Global private information in international equity markets ☆

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ABSTRACT

This paper studies international equity markets when some investors have private information that is valuable for trading in many countries simultaneously. We use a dynamic model of equity trading to show that global private information helps explain US investors' trading behavior and performance. In particular, the model predicts global return chasing (positive co-movement of US investors' net purchases with returns in many countries) which we show to be present in the data. Return chasing in our model can be due to superior performance of US investors, not inferior knowledge or naive trend-following. We also show that trades due to private information are strongly correlated across countries. A common (global) factor accounts for about half their variation.

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1. Introduction

US investors' net purchases in a foreign equity market co-move positively with returns there.[1] This co-movement has been labeled "return chasing": US investors tend to be net buyers of equity in a foreign country when stock prices there are rising. A common explanation for return chasing is based on the assumption that US investors lack the private information of local investors in foreign markets. In the presence of local private information, less informed US investors react more strongly to public signals than better informed local investors, even if all investors have rational expectations. If public signals are sufficiently important drivers of returns, this mechanism generates both return chasing and underperformance of US investors in foreign markets.

While the private information view of international equity markets helps explain return chasing and equity home bias, it has been challenged by recent empirical findings on investor performance. If local private information were important, domestic investors should make higher trading profits than foreign investors. However, the

[1] See, for example, Bohn and Tesar (1996a), Choe, Kho, and Stulz (2001), Froot, O'Connell, and Seasholes (2001) and Albuquerque, Bauer, and Schneider (2007).

evidence on the performance of foreign and local investors is mixed, with a number of studies suggesting that foreign investors outperform their domestic counterparts.[2] In light of models with local private information, it is puzzling why foreigners should sometimes have country-specific private information that is not available to local investors.

This paper proposes to broaden the private information view of international equity markets by considering global private information that is relevant for trading in many foreign countries simultaneously. As a concrete example, consider market research about the technology sector. Insights about the future of this sector in the United States, a country that dominates growth in the sector, are likely to be important for the valuation of tech stocks in Europe as well. Experience gained in the US market thus could give sophisticated US investors an advantage in recognizing global trends in technology and lead them to outperform domestic investors in Europe. More generally, the presence of global factors in international equity returns is a robust stylized fact, and in many empirical studies global factors are captured by US-specific variables (e.g., Campbell and Hamao, 1992; Harvey, 1991). This suggests that US investors' local private information could be valuable in foreign markets as well.

The presence of global private information reconciles the private information view with mixed evidence on investor performance and helps explain new evidence we present on the cross-country correlation of returns and flows. To show this, we first set out a theoretical model of international equity trading and derive its implications for returns and equity flows. Stock returns in our model are driven by both local and global factors. We view the world as a set of regions, a subset of which makes up the United States. In every region, local investors receive signals about local factors and some investors also receive signals about global factors. The key assumption is that the fraction of investors who receive global signals is larger in the US than in the rest of the world. With this information structure, local private information leads to home bias (in fact, to regional "home bias at home"). At the same time, global private information generates return chasing that reflects superior performance of US investors. This is because local investors abroad underreact to movements in global factors, about which they know less than US investors.

Analysis of the model leads to three new predictions. First, if global information is important, we should observe global return chasing: US investors' net purchases in any given country should co-move positively not only with returns in that country, but also with returns in other countries. We show this new fact in a monthly data set of US investors' equity purchases in eight developed countries. Second, the model suggests that it is natural to find mixed evidence on the performance of foreign investors relative to local investors. While local shocks (which are reflected in local private signals) favor local investors, global shocks (which are reflected in global private signals) favor US (i.e., foreign) investors. Empirical studies could thus uncover under- or overperformance of foreigners depending on the particular time period and country studied.

The third prediction is that global private information induces positive correlation in US investors' trades across countries. To assess it, we construct empirical measures of US investors' trades due to private information. If most private information were local, then the correlation of such trades across countries should be low. For example, private information generated by market research about France that leads sophisticated US investors to purchase French equities should not help forecast returns in Germany and, therefore, should not entail purchases of German equities. In contrast, the more private information is global, the higher the cross-country correlation of trades due to private information. We find that a global factor accounts for slightly more than half of the variation in trades due to private information across the eight countries we study. At the same time, private information accounts for about one-half of the overall variation in trades. Global private information thus plays an important role in international equity markets; It explains approximately 30% of US investors' trades abroad. To the best of our knowledge, this paper is the first to show global return chasing and global private information in international markets.

In our model, the key feature that allows both home bias and return chasing to obtain is the presence of asymmetric information. A benchmark symmetric information model cannot account for either fact. Under standard assumptions—all investors have identical hyperbolic absolute risk aversion (i.e., HARA) preferences and all assets are tradable—two fund separation obtains in equilibrium. Under two fund separation all investors hold all risky assets in the same proportions. As a result, there is no bias toward home assets, and there are no equity flows across borders that are systematically related to country returns.

A deviation from this benchmark that can lead to global return chasing is a gradual, simultaneous opening of equity markets in many countries to US investors. If markets become gradually more accessible, US investors increase their positions. At the same time, the marginal investor becomes more diversified and requires lower risk premia, which raises stock prices. Integration could thus lead to positive co-movement of US net purchases and returns at low frequencies. However, we show that most global return chasing occurs at high frequencies: The correlations between detrended flows and returns are similar to the raw correlations. This high frequency correlation is unlikely to be due to gradual market

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[2] For evidence that domestic investors perform better than foreigners, see Shukla and van Inwegen (1995), Hau (2001), Choe, Kho, and Stulz (2001), or Timmermann and Blake (2005). Coval and Moskowitz (2001) show that US mutual fund managers achieve better performance on equity of firms located close to the fund. This result rationalizes "home bias at home" (Coval and Moskowitz, 1999) and also suggests the presence of local private information. Evidence that foreign investors can outperform domestic investors outside the US is presented in Grinblatt and Keloharju (2000), Karolyi (2002), Hamao and Mei (2001), Seasholes (2000), Bailey, Mao, and Sirodom (2007), and Froot and Ramadorai (2008).