

DOMESTIC INVESTMENT BIAS AMONG STUDENT MANAGED INVESTMENT PORTFOLIOS

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Abstract

The paper examines the extent of “home bias” among a sample of student managed investment portfolio at thirty U.S. universities and colleges. The survey finds strong evidence of home bias. Among the thirty programs only thirteen had any foreign investments and their average investment in foreign investments was 2.7 percent of total assets. Even for the largest student-managed funds with assets of more than \$1,000,000, the average percentage in foreign investments was only 3.9 percent. These percentages in foreign investments are far less than we would expect from investment portfolios without home bias. Especially because the students are not professional investors and have little specialized investment information to help account for any home bias, these results provide additional support for the Merton investor recognition hypothesis which argues that investors with less information about foreign securities than domestic securities will tend to prefer those domestic securities with which they are more familiar.

Key words: Diversification, foreign investments.

JEL classifications: G11, G14.

Introduction

Previous research has shown that despite the financial advantages of international diversification, many investment portfolios tend to be biased toward domestic rather than foreign equities. Studies such as Seasholes (2000) and Grinblatt and Keloharju (2000) have found that professional fund managers, allegedly due to superior information about assets in their domestic markets, may be better able to select undervalued domestic investments and therefore tend to avoid foreign assets. In a different fashion, Merton’s (1987) investor recognition hypothesis argues that investors have less information about foreign securities than domestic securities will tend to prefer those domestic securities with which they are more familiar. Recent studies of the Merton hypothesis have considered foreign investors in Sweden (Choe, Kho, and Stulz, 2000) and Japan (Kang and Stulz, 1997) and world-wide (Chan, Kalok, Vicentiu Covrig, and Lilian K. Ng, 2005) and are consistent with the Merton hypothesis.

This paper investigates the extent of “home bias” phenomena among the student managed investment portfolios found in many U.S. university business programs. Since previous studies have investigated the behavior of both institutional and individual investors, these studies may have difficulty separating well-informed institutional and individual foreign investors from less-informed institutional and individual foreign investors or from foreign investors who utilize local foreign professional advisors to help them select foreign securities. By focusing on the investment practices of the student managed investment programs, this study seeks to provide additional understanding of the source and nature of the bias toward domestic securities.

Several characteristics of these student-managed investment portfolios make them an attractive subject of inquiry. First, finance professors typically serve a prominent role in advising and directing the activities of the student fund managers. Since finance professors, due to their educational training and research activities, are well aware of the theoretical advantage of international diversification, we can expect them to guard against an irrational bias against international investing. These faculty advisors can also be expected to inform students managers of the wide array of international investment vehicles including American Depository Receipts (ADRs), closed and open-end mutual funds, foreign indexed securities, foreign exchange traded funds (ETFs), and direct foreign purchases. While there may be exceptions, both the students and their faculty advi-

sors are not professional investment advisors nor are they likely to have day-to-day access to the expertise of professional investment advisors in foreign or domestic markets. Unlike some professional fund managers, there is little reason to expect that the students or their faculty advisors possess superior information about assets in either the domestic or foreign markets. Moreover, because the total asset values of the student managed portfolios are typically less than \$1,000,000 and rarely more than \$10 million, the cost of information acquisition faced by student managers would appear high for both domestic and international investments. The lack of professional expertise and the informational cost characteristics of the student-managed portfolios would seem to make them worthy candidates for helping us better understand the nature of the bias toward domestic investments observed elsewhere.

For our study, a survey of the student-managed investment programs was developed to measure the degree of bias, if any, toward domestic securities. The survey was mailed to the faculty advisors of 105 student-managed investment programs. The survey focused on the current extent of non-U.S., international equities in these portfolios, any restrictions on international investing, and the types, if any, of international investments currently utilized (i.e., country or foreign closed and open-end mutual funds, ADRs, foreign ETFs, and direct foreign investment). The survey also queried generally on the extent to which foreign securities have been utilized previously. Finally, information on the initial value of the fund, the class level of the students (i.e., graduate or undergraduate students), recent total asset value of the fund, and the number of years each student managed investment program has been in existence was obtained.

Survey Results

Thirty student-managed investment programs responded to the survey. Table 1 shows the approximate total value of the investments, the amount of investments in foreign securities, and the percentage of foreign investments as a percent of the total investment portfolio. The survey focused on the current holdings of the program and did not consider past or future decisions of the student managers. While the focus on the current holdings may be biased by short-term expectations, given the investment performance foreign equities for the three years prior to the survey, we should expect that student managers would display a reasonable level of interest in foreign securities.

Generally, while the survey respondents indicated acceptance of the idea of foreign investment, less than half of those responding to the survey invested in foreign securities of any type. Four of the thirty respondents had an express policy against foreign investment and a fifth is only permitted to invest a small amount in foreign equities to enhance the learning experience of the students. Those with an express ban on foreign equities include the Portland State University, Illinois Wesleyan, Mississippi University of Women, and the University of Iowa. Among all programs, only thirteen had any foreign investments and the average investment in foreign investments was 2.7 percent of total assets. For the largest student-managed funds with total assets of more than \$1,000,000, the percentage in foreign investments increased slightly to about 3.9 percent.

Several other programs had limitations on foreign holdings. Southwest Missouri, for example, allowed investments of no more than 10% of their total assets in foreign investments and the University of Tennessee, Martin, stated that their foreign investments were restricted to 15% of total assets. In addition, because most programs used market traded assets, open-end mutual funds were not commonly used. Rollins College was an exception and used an open-end mutual country fund. While a detailed review of their holdings was not possible, those with foreign investments focused on ADRs, direct foreign investments, foreign ETFs, and WEBS¹. Thus, when seen as a whole, the full range of ways to invest in foreign securities was used by the student-managed investment funds.

¹ WEBS or World Equity Benchmark Shares track are a type of closed-end fund that track designated country indices.

Table 1

(figures shown are approximate dollar values)			
University Program	Total Fund Value	Total Foreign Value	% Foreign
Appalachian State	55,000	1,250	2.27
California State University, Northridge	1,100,000	110,000	10.00
Cameron University	700,000	0	0.00
Central Michigan	42,000	2500	5.95
Creighton University	265,900	0	0.00
DePaul University	250,000	0	0.00
Illinois Wesleyan	600,000	N/A*	
James Madison University	91000	0	0.00
Lafayette College	272,000	7,165	2.63
Millisaps College	172,000	0	0.00
Mississippi University of Women	100,000	N/A*	
Ouachita Baptist College	11,250	0	0.00
Portland State University	140,000	N/A*	
Rollins College	280,000	34000	12.14
Southeast Missouri	40,000	3000	7.50
Stetson University	2,700,000	100000	3.70
Trinity College	550,000	0	0.00
UCLA	1,850,000	23000	1.24
University of Idaho	400,000	20000	5.00
University of Iowa	111,000	N/A*	
University of Iowa (MBA)	325,000	0	0.00
University of Kentucky	83,000	0	0.00
University of St. Thomas	800000	0	0.00
University of Tennessee, Chattanooga	145,000	0	0.00
University of Tennessee, Martin	133,000	0	0.00
University of Texas	12,500,000	0	0.00
University of Wisconsin, Madison	12,000,000	850000	7.08
Univesity of Utah	62,000	3500	5.65
Virginia Polytechnic Institute	2,900,000	50000	1.72
Wartburg College	720,000	40000	5.56

* These student-managed investment programs do not permit investment in non-U.S. equities.

There is no apparent relationship between the percentage of international equities and the length of time the student managed fund was operating or the class level of the students (i.e., graduate or undergraduate students). There is a slight tendency, although not statistically significant, for larger student-managed funds to investment more in non-U.S. equities. Interestingly, none of the respondents mentioned concern over currency risk or tax complexity as a reason for limiting their foreign investments.

When is there Home Bias?

What percentage in foreign investment should we expect if there is no bias? This is a surprisingly difficult question since we do not have direct information on a variety of non-financial

constraints which may influence their decisions. If an investor based his or her allocation decisions on the share of world market capitalization represented by foreign equities, we would expect an unbiased U.S. investor to put approximately 50% of their equities in the home market and 50% of their equity in other countries. Prestbo and Sease (1997), writing about the investment behavior of the general public suggested that, notwithstanding the issue of currency risk and potential tax problems, “a moderate portfolio for a middle-ground investor” would place 25% of their equity fund in foreign securities while for a more aggressive investor “fully half of the stock choices and bond choices could be outside of the United States”¹. The percentage of equities held in foreign investments by large public endowments including university endowments (with assets of more than \$750 million) is approximately 29% and by small public endowments (with assets of less than \$750 million) is approximately 11%².

While we cannot definitively state what the theoretical level of foreign investment for an unbiased student managed portfolio should be, holdings in the range of 10-15% would appear to be a conservative estimate. We say conservative, since the results of previous studies of home bias suggest that the actual holdings of conservative professionally and individually managed funds, like those of public endowments, exhibit home bias. Since the current data show that public endowments hold 11% or more of their equities in foreign investments, we should expect unbiased student managed funds to hold at least this percentage. Yet, only two of the student managed funds (Rollins College and California State University, Northridge) held more than 10% of their equity investments in foreign securities and both of them held less than 15%. Across all programs that permitted foreign investments, the average percentage of foreign investments was less than 4% (statistically significant at the 5% level) and far less than the 10-15% (or more) that we might expect if home bias was not present.

Merton’s investor-recognition hypothesis

Merton’s investor-recognition hypothesis states that investors prefer to invest in securities with which they are personally familiar and avoid securities with which they are unfamiliar. For the most part, these student investment managers know little about all investments. That is, while they may know something about the products are made by the company, their specific information about the investment prospects of the alternative investments is largely based on readily available public information. Why should we expect students to possess more information about the U.S. company, Procter and Gamble, than they do about the Swiss company, Nestle, or for students to know more about the products and profit potential of the U.S. automobile company, General Motors, than they do about Toyota, the Japanese automobile company? Can we really expect that students know more about biotech companies in the United States than they do about biotech companies elsewhere in the world? Possibly a better description of most students in these programs is that they are just beginning to apply their education in finance and economics and thus know relatively little about almost all securities, both foreign and domestic. Student managers are college students and not investment professionals. Consistent with this view of student managers, previous studies on their performance finds that their performance mirrors that the overall market averages that is, their returns are about average and there is little indication that they possess any superior knowledge or talent in selecting securities.

Why then should these student managers demonstrate such little interest in foreign investment, especially when they should be knowledgeable about the benefits of international diversification. A potential explanation is that the investor-recognition hypothesis includes investor information about the political, legal, and economic systems in which the foreign companies operate. While students may have relatively little information about the investment potential and risk of both foreign and domestic securities information, the student managers may have relatively little information about the underlying political, legal, and economic environment of most countries outside the United States. Even with general availability of detailed financial and market information on ADRs, WEBS, foreign ETFs, and other foreign securities, a lack of general country spe-

¹ See, page 294 of Prestbo and Sease (1997).

² This data comes from Wilshire Associates for the quarter ended 12/31/04.

cific information creates additional unfamiliarity about foreign investments. Apparently from the bias demonstrated by the students, the problem of lack of company and country specific information was sufficient to prevent the students from taking full advantage of the diversification effects of foreign investments.

For students who have limited information about all companies but who may be relatively more informed (or believe they are more informed) about the politics, legal, cultural, and overall economy of their own country, bias towards domestic securities may be seen, in part, as a response to lack of country-specific information. Viewed in this way, we see several testable implications about students and other investors. First, we should find that students (and other investors) with more travel and experience living in other nations may have better information (or believe they have better information) about the political and economic environment of other countries and, as a result, may demonstrate less home bias. Second, for all investors, to the extent they are generally less informed about the political, legal, and economic environments of other countries, investment in the equities of numerous countries or in equities with assets in numerous countries would seem a good tactic for taking advantage of the diversification effects of international equities while minimizing the problem of lack of country-specific information. This may help also explain why many U.S. investors use international mutual funds rather than ADRs, and similar country specific vehicles to invest internationally.

References

1. Chan, Kalok, Vicentiu Covrig, and Lilian K. Ng, "What Determines The Domestic Bias And Foreign Bias? Evidence From Mutual Fund Equity Allocations Worldwide", *Journal of Finance*, January 2005.
2. Choe, Hyuk, Bong-Chan Kho, and Rene Stulz, Do Domestic Investors Have More Valuable Information about Individual Stocks than Foreign Investors?, NBER Working Paper 8073, 2001.
3. Dahlquist, Magnus, and Goran Robertson, "Direct Foreign Ownership, Institutional Investors, and Firm Characteristics", *Journal of Financial Economics*, 59, 2001.
4. Falkenstein, Eric, "Preferences for Stock Characteristics as Revealed by Mutual Fund Portfolio Holdings", *Journal of Finance*, 51, 1996.
5. Grinblatt, Mark and Matti Keloharju, "The Investment Behavior and Performance of Various Investor Types: A Study of Finland's Unique Data Set", *Journal of Financial Economics*, 55, 2000.
6. Kang, Jun-Koo, and Rene Stulz, "Why is their Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan", *Journal of Financial Economics*, 46, 1997.
7. Merton, Robert C., "Presidential Address: A Simple Model of Capital Market Equilibrium with Incomplete Information", *Journal of Finance*, July 1987.
8. Prestbo, John and Douglas Sease, *The Wall Street Journal Book of International Investing*, Hyperion, 1997.