Is China Different?
A meta-analysis of the effects of foreign direct investment on domestic firms

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Abstract: Empirical evidence suggests that China has benefited from foreign direct investment (FDI). An important question that remains unanswered is whether China has benefited more from FDI than other countries in general and other transition and developing countries in particular. This paper investigates this issue by performing a meta-analysis on a sample of 67 country-specific studies yielding 137 observations that have gauged the link between FDI and measures of economic growth. The results suggest that the impact of FDI is on average more positively significant for China than for the full sample of countries, but that the difference between China and other transition economies is less clear.

Keywords: Meta-analysis: Foreign direct investment; Economic growth; China

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1. Introduction

Few areas of research have attracted more interest and debates in the past three decades than the study of the link between foreign direct investment (FDI) and various measures of income growth. This is due to a belief that FDI will not only create jobs, but may also generate spillovers and other linkages that have the ability to spur economic growth. This may be particularly important in the early stages of economic development (take off) and in economies in transition from a planned to a market economy. From being more or less isolated from international trade and investment, China started to accept foreign direct investment into so-called special economic zones (SEZ) in 1978. There was no immediate flood of investments and until 1991, the annual flow of FDI as a share of GDP remained at less than one percent. However, after Deng Xiaoping's "Southern Tour" in 1992, there was a boom in the inflows of FDI into China. Although the average growth rate of real GDP accelerated to over ten percent during the following decade, the inflows of FDI grew even faster: and reached 3-5 percent of GDP in 1995-2005. Although ratio of inward FDI to GDP is not extreme in an international comparison, it is remarkable that the inflows of FDI grew even faster than the booming Chinese economy.

It has been argued that FDI has worked as a catalyst for Chinese exports as well as a vehicle for technology transfers to China. In addition, FDI has introduced new organizational and management practices and contributed to raise the level of competition in the Chinese economy, all of which contribute to economic growth.[2] Therefore, it is not surprising that few areas of research have generated more interest and debate than the study of the link between FDI and growth. In addition, the recognition that policies designed to attract FDI can spur a country's economic growth, in particular in the early stages of economic development or in transition economies, has made China a particularly interesting object of study.[3]

Empirical evidence from a host of studies suggests that China has benefited from the massive inflows of FDI. Yet, a comparison of results across countries indicates a lack of consensus

[2] See e.g. Naughton (2006).
[3] For a survey of how FDI may affect the host country, see e.g. Aitken and Harrison (1999), Konings (2003) and Fan (2002).

regarding the impact of FDI on the host economy. Despite the potential benefits related to FDI, some studies find no growth effects of FDI and some even find a negative effect. It has been pointed out by e.g. Cohen and Levinthal (1989) and Kokko (1994) that for FDI to be truly beneficial for the host country, the technology gap between domestic and foreign firms must be neither too large nor too small. Meyer and Sinani (2008) argue that the dynamics of competition may lead to a non-linear relationship between economic development and received spillovers. An additional reason for why controversy exists may be attributable to differences in research design of the different FDI studies; as shown by e.g. Görg and Strobl (2001), both methodology and the type of data used may have a direct impact on results obtained.[4]

This paper scrutinizes the mixed evidence by conducting a meta-analysis of the literature on FDI and productivity covering a large number of countries at different stages of development. This leads to the specific objective of this paper, i.e., to investigate whether China differs from other countries in terms of how it is affected by FDI. Our analysis is made possible by the significant expansion of the literature on FDI and various measures of growth: the sample used consists of 67 studies yielding a maximum of 137 observations. This stands well in comparison to other meta-analyses on FDI and growth, including Görg and Strobl (2001) who examined 21 studies that yielded 25 observations, Diebel and Wooster (2006) who gathered 32 studies yielding 137 observations, and Meyer and Sinani (2008) who included 66 studies with 121 observations. Hence, our sample covers more studies than any currently available meta-analysis on FDI and growth. Naturally, this contributes to an improved generality and stability of the results. In addition, the meta-analyses cited above focus more on publication bias than the question of whether a specific country in a group of countries deviates from the overall pattern.

Meta-analysis is particularly convenient for summarizing and explaining the results (and variations in results) in groups of empirical studies concerned with a particular research topic (Stanley and Jarell, 1989)[5]. To be more exact, a meta-analysis allows us to quantify and unfold

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[4] See e.g. Görg and Strobl (2001).

[5] Following the influential work by Phillips (1994); Phillips and Gross (1995); Card and Krueger (1995); Smith and Huang (1995); Stanley (1998); Ashenfelter et al. (1999); Gorg and Strobl (2001) and Mookerjee (2006), the use of meta-analysis has been increasingly applied in economics. Wooster and Diebel (2006) use a slightly different methodology.

trends in the empirical results that would otherwise be difficult to detect. This paper is the first of its kind paying specific attention to China.

The rest of the paper is organized as follows. Section 2 discusses the data sources, the model specification and the variables used in the meta-analysis. The next section presents the results and, finally, section 4 provides some concluding remarks.

2. Model specification data and variables

Following the lead of Card and Krueger (1995), Görg and Strobl (2001) and, more recently, Diebel and Wooster (2006), we perform a meta-analysis using a sample of 67 country-specific studies that explore the link between FDI and various measures of income growth. Following Stanley and Jarrell (1989), and motivated by the fact that differences in the measurement of FDI affect the magnitude of the estimated regression coefficients, we use the *t*-statistic as our left-hand side variable giving us a dimensionless dependent variable.[6] More precisely, using t-values as the dependent variable provides us with a standardized measure of the significance of FDI as a determinant of growth, which allows for cross-study and cross-country comparisons. For each study, we collect the *t*-statistic of the coefficients for the FDI variable. The *t*-statistic variable is then regressed on a number of study characteristics that are meta-independent and presumed to influence the outcome of the study.[7] The following regression is estimated using OLS and constitutes the point of departure of our meta-regression analysis:

$$Y_i = \alpha_0 + \sum_{k=1}^{K} \alpha_k X_{ik} + \varepsilon_i ; \quad i = 1, \ldots, N \qquad \varepsilon \sim iid\ N(0, \sigma) \qquad \text{(eq. 1)}$$

where Y_i is the reported 't' statistic, and "X" contains a set of meta-independent variables that capture the characteristics of the empirical studies in the sample, so as to explain the variation in the Y_i across studies, α are the set of fixed coefficients to be estimated, and ε is the error term.

[6] The *t*-statistic can take both positive and negative values.
[7] Stanley and Jarrell (1989) named these techniques 'meta-regression' analyses.

The studies used here deliver country-specific results and for some studies, we have more than one observation. That is, we have a hierarchical structure of data. To improve the precision in the analysis and handle the hierarchical structure of the data, we extend eq. 1 to estimate multi-level models. Multi-level model methods allow us to take into account that the results may co-vary if they, for example, stem from the same country or if we have several interdependent observations from one study (so that the independence assumption may be violated; see Raudenbush (1993)). The advantages of using multi-level models in meta-analysis have been pointed out by Hox (2009). Examples of studies using multi-level modeling in meta-analysis include Kalaian and Raudenbush (1996) in their meta-analysis on educational studies of math performance and coaching, and Muthen and Muthen (2008), which use meta-analysis to examine the relation between gender differences and math performance. To the best of our knowledge, no earlier meta-analysis on FDI has used multi-level regression techniques.

Multi-level analysis is a straightforward generalization of linear models where the regression coefficients are modeled and can be described by a stochastic model. Taking this concept into studies on FDI, we project two sources of multi-level structures. First, we have country-specific effects. Given un-modeled country-specific factors, we might end up with a country-specific interdependence in the error term. In addition, the results may co-vary if they are drawn from the same study. Such country- and study-specific characteristics can be modeled in a number of different ways. A commonly used way of handling such group effects is to allow for country-specific random intercepts v_j in eq.1, where foot index *j* indicates country of origin. In this paper we have country-specific effects and for some studies, multiple observations. This gives us a nested nature of data where studies are nested under the country level. To control for country and study-specific effects we extend eq. 1 into a two-level model with random intercepts by country of origin (*j*) and study effects (*l*) nested under the country level, represented by the random intercepts v_j and $\lambda_{l[j]}$.[8]

As pointed out by Görg and Strobl (2001), the results may be sensitive to the choice of estimator, e.g., cross-section analysis *vs.* panel-data methods. Accordingly, in estimation 5, Table 1, we do

[8] For ease of exposition, by writing out the random intercepts only, we suppress the description of the design matrix for the random intercepts.

not only allow for random intercepts by country and study, but also for a country-specific random coefficient on the variable indicating whether cross-section analysis has been applied or not. That is, we add both random intercepts and a stochastic variable-specific component $\gamma_j(cross - \sec tion)_{ijl}$ to eq. 1.[9] Thus, the multi-level framework allows us to handle heterogeneity more fully than what is possible under a dummy variable framework, attributing different parts of the heterogeneity to different levels.[10]

2.1 Data and variables

The papers used in this study were drawn from 67 studies with country-specific results on FDI and growth; see Table A1 in the Appendix for a listing of studies included. The 67 papers yielded a maximum of 137 observations. The papers were obtained after a search using electronic databases of published and working papers, such as *Econlit* and *Google Scholar* with a keyword listing such as "FDI, productivity, economic growth, spillovers". Studies with no reported *t*-statistic for the FDI variable, or studies with a cross-country focus are not included in this the present analysis. Like Görgl and Strobl (2001), our data set has a few (five) outliers to which meta-regression results are sensitive.[11] Following Görg and Strobl (2001), most of the analysis is performed with the outliers excluded.

As seen in Table A2 in the Appendix, in comparison to other countries, the distribution of *t*-values for China is shifted toward relative high values. The question is whether these seemingly high *t*-values can be explained by way of data and research design and whether the difference is significant. Our relatively large sample allows us to include a large number of meta-independent variables and is not specifically constrained to problems related to inadequate degrees of freedom, a problem observed among previous studies using fewer observations. Economic theory does not provide any precise guidance to the choice of explanatory variables to be included in the estimations; we therefore lend support from the vast literature. The explanatory variables included are: Measures of FDI (FDI/L, FDI/Y, FDI/Assets, other); measures of growth

[9] The multi-level models applied here are estimated using restricted maximum likelihood (the default algorithm).
[10] For further reading on multi-level models, see e.g., Searle et al., (1992), Stram and Lee (1994), and Verbeke (2000).
[11] *t*-values > 8. Dropping the outliers raises the overall fit of the model and makes the results robust with respect to the set of included variables.

(growth rate or levels of output, labor productivity, and total factor productivity); control for the log of the degrees of freedom;[12] type of country (developed, emerging, secondary emerging, frontier or developing)[13] study-specific co-variates (control for capital intensity, labor quality, period dummies, type of data – firm-, industry-, or aggregate data; method of analysis (cross-section vs. non cross-section analysis); time dummies; period dummies; and control for unit fixed effects.

3. Empirical results

3.1. Results

Table 1 reports results from the meta-regression analysis. The dependent variable in all equations is the *t*-statistic for FDI. The estimations are conducted in a step-wise manner and estimations presented in columns 1 and 2 constitute our first small model set-up. The difference between model 1 and model 2 is that in the first estimation we do not distinguish between type of country (developed, emerging, secondary emerging, frontier or developing) while this is controlled for in column 2. In column 3, we proceed with the same variable set-up as in column 2 but control for the hierarchical structure of the data. More precisely, column 3 extends the OLS model in column 2 to a two-level mixed model with random intercepts by country and (nested) study. In addition, we allow for a random coefficient on the dummy variable indicating whether the data is cross sectional or not.[14] This procedure allows us to deal with the complex structures of interdependence and heterogeneity in data. Multilevel techniques are brought back in models 6-7 in Table 1 where a host of additional meta-independent control variables are included.

The results show that the estimated coefficients for China in columns 1 and 2 are positive and significant at the 5 and 10 percent level, respectively, implying that the impact of FDI has been comparably significant to Chinese economic growth irrespective of whether one makes a

[12] See Görg and Strobl (2001) and Makoorjee (2006) for a discussion of the need to control for the degree of freedom.
[13] Countries are classified according to the FTSG (Financial Times Stock Exchange) index, http://www.ftse.com/Indices/Country_Classification/index.jsp.
[14] The use of a stochastic component on the variable indicating whether data is cross-sectional or not is partly motivated by the results found by Görg and Strobl (2001), indicating that the results may be sensitive to whether data is cross-sectional or not.

comparison with all countries in general or, like in estimation two, controls for type of country (level of development). If we step up the analysis and take the hierarchical structure of data into account, the result becomes somewhat stronger; the significance for the China dummy increases from the 10 percent level (column 2) to the 5 percent level (column 3, random intercepts by country and study and with random coefficients for the cross-sectional dummy variable). Thus, so far we can conclude that in comparison with other countries, the impact of FDI has been positive and relatively significant for China. To be precise, the positive coefficients recorded for China in columns 1-3 signal that the positive impact of FDI has been more significant for China than for other countries, irrespective of whether China is compared to other countries in general or if the level of development is taken into account.

- Table 1 about here -

In columns 4-7 in Table 1, we perform a similar exercise as in column 1-3 with the difference that the latter columns add a set of meta-independent variables to the analysis. We notice that including additional control variables reduces the overall significance of the China dummy, in particular when we control for the level of development. That is, including additional covariates reduces the significance of the China dummy and mostly so if add control for the level of development (country type). However, if we in the estimation allow for both random intercepts by country and (nested) study as well as a random coefficient for the cross-sectional dummy variable the significance of the China dummy is brought back (estimation 7). Thus, without controlling for types of country (level of development), it is likely that the impact of FDI has been more significant for economic growth in China than for growth in other countries. However, the evidence becomes somewhat weaker when type of country (level of development) and other study characteristics is controlled for.

3.2. Robustness

To check the robustness of the results, we run a number of control estimations in Table 2. All robustness check models are estimated with the full set of control variables. It is noteworthy that the robustness checks are estimated as two-level random intercept models without a random coefficient for the cross-sectional dummy variable. This motivates two comments: (i) the reason for not allowing a random coefficient for the cross-sectional dummy variable is purely computational. In several cases, the robustness check models did not converge when we allowed a random coefficient for the cross-sectional dummy. (ii) As seen in Table 1, models 6-7, allowing for a random coefficient for the cross-sectional dummy raises the significance of the China dummy variable. Hence, it is likely that the significance of the China dummy in the robustness check models in Table 2 would have been slightly stronger if we had (could have) allowed for a random coefficient for the cross-sectional dummy variable.

In the first model in Table 2, we split the China dummy by estimator (cross section *vs*. panel/time series). The results point at a positive and significant China dummy when using panel/time series models. As these models constitute the large chunk of models, this is an expected result. However, for cross-sectional models, the China dummy, maybe surprisingly, turns out to be negative and significant. As there are rather few cross-sectional studies, the negative result for China may be driven by a few outliers.[15]

In the second model, we do not split the China dummy by estimator but by type of data. The results suggest that the positive significance of the China dummy is particularly strong for studies using aggregated data. One may speculate why the China dummy is particularly notable when using aggregated data. One possible explanation is that China has been determined to integrate local firms with foreign firms either by joint ventures or by promoting local firms as suppliers to foreign investors etc. In all, this may lead to the full effect of growth spillovers being more fully captured when using aggregated data than firm level data.

- Table 2 about here -

In the final estimation, provided in column 3, there are no restrictions on the *t*-values, e.g., the extreme values previously dropped are included. This wipes out the significance of the China dummy, which is similar to the result reported by Görg and Strobl (2001).

Our overall interpretation of the results presented in Table 1 and Table 2 is that the impact of FDI has been more significant for China than for other countries in general. However, taking the

[15] About 1/5th of the studies are cross sectional.

level of development (country type) into account, the results are less clear. Controlling for the level of development, the result for China only comes out as significant when taking the hierarchical structure of data into account and allowing for a stochastic coefficient for the data-type variable. Further robustness checks indicate that China comes out as particularly strong in studies using aggregated data. One possible explanation for this is that China has been determined to create linkages between foreign and local firms by, for example, supporting local firms as suppliers and promoting joint ventures between foreign and domestic firms.

4. Concluding remarks

Few areas of research have aroused more interest and debate in the last thirty years than the study of the link between FDI and various measures of income growth. This is due to the belief that FDI does not only generate jobs but also, through spillovers and other linkages, spur economic growth. Though the empirical evidence regarding the growth enhancing effect of FDI on growth is mixed, most studies on FDI and growth in China come out with positive results. The question is therefore whether China differs significantly from other countries.

In the field of empirical research and among econometricians it is well known that study design and type of data used have an impact on the results; therefore it cannot be excluded that the seemingly positive results on FDI for China may be driven by these factors. This is a fundamental argument for the use of meta-analysis to investigate whether the impact of FDI has been more significant for China than for other comparable countries.

This study presents a quantitative review of the empirical literature on the effects of FDI on various measures of income growth, covering a sample of 67 studies yielding 137 observations. In a meta-analysis framework, we investigate whether China is different from other countries with respect to the impact of FDI on growth. Although the evidence is somewhat mixed, it is clear that the impact of FDI on growth has on average been more significant for China than for other countries. The remaining question is whether China deviates from other *similar* economies. Taking the level of development (country type) into, we in a simple model cannot find that China stands out. However, when we take the hierarchical structure of the data into account and allow for a random coefficient on the data-type variable (our most advanced multi-level regression model), the results show that China does indeed differ significantly from other (comparable) countries: the positive impact of FDI on growth is significant.

A sensitivity analysis suggests that China comes out especially strong in studies using aggregated data. One possible explanation for this is that the Chinese government by promoting joint ventures and by encouraging domestic firms to become suppliers of foreign firms has managed to create linkages between local and foreign firms. These linkages may boost the growth enhancing effects of FDI at the aggregate level, although they may be hard to detect at the firm level. To conclude, the results suggest that compared to other economies, FDI has had a relatively positive and significant impact on economic growth in China and thus, it is likely that FDI has worked as a vehicle contributing to China's development.

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Table 1. Meta-regression analysis, Dependent variable: t-statistic

	M1. OLS.	M2. OLS	M3. 2 lvl random intercept and coef (B)	M4. OLS	M5. OLS	M6. 2 lvl. random intercept (A)	M7. 2. lvl random intercept and coef (B)
China dummy	1.3159	1.2622	1.7704	0.8967	0.7598	0.9123	2.9362
	(0.556)**	(0.656)*	(0.703)**	(0.585)	(0.700)	(1.007)	(1.217)**
$\ln\sqrt{DGF}$	-0.0941	-0.0766	-0.0661	0.0826	0.0544	-0.0804	-0.0717
	(0.150)	(0.156)	(0.162)	(0.233)	(0.248)	(0.255)	(0.251)
Cross-sectional model (C)	0.0025	0.0077	0.3677	0.7298	0.8816	1.0238	1.0209
	(0.582)	(0.591)	(0.723)	(0.706)	(0.729)	(0.732)	(0.871)
FDI/L				-0.2264	-0.1838	-0.4621	-0.0898
				(0.744)	(0.757)	(0.760)	(0.755)
FDI/assets				1.5829	1.6151	1.4024	1.7210
				(0.891)	(0.922)	(0.957)	(0.928)*
FDI/sales				-0.6685	-0.6821	-1.0373	-0.9861
				(0.563)	(0.586)	(0.580)	(0.586)*
ProdGrowth dummy				0.6682	0.6040	0.2292	0.3726
				(0.559)	(0.578)	(0.560)	(0.564)
Capital control dum.				-0.9211	-0.7948	-0.7583	-0.8218
				(0.546)	(0.562)	(0.558)	(0.544)
Lab. Quality dum.				-0.6098	-0.5774	-0.5441	-0.7686
				(0.488)	(0.521)	(0.521)	(0.513)
Industry dum.				-1.0592	-1.0207	-0.7063	-0.9151
				(0.723)	(0.753)	(0.752)	(0.731)
Period dum.				-0.0796	0.0917	-0.1022	0.2425
				(0.685)	(0.718)	(0.705)	(0.699)
FE-control				2.1497	2.3233	2.399	2.5727
				(0.659)***	(0.690)***	(0.704)***	(0.688)***
Country type (D)	No	Yes	Yes	No	Yes	Yes	Yes
country eff (E))			2e-04 (na)			0.68 (na)	0.92 (0.33)
data-type eff (F)			0.88 (0.76)				n.a
Study eff (G)			0.83 (0.42)			0.98 (na)	0.29 (1.25)
Linear p-val (H)			0.46			1.00	0.13
R^2, [p-val mod] (I)	0.05	0.06	[0.11]	0.19	0.20	[0.10]	[0.01]
Obs.	132	132	132	132	132	132	132

Notes: ***, **, * denote statistical significance at the 1%, 5% and 10% level, respectively. Standard errors in parenthesis (.).
(A).One-level mixed model with random intercept grouped by country.
(B).Two-level model; random intercept by country and study; random coefficient on cross-sectional model dummy at the country level. (C). Models are grouped into cross-sectional models with no time dimension *vs*. panel and time series models.
(D). Country types include (I) developed-, (II) advanced emerging (III.), secondary emerging, (IV.), frontier and (V.) developing countries. According to FTSE, China is classified as a type III. economy.
(E). Mean and standard deviation (.) of a country-specific random intercept. (F). Mean and standard deviation (.) random part of a cross-sectional model dummy variable, grouped by country. (G). Mean and standard deviation (.) of study-specific random intercept. (H). p-value, model vs. linear specification. (I). p-value, overall model specification.

Table 2. Meta-regression analysis, robustness check. [(A)]

	M1. 2 level. cs vs. panel/TS [(B)]	M2. 2 level. data-type [(C)]	M3. 2-level. No restr. on t-value [(F)]
China*ind level data		-0.2759	
		(1.436)	
China*firm level data		-1.7150	
		(1.395)	
China*aggregated data		2.4567	
		(1.088)**	
China dum* Cross-sectional mod.	-2.1518		
	(1.227)*		
China dum* non cross mod.	2.1651		
	(0.970)**		
China dum			1.0282
			(2.141)
Full set of control variables	Yes	Yes	Yes
Random countr. eff [(I)]	0.56 (n.a)	0.60 (0.43)	1.52 (0.97)
Random study eff [(J)]	7e-72 (n.a)	0.49 (0.75)	2.86 (0.71)
Model p-val [(K)]	0.00	0.02	0.41
Linear p-val [(L)]	0.78	0.63	0.00
Obs.	132	132	137

Notes: ***, **, * denote statistical significance at the 1%, 5% and 10% level, respectively. Standard errors in parenthesis (.).

[(A)]. All models are two-level random intercept models with random intercept by country and study with the same set of control variables as models 5-6 in Table 1.

[(B)]. China dummy split by estimator: Cross-section vs. panel and time series estimators.

[(C)]. China dummy split by type of data: Firm-, industry, and aggregated data.

[(D)]. [(E)]. [(F)]. China compared to rich/developed economies, other transition economies and developing countries.

[(G)]. No extreme t-values dropped from the analysis. In other models, all t-values above eight (8) are dropped from the analysis. This amounts to seven observations. [(H)]. Country types include (I) developed-, (II) advanced emerging, (III.) secondary emerging, (IV.) frontier and (V.) developing countries. According to FTSE, China is classified as a type III. economy.

[(I)]. Mean and stdv. (.) of country-specific random intercept. [(J)]. Mean and stdv. (.) of study-specific random intercept. [(K)]. p-value, overall model specification. [(L)]. p-value, model vs. linear specification.

Appendix

Table A1. Study Characteristics

Author and year of publication	Country	Dependent variable	Type of FDI	Year span
Aitken and Harrison (1999)	Venezuela	TFP-growth & level, Y-growth & level	FDI/Sales	1976-1989
Akinlo (2004)	Nigeria	Y-growth	Other FDI	1959-1995
Archanun (2003)	Thailand	Y-growth	Other FDI	1970-1999
Archanun (2006)	Thailand	Lp-level	FDI/Sales	1993-1999
Asheghian (2004)	USA	Y-growth	Other FDI	1960-2000
Ayanwale (2007)	Nigeria	Y-level	FDI/Sales	1970-2002
Baliamoune-Lutz (2004)	Marocco	Y-growth	FDI/Sales	1973-1999
Banga (2001)	India	Lp-level	FDI/Ass	1993-2000
Bende-Nabende and Ford (1998)	Taiwan	Y-growth	Other FDI	1959-1995
Bende-Nabende *et al*., (2001)	Indonesia	Y-growth	Other FDI	1970-1996
Berthélemy and Démurger (2000)	China	Y-growth	Other FDI	1985-1996
Blalock, G., and Gertler, P.J., (2002)	Indonesia	Y-level	FDI/Sales	1988-1996
Blalock, G., and Gertler, P.J., (2005)	Indonesia	Y-level	Other FDI	1988-1996
Blin and Ouattara (2004)	Mauritius	Y-growth	Other FDI	1975-2001
Blomström and Sjöholm (1998)	Indonesia	LP-level	FDI/sales	1991
Bolbol and Sadik (2001)	Oman	Y-level	FDI/Sales	1995-1999
Buckley *et al*., (2004)	China	Lp-level	FDI/Empl	1995
Buckley *et al.,* (2007)	China	Lp-level	FDI/Ass	2001
Bwalya (2006)	Zambia	Y-growth	FDI/Empl	1993-1995
Chakrabarty and Basu (2002)	India	Y-growth	FDI/Sales	1974-1996
Chandran and Krishnan (2008)	Malaysia	Y-growth	Other FDI	1970-2003
Crespo *et al.,* (2002)	Portugal	Lp-level	FDI/Ass	1996-1998
Crespo (2007)	Portugal	LP-level	FDL/Empl	1997-2000
Dimelis (2005)	Greece	Y-level	FDI/Ass	1992, 1997
Driffield *et al*., (2002)	U.K	Y-level	Other FDI	1983-1992
Eventt and Voicu (2001)	Czech Rep	TFP- level	Other FDI	1992-1998
Fedderke and Romm (2006)	S. Africa	Y-growth	Other FDI	1960-2000
Giorgioni *et al.,* (2006)	China	Y-level	Other FDI	1985-1999
Girma *et al*., (2008)	U.K	Y-growth	Other FDI	1992-1999
Globerman (1979)	Canada	Y-level	FDI/Sales	1972
Haskel *et al*., (2007)	U.K	Y-growth	FDI/Empl	1973-1994
Hu and Tong (2003)	China	Lp-level	FDI/Empl	1995
Kathuria (2002)	India	TFP-growth	FDI/Sales	1989-1997
Khaliq (2007)	Indonesia	TFP- level	Other FDI	1998-2006
Kokko (1994)	Mexico	Lp-level	FDI/Empl	1970
Kokko (1996)	Mexico	Lp-level	FDI/Empl	1970
Kokko *et al*., (1996)	Uruguay	Lp-growth	FDI/Sales	1988-1990
Konings (2003)	Bulgaria, Romania, Poland	Y-level	FDI/Sales	1993-1997
Kozlov *et al*., (2003)	Russia	Lp-level	Other FDI	1993-1997
Lee and Tan (2006)	Indonesia	Y-growth	Other FDI	1990-2000
Liu (2008)	China	TFP-level	FDI/Ass	1994-1999
Madariaga and Poncet (2007)	China	Y-growth	Other FDI	1990-2002
Marcin (2007)	Poland	Y level	Other FDI	1996-2003
Marin and Narula (2005)	Argentina	Lp-growth	FDI/Empl	1998-2001
Marwah and Tavakoli (2002)	Indonesia	TFP-level	Other FDI	1976-1998
Meyer and Sinani (2004)	Estonia	Y-growth	FDI/Empl	1970-2001
Mullen and Williams (2005)	USA	Lp-growth, Lp-level	FDI/Sales	1977-1997

Obwona (2001)	Uganda	Y-growth	Other FDI	1981-1995
Salehizadeh (2005)	USA	TFP level, Y-growth	Other FDI	1980-2003
Shujie (2006)	China	Y-level	Other FDI	1978-2000
Sjöholm (1999a)	Indonesia	LP-growth	FDI/Sales	1980
Sjöholm (1999b)	Indonesia	Lp-level & growth	FDI/Sales	1980
Smarzynska (2002)	Lithuania	Y-growth	Other	1996-2000
Stehrer and Woerz (2005)	Italy	TFP growth	Other FDI	1981-2000
Sun and Parikh (2001)	China	Y-growth	FDI/Sales	1986-1996
Thangavelu and Pattnayak (2006)	India	Y-level	Other FDI	1989-2000
Thuy (2007)	Vietnam	Lp-level	FDI/Empl	1995-1999
Tian *et al.,* (2004)	China	Y-growth	FDI/Empl	1985-2000
Vinish (2001)	India	TFP-level	FDI/Sales	1976-1989
Wei and Liu (2003)	China	Y-level	Other FDI	2000
Wei and Liu (2006)	China	Y-level	Other FDI	1998-2001
Wen (2007)	China	Y-growth	Other FDI FDI/Sales	1995-2001
Yao (2006)	China	Y-level	Other FDI	1984-2000
Zhang (2001)	China	Y-growth	Other FDI	1984-1988
Zhang (2006)	China	Y-growth	FDI/Sales	1992-2004
Zhao and Du (2007)	China	Y-growth	Other FDI	1985-2003
Zhang and Felmingham (2002)	China	Y-growth	Other FDI	1984-1998

Table A2. Distribution of *t*-values, by percentile.

	Non-China	China
P_{25}	t = 0.2	t = 1.5
P_{50}	t = 1.8	t = 2.7
P_{75}	t = 2.8	t = 4.8