

A small panel data set of these variables is used, covering four years (2001-04) and 49 countries. The regression uses the fixed effects method, which takes into account the fact that there are differences across countries and/or time periods in the data, caused by variables that are not included in the model. First, the entire sample of data is used. CDIA<sup>3</sup> is regressed upon the terms in the model indicated above. But the motivations for investing in developed nations may be quite different from the factors driving investments into emerging economies. Therefore the sample is additionally split into two groups<sup>4</sup>–advanced economies and emerging market economies–and the regressions are run again. The smaller numbers of observations in these latter two regressions reduces the inexplanatory power, but some useful results are obtained nonetheless. Results are displayed in Table D1. Since the U.S. is home to such a large amount of CDIA, regressions for the full and split sub-samples were run with the U.S. omitted. But the model seems to become unstable when this is done, with only two variables remaining significant (at the 5 per cent level) in the full sample, one in the advanced economy sub-sample, and none in the emerging economies sub-sample. These results are therefore not reported here.

Interestingly, the results for Canada differ from what Ihrig (2005) finds for the U.S. This is perhaps surprising, given that both Canada and the U.S. are advanced economies and share many similar characteristics as well as a fairly high level of economic integration. Ihrig finds support for horizontal direct investment from the U.S. to the full sample of countries and to advanced economies also. She only finds support for vertical direct investment from the DI support vertical direct investment in the full sample rather than horizontal. The results for CDIA to emerging markets are too weak to comment upon, but those for the advanced economies do not support horizontal direct investment either.

The result for the horizontal direct investment term of *sumgdp* is the opposite of what was expected: the coefficient is negative, indicating that as the economic size of the country-pair increases, CDIA decreases. This is the opposite of what Ihrig found for the U.S., which was that the larger the sum of the two economies' GDPs, the greater the U.S. direct investment. Returning to Canada's

case, sumgdp × tech has a positive coefficient, which indicates that the closer the recipient country's technology is to the world average, the less horizontal direct investment it receives from Canada. So possessing technology closer to Canada's has a dampening effect on horizontally motivated CDIA. The result for the third horizontal direct investment term,  $gdpdiff^2$ , is zero, which is the same result that Ihrig finds for the U.S. Overall, these results do not support the horizontal direct investment motive. As similar results are found in the advanced economies regression, the same can be said of that sub-group.

The results for the vertical direct investment terms, on the other hand, are supportive of that motive in CDIA. For the full sample, the coefficient on skilldiff is positive, indicating that the bigger the skill difference between Canada and the other country, the larger the CDIA. Interestingly, this result is found in the sub-sample of advanced economies as well. The effect of technology on this, as captured

investment Abroau			
Variable	All countries	Advanced economies	Emerging market economies
sumgdp	-7.25**	-9.20**	2.08
	(2.33)	(3.17)	(3.02)
sumgdp × tech	22.97**	24.73**	-1.92
	(3.75)	(4.71)	(6.88)
gdpdiff <sup>2</sup>	0.00**	0.00**	0.00
	(0.00)	(0.00)	(0.00)
skilldiff	890.84*	1349.56	-119.09
	(440.17)	(744.47)	(218.31)
skilldiff × tech	-1384.58*	-1962.55	21.50
	(677.67)	(1159.77)	(357.05)
skilldiff × gdpdiff	-0.28	-0.34	0.03
	(0.21)	(0.35)	(0.12)
No. observations	131	93	38
R <sup>2</sup>	0.87	0.88	0.04

## Table D1: Fixed Effects Regressions for Canadian Direct Investment Abroad

Note: regressions were conducted using STATA. Standard errors are reported in parentheses.

\* statistically significant at the 5 per cent level

\*\* statistically significant at the 1 per cent level