

Foreign bias in equity portfolios: Informational advantage or familiarity bias?

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Question I

- Why do investors have different subportfolios of risky assets

$$x_{hi} = x_i^U + \epsilon_{hi} \quad (1)$$

- investor h has wealth W_h^B in riskfree assets and wealth W_h^R in risky assets
- x_{hi} is the fraction of risky wealth, W_h^R , invested in asset i
- $(x_1^U, \dots, x_N^U)$ vector of weights for the world market portfolio – identical for all investors $h \in \{1, \dots, H\}$

Question II

- ϵ_{hi} is the extent to which investor h 's actual risky portfolio weight for asset i differs from world market portfolio – driven by return expectations – what drives return expectations?

is ϵ_{hi} by driven informational frictions or familiarity biases?

Theory Underlying the Empirical Strategy I

- Compare fraction of risky household wealth held in asset i for country A , $y_{A,i}$ with fraction of world risky household wealth invested in asset i , s_i
- $y_{A,i} \neq s_i$ because of deviations from market portfolio.
- For households in country A , compute fraction of risky household wealth held in asset i

$$y_{A,i} = \frac{\sum_{h \in A} x_{hi} W_h^R}{\sum_{h \in A} W_h^R} = \sum_{h \in A} x_{hi} w_{A,h}^R \quad (2)$$

$$= x_i^U + \sum_{h \in A} \epsilon_{hi} w_{A,h}^R \quad (3)$$

where $w_{A,h}^R$ is the fraction of risky household wealth in country A owned by household h

Theory Underlying the Empirical Strategy II

- Fraction of aggregate risky wealth in asset i

$$s_i = \frac{\sum_{\text{all } h} x_{hi} W_h^R}{\sum_{\text{all } h} W_h^R} \quad (4)$$

$$= x_i^U + \sum_{\text{all}} \epsilon_{hi} W_h^R, \quad (5)$$

where w_h^R is the fraction of risky household wealth in the world owned by household h

- $s_i \neq x_i^U$, market portfolio distorted by household portfolio errors

Why do s_i and $y_{A,i}$ differ?

Why is the portfolio weight for asset i in country A different from the weight in the market portfolio?

$$y_{A,i} - s_i = \sum_{h \in A} \epsilon_{hi} w_{A,h}^R - \sum_{\text{all}} \epsilon_{hi} w_h^R \quad (6)$$

- differences in expectations of returns across households in Country A **relative** to the world
- difference in the wealth distribution for Country A **relative** to the world
- $y_{A,i} - s_i > 0$ does not mean $\sum_{h \in A} \epsilon_{hi} > 0$

What the paper misses

- The market portfolio will also be impacted by household portfolio errors, $s_i \neq x_i^U$
- A country's wealth distribution **relative** to the world wealth distribution impacts $y_{A,i} - s_i$
- $y_{A,i} - s_i > 0$ does not mean $\sum_{h \in A} \epsilon_{hi} > 0$
 - $y_{A,i} - s_i$ driven by weighted sum of portfolio errors in Country A **relative** to weighted sum of portfolio errors in the world

Is the above important?

Activity and Learning

- Familiarity bias makes beliefs more volatile – can see this by extending Wonham filter

Is the above important in active trading?

Questions

- Why is a direct holding of a stock evidence of information-based decision making whereas an indirect holding is evidence of decision making distorted by familiarity biases?

Summary

- Think more carefully about how household portfolio errors aggregate
- Show theoretically that a direct holding of a stock is evidence of information-based decision making whereas an indirect holding is evidence of decision making distorted by familiarity biases