Are There Permanent Valuation Gains from Becoming Investable?

Thomas O'CONNOR
Department of Economics, Finance and Accounting, National University of Ireland Maynooth, Co. Kildare, IRELAND. E-mail: thomas.g.oconnor@nuim.ie

ABSTRACT

In this paper, I examine whether the "investable premium" documented by Mitton and O'Connor (2010) is permanent. In a series of firm-fixed effects regressions, I show that the "investability premium" disappears after five years of becoming investable, but subsequently reappears, and appears permanent. At the very least, the "investable premium" tends to last at least as long as some other "internationalization premia" documented in the literature, and remains even after 12 years of becoming investable. The premium persists, even after controlling for observable and unobservable firm-level characteristics, industry growth, and indirect investability.

JEL Classification: G15; F36.

Key Words: Investability; Tobin's q; Internationalization.

1. INTRODUCTION

In recent years, a general consensus has emerged which suggests that corporate internationalization impacts firm value positively. For example, Doidge et al. (2004) show that international cross listings in the U.S. manifest into a "cross-listing premium" for cross-listing firms. However, disagreement exists in relation to the permanency of these valuation gains. Doidge et al. (2009) suggest that the "cross-listing premium" is permanent, and King and Segal (2009) find likewise for Canadian U.S. cross-listing dual-class firms and for single-class firms who can attract and maintain a larger shareholder base. In contrast, both Gozzi et al. (2008) and Sarkissian and Schill (2009a, 2009b) refute these findings. Both agree that internationalization (either international cross-listings or international capital raising) impacts positively on firm value, but they question the durability of these valuation gains. In short, both find that the valuation gains from internationalization disappear after three years.

In a recent paper, Mitton and O'Connor (2010) document positive valuation gains from another aspect of internationalization, namely investability, or openness to foreign investment. However, they don't examine the durability of this "investable premium". In this paper, I show that like Gozzi et al. (2008) and Sarkissian and Schill (2009a, 2009b), the valuation gains from internationalization, Investability in this instance; disappear five years after becoming investable. However, unlike them, I find that the "investable premium" returns in subsequent years, and appears permanent.

The paper proceeds as follows. In the next section, I describe the sample. Section 3 presents the empirics. Section 4 concludes.

2. SAMPLE DESCRIPTION

I begin by sourcing an initial sample of all 2,784 firms from the major markets of the IFC Emerging Market Database that were deemed investable at any time between 1980 and 2000. To be included in the final sample, firms must have financial data available in the Worldscope database and satisfy a minimum-data requirement. First, investable firms are required to have financial data available at least one year before and one year after the year in which they are first deemed investable. Firms that never become investable are required to have financial data available one year either side of the median year in which firms are first

investable in their respective countries. The final sample outlined in Table 1 consists of 251 investable and 1,259 non-investable firms from twenty countries.

In Table 1, I outline by country, the number of investable (# Inv) and non-investable (# NI) firms, the number of firm-year observations (# Obs), the total number of firms (# Total), and the first year in which firms from each country become investable (First Invest). The number of sample firms per country varies significantly, ranging from a minimum of 8 (Colombia) to a high of 223 in Malaysia. Korea provides the greatest number of investable firms (56), while Indonesia provides just one. Firms first become investable in 1988.

Like Mitton and O'Connor (2009), I measure the openness of a firm's stock to foreign investors using the "investable" measure provided by the IFC Emerging Markets Database. The IFC designates a firm as investable if its stock is free from both country-level and firm-level restrictions on foreign investment. It also requires that the stocks have sufficient size and liquidity to be realistically available to foreign investors. I define a firm as investable in a given year if the firm's stock appears in the IFC investable index by December of that year. My sample runs from 1980 to 2000.

I employ Tobin's q to measure firm value, where Tobin's q is defined as the book value of debt plus market capitalization divided by the book value of assets. Doidge et al., (2004, 2009) and Gozzi et al., (2008) also use Tobin's q to proxy for firm value in their studies. All firm-level financial information is sourced from Worldscope for each year from 1980 to 2000. I control for firm and industry related factors commonly employed in other studies using Tobin's q (see Doidge et al., (2004, 2009), Gozzi et al., (2008), and King and Segal (2009)), namely sales growth, and global industry q to account for firm and industry growth, respectively, firm size, firm leverage and profitability. Tobin's q, sales growth, firm size, leverage and profitability are winsorized at the 1 and 99% tails of the distribution to remove the confounding effects of outliers. Finally, I exclude financial firms since these firms are more likely to be valued differently from non-financial firms. Table 6 provides a detailed description of all variables employed in the paper.

3. EMPIRICAL TESTS

I begin by reconfirming the existence of an "investable premium" as per Mitton and O'Connor (2010). Like them, I estimate the following two-way fixed effects model:

$$\text{Tobin's } q_{it} = \alpha + X_{it}\beta + \text{Investable}_{it} + \text{Year}_t + \text{Firm}_i + \varepsilon_{it}$$

Where Tobin's q_{it} is Tobin's q for firm i in year t, X_{it} is a set of firm and industry controls (sales growth, size, and global industry q), and Investable is a dummy variable that equals one if firm i is investable in year t and zero otherwise. Year_t and Firm_i represent year and firm fixed effects, respectively. Table 2 presents the coefficient estimates of Eq. (1), with t-statistics, adjusted for heteroskedasticity as in White (1980), in parentheses underneath the coefficient estimates.

The results do confirm the findings of Mitton and O'Connor (2010). Controlling for observable and unobservable firm level characteristics, industry effects using Global industry q, and indirect investability i.e., ADRs and Country Funds, the coefficient estimate on the investable dummy is always positive and statistically significant. Country fund data is sourced from Bekaert et al. (2005) and Patro (2005). All information on cross-listed firms is sourced from the Bank of New York, and cross-referenced with information from Deutsche Bank, JP Morgan, the New York Stock Exchange, and NASDAQ. See Table 1 for more details.

In the remaining rows of Table 2, I replace the investable 0/1 measure with a second measure of the openness to foreign investment, namely degree-open factors, a continuous variable ranging from zero (not open to foreign investors) to one (fully open to foreign investors). Again, I find that openness to foreign investment impacts positively on firm value. In all specifications, the coefficient estimates on the degree-open factor are positive and statistically significant. Finally, the control variables are, by and large, statistically significant, and of the correct sign. Firm value increases in growth, leverage and profitability.

Larger firms tend to be worth less. I document a "cross-listing premium" for Level 2 ADRs, and also find that the existence of a country-fund impacts positively on firm value. In the next section, I examine if the "investable premium" is permanent.

First, consider Table 3. Here I compare the value of investable to non-investable firms in event time. Comparisons are made in each event year from three years before to five years after becoming investable, inclusively. The ">5 Years After Investability" measure equals one in each year after the fifth year in which a firm is deemed investable. For each event year, I present the mean and median value of Investable firms, and in the fifth and sixth columns, I calculate the mean and median difference, between investable and non-investable firms. The final columns of Table 3, compare investable to non-investable firms using Relative Tobin's q. Relative q is calculated as the q of each investable firm divided by the median q of all noninvestable firms in the firm's home country. A value of relative q greater than one indicates that the investable firm is worth more than its median counterpart noninvestable firm. The column labelled "# Invest" measures the firm-year investable observations available in each event year. Finally, I supplement the analysis presented in Table 3 with Figure 1. Figure 1 depicts the time-series behaviour of mean and median Tobin's q and Relative Tobin's q in a sixteen-year event window.

The analysis presented in Table 3 and Figure 1, suggest that investable firms are typically worth more than non-investable firms. This valuation premium manifests even prior to becoming investable. It typically increases in the run-up to becoming investable, and falls off thereafter. Doidge et al. (2009) and Gozzi et al. (2008) reveal similar patterns in firm value for firms that cross-list/internationalize, respectively. After five years of becoming investable, investable firms are no longer worth more. Mitton and O'Connor (2010) find likewise in their study, which suggests that the valuation gains from becoming investable may not be permanent.

The bottom row of Table 3 and the behaviour of firm value after the fifth year of investability presented in Figure 1 suggest that this may not in fact be the case. The ">5 Years After Investability" dummy suggests that investable firms once again are worth more than their non-investable counterparts. The mean and median valuation differences are positive and statistically significant. Figure 1 also bears this out. After the fifth investable year, firm value tends to level out, and eventually tends to increase again, both on an absolute and relative basis. These preliminary results suggest that investability may have a positive permanent effect on firm value. Of course the permanency of these valuation premia may have noting to do with the act of becoming investable, but in turn, may be caused by other factors e.g., firm growth, profitability. In the next section, I examine whether this valuation premium persists, once I control for other determinants of firm value.

In Table 4, I re-estimate Eq. (1), but now with a series of event time investable dummies, identical to those presented in Table 3. In doing so, I follow a similar approach to Gozzi et al. (2008). Specifically, I create a series of event year investable dummy variables from three years prior to becoming investable to five years after becoming investable. The final event year dummy, ">5 Years After Investability" equals one once the firm has been investable for six years and more. In this paper, I interpret a positive and statistically significant coefficient estimate on the ">5 Years After Investability" dummy as evidence of permanent valuation gains from becoming investable. While it is difficult to definitely assert that permanent valuation gains manifest using this approach since I have only 12 post-investable years, at the very least, a statistically positive">5 Years After Investability" dummy would imply that the valuation gains from investability last longer than some other aspects of internationalization.

This is exactly what I find. In three different specifications, the coefficient estimate on the ">5 Years After Investability" is positive and statistically significant, ranging from 0.191 to 0.230. Consistent with earlier, the coefficient estimate on the "5 Years After Investability" dummy is positive but statistically insignificant. Again, firm value tends to increase in the years immediately prior to becoming investable, peak in the invest year and fall off thereafter. However, once the firm is investable for at least five years, the "investable premium" returns, which suggests that the premium originally documented by Mitton and O'Connor (2010) is permanent. In Table 5, I replace the ">5 Years After Investability" dummy with individual event year dummies from 6 years to 12 years post investability, inclusively. The coefficient estimates on the individual event dummies from year 8 to year 12 are invariably all positive, and

statistically significant at conventional levels. At the very least, these results suggest that the valuation gains from investability reappear, and last just as long as the gains documented by Doidge et al. (2009) for cross-listing firms.

4. CONCLUSION

In this paper, I show that the "investable premium" originally documented by Mitton and O'Connor (2010) is permanent. While the valuation gains from becoming investable disappear after the fifth investable year, I show that the "investable premium" returns in subsequent periods. In a series of firm-fixed effects regressions, I show that this premium persists, even after controlling for observable and unobservable firm-level characteristics, industry growth, and indirect investability. These findings are in line with Doidge et al. (2009). Like them, I show that another aspect of internationalization, namely investability appears to deliver permanent valuation gains.

REFERENCES

Bekaert, G., Harvey, C., and Lundblad, C. (2005), Does Financial Liberalization Spur Growth?, *Journal of Financial Economics*, 77 (1): 3-55.

Doidge, C., Karolyi, G.A., and Stulz, R.M. (2004), Why are Foreign Firms Listed in the U.S. Worth More? *Journal of Financial Economics*, 71 (2): 205-38.

Doidge, C., Karolyi, G.A., and Stulz, R.M. (2009), Has New York Become Less Competitive in Global Markets? Evaluating Foreign Listing Choices Over Time, *Journal of Financial Economics*, 91 (3): 253-77.

Gozzi, J.C., Levine, R., and Schmukler, S.L. (2008), Internationalization and the Evolution of Corporate Valuation, *Journal of Financial Economics,* 88 (3): 607-32.

King, M. R. and Segal, D. (2009), the Long-Term Effects of Cross Listing, Investor Recognition, and Ownership Structure on Valuation, *Review of Financial Studies*, 22 (6): 2393-421.

Mitton, T. and O'Connor, T. (2010), Investability and Firm Value, *European Financial Management* (in Press).

Patro, D. (2005), Stock Market Liberalization and Emerging Market Country Fund Premiums, *Journal of Business*, 78 (1): 135-68.

Sarkissian, S. and Schill, M. J. (2009a), Cross Listing Waves and the Search for Value Gains, Working Paper, McGill University.

Sarkissian, S. and Schill, M. J. (2009b), Are There Permanent Valuation Gains to Overseas Listings?, *Review of Financial Studies*, 22 (1): 371-412.

White, H. (1980), a Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity, *Econometrica*, 48 (4): 817-38.

APPENDIX

Table 1. Sample Statistics by Country

	Sample # Obs	# Invest	# Non Invest	Total	ADR ADR	Key Dates First Invest	First ADR	Country Fund
Argentina	75	3	9	12	0	1992	-	1991
Brazil	363	9	44	53	7	1991	1994	1992
Chile	265	11	30	41	5	1992	1993	1992
China	313	2	68	70	1	1992	1995	1992
Colombia	63	2	6	8	1	1991	1994	1992
Greece	660	20	86	106	1	1988	1990	1998
India	1,123	12	185	197	10	1991	1993	1991
Indonesia	496	1	78	79	1	1993	1996	1991
Israel	91	6	11	17	0	1994	-	1994
Korea	1,317	56	120	176	10	1988	1991	1984
Malaysia	1,671	45	178	223	4	1988	1992	1987
Mexico	329	15	21	36	14	1988	1991	1982
Pakistan	303	3	51	54	0	1994	-	1994
Peru	61	2	12	14	0	1993	-	NA
Philippines	216	5	33	38	3	1993	1995	1990
Portugal	280	9	30	39	2	1988	1990	1987
South Africa	750	23	43	66	18	1982	1994	1994
Taiwan	538	14	98	112	10	1990	1992	1990
Thailand	874	7	129	136	0	1989	1999	1989
Turkey	204	6	27	33	1	1991	1994	1990
	9,992	251	1,259	1,510	88			

Note: The table reports summary statistics of the sample by country. Investable dates are taken from the Emerging Markets Database (EMDB). # Obs is the number of firm-year observations; # Inv is the number of investable firms; # NI is the number of non-investable firms, and # Total is the total number of firms. All information on ADRs is sourced from the Bank of New York, Citibank, NYSE, and NASDAQ. The number of ADRs refers to the number of firms with ADRs that also have post-listing financial data. First country fund dates are taken form Bekaert, Harvey, and Lundblad (2005) and Patro (2005).

Table 2. Regression Estimates of the Effect of Investability on Firm Value

	Investable Dummies							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Investable	0.117*** (3.15)	0.120*** (3.22)	0.132*** (3.60)	0.136*** (3.72)	0.136*** (3.72)	0.125*** (3.43)	0.139*** (3.80)	0.101*** (2.76)
Firm Size		-0.011 (0.53)	-0.073*** (3.09)	-0.073*** (3.10)	-0.074*** (3.14)	-0.079*** (3.36)	-0.077*** (3.31)	-0.097*** (4.29)
Firm Growth			0.825*** (8.15)	0.830*** (8.19)	0.835*** (8.28)	0.696*** (6.82)	0.688*** (6.77)	0.624*** (6.21)
Global Industry Q				1.065*** (6.98)	1.066*** (6.99)	1.022*** (6.84)	0.978*** (6.55)	0.973*** (6.45)
Firm Leverage					0.035 (0.39)	0.218*** (2.34)	0.213** (2.29)	0.265*** (2.94)
Firm Profitability						0.951*** (7.01)	0.944*** (6.95)	0.968*** (7.33)
Level 1 ADR							-0.029 (0.27)	
Level 2 ADR							0.256*** (2.79)	
Level 3 ADR							-0.065 (0.59)	
Rule 144a/Reg S ADR							-0.369*** (3.38)	
Country Fund								0.928*** (13.96)
Time Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# Obs	9,992	9,992	9,992	9,992	9,992	9,992	9,992	9,992
R-Squared	0.039	0.031	0.010	0.010	0.010	0.013	0.013	0.010
	Degree Open Factors							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Degree open	0.162*** [3.98]	0.165*** [4.03]	0.177*** [4.37]	0.184*** [4.57]	0.185*** [4.58]	0.173*** [4.29]	0.179*** [4.42]	0.139*** [3.48]
Time Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# Obs	9,992	9,992	9,992	9,992	9,992	9,992	9,992	9,992
R-Squared	0.041	0.033	0.001	0.010	0.010	0.014	0.014	0.010

Note: The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value), adjusted for heteroskedasticity, in parentheses. The dependent variable is Tobin's q. Openness to foreign investors is measured using either investable dummies or degree-open factors, respectively. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable. The degree open factor ranges from zero (not open to foreign investors) to one (fully open to foreign investors). Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment. Firm size is measured as the log of annual sales in real $U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global industry q is calculated as the average q of all global firms within each industry classification. Firm leverage is total debt to total assets, and profitability is defined as ernings before interest and taxation (EBIT) to total assets. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm's country. Also estimated but not reported are a constant, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Table 3. Comparisons in Event Time

	# Invest	Tobin's q				Relative Tobin's q	
		Mean	Median	Mean Difference	Median Difference	Mean	Median
3 Years Before Investability	104	1.57	1.27	0.17*	0.20***	1.61	1.05
2 Years Before Investability	165	1.54	1.18	0.14*	0.11***	1.47	1.07
1 Year Before Investability	245	1.74	1.42	0.34***	0.35***	1.47	1.12
Invest Year	244	1.74	1.32	0.34***	0.25***	1.53	1.10
1 Year After Investability	248	1.60	1.20	0.20***	0.13***	1.49	1.09
2 Years After Investability	247	1.55	1.20	0.15**	0.13***	1.30	1.06
3 Years After Investability	246	1.51	1.14	0.11*	0.07**	1.28	1.04
4 Years After Investability	209	1.48	1.07	0.11*	0.02*	1.27	1.08
5 Years After Investability	180	1.41	1.04	0.08	0.01	1.15	1.03
> 5 Years After Investability	468	1.47	1.15	0.07*	0.08***	1.29	1.09

Note: The table reports the mean and median value of investable firms relative to the value of noninvestable firms in event time. The event window defined as a sixteen-year period around the event year (i.e., Year 0 is the first year that a firm becomes investable). "> 5 Years After Investability" equals one in every year greater than five years after a firm becomes investable, otherwise zero. The mean and median valuation difference between investable and non-investable firms is calculated as the mean (or median) of the value of investable firms less the mean (or median) value of noninvestable firms in the same year. # Invest is the number of firm-year investable observations in each event year. The last two columns present the value of investable firms relative to non-investable firms in each event year. Relative Tobin's q is calculated as the value of each investable firm divided by the median value of non-investable firms in each year. Asterisks denote significance of z-tests of the equality of medians, where ***, **, * denote significance at the 1%, 5%, and 10% level, respectively.

Table 4. Regression Estimates of the Permanent Effect of Investability on Firm Value

	(1)	(2)	(3)
3 Years Before Investability	0.044	0.049	0.063
	(0.48)	(0.55)	(0.73)
2 Years Before Investability	0.052	0.064	0.069
	(0.62)	(0.78)	(0.86)
1 Year Before Investability	0.170**	0.187**	0.137
	(1.97)	(2.19)	(1.60)
Investable Year	0.231***	0.251***	0.226***
	(3.02)	(3.32)	(2.99)
1 Year After Investability	0.107	0.135*	0.127*
	(1.39)	(1.76)	(1.67)
2 Years After Investability	0.140*	0.174**	0.101
	(1.83)	(2.30)	(1.35)
3 Years After Investability	0.210***	0.244***	0.176**
	(2.59)	(3.05)	(2.24)
4 Years After Investability	0.192**	0.226**	0.163*
	(2.14)	(2.55)	(1.87)
5 Years After Investability	0.110	0.146	0.103
	(1.21)	(1.62)	(1.16)
>5 Years After Investability	0.191**	0.230***	0.198**
	(2.19)	(2.67)	(2.31)
Firm Size	-0.079***	-0.078***	-0.097***
	(3.34)	(3.32)	(4.27)
Firm Growth	0.690***	0.685***	0.619***
	(6.78)	(6.75)	(6.16)
Global Industry Q	1.050***	1.008***	0.997***
	(6.96)	(6.68)	(6.56)
Firm Leverage	0.217**	0.213**	0.265***
	(2.33)	(2.28)	(2.94)
Firm Profitability	0.959***	0.953***	0.972***
	(7.07)	(7.03)	(7.38)
Level 1 ADR		-0.028	
		(0.26)	
Level 2 ADR		0.266***	
		(2.87)	
Level 3 ADR		-0.055	
		(0.52)	
Rule 144a/Reg S ADR		-0.371***	
		(3.41)	
Country Fund			0.931***
			(13.98)
Time Dummies	Yes	Yes	Yes
# Obs	9,992	9,992	9,992
R-Squared	0.013	0.013	0.010

*Note: The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value), adjusted for heteroskedasticity, in parentheses. The dependent variable is Tobin's q. The single year investabilty dummies equal one in the indicated year and zero otherwise. The ">5 Years After Investability" dummy equals one after the fifth year of investability and zero otherwise. Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment. Firm size is measured as the log of annual sales in real $U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global industry q is calculated as the average q of all global firms within each industry classification. Firm leverage is total debt to total assets, and profitability is defined as ernings before interest and taxation (EBIT) to total assets. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm's country. Also estimated but not reported are a constant, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.*

Table 5. Regression Estimates of the Permanent Effect of Investability on Firm Value

	(1)	(2)	(3)
6 Years After Investability	0.127	0.164*	0.147
	(1.34)	(1.74)	(1.56)
7 Years After Investability	0.064	0.106	0.077
	(0.66)	(1.10)	(0.78)
8 Years After Investability	0.370***	0.414***	0.340***
	(3.35)	(3.77)	(3.13)
9 Years After Investability	0.425***	0.464***	0.433***
	(2.71)	(2.96)	(2.90)
10 Years After Investability	0.283**	0.314**	0.273**
	(2.01)	(2.23)	(1.98)
11 Years After Investability	0.359*	0.402*	0.421**
	(1.73)	(1.93)	(2.30)
12 Years After Investability	0.300	0.349*	0.289*
	(1.51)	(1.77)	(1.65)
Firm Size	-0.080***	-0.080***	-0.098***
	(3.41)	(3.39)	(4.34)
Firm Growth	0.679***	0.674***	0.610***
	(6.65)	(6.62)	(6.05)
Global Industry Q	1.048***	1.005***	0.995***
	(6.91)	(6.62)	(6.56)
Firm Leverage	0.214**	0.210**	0.262***
	(2.30)	(2.25)	(2.90)
Firm Profitability	0.965***	0.959***	0.976***
	(7.13)	(7.09)	(7.43)
Level 1 ADR		-0.036	
		(0.33)	
Level 2 ADR		0.265***	
		(2.84)	
Level 3 ADR		-0.047	
		(0.43)	
Rule 144a/Reg S ADR		-0.374***	
		(3.45)	
Country Fund			0.929***
			(14.00)
Time Dummies	Yes	Yes	Yes
# Obs	9,992	9,992	9,992
R-Squared	0.013	0.013	0.010

Note: The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value), adjusted for heteroskedasticity, in parentheses. The dependent variable is Tobin's q. The single year investabilty dummies equal one in the indicated year and zero otherwise. Individual event year dummies from three years before investability to five years after investability are included but not reported. Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment. Firm size is measured as the log of annual sales in real $U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global industry q is calculated as the average q of all global firms within each industry classification. Firm leverage is total debt to total assets, and profitability is defined as ernings before interest and taxation (EBIT) to total assets. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm's country. Also estimated but not reported are a constant, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Table 6. Variable Definitions

Variable	Description	Source
Tobin's q	Book value of debt plus market capitalization divided by the book value of assets.	Worldscope
Investable	Equals 1 if the firm is deemed investable/open to foreign ownership.	IFC EMDB
Firm Growth	Average (geometric) sales growth (inflation-adjusted) over the last two years.	Worldscope
Firm Size	Log of Real Sales (US$).	Worldscope
Global Industry Q	The (yearly) mean global industry q is calculated as the average q of all global firms within each classification. The general industry classification codes are; 1 (Industrial), 2 (Utility), 3 (Transportation), 4 (Bank/Savings & Loan), 5 (Insurance), 6 (Other Financial).	Worldscope
Firm Profitability	Earnings Before Interest & Taxation (EBIT) to Total Assets.	Worldscope
Firm Leverage	Total Debt to Assets.	Worldscope
Level 1 ADR	Equals 1 if the firm is cross-listed in the United States as a Level 1 ADR	BNY/CB
Level 2 ADR	Equals 1 if the firm is cross-listed in the United States as a Level 2 ADR	BNY/CB
Level 3 ADR	Equals 1 if the firm is cross-listed in the United States as a Level 3 ADR	BNY/CB
Level 4 ADR	Equals 1 if the firm is cross-listed in the United States as a Level 4/rule 144a ADR	BNY/CB
Country Fund	Equals 1 if a country fund is available in that country.	Bekaert et al. (2005) and Patro (2005).

Investability and Tobin's *q*
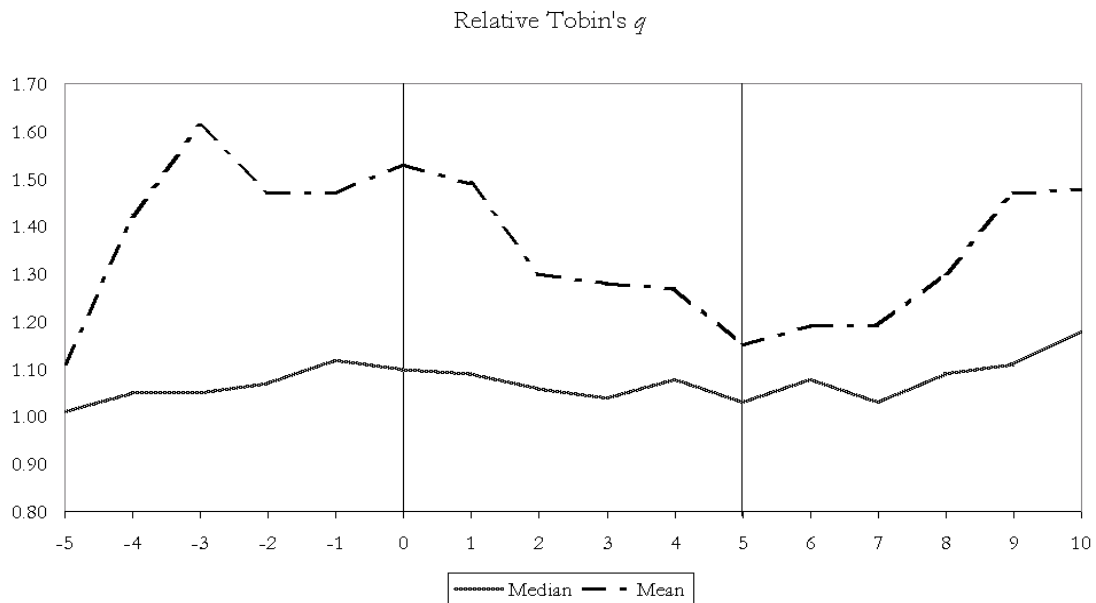
Tobin's *q*

Relative Tobin's *q*

Figure 1.
The top panel displays the value of investable in event time around the time of becoming investable. The data is the mean and median value of investable firms in each year from five years prior to becoming investable to ten years after becoming investable. Year '0' is the investable year. The bottom panel displays the value of investable firms relative to non-investable firms using Relative Tobin's *q*. Relative Tobin's *q* is calculated as the value of each investable firm divided by the median value of non-investable firms in each year. Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment.