Assessing the importance of taxation on foreign direct investment: evidence from Southeast Asian developing countries

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Abstract

This study examines the influence of taxation on foreign direct investment (FDI) using data from Southeast Asia. It employs the quantile regression approach with fixed effects that provides a comprehensive view of the tax sensitivity across the FDI distribution. Estimates confirm the significantly negative impact of the bilateral effective average tax rate and indicate the marked difference in the tax sensitivity levels at the two ends of the distribution. This stresses the importance of understanding the effect of taxation across the distribution rather than only at the mean. The economic significance of the tax is also relatively smaller than that of other fundamental factors such as labour quality and governance.

Key words: Tax incentives, international tax, corporate income tax, FDI, Southeast Asia

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Table 1: Distribution of Real Net FDI Flows (Unit: million USD) Ä   !   .   ₲

Percentiles				
10	30	50	70	90
-9.54	19.86	166.80	498.95	2843.87

Table 2: Summary Statistics for the Variables Used in the Empirical Analysis

Variables	N	Mean	Median	S.D.
Real net FDI flow (millions)	641	938.60	166.80	2,748.98
Bilateral EATR (Max incentives)	641	16.11	14.83	6.54
Bilateral EATR (Standard treatment)	641	32.63	32.11	6.15

EMPIRICAL RESULTS

4.1   Baseline estimates

At the beginning of the analysis using Cana (2011)'s pooled-quantile regression model with fixed effects.[6] The baseline model describes the net FDI flows as a function of the bilateral EATR under maximum tax incentives and other control variables. It also includes country-pair and as well as year-fixed effects. The results for the 10th, 30th, 50th, 70th and 90th percentiles are provided in Columns 1-5 of Table 3.

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confirm the negative and significant impact of taxation and illustrate that investment associated with country pairs at the tails of the distribution is subject to noticeably different levels of tax-sensitivity. This underlines the importance of equipping policy-makers with a comprehensive understanding of the effects of taxation rather than focusing only on the effect at the mean. Another important finding is that the economic significance of the tax is relatively smaller than that of labour productivity and rule of law. This suggests that policy-makers should not overemphasise the role of taxes since other economic and governance factors are also important determinants of FDI. Finally, it is important to note that, while this study takes into account both domestic and international tax aspects of host countries, it does not take into account important tax issues such as tax certainty, tax compliance burden and international tax avoidance opportunities. I leave these issues as avenues for future research.

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APPENDIX

Table A1: Variance Decomposition of the Variables Used in the Empirical Analysis

Table A3: Robustness Test ± Including Core Gravity, Economic and Infrastructure Variables 8 :9.5.1

VARIABLES	(1) 0.1	(2) 0.3	(3) 0.5	(4) 0.7	(5) 0.9
Bilateral EATR	-128.3**	-102.6**	-101.4**	-102.4**	-94.3*
	(53.20)		(49.97)	(50.64)	(51.02)
Lagged host GDP	-21,59		22,759.7	-22,963.6	-22,902.7
	(19		95.23)	(20,097.13)	(20,184.26)
Lagged home GDP				2,366.5	2,408.3
				(2,586.21)	(2,510.66)
Lagged host per capita				25,097.6	25,545.4
				(22,627.69)	(22,853.64)
Labor				7,833.2*	5,675.1
	,174.43)			(4,11	

Table A5: Robustness Test ±Conditional Mean Estimate

VARIABLES	Mean
Bilateral EATR	-108.7**
	(46.45)
Lagged host GDP	-14,587.5
	(27,536.44)
Lagged home GDP	2,384.8
	(2,119.61)
Lagged host GDP per capita	15,108.6
	(36,160.81)
Labor productivity	5,909.2*
	(3,431.51)
Host trade openness	11.4
	(49.58)
Home trade openness	7.6
	(13.84)
Host financial openness	-37.7
	(136.44)
Home financial openness	35.9
	(48.51)
Air transport	2,625.1
	(3,395.58)
Cellular subscription	-5.8
	(21.37)
Regulation quality	37.7
	(37.92)
Corruption control	-3.4
	(16.27)
Rule of law	71.8**
	(32.14)
Political stability	14.5
	(32.68)
Voice and accountability	-86.0
	(63.43)
Government effectiveness	-65.0
	(64.84)
Constant	189,279.8
	(470,380.78)
R^2	0.889
Observations	641

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Note: The regression includes both country pair- and year-fixed effects. Numbers in parentheses indicate robust standard error. ***, **, * denotes significance at the 1%, 5%, and 10% levels, respectively.