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HOME BIAS IN EQUITY PORTFOLIOS AND THE COST OF CAPITAL FOR MULTINATIONAL FIRMS

*by Ian Cooper and Evi Kaplanis, London Business School**

As formulated in Harry Markowitz's pathbreaking paper in 1952, the single most important concept in portfolio theory has been that of diversification.[1] The whole of modern capital market theory is based upon the idea that investors diversify efficiently. Combined with the assumed ability of investors to borrow and lend, and their equal access to information, the assumption of efficient diversification leads to the proposition that all investors will hold the "market portfolio" of equities.

And from the concept of the market portfolio has in turn come the capital asset pricing model (CAPM), the model of the relationship between risk and return that constitutes one of the foundations of modern finance theory. Among its many uses, the CAPM provides the method used by most companies today in calculating their minimum required rates of return on contemplated investments.

While the proposition that all investors hold the same fully diversified equity portfolio is obviously not a literal description of reality, empirical studies of actual stock behavior suggest that it may not be far from the truth. One study demonstrates, for example, that investors diversifying their portfolios with as few as 20 U.S. stocks may accomplish a reduction in risk (as measured by standard deviation of annual returns) that is about 90% as effective as that achieved by an investor holding the entire S & P 500.[2]

Almost all of this empirical evidence, however, is confined to domestic U.S. equity portfolios. According to finance theory, the relevant universe of shares over which investors should diversify is the "global" market. To the extent price movements in different international stock markets are uncorrelated, investors can expect to achieve a significant reduction in the risk of their portfolios simply by substituting foreign for domestic securities with the same expected return.

*The authors are grateful to Dick Brealey and Harold Rose for helpful comments.

1. Harry M. Markowitz, "Portfolio Selection," *Journal of Finance* 7 (1952), 77-91.

2. See Meher Statman, "How Many Stocks Make a Diversified Portfolio?" *Journal of Financial and Qualitative Analysis 22* (1987), 353-364

As shown in Table 1, over the period 1986-1994, the average correlation of 16 national stock market indices with the U.S. market index was just 0.55 (a coefficient of "1.0" means the markets move completely in sync). U.S. stocks today account for about 40% of the value of the global market portfolio. And, given a correlation among international markets of 0.55, U.S. investors who put 60% of their portfolio in index funds from these 16 countries (in proportion to their market capitalizations), instead of 100% in the S&P 500, would have expected to earn roughly the same return while reducing the standard deviation of their annual returns by about 50%.[3] And, to the extent that the future can be expected to repeat the past, such a reduction in risk without any sacrifice of expected return should provide investors with strong incentives to diversify internationally.

TABLE 1 ■ CORRELATIONS OF FOREIGN EQUITY RETURNS WITH THE U.S. MARKET (1986-1994)

Country	Correlation
Australia	0.54
Belgium	0.59
Canada	0.76
Denmark	0.42
France	0.56
Germany	0.47
Hong Kong	0.48
Italy	0.29
Japan	0.37
Netherlands	0.69
Norway	0.54
Singapore	0.63
Spain	0.55
Sweden	0.46
Switzerland	0.65
UK	0.77
Average	0.55

Nevertheless, when we examined the portfolios of institutional investors in nine different countries, we found a striking departure from this prediction of portfolio theory. As summarized in Table 2, as recently as 1993 the stock portfolios of institutional investors in these nine countries were all heavily concentrated in the home markets of the investors. For example, American funds held 95% of their equities in the U.S. as compared to the 42% that the U.S. market comprised as a proportion of the global market. The difference between these two percentages, 53%, is a measure of the "home bias" of these U.S. portfolios at that time. As another example, French institutional investors put 92% of their funds in French companies; and since such companies account for only 3% of the global market, the French home bias is an extraordinary 88%!

It's also important to note, however, that the extent of this home bias has gradually been declining as markets have become more international. For example, the proportion of U.S. equity funds invested in foreign equities has increased from one percent in 1976 to almost six percent in 1994. And such is the paradox of efficient markets that, as the home bias decreases with ever more international investment, the benefits held out by further global diversification will be steadily reduced by the resulting increase in the tendency of markets to move together. (In this sense, investors' search for bargains ends up eliminating the very opportunities that impelled the search.) As evidence of this growing tendency of national markets to move together, the average correlation between foreign equities and U.S. equities in the period 1967-70 was only 0.30, as compared with the 0.55 in the period 1986-1994 noted above.

Thus, in the 1970s, foreign equities held out even greater opportunities to investors for risk-reducing diversification than they do today. Such changes presumably reflect increased linkages between equity returns in different countries resulting from two developments: (1) continuing foreign direct investment and thus increased integration of real economies and (2) gradual (and by no means complete) integration of global capital markets.

CAUSES OF THE HOME BIAS

If investors are behaving rationally, the home bias must be caused by some feature of international portfolio investment that offsets the large potential gains from international diversification. We now discuss alternative explanations of this

3. See, for example, Evi Kaplanis and Stephen Schaefer, "Exchange Risk and International Diversification in Bond Equity Portfolios," *Journal of Business and Economics* (November 1991). If the foreign index portfolio is equally weighted instead of value-weighted, the risk reduction is negligible because a large weight is given to high variance markets such as Hong Kong and Singapore. In this case, one would expect a higher return than that of the S&P 500.

If investors are behaving rationally, the home bias must be caused by some feature of international portfolio investment that offsets the large potential gains from international diversification.

TABLE 2
THE HOME BIAS IN EQUITY PORTFOLIOS
1993

Country	Market Capitalization as a % of Total (1)	% of Equity in Domestic Stocks (2)	"Home Bias"(%) (2) – (1)
Canada	3	84	81
France	4	92	88
Germany	3	78	75
Italy	2	92	90
Japan	33	92	59
Netherlands	1	51	50
Switzerland	2	66	64
UK	10	69	59
USA	42	95	53
TOTAL	100		

Sources: Equity holdings for all countries other than the US and UK are from Financial Accounts of OECD countries, various issues. Holdings for the UK are from Financial Statistics, August 1995 and for the US, Survey of Current Business, June 1995. Market capitalizations are from MSCI.

home bias—explanations that fall into three basic categories.

The first is that investors concentrate their equity portfolios in domestic equities because the returns to domestic equities provide the best match with the target risk characteristics of the investor's portfolio. For instance, it could be that domestic equity returns are expected to be high when inflation is high, thus providing a hedge against unexpected rises in inflation. And, in addition to the inflation hedge provided by domestic stocks, the currency risk associated with foreign equities could present a major deterrent to investors.

The second class of possible motives for the home bias are direct costs of foreign investment such as withholding taxes and higher transaction and information costs. Similar in effect to such "deadweight" costs imposed on foreign investors are restrictions placed on *domestic* investors that force them to hold domestic equities.

A third possibility, of course, is that investors are not behaving rationally and that global markets are "inefficient." Opportunities for global diversification could remain unexploited because investors demand an excessive risk "premium" to compensate them for the greater uncertainty (or at least their perception thereof) associated with holding foreign stocks. On the other hand, such an apparent inefficiency could also be reconciled with efficient market theory by attributing it to significant "information costs" that confront investors in dealing with unfamiliar markets. Of course, whether one chooses to attribute such risk premiums to market inefficiency or information costs may be largely a matter of semantics. But the choice may be important for the following reason: If, as seems reasonable, there is a foreign-investment "learning curve" in which investors' information costs are expected to fall over time, then whatever apparent inefficiencies now exist are likely to disappear in the coming years.

WHY HOME BIAS IS IMPORTANT

To illustrate the implications of the home bias, consider a simple example in which the world consists of just two countries: the U.S. and the rest of the world (ROW). Suppose that the home bias is complete, so that U.S. investors hold only U.S. equities and ROW investors hold only ROW equities. From the perspective of the U.S. investor, U.S. equities have provided an historical risk premium over U.S. Treasury bonds that ranges from as low as 4% to over 8%, depending on the period measured and the method of averaging (geometric or arithmetic) used. But let's pick a point near the mid-point of this range and assume that U.S. investors today expect to earn a 6% risk premium, on average, over Treasury bonds. What do the expected returns on ROW equities have to be for U.S. investors to be willing to hold the foreign securities?

Relative to the U.S. portfolio, ROW equities look like low-risk investments. From the perspective of a U.S. investor, ROW equities have a beta of only 0.55 (whereas U.S. equities have a beta of 1.0), and such a low beta means that most of the risk of ROW equities will be diversified away when added to the

U.S. portfolio. If we further assume that ROW equities have the same volatility as U.S. equities and also offer a risk premium of 6%, then the foreign stocks represent a better deal for U.S. investors—same expected return with only about half the risk. And the same is true of ROW investors as well: U.S. stocks are a low-risk, normal-return investment for them.

Obviously U.S. and ROW investors do not perceive the situation in this way or they would both hold more foreign equities. So we can ask the question: For the portfolio that the U.S. investor holds to be the optimal one, what must she believe about returns to foreign equities? In fact, for U.S. investors to hold no ROW equities in this example requires that the risk-premium on ROW equities from the point of view of the U.S. investor be less than 3.3% (or 0.55 × 6%). And the same must be true of ROW investors: If they expect a 6% risk premium on ROW securities, they must expect a return of only 3.3% above Treasury yields on U.S. securities.

In sum, the existence of a pronounced home bias is difficult to reconcile with the assumption that U.S. and ROW investors have the same beliefs about expected returns. For the portfolios they hold to be optimal, U.S. investors must believe that they will receive a return that is at least 2.7% (6.0% – 3.3%) per annum lower from ROW equities than from U.S. equities. Conversely, ROW investors must believe that U.S. equities have expected returns that are at least 2.7% lower than those of ROW equities. This can occur only if there is something driving a wedge between the returns derived by domestic and foreign investors. For instance, as suggested earlier, the avoidance of foreign stocks could be explained by "deadweight" costs that amount to 2.7% per annum for both U.S. and ROW investors.

This example is intended to illustrate two points. First, the portfolio holdings of international investors may be telling us something about such investors' perception of the costs of foreign investment. Second, these perceived costs are potentially quite large. Indeed, such deadweight costs could be large enough to justify the continued "segmentation" of international capital markets that puzzles many financial economists. On the other hand, as noted earlier, the home bias may be attributable to investors' hedging motives that, if operative, could exist in integrated as well as segmented capital markets. As we discuss later, whether international markets are integrated or segmented will affect the cost of capital for multinational corporations when evaluating their overseas investments. For this reason, it is important to see which explanation—hedging or deadweight costs—does a better job of accounting for the home bias.

CAN HEDGING EXPLAIN THE HOME BIAS?

Even if international capital markets are integrated in the sense that there are no direct costs to cross-border investment, investors might prefer domestic equities because they have better risk characteristics than foreign equities. If this is the case, the argument presented above based solely on differences in beta would be incomplete. To the extent this argument fails to capture some other element of risk associated with foreign share ownership, we might still observe the home bias without any direct costs to foreign investment.

Investors in different countries consume different bundles of goods and pay for them in different currencies. Differences in uncertainty about future inflation rates and exchange rates may well cause investors in different countries to hold different portfolios.[4] For example, a possible explanation of the home bias might be that domestic equities allow investors to avoid foreign exchange risk and perhaps even provide them with an effective hedge against domestic inflation.

Currency Hedging

It is thus tempting, for example, to think that exchange risk provides an obvious explanation for the home bias. Both theory and evidence, however, suggest that this is not the case. Uncertainty about exchange rates can be effectively hedged just by buying or selling foreign bonds in the same currencies. Investors should not give up the advantages of international equity diversification to avoid currency risk, but simply hedge the exchange risk component if they want to eliminate it.

In short, decisions to hold foreign equities and to hold foreign currencies should be completely separable. Furthermore, it is not clear that being exposed to foreign exchange risk is undesirable. A foreign currency is another risky asset, very much

4. See Adler and Dumas (1983) and Stulz (1981).

Because U.S. investors behave as if there are substantial costs to foreign portfolio investment, U.S. corporations pursuing international diversification may be accomplishing something their predominantly U.S. investors appear unwilling or unable to do themselves.

like an equity. A decision to hold a position in any risky asset should be based on its risk and return characteristics, and foreign currencies viewed in this way do not normally merit zero holdings in the optimal portfolio. Thus, currency hedging does not seem a plausible explanation for the extreme home bias we observe.

Inflation Hedging

Another kind of hedging that might bring about a preference for domestic equities is a desire to hedge inflation. If returns to equities are closely related to unanticipated changes in the domestic rate of inflation, investors such as pension funds whose objective is to meet real liabilities would then have an incentive to hold domestic equities. Investors in different countries would each want to hedge their own inflation rate, so they would have an incentive to concentrate investment in their own equity markets.

But before examining the reasonableness of this motive, it would be logical to test whether equity returns do provide a good hedge against inflation. To this end, Table 3 reports the correlation coefficients between inflation and the stock market index returns for nine countries. Such coefficients measure the degree to which domestic equity returns move in line with domestic inflation. If the returns strongly reflect inflation, the coefficient should be close to one; if there is no relationship the coefficient is about zero.

For the nine countries in question, the relationship is insignificant. Indeed, in most of the countries it is effectively zero. Thus, there seems little point in pursuing inflation hedging as an explanation of investor home bias.[5]

TABLE 3 ■ CORRELATIONS BETWEEN DOMESTIC EQUITY RETURNS AND INFLATION, 1986-1993

Country	Correlation
Canada	0.06
France	0.11
Germany	0.02
Italy	0.03
Japan	0.00
Netherlands	0.04
Switzerland	0.01
UK	0.05
USA	0.06

HOW SEGMENTED ARE EQUITY MARKETS?

The previous section showed that explanations for the home bias that assume integrated international equity markets do not stand up to close scrutiny. Thus, we are left with explanations that focus on the costs associated with cross-border investing. Among such costs are withholding taxes, custodian fees, and differential transaction costs. Such costs could bring about a home bias in equity portfolios to the extent they cause the net return on equities to be higher for domestic than for foreign investors. Other factors that are similar in their effects are the possibility of political risk, informational disadvantages of investing in foreign equities, and restrictions on portfolio holdings.[6] For instance, the possibility of loss through expropriation or capital controls will have an effect on the net expected rate of return that is very similar to the effect of a withholding tax. And, if sufficiently large, all of these costs when taken together could cause international equity markets to be segmented rather than integrated.

How large would such costs have to be to prevent international markets from becoming integrated? As we observed earlier, for the nine countries listed in Table 2, the average size of the costs required to explain the home bias is currently about 2.7% per annum. This means that foreign investors would have to experience a cost of investing in equities of 2.7% per annum more than domestic investors for the average of the ten countries.[7]

5. See Ian A. Cooper and Evi Kaplanis, "Home Bias in Equity Portfolios, Inflation Hedging and International Capital Market Equilibrium," *Review of Financial Studies* (1994).

6. For discussions of such costs, see Fischer S. Black, "International Capital Market Equilibrium with Investment Barriers," *Journal of Financial Economics* 1 (1974), 337-352; Rene M. Stulz, "On the Effects of Barriers to International Investment," *Journal of Finance* 36, Vol.9 (1981); Ian A.Cooper and Evi Kaplanis, "Costs to Crossborder Investment and International Equity Market Equilibrium," in Jeremy Edwards et al, eds., *Recent Advances in Corporate Finance* (Cambridge University Press, 1986); and Ian A. Cooper, and Evi Kaplanis, "Home Bias in Equity Portfolios, Inflation Hedging and International Capital Market Equilibrium," *Review of Financial Studies* (1994).

7. As we also noted earlier, this figure was based on an assumption of equal expected returns (6%) across all markets, and an average correlation of 0.55 of the nine countries with the U.S. market. Given the increase in correlation coefficients over time, the size of the costs necessary to explain the home bias has been steadily decreasing with time. In 1982, for example, we estimated that the deadweight costs necessary to explain this difference were 5.0%, and in 1988 the number was 3.5%. These estimates come from our earlier papers (Cooper and Kaplanis (1986), cited earlier, and "The Implications of the Home Bias in Equity Portfolios," *Business Strategy Review*, 5.2 (1994), 41-53.

These estimates of the costs necessary to justify the home bias seem considerably higher than readily observable costs such as withholding taxes and management fees for foreign funds. For example, a U.K. pension fund investing in the U.S. would be subject to withholding tax on dividends (and since the fund is tax-exempt in the U.K., this withholding tax cannot be reclaimed). Nevertheless, even in the case of a very high dividend yield of 7% and a withholding tax on dividends of 15%, this cost translates into at most a 1% reduction in the return from foreign investment. Another quantifiable cost is the fee that investment funds charge for foreign funds relative to domestic funds. The annual average expense ratio of U.S. diversified funds (with assets between $50-500m) in 1995 was 1.3% while the average expense ratio for foreign funds (from the U.S. perspective) was 1.7%, giving U.S. investors a cost disadvantage of about 0.4% in investing overseas.[8]

Thus, considering taxes and transactions costs only, the level of observable costs associated with holding foreign equities rather than domestic equities appears somewhat lower than estimates of the size of the cost necessary to explain portfolio holdings. And such low direct costs of cross-border holdings are also consistent with the trend toward increasing market integration. As examples, restrictions on foreign holdings of equities have been relaxed in the last few years by countries as diverse as Sweden and South Africa. At the same time, restrictions imposed by individual Swiss companies on foreign holdings of their shares have been removed.[9] Moreover, cross-border equity listings have reduced the costs of holding foreign shares and enabled investors in countries such as South Korea to avoid restrictions on foreign holdings of shares. And custodian fees for foreign securities have fallen to a few basis points.

But despite this trend toward a reduction in the barriers and costs of international equity ownership, fund managers still remain somewhat reluctant to invest in foreign markets. As suggested earlier, one remaining possible explanation (consistent with rational investors and efficient markets) is high information costs. Given that different countries have different accounting rules, the costs associated with acquiring and interpreting information about foreign companies are potentially significant. But, as also noted earlier, such costs are falling and can be expected to fall further as accounting rules become more international[10] and global investors move down the foreign-investment learning curve.

In sum, although recent trends appear to suggest the likelihood of further integration of global markets, there appear to be persuasive arguments—as well as some empirical evidence—for viewing international equity markets as still at least partly segmented.[11] We now consider the import of segmentation of markets for international corporate financial decision-making.

IMPLICATIONS FOR MULTINATIONALS' COST OF CAPITAL

A fully integrated global capital market with no barriers or costs to international investment would be just like a domestic capital market. The returns required on an overseas investment project would depend only on its risk and not on the identity or location of the firm making the investment. The appropriate way to measure risk would be to use the perspective of a globally diversified investor. The correct beta to use in the CAPM would be the world beta of an equity, firm, or project.[12] Firms would differ in their country of trading, but this would be of no more significance than the difference between a NASDAQ and NYSE listing in the U.S.

On the other hand, if international equity markets are not fully integrated, then there are likely to be major obstacles (or costs) that prevent portfolio investors taking advantage of international diversification. These costs may be as obvious as withholding taxes or as subtle as perceived informational disadvantages. In either case, these investor costs can be avoided by international *corporate* diversification. To be sure, such corporate direct foreign investment is not without costs of its own. For example, corporations making cross-border invest-

8. Related to authors by private sources.

9. See in this issue the discussion of Nestlé by René Stulz, "Globalization of Capital Markets and the Cost of Capital: The Case of Nestlé."

10. See the article by Ray Ball, "Making Accounting More International," in this issue.

11. See P. Jorion and E. Schwartz, "Integration vs Segmentation in the Canadian Stock Market," *Journal of Finance* 41 (1986), 603-614; and Pekka T. Hietala, "Asset Pricing in Partially Segmented Markets: Evidence from the Finnish Market," *Journal of Finance* 44 (1989), 697-718.

12. For an explanation of the implications of globally integrated equity markets, see in this issue Rene Stulz, "Globalization of Capital Markets and the Cost of Capital: The Case of Nestle."

The idea that foreign investment by multinational corporations should have lower required returns than comparable domestic investments runs counter to common practice. In our experience, international firms tend to charge risk premiums for overseas investment that run as high as 10% per annum above their estimates of home-country cost of capital.

ments typically incur withholding taxes on intra-firm dividends as well as distributions to their investors. In this sense, one may think of corporate foreign investment as substituting lower costs of corporate diversification for the higher portfolio diversification costs faced by investors.[13]

To the extent it provides its domestic investors with benefits they cannot secure on their own, direct foreign investment by a multinational should have a lower *net* required return on an investment than a domestic firm operating in the same business. Toyota, for example, should require a lower net rate of return from its U.S. automobile operations than does General Motors. Operating in the U.S. confers on Toyota's predominantly Japanese shareholders benefits of international diversification that General Motors's U.S. operations do not offer its American shareholders. The estimates of deadweight costs to cross-border investment cited above give an indication of the size of the disadvantage portfolio investors suffer when making foreign equity investments. Multinational corporations can experience incremental costs (that is, compared to domestic investments) of roughly this level in diversifying overseas and still make their shareholders better off than if shareholders had invested directly.[14]

The idea that foreign investment by multinational corporations should have lower required returns than comparable domestic investments runs counter to common practice. In our experience, international firms tend to charge risk premiums for overseas investment that run as high as 10% per annum above their estimates of home-country cost of capital. Thus, we are faced with an apparent paradox: Although foreign investments have desirable characteristics for globally undiversified investors, multinational firms often require a very large premium return for making them.

The key to understanding this apparent contradiction is likely to lie in the definition of required return that is used. The expected return to a foreign investment can be measured in at least three different ways: (1) as a local return before all potential costs associated with international ownership; (2) as a local return including such international costs as political risks; and (3) as a return allowing for all international costs that include both political risks and the costs of repatriating funds (and converting them back into dollars). It is this last completely net return that represents the return delivered to the shareholders of the investing firm. The implication of the home bias is that the required return net of all foreign-investment costs is less than the required return for a local firm investing in the same project.

But if the projected return on a contemplated overseas investment is estimated before all such costs, then the required return on the project must be raised to include compensation for remittance costs, the net burden of foreign tax, and expropriation risk. Thus, the required pre-cost return on foreign investment can be viewed as having two components: (1) a net return that is lower for a foreign firm than for a domestic firm; and (2) an additional risk premium necessary to compensate for various other costs (or "nonsystematic" risks) associated with foreign investment. At the very least, this separation of the required return into two components will make clear the following: When companies impose a premium on their required returns on foreign investment, they are effectively saying that they believe that the additional costs of foreign investment outweigh any advantage they have in the net required rate of return.

The problem with this approach, however, is that it attempts to encapsulate in a single number the aggregate of a variety of effects, most of which are negative in the case of foreign investment. But one of these effects, the achievement of investor diversification, seems significantly positive—or at least this is what the existence of a home bias suggests.[15]

Take the case of a recent trend in which U.S. utilities are acquiring U.K. utilities. One of the principal benefits claimed for such transactions is that of international diversification.[16] Unlike the case

13. For a derivation of optimal international capital budgeting rules with partially segmented markets, see our article, "Partially Segmented International Capital Markets, Securities Market Equilibrium, and Corporate Financial Policy," Working Paper, London Business School (1995).

14. The precise calculation of the relative required return for domestic and foreign companies is complicated by the fact that we need to estimate the required *marginal* return, whereas the observations of portfolios in Table 1 are average holdings. This is addressed in Cooper and Kaplanis (1995).

15. It is difficult, if not impossible, to capture all these components in a single number. Indeed Lessard (1979) argues that the adjustments for expropriation risk and remittance costs should be made through adjusted present value (APV) calculations. If this is done, then the remaining required rate of return is unlikely to be greater for a foreign firm than for a domestic firm. (See Donald R.Lessard, Evaluating Foreign Projects: An Adjusted Present Value Approach, *Diessaro International Financial Management* (Boston: Warren, Gorham and Lamont, 1979).

16. In an article entitled "US Giants Stalk British Power," the author remarks that "US companies such as the Southern Company are anxious to diversify away from reliance on their home territories." (*The Observer*, July 30, 1995).

for domestic diversification, which has been largely dismissed because investors can diversify more cheaply than corporations, the case for diversification as a motive for foreign investment seems plausible. Because U.S. investors behave as if there are substantial costs to foreign portfolio investment, U.S. corporations pursuing international diversification may be accomplishing something their predominantly U.S. investors appear unwilling or unable to do themselves.

SUMMARY AND CONCLUSIONS

The home bias in international equity portfolios is not caused by investors trying to hedge inflation. The link between equity returns and inflation is too weak for this to be a plausible explanation. It is also not likely to be caused by investors trying to hedge nominal exchange rates; such currency risk can be hedged as easily as by selling or purchasing foreign bonds. A much more plausible explanation for the home bias are deadweight costs—in the form of withholding taxes and transaction and information costs—associated with cross-border investment. Our current estimate of the level of such costs required to generate the observed home bias in portfolios is about 2.7% per year.

The implication of our analysis is that international capital markets are segmented by costs and restrictions on international portfolio investment and other informational "costs" or "imperfections." Our results, which are consistent with other direct tests of international capital market segmentation, imply that international capital budgeting decisions should depend on the location of the investing company. To the extent markets continue to be segmented, the cost of capital for an overseas investment is likely to be not higher (as in common practice) but lower than the cost of capital for the same project undertaken in the home country.

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