Is foreign direct investment a channel of knowledge spillovers? Evidence from Japan's FDI in the United States#. *Journal of International Economics* **68**, 325-344. [CrossRef]

626. Davide Castellani, Antonello ZanfeiMultinational Firms and Productivity Spillovers: The Role of Firms' Heterogeneity 33-60. [CrossRef]

627. M. Ayhan Kose, Eswar Prasad, Kenneth Rogoff, Shang-Jin Wei. 2006. Financial Globalization: A Reappraisal. *IMF Working Papers* **06**, 1. [CrossRef]

628. Franco PrausselloGlobalization and Incomplete Technology Transfer to Developing Countries 200-216. [CrossRef]

629. Sourafel Girma, Yundan Gong, Holger GörgProduct Innovation as a Source of FDI Spillovers? The Case of Chinese State-owned Enterprises 48-62. [CrossRef]

630. Holger Gorg, Eric Strobl. 2005. Spillovers from Foreign Firms through Worker Mobility: An Empirical Investigation*. *Scandinavian Journal of Economics* **107**:10.1111/sjoe.2005.107.issue-4, 693-709. [CrossRef]

631. Andrzej Cieslik. 2005. Regional characteristics and the location of foreign firms within Poland. *Applied Economics* **37**, 863-874. [CrossRef]

632. International Monetary Fund. 2005. Trade Costs and Location of Foreign Firms in China. *IMF Working Papers* **05**, 1. [CrossRef]

633. Elina Ribakova, Balázs Horváth, Dimitri G. Demekas, Yi Wu. 2005. Foreign Direct Investment in Southeastern Europe: How (And How Much) Can Policies Help?. *IMF Working Papers* **05**, 1. [CrossRef]

634. Duncan GreenThe International System 239-352. [CrossRef]

635. Duncan GreenConclusion: A new deal for a new century 367-370. [CrossRef]

636. Duncan GreenHow History Happens: The food and financial crises of 2008-11 353-366. [CrossRef]

637. Duncan GreenPower and Politics 15-84. [CrossRef]

638. Duncan GreenIntroduction: From Poverty to Power 1-14. [CrossRef]

639. Kamal SaggiChapter 10 Intellectual Property Rights and International Technology Transfer via Trade and Foreign Direct Investment 329-355. [CrossRef]

640. Duncan GreenBack Matter - From Poverty to Power 371-470. [CrossRef]

641. Rob van Tulder, Andrea da RosaThe Role of Cross-Sector Partnership Portfolios in the Inclusive Business Strategies of Multinational Enterprises 153-180. [CrossRef]

642. Alper Sönmez, Mehmet Teoman PamukçuForeign Direct Investment and Technology Spillovers in the Turkish Manufacturing Industry 30-51. [CrossRef]

643. Bahar Bayraktar Saglam, Selin SayekSkill and Foreign Firm Premium 185-215. [CrossRef]

644. Duncan GreenHuman Security: Managing risk and vulnerability 163-238. [CrossRef]

645. Duncan GreenPoverty and Wealth: The role of markets in development 85-162. [CrossRef]

646. Abd Rahim JaguliChannel for Vertical Spillovers: 111-132. [CrossRef]