

Who Is Internationally Diversified? Evidence from 296 401(k) Plans

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The proportion of domestic stocks in most investors' equity portfolios well exceeds their country's relative market capitalization in the world, making investors forego substantial diversification benefits. We examine the international equity allocations of over 3 million individuals in 296 401(k) plans over the 2006-2011 period. We find enormous cross-individual variation in these asset allocations, ranging between zero and over 75 percent. Irrespective of the salary level, people in Iowa have about 5 to 10 percent higher international allocations than people in Nevada; the difference for diversified versus non-diversified firms is larger still, at 20-30 percent. Moreover, older people are consistently less internationally "diversified" than younger people.

Understanding this cross-individual dispersion may have profound implications for the international diversification literature. First, while destination country characteristics, such as various investment restrictions in different countries or corporate governance problems, explain the variation in foreign investment attracted by different countries, they leave the variation in international diversification across U.S. individuals unexplained. Second, the cross-individual dispersion we find suggests that individual heterogeneity in preferences or background risk may play a large role in driving international under-diversification, and may be more important than the "cost" of international investing or international risk factors such as transaction costs and real exchange rate risk. Personal characteristics such as age, salary, and wealth may play a role. Familiarity bias (Huberman, 2001) or informational asymmetry between local and non-local investors (Coval and Moskowitz, 1999) also have implications for the incidence of "international" home bias for individuals in different locations within the U.S. (e.g. based on the number of foreign born people in a region), or working for different firms (international versus domestic firms). Finally, cross-country studies miss a set of potentially very important determinants of home bias, which may be policy relevant, such as education levels or the quality of the 401(k) investment options available to the individual.

We find an upward trend that is only partially accounted for by the slight decrease in importance of the U.S. market relative to the world market. International equity allocations also display strong cohort effects, with the younger generations investing more internationally than older ones, but also each generation investing more internationally over time. This finding suggests that the home bias phenomenon may slowly disappear over time. Worker's salary has a

positive effect on international allocations, while account balance has a negative one, but these effects are not economically large.

We also find that zip codes with a higher percent of the population born in foreign countries have substantially higher international allocations. The analysis controls for a large number of other zip code specific characteristics, including the average (median) house value per zip code, and state income and growth levels. Also consistent with the familiarity or information hypotheses, is our finding that more export-oriented states feature higher international allocations. Finally, we find that higher education levels and financial literacy lead to a significantly higher international equity allocation, both statistically and economically. These effects are orthogonal to the immigration effect.

References

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