

Discussion of

**“Who is internationally diversified?
Evidence from 296 401(k) Plans”**

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Broad Policy Question

How is the quality of individual retirement savings and investment decisions impacted by:

- Investor characteristics?
- Regional characteristics?
- Firm characteristics?
- Investment menu?
- Default investment option?
- Availability of financial advice?

Authors focus on an interesting aspect of the portfolio choice and on a subset of these factors...

Home Bias

Portfolio Theory:

- Significant (potential) diversification benefits from investing in international equity
- Degree of integration has asset pricing implications

Existing Papers:

- Document significant variation across countries
- Attribute to information barriers & familiarity biases

This Paper:

- Documents significant variation in home bias across states and 401(k) plans in the U.S.
- Seeks to explain variation in home bias using the characteristics of individuals, regions, and firms

Data & Findings

Data from Financial Engines:

- Account-level data on **3.8 million** investors in **296** DC plans
- Large plans offered by large firms, covering **2006-2011**

Main Findings:

1. Cross-individual dispersion of home bias in U.S. \approx cross-country dispersion in home bias
2. Allocation to international equity **increases over time**
 - “Consistent with ongoing globalization process making people more comfortable with foreign investing”
3. More educated and literate areas hold more int'l equity
4. Persistent differences across regions and firms
 - Areas with more foreign-born people hold more int'l equity
 - Affiliates of foreign firms hold more int'l equity

1st Main Finding is Robust

I calculated holdings of international equity funds as % of all equity MF holdings using **BrightScope** data on **17,913** DC plans

- 10th percentile: **10.2%**
- 25th percentile: **15.3%**
- 50th percentile: **21.1%**
- 75th percentile: **28.4%**
- 90th percentile: **37.5%**

Notes:

- Fraction of assets allocated to int'l equity is positively correlated with fraction of menu consisting of int'l funds ($\rho = 0.7453$) → **Suggestive evidence that investment menus matter.**
- To capture “intentional” allocations, I exclude TDFs.
- Only 63.1% of plan-investment pairs are MFs that I can match to an asset class (others are separate accounts, GICs, ...)

Other Explanations for Trend?

Cost of international diversification has fallen

- Median expense ratios of domestic and int'l equity funds have been converging:
U.S. Growth: **1.38%** in 2006 **1.25%** in 2013
Int'l Equity: **1.65%** in 2006 **1.42%** in 2013
- Vanguard FTSE All-World ex-US Index charges **0.15%** whereas Vanguard S&P 500 Index charges **0.05%**

On the other hand, **Benefits** of international diversification has also fallen for U.S. investors

- Correlation in monthly returns of S&P 500 and MSCI World ex-US equity index has sharply increased:
1993-2002: **0.7251**
2003-2012: **0.9074**

Other Explanations for Trend?

Pension Protection Act of 2006

- Default switches from MMF to TDFs
- Increased allocation to **international equity**...
... at least for plans with auto enrollment and default

Consider samples of TDFs available in 2003 or 2012
with target retirement dates of 2035 or 2040

- Beta on int'l factor increases from **0.090** to **0.240**
- Dispersion in Beta increases from **0.048** to **0.070**

*Unless the authors' measure already accounts for these
across-TDF differences, they are underestimating both
trends*

Conclusion

Paper documents and helps to explain variation across portfolios... but offers limited policy recommendations:

- *We already know financial literacy improves outcomes*
- *Familiarity with international equity is hard to legislate*

Next step is to analyze investment menus:

- How much of the variation in home bias is due to variation in investment menu options and costs?
- Do different types of firms offer different menus?
 - *Balduzzi & Reuter (2013): Riskier firms choose riskier TDFs!*

Potential to improve decisions through education and advice → which is why firms hire Financial Engines!