Information Acquisition, International Under-diversification and Portfolio Performance of Institutional Investors

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Abstract: We test whether 1) institutional investors with concentrated international holdings outperform internationally diversified investors, and 2) foreign investors with information advantage, measured by cultural and geographic proximity to the target market, outperform other foreign investors. Using the United States as a target market, we document that investors concentrated in US securities do not outperform other investors. This result contradicts the idea that internationally under-diversified portfolios are mean-variance efficient due to the benefits of economies of scale and specialization. However, cultural similarity and geographic proximity to the US enhance investors' performance in US securities.

Keywords: home bias, international under-diversification, institutional investor performance, culture JEL code: G11, G15, G02

Traditional portfolio theory predicts that investors' portfolios should be diversified across international markets. In contrast, empirical studies document that investors are more likely to invest in their home country (i.e., exhibit home bias; see e.g., French and Poterba (1991)) and in foreign markets that are culturally similar to and geographically nearby the investor's home market (i.e., exhibit familiarity bias; see Chan, Covrig, and Ng (2005) and Anderson, Fedenia, Hirschey, and Skiba (2011)). These findings refute the implications about investor behavior developed in traditional asset-pricing models and imply that investors do not take advantage of international diversification opportunities. In contrast to the traditional theory, another strand of theoretical literature shows that portfolios can be under-diversified but optimal if they are based on information advantage (see Gehrig (1993), and Van Nieuwerburgh and Veldkamp (2009, 2010)). This study examines empirically whether observed home bias and international under-diversification is a rational choice attributed to information advantage. Specifically, we investigate whether portfolio concentration in a given target market and in culturally and geographically close markets is associated with better investors' performance.

We conjecture that investors, when determining their international portfolio allocations, construct an optimal, though not well-diversified portfolio by concentrating their holdings in a small set of markets. Gehrig (1993) and, more recently, Van Nieuwerburgh and Veldkamp (2009, 2010) argue that portfolio under-diversification, specifically portfolio home bias, arises when investors are better informed about domestic stocks and thus prefer the return distribution of a less diversified portfolio. They show that a trade-off between scale economies that lead investors to learn about a set of highly-correlated assets and the benefits to diversification

emerges such that portfolios are under-diversified but optimal. Accordingly, investors incur the market-specific cost of achieving a greater degree of diversification only if it buys them extra expected return. We hypothesize that if concentrating in a small set of markets is based on value-relevant information, then the resulting portfolio under-diversification should be associated with better investors' performance. To test this hypothesis, we examine asset allocations in US securities by domestic (US) and foreign (non-US) institutional investors. We investigate whether the institution's portfolio weight of the US market is positively related to the institution's abnormal performance in US securities.

In the second part of the analysis, we examine whether geographic proximity and cultural similarity between the investor's home country and the target market enhance investors' performance. Chan, Covrig, and Ng (2005) and Anderson, Fedenia, Hirschey, and Skiba (2011) show that investors are more likely to invest in a foreign market that is culturally similar to and geographically nearby the investor's home market. We conjecture that geographic proximity and cultural similarity are associated with information advantage. That is, investors from nearby and culturally similar countries may have an advantage in information acquisition and processing when compared to the investors from more distant countries. We hypothesize that, because of information advantage, investors that are culturally or geographically distant. To test this hypothesis, we examine the relation between cultural similarity and geographic proximity between the home countries of foreign institutional investors and the US and the performance of these institutions in US securities.

Our empirical results can be summarized as follows. First, we document that greater weighting of the US market by either domestic or foreign institutional investors does not enhance their performance in US securities. To the contrary, the weight of the US market is *negatively* and significantly related to the abnormal performance of foreign investors in US securities. The weight of the US market is also negatively, but not significantly, related to the abnormal performance of US institutions in US securities. These findings suggest that portfolios concentrated in a few markets do not achieve above benchmark performance and, in fact, in some cases, are associated with lower performance. These results do not provide any evidence that home-biased and internationally under-diversified portfolios are optimal due to economies of scale and specialization.

However, the second part of the analysis suggests that geographic proximity and cultural similarity between the investor's home country and the target market enhance the investor's performance in the target market. The results show that cultural and geographic distances between the institution's home country and the US are significant determinants of foreign institutions' abnormal returns in US securities. The negative coefficients on these factors imply that institutional investors from countries that are culturally or geographically close to the US outperform institutional investors from countries that are culturally or geographically distant from the US. This result provides supportive evidence for the information advantage theory suggesting that investors rationally choose foreign markets that are culturally similar to and geographically nearby their home countries. Combined with the finding that market concentration deteriorates the investors' performance, this result suggests that high concentration

in the target market is especially harmful when investors are located in the markets that are culturally and geographically distant from the target market.

This study contributes to the existing literature in several ways. First, to our knowledge, we are the first to examine the link between performance and market concentration in an international setting. Coval and Moskowitz (2001) show that locally concentrated mutual funds outperform geographically diversified funds in the US. We show that neither US nor foreign investors with higher US portfolio weights outperform, in US securities, investors that are more internationally diversified. Thus, we do not find any evidence of positive benefits from economies of scale and specialization in the international setting. Second, to our knowledge, we are the first to examine institutions' performance conditioning on investors' home-country characteristics. Specifically, we test whether the performance in US securities by foreign institutional investors is associated with cultural closeness and geographic distance between the investor's home country and the US. By focusing on foreign investments in US securities, we attain a controlled environment for a portfolio-performance study with well-established methodologies and reliable pricing data. Finally, this study utilizes country-specific and investorspecific measures of information advantage. The geographic and cultural distances between the investor's home country and the US are country-specific variables, meaning that all institutions that are domiciled in the same country have identical measures of information advantage. In contrast, the weight of US holdings is investor-specific measure of information advantage, uniquely determined for each institutional investor. A significant result for country-specific

measures implies that, after controlling for other determinants of investor performance, investors from nearby and similar markets outperform investors from distant markets.

The rest of the paper is organized as follows. Section I reviews the related literature and develops hypotheses. Section II discusses our data and methodology. Section III presents the results, and Section IV concludes.

I. Literature Review and Hypothesis Development

A. Home Bias and International Under-diversification: Prior Evidence

Traditional portfolio theory predicts that investors diversify across domestic and foreign markets to maximize portfolio efficiency (Levy and Sarnat (1970)). In practice, home-country portfolio allocations exceed and international allocations fall short of benchmark weights based on each country's market capitalization. The preference of investors for holding home-country securities has become known as "home bias" and has been widely studied in the finance literature since the seminal work by French and Poterba (1991).¹

Studies of international portfolio allocations show that home bias is present in many countries' aggregate equity positions (see Lewis (1999)). Chan, Covrig, and Ng (2005) show that the degree of home bias is related to different investment barriers, such as financial market development, economic development, and investor protection. Home bias is also correlated with familiarity measures, such as geographic proximity, common language, and common culture

¹ See Lewis (1999) and Karolyi and Stulz (2005) for reviews of the literature on home bias.

(Chan et al. (2005) and Anderson et al. (2011)). Furthermore, the relatively small shares of portfolios that investors allocate abroad are often invested in securities and countries that most closely resemble the investor's home country (Amadi (2004)). These findings suggest that investors, on average, are not taking advantage of international diversification opportunities. Alternatively, these findings could indicate that investors acquire useful information about familiar firms from reading company statements in a language they understand, from general or acquired knowledge about geographically nearby firms, or from the similar cultural groups they socialize (see Grinblatt and Keloharju (2001)).

B. Information Advantage and Performance

Several theoretical studies model investors' portfolio choices conditioning on information advantage. Gehrig (1993) develops a rational-expectations model where even in equilibrium investors remain incompletely informed. The author shows that home bias in international investment portfolios arises when investors are better informed about domestic than about foreign stocks. Van Nieuwerburgh and Veldkamp (2009, 2010) develop a model of rational investors making a choice regarding information acquisition about assets when forming portfolios. Scale economies lead investors to learn about a set of highly correlated assets, which competes with benefits to diversification. Resulting portfolios are under-diversified but optimal.

Several country-specific empirical studies show that focused (i.e., under-diversified) investment strategies lead to better performance. Kacperczyk, Sialm, and Zheng (2005) examine the relation between industry concentration and performance of actively managed US mutual

funds. They find that industry-concentrated funds outperform other funds on a risk-adjusted basis. Brands, Brown, and Gallagher (2005), in the Australian market, document a positive relation between fund performance and portfolio concentration, measured as a deviation in portfolio weights held in stocks, industries, and sectors from the underlying index or market portfolio. This relation is stronger for stocks in which managers hold over-weighted positions and stocks not included in the largest 50 securities traded on Australian Stock Exchange (ASX). Ivković and Weisbenner (2005) document that an average US household generates an additional 3.2% annual return from its local holdings, suggesting that local investors are getting an advantage from local knowledge. Similarly, Coval and Moskowitz (2001) show that money managers earn a substantial abnormal return on firms that are located closer to their local area; the result is stronger for smaller, older, and more concentrated funds with fewer holdings.

In an international setting, Cumby and Glen (1990) examine the performance of fifteen internationally diversified US funds. The authors find no evidence that these funds generate returns that exceed a global benchmark. Bhargava, Gallo, and Swanson (2001) evaluate the performance of 114 international equity managers. The authors show that, on average, these managers do not outperform Morgan Stanley Capital International (MSCI) World benchmark index. However, certain geographic asset allocation and equity-style allocation decisions enhance fund performance. In a more recent and comprehensive international-performance study, Thomas, Warnock, and Wongswan (2006) investigate the performance of US international investment portfolios over 25 years in 44 countries. They document that US investors achieved significantly higher Sharpe ratios, especially since 1990, relative to global benchmarks. The

authors attribute this result to the successful exploitation of public information, preference for cross-listed and well-governed firms, and selling of past winners instead of return-chasing strategies.

Several other studies compare domestic and foreign investors' performance and provide some support for the information advantage hypothesis. Dvořák (2005) shows that in the Indonesian market, domestic clients of global brokerages earn higher profits than foreign clients, suggesting that local information and global expertise lead to higher profits. Choe, Kho, and Stulz (2005) show that in the Korean market, domestic investors have an edge in trading domestic stocks. They document that foreign fund managers face about 37 basis points greater transaction costs than domestic fund managers. In a cross-country study, Hau (2001) investigates trading profits earned on the German Security Exchange by 756 professional traders located in eight European countries. He finds that traders located outside of Germany, in non-Germanspeaking cities, have lower trading profits, though the results are not statistically significant. In a study of US holdings, Shukla and van Inwegen (2006) find that UK mutual funds under-perform US mutual funds in US stocks and attribute this performance differential to information disadvantage.

A more recent study by Ferreira, Matos, and Pereira (2009) presents evidence inconsistent with the idea that local information advantage is associated with better performance. Using a large sample of equity mutual funds, the authors find that foreign managers outperform domestic managers. Furthermore, the foreign advantage is negatively related to information availability and market transparency. It is less pronounced during bear markets, in less developed countries, countries with lower investor protection, in smaller securities, and in securities followed by fewer analysts.

C. Hypotheses

Extending these theoretical and empirical studies, we form two hypotheses. Our first hypothesis states that institutions that concentrate their holdings in a particular market generate positive abnormal returns in the holdings of that market. The intuition is that institutional investors with greater portfolio weight in a given market benefit from specialization and economies of scale in information acquisition. This results in under-diversified but mean-variance efficient portfolios. Formally, the testable hypothesis states:

 H_1 : Investors' portfolio weighting of a market is positively related to abnormal performance in that market's securities.

We test this hypothesis by examining portfolio weights and performance in US securities by domestic and foreign institutional investors. We expect that US institutions that are more concentrated in the US market (i.e., less internationally diversified and, thus, more US-focused) will outperform, in the part of the portfolio that consists of US securities, US institutions that are less concentrated in the US market (i.e., more internationally diversified). Similarly, we expect that foreign institutions with higher portfolio weights in US securities will outperform, in the part of the portfolio that consists of US securities, foreign institutions with lower weights in US securities. Our second hypothesis examines other measures of information advantage -- cultural similarity and geographic proximity between the investor's home country and the target market. We conjecture that an investor from a culturally similar country has an advantage in interpreting the signals available on a target market. Similarly, an investor who is geographically close to the target market has an advantage in information acquisition and processing. This reasoning echoes Grinblatt and Keloharju (2001) who note that the preference for nearby and same-culture firms may be rational if it generates superior performance in these firms. Formally, our second hypothesis states the following:

 H_2 : Investors that are culturally or geographically close to a target market outperform, in that market's securities, investors that are culturally or geographically distant.

We test this hypothesis by examining the relation between cultural and geographic distance between the foreign investor's home country and the US and the performance in US securities. We expect that foreign institutional investors that are geographically and culturally closer to the US will outperform, in the US part of their portfolio, foreign investors that are more distant from the US.

II. Data and Methodology

A. Data

We use quarterly institutional holdings data from the FactSet/Lionshares Company database from the last quarter of 1999 to the first quarter of 2010. The holdings' data comprises all 13-F filings and similar filings from each institutional investor's home country where such information is reported. The data include detailed information on each individual security that is held by institutional investors in any given quarter. The number of shares held by each institution in all their target markets including the US and the market value of each security in institutional investors' portfolios in US dollars are also included. In addition, we have detailed data on the investor type, investor domicile, country where securities are listed, and many other investor and security characteristics.

Since the main focus of this study is the performance of institutional investors in the US market, we merge the security-level holdings' data to security prices from the Center for Research in Security Prices (CRSP). All ordinary shares (CRSP share code of 10 or 11) are included in the sample. Macroeconomic variables include Gross Domestic Product (GDP) for investor countries obtained from the United States Department of Agriculture² and bilateral trade flows obtained from the NBER.³

To be included in the sample, each institution is required to have at least some holdings in US stocks during the sample time period and non-missing data for the main explanatory variables, including cultural distance, geographic distance, and industry concentration (variables are defined in sections II. B and II. C). Institutional investors are also required to have at least five quarters of trading records. We define institutions as foreign if their reported country of domicile is not the US and as domestic if their reported country of domicile is the US. FactSet's

² United States Department of Agriculture: http://www.usda.gov/wps/portal/usdahome

³ NBER World trade database is maintained by Feenstra: http://www.econ.ucdavis.edu/faculty/fzfeens/

country domicile is the location of the institution's main operations and this variable is available for all 4,121 institutions that meet our other criteria.

Table I displays summary statistics for 4,121 sample institutional investors. Panel A shows the investors' style distribution. The most frequently reported investment style is GARP (33.34%), followed by Value (30.11%), and Growth (14.34%). Panel B presents the distribution of institutions by investor type. Investment Advisers (52.07%) and Hedge Fund Companies (22.54%) account for the majority of investors. Other investor types include Bank Management Divisions (9.66%), Mutual Fund Managers (7.01%), and Insurance Management Divisions (2.38%).

[Insert Table I here]

B. Portfolio Weight in US Securities of US and Foreign Institutional Investors

We compute an investor's US weight as a percentage share of the investor's portfolio. Each institution's portfolio weight in US securities is computed on quarterly basis. For domestic institutions, we compute US weight as a percentage of the total investor's portfolio. For foreign institutions, we compute the US weight for each institution as a percentage of its total foreign investments rather than as a percentage of its total portfolio. Since the extant literature documents a large home bias in investors' portfolios, this measure more precisely captures the investor's concentration in the foreign market. The US weight for foreign institutions is computed as:

$$US_weight_{i,t} = \frac{p_{i,US,t}}{\sum_{I} p_{i,j,t}}$$
(1)

where $p_{i,US,t}$ is the total market value of all securities institution *i* holds that are headquartered and listed in the US at time t. The denominator is the total market value of institution *i*'s holdings in *J* countries.

Figure 1 shows the US market capitalization as a share of the world's market capitalization and indicates the approximate expected allocation to the US market. Consistent with prior literature, we document the existence of under-diversification in foreign investors' portfolios. For example, in 2009, the US market capitalization is roughly 32% of the world's market capitalization, so for an investor to be perfectly diversified according to market capitalization, we would expect the average allocation to the US market to be roughly 32%.⁴

[Insert Figure 1 here]

[Insert Table II here]

Table II shows each country's average US weight computed based on Equation 1. The weights are first computed quarterly, after which we compute each institutional investor's time series average weight in the US. The column titled "US weight" shows a large heterogeneity in the investor countries' weights of the US market. For example, US institutions hold almost 95%

⁴ It is a common practice, when computing portfolio weights, to adjust the expected allocations to "investability". This means that shares that are closely held by insiders or not actively traded are not counted in the total market capitalizations. The investability adjustment increases the US weight from 32%. However, since we are only focusing on one target market and on the raw weights of the US market of the portfolios in this study, the investability adjustment will not be necessary.

of their total portfolios in domestic securities. The US weight is also high for Taiwanese, Brazilian, and Israeli investors (81.16%, 73.49%, and 53.56% respectively). On the other hand, US weight is very low for investors domiciled in Thailand, India, and Poland (0.44%, 0.6%, and 1.28% respectively). It should be noted again that our sample is limited to those investors that have at least some holdings in the US market.

C. Geographic and Cultural Distances between the Investor's Home Country and the US

We use two other measures of information advantage: geographic and cultural distances between the investor's home country and the US. Geographic distance is from Jon Haveman's international-trade data source and is measured as the distance, in kilometers, between the investor's capital city and Washington DC. ⁵ To measure cultural distance, we follow methodology in Kogut and Singh (1988) and use the four primary dimensions of culture from Hofstede (1980, 2001).⁶ We omit the fifth dimension, long-term orientation, because its values are missing for the majority of countries in our sample. Complete explanation of the primary dimensions is provided in Appendix A. Appendix B reports the investor countries' index scores of each primary dimension. The four dimensions used in the computation of the cultural distance include:

⁵ Jon Haveman's International Trade data source: http://www.haveman.org/

⁶ Hofstede's survey-based evidence shows that countries' cultural attributes can be measured along five primary dimensions. See Geert Hofstede's website: http://www.Geert-Hofstede.com and Culture Consequences, 2001, 2nd edition, pages xix-xx.

Uncertainty avoidance index (UAI) - society's tolerance for uncertainty and ambiguity.

Individualism (IDV) as opposed to collectivism - the degree to which individuals are integrated into groups.

Power distance index (PDI) - the extent to which less powerful members of organizations and institutions accept and expect that power is distributed unequally.

Masculinity (MAS) versus femininity - the distribution of roles between the genders.

Following Kogut and Singh (1988), we compute the cultural distance (*CD*) from the US for each investor country as:

$$CD_{I} = \sum_{n=1}^{4} \frac{\left(H_{n,I} - H_{n,US}\right)^{2}}{V_{n}} / 4$$
(2)

where $H_{n,I}$ is the n^{th} cultural dimension of an investor country I, $H_{n,US}$ is the n^{th} cultural dimension of the US, and V_n is the variance of the n^{th} cultural dimension.

Table II presents the geographic and cultural distances from the investor's home country to the US. The table shows no consistent pattern in the relation between cultural similarity and geographic distance. In some cases, culturally distant countries are also geographically distant. For example, Malaysia is both culturally and geographically far from the US. However, some countries that are geographically close, such as Mexico, are culturally distant. The opposite can also be true: countries that are geographically distant, for example New Zealand, are culturally close.

D. Industry Concentration

In some specifications, we control for industry concentration of institutional investors' portfolios. Kacperczyk, Sialm, and Zheng (2005) document that industry-concentrated portfolios outperform industry diversified portfolios. Fedenia, Shaffer, and Skiba (2011) document a significant relation between information proxies (cultural and geographic distance) between the US and international markets and international investors' industry concentration. It is possible that the performance of institutions from distant countries differs from the performance of institutions from close countries, not because of information advantage but because of industry concentration. The expected industry allocation is computed based on US securities' (NYSE, NASDAQ, AMEX with share codes 10 and 11) market capitalization weights. Each institution *i*'s deviation from expected industry allocation with respect to each 2-digit SIC code is calculated as:

$$bias_{i,SIC} = \frac{p_{i,SIC}}{\sum_{SIC} p_{i,SIC}} - \frac{MV_{SIC}}{\sum_{SIC} MV_{SIC}}$$
(3)

where $p_{i,SIC}$ is the market value of all shares held by an institution *i* that belong to industry *SIC*. $p_{i,SIC}$ is scaled by institution *i*'s total US portfolio, or the total value of shares invested in all industries, *SIC*. *Bias* in each industry is then computed as the difference between the institutional investor's actual shares invested in each *SIC* minus the expected value of each *SIC*. *MV*_{SIC} is industry *SIC*'s market value and is scaled by the total market value of all industries. We then aggregate the individual industry deviations from their expected values in Equation 3 across all industries for each institution *i*, so that the resulting *Industry Concentration* measure is:

Industry Concentration_i =
$$\sum_{SIC} \left| \frac{bias_{i,SIC}}{2} \right|$$
 (4)

where *bias_{i,SIC}* is computed as shown in Equation 3. The measure is zero for an investor whose industry allocations in US securities are made exactly in line with industry benchmark weights. A measure greater than zero indicates the portfolio is not perfectly diversified across industries. It is interpreted as the fraction of the portfolio that should be reallocated to achieve perfect industry diversification.

E. Performance Measure

At the end of each quarter, we compute the value-weighted buy and hold quarterly return to an institution's US security holdings over a subsequent quarter as:

$$\mathbf{R}_{i,t} = \sum_{j=1}^{J} w_{i,j,t} \times \mathbf{R}_{j,t}$$
(5)

where $w_{i,j,t}$ is security *j*'s capitalization weight in institution *i*'s US holdings at the end of month *t*, and $R_{j,t}$ is the quarterly return to a security *j*, computed based on the split-adjusted monthly returns over month t+1 to t+3. We then compute calendar-time abnormal returns for an institution *i*'s US portfolios using Carhart's (1997) four-factor model. The abnormal return is the intercept from a time-series regression of the institution's quarterly return to US securities on the Fama and French (1993) market, size and value factors and momentum factor:

$$R_{i,t} - R_{f,t} = \alpha_i + \beta_i (R_{MKT,t} - R_f) + \lambda_i (SMB_t) + \gamma_i (HML_t) + \theta_i (MOM_t) + \varepsilon_i$$
(6)

where $R_{i,t}$ is the quarterly return to institution *i*'s US holdings (from Equation 5), $R_{f,t}$ is the risk-free rate, SMB_t, HML_t are Fama and French's size and value factors, and MOM_t is the momentum factor.

III. Results

A. Portfolio US Weight and Performance

To test Hypothesis 1, we first examine whether there are any patterns in performance of institutional investors conditioning on their portfolio weight of US securities. We sort US institutions into portfolio quintiles based on the time series average weight of US securities in their total portfolios. Separately, we sort foreign institutions into portfolio quintiles based on the time series average US weight measured as the percentage of the institution's total market value of foreign investment (see Equation 1). In addition, we sort all portfolios into size quintiles.⁷ For each institution, the abnormal return in US securities is computed based on the Carhart fourfactor model (Equation 6).

Table III reports the average abnormal returns and corresponding *t*-statistics for 25 weight/size quintile portfolios. Panel A reports the results for US investors, and Panel B reports the results for foreign investors. The last column presents differences in average abnormal returns between portfolios with the largest and the smallest weight in US securities for each size

⁷ Chen, Hong, Huang, and Kubik (2004) document that mutual fund returns decline with fund size.

quintile. The last row reports differences in average abnormal returns between the largest and the smallest size portfolios for each weight quintile.

According to Hypothesis 1, we expect that higher portfolio weight in US securities is associated with better performance in US securities. The results presented in Table III do not support this hypothesis. First, in Panel A, the abnormal performance of US institutional investors in US securities does not increase with US weight for any of the size quintiles. In fact, it tends to decline. This decline is not perfectly monotonic, but the performance differential between the portfolios with the highest and the lowest US weight is negative (albeit insignificant) in size quintiles 2 through 5. Consistent with prior literature, we find that portfolio size deteriorates performance; the abnormal performance differential between the smallest and the largest institutional portfolios is always positive and is statistically significant in two of the five weight quintiles.

[Insert Table III here]

The results for foreign institutions presented in Panel B also do not support Hypothesis 1. Contrary to the hypothesis prediction, the abnormal performance in US securities tends to be the highest for the institutions with the lowest US weight, and tends to be the lowest for the institutions with the highest US weight. None of the weight/size portfolios have average abnormal returns that are significantly different from zero, but the difference in abnormal returns between US weight quintiles 1 and 5 is negative in all size quintiles and statistically significant in mid-size portfolio. The results show that after controlling for portfolio size, foreign investors who are more concentrated in US market do not outperform foreign investors who are less concentrated in US market. These results do not provide any supportive evidence that investors' concentration in a given foreign market is associated with better investors' performance in that target market.

Table IV presents the results of cross-sectional OLS regressions of the determinants of institutional investors' abnormal returns in US securities. We perform the analysis for: i) all institutions, ii) foreign institutions only, and iii) US institutions only. The abnormal return is the Carhart's four-factor regression alpha for each institutional investor's portfolio (see Equation 6). The main variable of interest is the institutions' portfolio weight of US securities. According to Hypothesis 1, US weight should take on a positive sign. Other independent variables include the industry concentration measure, which is expected to be positively related to abnormal performance, and the institution's total market value, which is expected to be negatively related to abnormal performance according to the previous literature. In the specifications 1 through 4, we also include an indicator variable equal to one if the institution is domiciled in the US and equal to zero otherwise. We also repeat the analysis with indicator variables for country domiciles (specifications 2 and 5), investor-type indicators (specifications 3, 6, and 9), and investor-style indicators (specifications 4, 7, and 10).

[Insert Table IV here]

Consistent with the results in Table III, results in Table IV do not provide support for Hypothesis 1. The coefficient on US weight is negative and statistically significant across most specifications. The result is the strongest with the samples that include foreign institutions only (specifications 5 through 7). In the samples that include US institutional investors only, the coefficient is also negative but statistically insignificant. These findings suggest that higher concentration in the US market by either domestic or foreign institutions does not enhance institutions' performance in US securities. In fact, a higher weighting of the US market by foreign institutions tends to deteriorate the institutions' performance. The magnitude of this effect is quite large. For example, a one standard deviation increase in the US weight corresponds to a roughly 0.8% reduction in the quarterly abnormal return in the sample of foreign institutions' performance (specifications 5 to 7). In the sample of all institutions, it is about 0.2%. Overall, the results provide no evidence that concentrating in a given market is associated with information advantage from economies of scale and specialization. There is no evidence that a higher portfolio weight of a given market is associated with better investors' performance in that market.

Table IV also shows that control variables are significant determinants of investors' performance in most specifications. Consistent with Kacperczyk, Sialm, and Zheng (2005), industry concentration is positively related to investors' performance. Across all specifications, a one standard deviation increase in the industry concentration measure corresponds to a roughly 0.3% increase in the quarterly alpha. In contrast to prior expectations, the coefficient on the institution's portfolio size is positive and significant in most specifications. Furthermore, in specifications 1, 3, and 4, the US indicator variable enters positively and significantly, providing

some support for local advantage: US investors seem to outperform foreign investors by about 0.38% per quarter.

B. Cultural and Geographic Distances and Performance

In this section we test Hypothesis 2 stating that investors that are geographically or culturally close to the target market outperform investors that are distant from the target market. We test the hypothesis by analyzing the performance of foreign funds in US securities. We begin the analysis by examining excess returns from the Carhart's (1997) four-factor model for 25 portfolios of foreign institutions, formed on the weight of their US holdings as a share of their foreign market portfolio and on information proxies. Table V reports the average abnormal returns and corresponding *t*-statistics for 25 US weight/information proxy portfolios. The information proxy is the geographic distance between the investor's home country and the US in Panel A and the cultural distance between the investor's home country and the US in Panel B. The last column presents differences in average abnormal returns between the portfolios with the largest and the smallest weight in US securities for each information proxy quintile. The last row in each panel reports differences in average abnormal returns between geographically/culturally farthest and closest portfolios for each weight quintile.

[Insert Table V here]

Panel A shows that the differences in average abnormal returns between the farthest and the closest investors are negative in all weight quintiles and are statistically significant in all but the 3rd weight quintile. The quarterly excess returns in US securities between the farthest and the closest foreign investors range from 0.85% to 5.03%. This result suggests that foreign investors that are geographically close to the US outperform foreign investors that are geographically distant from the US. This evidence supports Hypothesis 2, and provides additional evidence against Hypothesis 1. The foreign investors' performance in US securities deteriorates across all geographic distance quintiles as the US portfolio weight increases. In fact, excluding distance quintile 4, all other differences in portfolio alphas between the smallest and the largest US portfolio weights are statistically significant and large in magnitude, ranging from 0.62% to as high as 4.27% per quarter. Furthermore, the results suggest that having a large US weight is especially harmful for investors that are geographically far from the US: the portfolio of geographically farthest institutions with the highest US weight produces the lowest abnormal return of -0.38% per quarter (statistically significant at 10%).

Panel B documents similar results for the cultural distance. The last row shows that the performance differentials between the investors that are culturally farthest and the investors that are culturally closest to the US are negative in all weight quintiles and are statistically significant in all but the largest weight quintile. Consistent with Hypothesis 2, this evidence suggests that foreign investors from countries that are culturally close to the US outperform foreign investors from countries that are culturally close to the US outperform foreign investors from countries that are culturally distant from the US, after controlling for the US portfolio weights.

Table VI reports the results of cross-sectional OLS regressions examining the determinants of foreign investors' abnormal performance in US securities. As in Table IV, the

dependent variable is the portfolio's average abnormal return, computed using Carhart's (1997) four-factor model. The main variables of interest are: institutional portfolio weight of US securities as a share of the total foreign portfolio (*US Weight*) and the information proxies between the investor's home country and the US (*Cultural Distance* and *Geographic Distance*). Similar to Table IV, we also include portfolio size and industry concentration measure. In addition, we control for investors' home-country characteristics and differences in economic development that may affect the investors' performance. To capture these differences, we control for stock market correlation, difference in real exchange rate appreciation, GDP, GDP per capita, and GDP growth.⁸ In specifications 4 through 6, we also include indicator variables for the institution's style and type.

[Insert Table VI here]

The results presented in Table VI show that cultural and geographic distances are negative and significant in all specifications, either included separately (specifications 1, 2, 4, and 5) or together (specifications 3 and 6). Both information proxies are also economically significant. One standard deviation increase in geographic and cultural distance corresponds to a 0.7% to 0.8% and 0.4% to 0.5% reduction in the quarterly abnormal return, respectively, depending on the specification. This indicates that foreign investors from countries that are

⁸ All macroeconomic variables are from USDA. Country GDP and GDP per capita are in logs. The GDP growth rate is the growth in each country's GDP during the sample period. Similarly, the real exchange rate differential is measured during the sample period.

culturally and geographically close to the US outperform foreign investors from countries that are culturally and geographically distant from the US. The result provides support for Hypothesis 2, suggesting that as information becomes more difficult to access and interpret, institutions' performance deteriorates. The coefficient on US weight is negative and significant in all specifications, providing further evidence against Hypothesis 1. The economic significance of US weight variable is large in all specification. One standard deviation increase in US weight corresponds to a decrease in quarterly excess returns ranging from 0.45% to 0.65%. Consistent with Kacperczyk, Sialm, and Zheng's (2005) finding for US mutual funds, we find that foreign institutional investors with industry-concentrated US holdings have higher excess returns, although industry concentration loses its significance when we include the style and type indicators. Overall, these results indicate that information proxies – cultural distance and geographic distance – are negatively related to institutional investors' performance.

C. Robustness Checks

In this section, we perform several robustness tests. They include the following: 1) using GLOBE's cultural dimensions instead of Hofstede's, 2) using Characteristics Sensitivity measure instead of the Carhart's (1997) four-factor model abnormal return, 3) running the analyses excluding investors from Canada and UK, 4) running the analyses for different investor groups, 5) dividing the sample into emerging and developed investor countries, and 6) adding legal and regulatory control variables. The tables presenting the results from these additional tests are included in Appendix C.

We first repeat the analysis of portfolio abnormal returns and the determinants of abnormal returns with a different measure of cultural distance. Instead of the Hofstede's primary dimensions of culture, we examine the primary dimensions of culture from a more recent GLOBE study.⁹ Table C1 shows four GLOBE's cultural dimensions by country.¹⁰ Table C2.1 reports average abnormal returns for 25 portfolios formed on portfolio weights of US securities and GLOBE's cultural distance between the investor's home country and the US.¹¹ The result for GLOBE's measure is similar, and, in fact, is larger in magnitude compared to the result for Hofstede's measure presented in Table V. In Table C2.2 we run the regressions of foreign investors' abnormal returns replacing the Hofstede's cultural distance with the GLOBE's cultural distance. In this analysis, the GLOBE's cultural distance is not significant. However, geographic distance is negative and significant and is larger in magnitude in comparison to the results presented in Table VI. The US weight remains negative in all specifications and is statistically significant in three out of six specifications.

In the next part of the analysis, we use a different measure of performance. Instead of the Carhart's (1997) four-factor model abnormal return, we use Characteristic Sensitivity (CS) measure from Daniel, Grinblatt, Titman, and Wermers (1997, DTWS hereafter). The CS measure

⁹ GLOBE (Global Leadership and Organizational Behavior Effectiveness) is a research program focusing on culture and leadership in 61 nations initiated by Robert J. House from Wharton School of Business, University of Pennsylvania in 1991. GLOBE cultural measure includes nine dimensions: Power distance, Uncertainty Avoidance, Humane Orientation, Collectivism I, Collectivism II, Assertiveness, Gender Egalitarianism, Future Orientation, and Performance Orientation. For more detailed description, see House et al. (2004).

¹⁰ The other five GLOBE's dimensions are not available for the majority of countries in our sample.

¹¹ We compute GLOBE cultural distance as in Equation 2, using four cultural dimensions described in Table C2.1.

shows the return differential between a security j in an institution i's portfolio and the passive benchmark portfolio that the stock belongs to. The CS measure of zero indicates that the institution's performance could have been replicated by purchasing a stock with a similar size, book-to-market, and momentum characteristics. A positive CS measure indicates some stock selection ability by a fund manager. The CS measure is calculated as follows:

$$CS_{t} = \sum_{j=1}^{N} w_{j,t} \left(R_{j,t+1} - R^{b_{j,t}}_{t+1} \right),$$
(7)

where $w_{j,t}$ is the portfolio weight of stock j in the end of quarter t, and the $R_{j,t+1}$ is the t+1 quarter's return to stock j and $R_{t+1}^{b_{j,t}}$ is the quarter t+1 return to the passive benchmark portfolio that is matched to stock j during month t.

We repeat the analysis of the determinants of institutional investors' abnormal returns (Tables IV and VI) with the CS measure as the dependent variable. Table C3.1 shows that US weight is not significantly related to the CS measure. That is, increasing the portfolio weight in US securities by foreign or domestic institutional investors does not improve the institution's stock picking ability in US market. Similar to the results presented in Table IV, this result does not provide support for Hypothesis 1. In Table C3.2 we test Hypothesis 2 with the CS measure as the dependent variable. The coefficient on geographic distance is negative and significant, indicating that increasing the distance between the institution's home country and the US reduces the institution's stock picking ability. Cultural distance is negative in all but one specification but is not statistically significant. Overall, the results of analysis with a different measure of performance are consistent with the main results presented earlier in the paper.

We then perform the analysis excluding Canadian and UK investors. Since a large number of institutions are domiciled in Canada and UK, we want to ensure that investors from these two culturally and geographically (in case of Canada) proximate countries do not drive the results. With these reduced samples, we re-run the analyses in Tables V and VI. The results presented in Tables C4.1 and C4.2 are consistent with our main findings. The specifications 1 through 4 exclude Canadian investors and the specifications 5 through 8 exclude UK investors. We run the same tests with the sample excluding both Canadian and UK investors (unreported) and the results remain similar.

Next, we test if one type of investor groups drives the results. We split the sample into growth, value, and hedge funds. The results presented in Table C5.1 show that US weight is negative and significant across most specifications, with the exception of value institutions, where US weight is negative but insignificant. In Table C5.2 both information proxies, cultural and geographic distances, are negative and significant, except cultural distance loses significance in regressions for value investors. Overall, our main findings continue to hold: the results are inconsistent with hypothesis 1 and provide strong support for hypothesis 2.

To test whether the small group of emerging market institutions in our sample drives the results, we split the sample based on whether investors' home markets are developed or emerging.¹² The results in Tables C6.1 and C6.2 are similar for both groups that contain only developed market institutions and only emerging market institutions. There seems to be no

¹² We use IMF's classification method to define emerging and developed markets in our sample.

significant difference in the performance measure between the two investor types. US weight continues to be negative across specifications in both tables, but is statistically significant only when emerging market investors are excluded from the sample. It seems that higher concentration in the US market is less harmful for emerging market investors. In Table C6.2, both geographic and cultural distances are negative and significant. Geographic distance drives the returns more significantly in a sample of developed market investors, and cultural distance affects the performance more in a sample of emerging market investors.

Finally, we extend the analysis that examines the determinants of foreign investors' abnormal performance (Table VI) by controlling for differences in legal and regulatory environments in investors' home countries. We add a measure of disclosure standard, creditor rights, and anti-self-dealing index. We also include indicator variables for each investor country's legal origin (French, German, Scandinavian, UK origin, or socialism). All legal and regulatory variables are from La Porta, Lopez-de-Silanes, and Shleifer (2006). Results are presented in Table C7. Consistent with our main results, US weight, geographic and cultural distances continue to be negative and significant in most specifications. Only cultural distance loses significance in the first two specifications.

IV. Conclusion

Prior literature documents that investors are home-biased and internationally under-diversified. It is not clear, however, if the observed under-diversification is an irrational choice due to familiarity bias or a rational choice influenced by information advantage. This study uses institutional investors' performance from 36 countries to investigate this question.

We focus on performance of US and foreign institutional investors with asset allocations in US securities. First, we examine whether the weight of US securities affects the institutions' performance in US securities. For US investors, the weight is related to the degree of home bias, and for foreign investors, the weight is related to under- or overweighting of the US market, thus, to the international under-diversification. Our results suggest that greater concentration in the US market, whether in domestic or foreign investors' portfolios, does not enhance the investors' performance in US securities. This finding contradicts the idea that under-diversified portfolios concentrated in a few target markets are mean-variance efficient due to information advantage arising from economies of scale and specialization.

However, the analysis of other information proxies, i.e., cultural and geographic distances, provide support for information advantage theory. We document that geographic and cultural closeness between the investor's home country and the US enhances the performance of foreign institutions in US securities. This suggests that investors rationally choose to concentrate their portfolios in geographically nearby and culturally similar countries because of the information advantage that leads to better investors' performance.

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Figure 1 US Capitalization – Expected Investment in the US

Figure 1 shows the world and US capitalization, in trillions of US dollars from 1988 to 2009. In addition, the figure shows the US capitalization as a percentage of the world capitalization. Source: World Bank



Table ISample Characteristics

Table I presents the distribution of institutional investors by style (Panel A) and investor type (Panel B). The sample includes 4,121 institutions from 36 countries that have holdings in the US market for at least five quarters during 1999-2010 and cultural/geographic distance measures, defined in section II.C of the paper.

Panel A: Style		
Style Category	Number of Institutions	Percentage
GARP	1,374	33.34
Value	1,241	30.11
Growth	591	14.34
Deep Value	373	9.05
Yield	351	8.52
Aggressive Growth	73	1.77
Index	19	0.46
Unclassified	99	2.40
Total	4,121	100

Panel B: Investor Type

Investor Type Category	Number of Institutions	Percentage
Investment Adviser	2,146	52.07
Hedge Fund Company	929	22.54
Bank Management Division	398	9.66
Mutual Fund Manager	289	7.01
Insurance Management Division	98	2.38
Pension Fund	67	1.63
Broker	61	1.48
Broker/Investment Bank Asset Management	61	1.48
Insurance Company	33	0.80
Private Banking Portfolio	20	0.49
Foundation/Endowment	17	0.41
Arbitrage	2	0.05
Total	4,121	100

Table II Sample Characteristics by Country

Table II reports sample characteristics for each country. The sample includes 4,121 institutions from 36 countries that have holdings in the US market for at least five quarters during 1999-2010 and cultural/geographic distance data. *No. Ins* is the number of institutions. *US Weight (%)* is the average amount of institution's holdings of US securities as a percentage of the investor portfolio's total market value (for US) and as a percentage of the investor's total foreign portfolio's market value (for non-US) (see Equation 1). *Cultural Distance* is the measure for cultural closeness between the institution's home country and the US (see Equation 2). *Geographic Distance* is the distance between Washington D.C. and the capital of an investor's country, in kilometers.

Country	No. Inc.	US Weight	Cultural	Geographic
Country	no. ms	(%)	Distance	Distance (km)
Argentina	3	42.58	1.671	8,403
Australia	33	13.63	0.020	15,962
Austria	37	36.02	1.447	7,130
Belgium	21	20.42	1.506	6,223
Brazil	1	73.49	2.169	6,794
Canada	155	57.43	0.125	737
Chile	1	3.32	3.816	8,081
Czech Republic	4	31.61	0.990	6,905
Denmark	27	22.32	2.094	6,519
Finland	19	13.47	1.354	6,943
France	88	16.53	1.540	6,169
Germany	127	27.53	0.438	6,718
Greece	13	35.67	3.549	8,260
Hong Kong	17	5.67	2.439	13,131
Hungary	5	13.89	1.130	7,342
India	2	0.60	1.529	12,060
Ireland	19	35.91	0.344	5,449
Israel	2	53.56	1.670	9,451
Italy	38	24.02	0.572	7,225
Japan	36	20.61	2.701	10,919
Malaysia	4	1.55	4.027	15,357
Mexico	2	26.12	3.078	3,038
Netherlands	20	31.80	1.698	6,197
New Zealand	2	21.70	0.239	14,220
Norway	23	16.00	2.310	6,240
Poland	13	1.28	1.808	7,184
Portugal	10	19.08	4.243	5,740
Singapore	14	10.93	3.564	15,564
South Africa	13	17.89	0.340	13,040
Spain	88	14.44	1.845	6,092
Sweden	36	20.24	2.631	6,644
Switzerland	134	37.10	0.359	6,603
Taiwan	1	81.16	2.993	12,659
Thailand	1	0.44	3.184	14,174
United Kingdom	209	30.15	0.080	5,901
United States	2,903	94.91	N/A	N/A

Table III

Average Abnormal Returns for 25 Portfolios Formed on US Weight and Portfolio Size

Table III summarizes the average quarterly abnormal returns in US securities from 1999:4 to 2010:1 for portfolios of institutional investors. Portfolios are formed based on the portfolio weight of US securities and the size of the portfolio. Panel A includes only US investors, and panel B includes only foreign (non-US) investors. The quintile cutoffs for Panel A are US specific and the cutoffs for Panel B are foreign specific. Excess returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. Each portfolio represents the average excess return of the institutions' portfolios that belong to the intersection of two quintile measures. The last column reports differences in average abnormal returns between the portfolios with the largest and the smallest weight in US securities for each size quintile. The last row reports differences in average abnormal returns between the smallest and the largest size portfolios for each US weight quintile. *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

	US Weight							
		Small	2	3	4	Large	Large-Small	
	Small	0.0097	0.008	0.0041	0.0032	0.0115	0.0018	
		(2.00)**	(2.1)**	(1.58)	(1.20)	(1.50)	(0.30)	
lio	2	0.0069	0.0046	0.0033	0.0017	0.0037	-0.0033	
rtfo		(1.51)	(1.61)	(1.55)	(0.89)	(1.07)	(-0.82)	
Po	3	0.0072	0.0073	0.0033	0.0019	0.0028	-0.0044	
the		(1.56)	(3.63)***	(1.95)*	(1.20)	(1.09)	(-1.27)	
e of	4	0.0064	0.0084	0.0048	0.0036	0.0052	-0.0013	
Siz		(2.02)**	(3.22)***	(2.44)**	(1.99)**	(1.78)*	(-0.42)	
	Large	0.0046	0.0028	0.0018	0.0005	0.0025	-0.0022	
		(1.80)*	(1.26)	(1.25)	(0.29)	(1.25)	(-0.96)	
	Small-Large	0.0051	0.0052	0.0023	0.0027	0.0091		
		(1.44)	(1.81)*	(1.20)	(1.22)	(2.33)**		

Panel A: US Investors' Performance in US Securities

Panel B: Foreign Investors' Performance in US Securities

	US Weight									
		Small	2	3	4	Large	Large-Small			
	Small	0.0127	0.0063	0.001	0.0074	0.0074	-0.0053			
		(0.94)	(0.83)	(0.15)	(1.33)	(0.92)	(0.51)			
lio	2	0.012	-0.0003	0.0005	0.0054	-0.0067	-0.0187			
rtfo		(0.82)	(-0.03)	(0.09)	(1.13)	(-0.75)	(-1.63)			
e Po	3	0.0176	0.007	0.0031	0.0038	-0.0041	-0.0217			
fthe		(1.08)	(1.18)	(1.03)	(1.32)	(-1.49)	(-3.26)***			
ze of	4	0.0037	0.0033	0.011	0.0022	0.0039	0.0002			
Siz		(0.27)	(0.60)	(1.04)	(0.64)	(1.00)	(0.03)			
	Large	0.0071	0.0022	0.0027	0.0002	-0.0012	-0.0083			
		(0.40)	(0.22)	(0.70)	(0.05)	(-0.54)	(-1.32)			
	Small-Large	0.0056	0.0041	-0.0016	0.0072	0.0086				
		(0.36)	(0.47)	(-0.32)	(0.02)	(2.04)**				

Table IV Determinants of Institutional Investors' Abnormal Performance

Table IV shows the results of cross-sectional OLS regressions examining the determinants of institutional investors' abnormal performance in US securities from 1999:4 to 2010:1. Excess returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. The independent variables include institutional portfolios' *US Weight* (see section II.B), *Industry Concentration* measure (see Equation 4), total market value of the portfolio (*Portfolio Size*), and an indicator variable equal to one if the institution is domiciled in the US and zero otherwise (*US Indicator*). Where indicated, the regressions control for country, investor type, or investor style fixed effects. All errors are robust, and specifications 1, 3, and 4 are run with country clustered errors. *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

		All Ins	titutions		Foreig	gn Institutions	s Only	US	Institutions C	Only
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
US Weight	-0.0087	-0.0106	-0.0082	-0.0093	-0.0153	-0.018	-0.018	-0.0052	-0.0055	-0.0047
	(-2.11)**	(-3.35)***	(-1.95)*	(-2.00)*	(-3.58)***	(-2.97)***	(-3.74)***	(-1.26)	(-1.35)	(-1.15)
Industry Concentration	0.0152	0.015	0.0115	0.0176	0.0126	0.0011	0.0124	0.0163	0.0137	0.0194
	(5.60)***	(6.18)***	(4.41)***	(6.09)***	(2.59)***	(0.18)	(2.42)**	(5.88)***	(4.18)***	(6.50)***
Portfolio Size	0.0009	0.0011	0.0009	0.001	0.0000	-0.0009	0.0001	0.0015	0.0015	0.0015
	(2.07)**	(3.78)***	(1.76)*	(2.24)**	(0.01)	(-1.48)	(0.23)	(4.54)***	(4.31)***	(4.20)***
US Indicator	0.0037		0.0028	0.0038						
	(2.07)**		(1.10)	(2.01)*						
Constant	-0.0211	-0.0181	-0.0367	-0.0255	0.0003	-0.0163	0.0021	-0.033	-0.0205	-0.0321
	(-1.94)*	(-2.54)**	(-3.08)***	(-2.91)***	(0.03)	(-1.08)	(0.16)	(3.72)***	(1.73)*	(2.91)***
Fixed Effects		Country	Inv. Type	Inv. Style	Country	Inv. Type	Inv. Style		Inv. Type	Inv. Style
Observations	3,968	3,968	3,474	3,966	1,245	756	1,245	2,723	2,718	2,721
Adjusted R ²	1.90%	7.12%	1.65%	2.06%	1.60%	2.95%	1.90%	2.28%	2.47%	2.78%

Table V

Average Abnormal Returns for 25 Foreign Portfolios Formed on US Weight and Information Proxies

Table V summarizes the average quarterly abnormal returns for portfolios of foreign investors' US securities from 1999:4 to 2010:1. The portfolios are formed on the weight of US securities in the institution's foreign portfolio holdings and on the information proxies. Geographic distance between the investor's home country and the US is the information proxy used in Panel A; cultural difference between the investor's home country and the US is the information proxy used in Panel B. Each portfolio represents the average excess return of the institutions' portfolios that belong to the intersection of two quintile measures. The last column reports differences in average abnormal returns between the portfolios with the largest and the smallest weight in US securities for each information proxy quintile. The last row in each panel reports differences in average abnormal returns between geographically/culturally farthest and closest portfolios for each weight quintile. *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

	US Weight								
		Small	2	3	4	Large	Large-Small		
	Close	0.0528	0.0064	0.0163	0.0184	0.0101	-0.0427		
		(2.23)**	(0.55)	(1.43)	(3.06)***	(0.55)	(-2.05)**		
nce	2	0.0352	-0.0078	-0.0014	-0.0006	0.0063	-0.0289		
istaı		(2.10)**	(-0.74)	(-0.47)	(-0.10)	(1.04)	(-2.89)***		
c Di	3	0.0264	-0.0004	0.0021	0.0050	-0.0016	0.0280		
ihdi		(1.79)*	(-0.07)	(0.58)	(1.39)	(-0.45)	(-3.86)***		
bgra	4	0.0054	0.0072	0.0021	0.0017	0.0042	-0.0012		
Gee		(1.03)	(1.15)	(0.53)	(0.83)	(1.70)*	(-0.00)		
	Far	0.0025	-0.0043	0.0078	0.0037	-0.0038	-0.0062		
		(0.76)	(-1.33)	(0.81)	(1.00)	(-1.65)*	(-2.30)**		
	Far-Close	-0.0503	-0.0107	-0.0085	-0.0146	-0.0139			
		(-5.77)***	(-1.75)*	(-0.81)	(-3.09)***	(-2.14)**			

Panel A: US Weight/Geographic Distance Portfolios

Panel B: US Weight/Cultural Distance Portfolios

	US Weight									
		Small	2	3	4	Large	Large-Small			
	Close	0.0102	0.0414	0.0199	0.0355	0.0021	-0.0081			
		(0.95)	(1.47)	(3.61)***	(1.27)	(0.15)	(-0.65)			
ş	2	-0.0055	0.0334	-0.0021	0.004	-0.001	0.0045			
tanc		(-0.50)	(1.95)*	(-0.31)	(1.03)	(-0.17)	(0.55)			
Dist	3	-0.0006	0.0302	0.0045	0.0014	0.0113	0.0119			
ıral		(-0.11)	(1.80)*	(1.24)	(0.44)	(0.89)	(1.45)			
ultu	4	0.0076	0.0068	0.0018	0.0072	-0.0011	-0.0086			
Ŭ		(1.21)	(1.26)	(0.78)	(1.29)	(-0.35)	(-0.03)			
	Far	-0.0039	0.0025	0.0044	0.0064	-0.0026	0.0013			
		(-1.23)	(0.74)	(1.17)	(0.66)	(-0.88)	(0.41)			
	Far-Close	-0.0141	-0.0389	-0.0155	-0.0291	-0.0048				
		(-2.41)**	(-4.03)***	(-3.41)***	(-1.76)*	(-0.72)				

Table VI Determinants of Foreign Investors' Abnormal Performance

Table VI shows the results of cross-sectional OLS regressions examining the determinants of foreign investors' abnormal performance in US securities from 1999:4 to 2010:1. Excess returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. The independent variables are grouped into investor characteristics, including the investor portfolio's *US Weight* (Equation 1), log of the investor's portfolio market value (*Portfolio Size*), and *Industry Concentration* (Equation 4). The information variables include cultural distance between the investor's home market and the US (Equation 2) and geographic distance between the investor's home market and the US. Other variables include macroeconomic and stock market controls. In specifications 4-6 we repeat the analysis with fund type and style indicator variables. All regressions are run with country clustered standard errors. The robust *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 1% level).

	(1)	(2)	(3)	(4)	(5)	(6)
US Weight	-0.0204	-0.0201	-0.0173	-0.0290	-0.0278	-0.0267
	(-2.06)**	(-2.05)**	(-1.71)*	(-1.78)*	(-1.85)*	(-1.63)
Portfolio Size	0.0005	-0.0001	0.0006	0.0002	-0.0009	0.0003
	(0.94)	(-0.09)	(1.02)	(0.33)	(-1.28)	(0.52)
Industry Concentration	0.0162	0.0109	0.0179	0.0047	0.0000	0.0054
	(2.51)**	(1.39)	(2.57)**	(0.74)	(0.01)	(0.85)
Cultural Distance	-0.0047	-0.0063		-0.0038	-0.0063	
	(-3.12)***	(-2.67)**		(-2.22)**	(-2.14)**	
Geographic Distance	-0.0092		-0.0103	-0.0107		-0.0116
	(-10.31)***		(-8.42)***	(-13.79)***		(-10.64)***
Market Correlation	0.0044	-0.0248	-0.0028	0.0049	-0.0267	-0.0018
	(0.31)	(-1.02)	(-0.17)	(0.36)	(-1.36)	(-0.12)
Real Exchange Diff.	-0.0003	-0.0001	-0.0001	-0.0001	0.0000	0.0001
	(-2.24)**	(-0.52)	(-0.89)	(-1.11)	(0.34)	(0.59)
GDP Growth	-0.0032	-0.0032	-0.0038	-0.0046	-0.0036	-0.0049
	(-1.80)*	(-1.21)	(-1.56)	(-2.36)**	(-1.43)	(-2.18)**
GDP per Capita	-0.0131	-0.0111	-0.0116	-0.01	-0.0085	-0.008
	(-2.19)**	(-1.57)	(-1.82)*	(-2.14)**	(-1.49)	(-1.65)
GDP	-0.0034	-0.0018	-0.0011	-0.0029	-0.0018	-0.0005
	(-2.10)**	(-0.87)	(-0.65)	(-2.70)**	(-1.00)	(-0.37)
Constant	0.2298	0.1578	0.2084	0.1715	0.0969	0.1433
	(3.66)***	(2.13)**	(3.07)***	(2.65)**	(1.29)	(2.25)**
Style, Type Indicators Yes/No	No	No	No	Yes	Yes	Yes
Observations	1,245	1,245	1,245	756	756	756
Adjusted R ²	7.32%	4.46%	6.41%	10.87%	6.59%	10.39%

Appendix A. Hofstede's Primary Dimensions of Culture

- 1. Uncertainty Avoidance Index (UAI) deals with a society's tolerance for uncertainty and ambiguity. It indicates to what extent a culture programs its members to feel either uncomfortable or comfortable in unstructured situations. Unstructured situations are novel, unknown, surprising, or different from usual. Uncertainty avoiding cultures try to minimize the possibility of such situations by strict laws and rules, safety and security measures. Uncertainty avoiding countries are also more emotional and are motivated by inner nervous energy.
- 2. **Individualism (IDV)** as opposed to *collectivism*, is the degree to which individuals are integrated into groups. On the individualist side we find societies in which the ties between individuals are loose: everyone is expected to look after herself and her immediate family. In collectivist societies people from birth onwards are integrated into strong, cohesive groups.
- 3. **Power Distance Index (PDI)** is the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally. It suggests that a society's level of inequality is endorsed by the followers as much as by the leaders. Power and inequality are extremely fundamental facts of any society and while all societies are unequal, some are more unequal than others.
- 4. **Masculinity** (**MAS**) versus femininity refers to the distribution of roles between the genders. The survey studies reveal that (a) women's values differ less among societies than men's values; (b) men's values from one country to another contain a dimension from very assertive and competitive and maximally different from women's values on the one side, to modest and caring and similar to women's values on the other. The assertive pole has been called 'masculine' and the modest, caring pole 'feminine'. The women in feminine countries have the same modest, caring values as the men; in the masculine countries they are somewhat more assertive and competitive, but not as much as the men, so that these countries show a gap between men's values and women's values.
- 5. **Long-Term Orientation (LTO)** versus short-term orientation: this fifth dimension was found in a study among students in 23 countries around the world. Values associated with Long-Term Orientation are thrift and perseverance.

Appendix B. Hofstede's Primary Dimensions of Culture by Country

This table presents Hofstede's primary dimensions of culture by country. Cultural dimensions are from Hofstede's (1980, 2001) and are described in Appendix A. PDI is the measure of power-distance index. IDV measures individualism/collectivism. MAS measures masculinity. UAI measures uncertainty avoidance. LTO measures long-term versus short-term orientation. Countries in this table are ranked based on the uncertainty avoidance score from lowest uncertainty avoidance to the highest.

Country	PDI	IDV	MAS	UAI	LTO	Country	PDI	IDV	MAS	UAI	LTO
Singapore	74	20	48	8	48	Taiwan	58	17	45	69	87
Jamaica	45	39	68	13	n/a	Austria	11	55	79	70	n/a
Denmark	18	74	16	23	n/a	Luxembourg	40	60	50	70	n/a
Hong Kong	68	25	57	29	96	Pakistan	55	14	50	70	0
Sweden	31	71	5	29	33	Czech Republic	57	58	57	74	13
China	80	20	66	30	118	Italy	50	76	70	75	n/a
Vietnam	70	20	40	30	80	Brazil	69	38	49	76	65
Ireland	28	70	68	35	n/a	Venezuela	81	12	73	76	n/a
United Kingdom	35	89	66	35	25	Colombia	67	13	64	80	n/a
Malaysia	104	26	50	36	n/a	Israel	13	54	47	81	n/a
India	77	48	56	40	61	Hungary	46	80	88	82	50
Philippines	94	32	64	44	19	Mexico	81	30	69	82	n/a
United States	40	91	62	46	29	Bulgaria	70	30	40	85	n/a
Canada	39	80	52	48	23	South Korea	60	18	39	85	75
Indonesia	78	14	46	48	n/a	Turkey	66	37	45	85	n/a
New Zealand	22	79	58	49	30	Argentina	49	46	56	86	n/a
South Africa	49	65	63	49	n/a	Chile	63	23	28	86	n/a
Norway	31	69	8	50	20	Costa Rica	35	15	21	86	n/a
Australia	36	90	61	51	31	France	68	71	43	86	n/a
Slovakia	104	52	110	51	38	Panama	95	11	44	86	n/a
East Africa	64	27	41	52	25	Spain	57	51	42	86	n/a
Netherlands	38	80	14	53	44	Peru	64	16	42	87	n/a
West Africa	77	20	46	54	16	Romania	90	30	42	90	n/a
Trinidad	47	16	58	55	n/a	Japan	54	46	95	92	80
Switzerland	34	68	70	58	n/a	Surinam	85	47	37	92	n/a
Finland	33	63	26	59	n/a	Poland	68	60	64	93	32
Iran	58	41	43	59	n/a	Belgium	65	75	54	94	n/a
Bangladesh	80	20	55	60	40	El Salvador	66	19	40	94	n/a
Estonia	40	60	30	60	n/a	Russian Federation	ı 93	39	36	95	n/a
Thailand	64	20	34	64	56	Malta	56	59	47	96	n/a
Germany	35	67	66	65	31	Uruguay	61	36	38	100	n/a
Ecuador	78	8	63	67	n/a	Guatemala	95	6	37	101	n/a
Arab World	80	38	52	68	n/a	Portugal	63	27	31	104	n/a
Morocco	70	46	53	68	n/a	Greece	60	35	57	112	n/a

Appendix C. Results for Robustness Check

Table C1

GLOBE's Primary Dimensions of Culture by Country

Table C1 shows four primary dimensions of culture by country from the GLOBE study. FUTURE ORIENTATION is the degree to which a society collectivity encourages and rewards future-oriented behaviors such as planning and delaying gratification. ASSERTIVENESS is the degree to which individuals are assertive, confrontational, and aggressive in their relationships with others. IN-GROUP COLLECTIVISM is the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families. UNCERTAINTY AVOIDANCE is the extent to which a society, organization, or group relies on social norms, rules, and procedures to alleviate the unpredictability of future events.

Country	FUTURE ORIENTATION	ASSERTIVENESS	IN-GROUP COLLECTIVISM	UNCERTAINTY AVOIDANCE
Argentina	3.08	4.22	3.66	4.66
Australia	4.09	4.28	4.29	3.98
Austria	4.46	4.62	4.3	3.66
Brazil	3.81	4.2	3.83	4.99
Canada	4.44	4.05	4.38	3.75
China	3.75	3.76	4.77	5.28
Denmark	4.44	3.8	4.8	3.82
Finland	4.24	3.81	4.63	3.85
France	3.48	4.13	3.93	4.26
Germany	4.27	4.55	3.79	3.32
Greece	3.4	4.58	3.25	5.09
Hong Kong	4.03	4.67	4.13	4.63
Hungary	3.21	4.79	3.53	4.66
India	4.19	3.73	4.38	4.73
Ireland	3.98	3.92	4.63	4.02
Israel	3.85	4.23	4.46	4.38
Italy	3.25	4.07	3.68	4.47
Japan	4.29	3.59	5.19	4.33
Kuwait	3.26	3.63	4.49	4.77
Malaysia	4.58	3.87	4.61	4.88
Mexico	3.87	4.45	4.06	5.26
Netherlands	4.61	4.32	4.46	3.24
New Zealand	3.47	3.42	4.81	4.1
Poland	3.11	4.06	4.53	4.71
Portugal	3.71	3.65	3.92	4.43
Singapore	5.07	4.17	4.9	4.22
South Africa	4.13	4.6	4.62	4.79
South Korea	3.97	4.4	5.2	4.67
Spain	3.51	4.42	3.85	4.76
Sweden	4.39	3.38	5.22	3.6
Switzerland	4.73	4.51	4.06	3.16
Taiwan	3.96	3.92	4.59	5.31
Thailand	3.43	3.64	4.03	5.61
Turkey	3.74	4.53	4.03	4.67
United Kingdom	4.28	4.15	4.27	4.11
United States	4.15	4.55	4.2	4

Table C2.1

Average Abnormal Returns for 25 Portfolios Formed on GLOBE Cultural Dimensions and US Weight Table C2.1 summarizes the average quarterly excess returns from 1999:4 to 2010:1 for 25 portfolios of foreign investors' US securities. Portfolios are formed based on GLOBE's cultural distance between the investor's home country and the US and the institution's weight of US holdings. Each portfolio represents the average excess return of the portfolios that belong to the intersection of two quintile measures. The last column reports differences in average abnormal returns between the portfolios with the largest and the smallest weight in US securities for each cultural distance quintile. The last row in each panel reports differences in average abnormal returns between culturally farthest and closest portfolios for each US weight quintile. *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

				US Weight			
		Small	2	3	4	Large	Large-Small
	Close	0.0010	0.0646	0.0147	0.0227	0.0133	0.0123
ce		(0.07)	(2.04)**	(1.06)	(4.10)***	(1.34)	(1.02)
stan	2	0.0022	0.0342	0.0014	-0.0004	-0.0068	-0.0090
Dis		(0.32)	(2.27)**	(0.30)	(-0.06)	(-0.74)	(-1.13)
ural	3	0.0115	0.0239	-0.0014	0.005	-0.0027	-0.0141
Jult		(0.89)	(2.07)**	(-0.43)	(1.38)	(-0.73)	(-2.06)**
E	4	0.0066	0.0068	0.0073	0.0026	0.0027	-0.0039
,0B		(0.80)	(1.47)	(1.12)	(1.01)	(0.85)	(-0.01)
GI	Far	0.0129	0.0015	-0.0001	0.006	-0.0037	-0.0166
		(0.69)	(0.44)	(-0.04)	(1.53)	(-1.76)*	(-2.64)***
	Far-Close	0.0119	-0.063	-0.0147	-0.0167	-0.017	
		(0.71)	(-6.03)***	(-2.65)***	(-3.6)***	(-3.72)***	

Table C2.2

Determinants of Foreign Investors' Abnormal Performance using GLOBE's Cultural Distance

Table C2.2 shows the results from cross-sectional OLS regressions examining the determinants of foreign investors' abnormal performance in US securities from 1999:4 to 2010:1. Abnormal returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. The independent variables are grouped into investor characteristics, including the investor portfolio's *US Weight* (Equation 1), log of the investor's portfolio market value (*Portfolio Size*), and *Industry Concentration* (Equation 4). The information variables include cultural distance between the investor's home market and the US measured with GLOBE's cultural dimensions and geographic distance between the investor's home market and the US. Other control variables include macroeconomic and stock market controls. In specifications 4-6 we repeat the analysis with fund type and style indicator variables. All regressions are run with country clustered standard errors. The robust *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

	(1)	(2)	(3)	(4)	(5)	(6)
US Weight	-0.0201	-0.0147	-0.0173	-0.0363	-0.0285	-0.0267
	(-1.53)	(-1.21)	(-1.71)*	(-2.25)**	(-1.79)*	(-1.63)
Portfolio Size	0.0005	0.000	0.0006	-0.0002	-0.001	0.0003
	(0.71)	(0.05)	(1.02)	(-0.24)	(-1.61)	(0.52)
Industry Concentration	0.0196	0.0156	0.0179	0.0058	0.002	0.0054
	(2.36)**	(1.71)*	(2.57)**	(0.82)	(0.25)	(0.85)
Cultural Distance	0.0012	0.0017		0.0002	0.0007	
	(0.68)	(0.83)		(0.15)	(0.39)	
Geographic Distance	-0.0124		-0.0103	-0.0149		-0.0116
	(-3.59)***		(-8.42)***	(-4.73)***		(-10.64)***
Market Correlation	0.0186	-0.0725	-0.0028	0.0334	-0.0764	-0.0018
	(0.47)	(-1.73)*	(-0.17)	(1.07)	(-2.07)**	(-0.12)
Real Exchange Diff.	-0.0003	0.0005	-0.0001	-0.0003	0.0006	0.0001
	(-0.83)	(1.59)	(-0.89)	(-1.04)	(2.37)**	(0.59)
GDP Growth	-0.0034	-0.0045	-0.0038	-0.0055	-0.0056	-0.0049
	(-1.38)	(-1.07)	(-1.56)	(-2.61)**	(-1.53)	(-2.18)**
GDP per Capita	-0.0137	-0.0063	-0.0116	-0.0109	-0.0012	-0.008
	(-1.81)*	(-0.71)	(-1.82)*	(-1.96)*	(-0.17)	(-1.65)
GDP	-0.0031	0.005	-0.0011	-0.0053	0.0053	-0.0005
	(-0.82)	(1.33)	(-0.65)	(-1.87)*	(1.70)	(-0.37)
Constant	0.2437	0.0936	0.2084	0.2922	0.0973	0.1433
	(2.67)**	(1.09)	(3.07)***	(3.38)***	(1.12)	(2.25)**
Style, Type indicators Yes/No	No	No	No	Yes	Yes	Yes
Observations	987	987	1,245	577	577	756
Adjusted R ²	7.46%	3.84%	6.41%	12.53%	7.80%	10.39%

Table C3.1 Determinants of Institutional Investors' Abnormal Performance Using Characteristic Sensitivity Measure of Performance

Table C3.1 shows the results from cross-sectional OLS regressions examining the determinants of investors' abnormal performance in US securities from 1999:4 to 2010:1. Abnormal performance is computed based on Daniel et al.'s (1997) Characteristic Sensitivity (CS) measure using subsequent buy and hold quarterly portfolio returns (Equation 7). The independent variables include institutional portfolios' *US Weight* (see section II.B), *Industry Concentration* measure (see Equation 4), total market value of the portfolio (*Portfolio Size*), and an indicator variable equal to one if the institution is domiciled in the US and zero otherwise (*US Indicator*). Where indicated, the regressions control for country, investor type, or investor style fixed effects. All errors are robust, and specifications 1, 3, and 4 are run with country clustered errors. The *t*-statistics are reported in the parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

		All Fu	inds		Fore	eign Investors C	Only	U	S Investors on	ly
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
US Weight	0.0026	0.0039	0.0044	0.0025	-0.0029	-0.005	-0.0066	0.0068	0.0075	0.0075
	(0.79)	(1.15)	(1.56)	(0.69)	(-0.57)	(-0.86)	(-1.51)	(1.54)	(1.58)	(1.70)*
Industry Concentration	0.0107	0.0107	0.0123	0.0141	0.0021	-0.0054	0.0017	0.0137	0.0179	0.0209
	(3.18)***	(4.13)***	(2.66)**	(2.70)**	(0.46)	(-1.01)	(0.38)	(4.34)***	(4.11)***	(5.58)***
Portfolio Size	0.0001	0.0002	0.0000	0.0001	-0.0004	-0.0014	-0.0006	0.0004	0.0005	0.0004
	(0.18)	(0.83)	(0.11)	(0.23)	(-0.87)	(-2.80)***	(-1.37)	(1.29)	(1.44)	(1.31)
US Indicator	-0.0008		-0.0007	-0.0009						
	(-0.40)		(-0.36)	(-0.40)						
Constant	-0.0141	-0.0191	-0.0103	-0.0133	-0.0021	0.0398	0.0077	-0.0276	-0.0369	-0.0285
	(-1.67)	(-2.90)***	(-0.56)	(-1.42)	(-0.19)	(3.15)***	(0.72)	(-3.53)***	(-4.03)***	(-2.60)***
Fixed Effects		Country	Inv. Type	Style	Country	Inv. Type	Style		Inv. Type	Style
Observations	4,018	4,018	3,504	4,016	1,275	766	1,275	2,743	2,738	2,741
Adjusted R ²	0.55%	3.90%	0.77%	1.13%	8.88%	1.06%	0.39%	0.97%	1.44%	2.37%

Table C3.2 Determinants of Foreign Investors' Abnormal Performance

Table C3.2 shows the results from cross-sectional OLS regressions examining the determinants of foreign investors' abnormal performance in US securities from 1999:4 to 2010:1. Abnormal performance is computed based on Daniel et al.'s (1997) Characteristic Sensitivity (CS) measure using subsequent buy and hold quarterly portfolio returns (Equation 7). The independent variables are grouped into investor characteristics, including the investor portfolio's *US Weight* (Equation 1), log of the investor's portfolio market value (*Portfolio Size*), and *Industry Concentration* (Equation 4). The information variables include cultural distance between investor's home market and the US (Equation 2) and geographic distance between the investor's home market and the US. Other variables include macroeconomic and stock market controls. In specifications 4-6 we repeat the analysis with fund type and style indicator variables. All regressions are run with country clustered standard errors. The robust *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

	(1)	(2)	(3)	(4)	(5)	(6)
US Weight	-0.0022	-0.0022	-0.0015	-0.0047	-0.0041	-0.0052
	(-0.85)	(-0.81)	(-0.63)	(-0.98)	(-0.96)	(-1.13)
Portfolio Size	-0.0001	-0.0003	-0.0001	-0.0005	-0.001	-0.0005
	(-0.30)	(-0.66)	(-0.26)	(-1.09)	(-1.98)*	(-1.13)
Industry Concentration	0.0083	0.0069	0.0087	0.0015	-0.0005	0.0014
	(2.02)*	(1.67)	(2.07)**	(0.40)	(-0.11)	(0.36)
Cultural Distance	-0.001	-0.0014		0.0008	-0.0003	
	(-1.16)	(-1.46)		(0.86)	(-0.23)	
Geographic Distance	-0.0025		-0.0027	-0.0047		-0.0045
	(-3.11)***		(-3.77)***	(-6.51)***		(-6.50)***
Market Correlation	0.0066	-0.0012	0.0051	0.0135	-0.0004	0.0149
	(0.82)	(-0.15)	(0.59)	(1.29)	(-0.04)	(1.40)
Real Exchange Diff.	-0.0002	-0.0001	-0.0001	-0.0001	0.000	-0.0001
	(-2.38)**	(-1.73)*	(-2.08)**	(-1.09)	(0.41)	(-1.79)*
GDP Growth	-0.0018	-0.0019	-0.002	-0.0036	-0.0031	-0.0035
	(-1.70)*	(-1.43)	(-1.63)	(-2.91)***	(-2.11)**	(-3.06)***
GDP per Capita	-0.0095	-0.0089	-0.0091	-0.0064	-0.0057	-0.0068
	(-2.48)**	(-2.23)**	(-2.43)**	(-2.15)**	(-1.89)*	(-2.52)**
GDP	-0.0026	-0.0022	-0.0021	-0.0012	-0.0008	-0.0017
	(-2.74)***	(-2.30)**	(-2.46)**	(-1.08)	(-0.76)	(-1.89)*
Constant	0.1258	0.1065	0.1214	0.1246	0.0928	0.1305
	(3.16)***	(2.58)**	(3.09)***	(3.35)***	(2.51)**	(3.75)***
Style, Type indicators Yes/No	No	No	No	Yes	Yes	Yes
Observations	1,253	1,253	1,253	755	755	755
Adjusted R ²	2.71%	2.31%	2.69%	5.72%	3.41%	5.77%

Table C4.1

Determinants of Institutional Investors' Abnormal Performance Excluding Canadian and UK Investors

Table C4.1 shows the results from cross-sectional OLS regressions examining the determinants of investors' abnormal performance in US securities from 1999:4 to 2010:1. Abnormal returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. The independent variables include institutional portfolios' *US Weight* (see section II.B), *Industry Concentration* measure (see Equation 4), total market value of the portfolio (*Portfolio Size*), and an indicator variable equal to one if the institution is domiciled in the US and zero otherwise (*US Indicator*). Panel A presents the results for all investors (US and foreign). Specifications (1) to (4) include the entire sample investors except Canadian investors and Specification (5) to (8) include the results for foreign investors. Specifications (1) to (4) include all foreign investors except UK investors. Where indicated, the regressions control for country, investor type, or investor style fixed effects. All errors are robust, and specifications 1, 3, 4, 5, 7 and 8 are run with country clustered errors. The *t*-statistics are reported in the parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

		All Investors Ex	cluding Canada			All Investors	Excluding UK	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
US Weight	-0.0059	-0.0063	-0.005	-0.0062	-0.008	-0.0105	-0.0078	-0.0086
	(-3.17)***	(-1.99)**	(-5.36)***	(-2.89)***	(-2.01)*	(-3.14)***	(-1.89)*	(-1.91)*
Industry Concentration	0.0159	0.0156	0.0119	0.0174	0.0155	0.0149	0.0114	0.0178
	(6.36)***	(6.50)***	(5.02)***	(6.07)***	(5.37)***	(5.95)***	(4.08)***	(5.61)***
Portfolio Size	0.001	0.0012	0.0011	0.001	0.001	0.0011	0.0009	0.001
	(2.39)**	(4.07)***	(3.34)***	(2.45)**	(2.26)**	(3.70)***	(1.74)*	(2.42)**
US Indicator	0.0043		0.0064	0.0044	0.0027		0.0012	0.0027
	(4.53)***		(6.97)***	(4.38)***	(1.57)		(0.45)	(1.51)
Constant	-0.0261	-0.025	-0.0233	-0.0246	-0.0224	-0.0182	-0.0357	-0.0213
	(-2.95)***	(-3.27)***	(-1.69)	(-2.43)**	(-2.16)**	(-2.47)**	(-3.06)***	(-1.89)*
Fixed Effects		Country	Inv. Type	Style		Country	Inv. Type	Style
Observations	3,814	3,814	3,320	3,812	3,762	3,762	3,329	3,760
Adjusted R ²	1.67%	5.75%	1.61%	1.74%	1.95%	7.44%	1.93%	2.10%

Panel A: All Investors

Panel B: Foreign Investors										
	Fo	oreign Investors	Excluding Canac	la		Foreign Investors Excluding UK				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
US Weight	-0.0082	-0.0101	-0.0024	-0.0089	-0.0151	-0.0246	-0.0215	-0.0175		
	(-2.14)**	(-2.33)**	(-0.52)	(-2.04)**	(-3.11)***	(-4.31)***	(-2.99)***	(-3.19)***		
Industry Concentration	0.0152	0.0126	0.0046	0.0144	0.0132	0.0085	-0.0012	0.0124		
	(3.18)***	(2.63)***	(0.83)	(2.80)***	(2.32)**	(1.50)	(-0.16)	(2.08)**		
Portfolio Size	0.0001	0.0003	-0.0002	0.0002	0.0000	-0.0001	-0.0014	0.0001		
	(0.22)	(0.54)	(-0.30)	(0.42)	(0.01)	(-0.15)	(-1.94)*	(0.26)		
Constant	-0.0077	-0.0046	-0.0335	-0.0168	-0.0054	-0.0139	-0.0111	-0.0156		
	(-0.62)	(-0.34)	(-2.20)**	(-1.15)	(-0.37)	(-0.9)	(-0.61)	(-0.91)		
Fixed Effects		Country	Inv. Type	Style		Country	Inv. Type	Style		
Observations	1,091	1,091	602	1,091	1,039	1,039	611	1,039		
Adjusted R ²	1.27%	9.08%	0.61%	1.52%	1.45%	12.24%	3.66%	1.87%		

Table C4.2

Determinants of Foreign Investors' Abnormal Performance Excluding Canadian and UK Investors Table C4.2 shows the results from cross-sectional OLS regressions examining the determinants of foreign investors' abnormal performance in US securities from 1999:4 to 2010:1, excluding Canadian (Panel A) and UK (Panel B) investors. Abnormal returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. The independent variables are grouped into investor characteristics, including the investor portfolio's US Weight (Equation 1), log of the investor's portfolio market value (*Portfolio Size*), and *Industry Concentration* (Equation 4). The information variables include cultural distance between the investor's home market and the US (Equation 2) and geographic distance between the investor's home market and the US. Other variables include macroeconomic and stock market controls. In specifications 4-6 we repeat the analysis with fund type and style indicator variables. All regressions are run with country clustered standard errors. The robust *t*statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

~ ~	(1)	(2)	(3)	(4)	(5)	(6)
US Weight	-0.0096	-0.0087	-0.0061	-0.006	-0.0047	-0.0035
	(-2.90)***	(-2.68)**	(-1.68)	(-1.13)	(-0.92)	(-0.68)
Portfolio Size	0.0009	0.0008	0.001	0.0008	0.0006	0.0009
	(1.46)	(1.31)	(1.51)	(0.94)	(0.77)	(1.08)
Industry Concentration	0.0198	0.0182	0.0214	0.0096	0.0081	0.0103
	(3.09)***	(2.85)***	(3.05)***	(1.43)	(1.11)	(1.56)
Cultural Distance	-0.0044	-0.004		-0.0027	-0.0022	
	(-2.81)***	(-2.51)**		(-1.81)*	(-1.38)	
Geographic Distance	-0.0134		-0.0117	-0.0163		-0.0149
	(-1.84)*		(-1.34)	(-2.52)**		(-2.22)**
Market Correlation	0.0074	0.0032	0.001	0.0068	0.0026	0.0025
	(0.52)	(0.24)	(0.06)	(0.53)	(0.20)	(0.20)
Real Exchange Diff.	-0.0003	-0.0002	-0.0001	-0.0001	0.0000	0.0000
	(-1.92)*	(-1.61)	(-0.96)	(-0.96)	(0.32)	(0.01)
GDP Growth	-0.0025	-0.0045	-0.0035	-0.0034	-0.0057	-0.0040
	(-1.13)	(-2.32)**	(-1.35)	(-1.66)	(-2.79)***	(-2.01)*
GDP per Capita	-0.0136	-0.0140	-0.0124	-0.0118	-0.0115	-0.0105
	(-2.43)**	(-2.20)**	(-2.11)**	(-2.82)***	(-2.50)**	(-2.58)**
GDP	-0.0036	-0.0027	-0.0014	-0.0027	-0.0013	-0.0010
	(-1.95)*	(-1.65)	(-0.82)	(-2.27)**	(-1.47)	(-0.96)
Constant	0.2568	0.147	0.215	0.2329	0.0901	0.1963
	(2.46)**	(2.30)**	(1.85)*	(2.64)**	(1.40)	(2.22)**
Style, Type indicators Yes/No	No	No	No	Yes	Yes	Yes
Observations	1,091	1,091	1,091	602	602	602
Adjusted R ²	4.18%	3.63%	3.25%	2.80%	1.81%	2.50%

Panel A: Excluding Canadian Investors

	(1)	(2)	(3)	(4)	(5)	(6)
US Weight	-0.0235	-0.0201	-0.0204	-0.0372	-0.0306	-0.0350
	(-1.91)*	(-1.72)*	(-1.60)	(-2.30)**	(-1.96)*	(-2.12)**
Portfolio Size	0.0005	0.0001	0.0005	-0.0001	-0.001	0.0000
	(0.77)	(0.12)	(0.83)	(-0.15)	(-1.47)	(0.06)
Industry Concentration	0.0163	0.0123	0.0182	0.0024	-0.0018	0.0032
	(2.13)**	(1.46)	(2.23)**	(0.33)	(-0.23)	(0.44)
Cultural Distance	-0.0046	-0.0065		-0.0036	-0.0061	
	(-3.05)***	(-2.83)***		(-1.93)*	(-2.35)**	
Geographical Distance	-0.0104		-0.0121	-0.0140		-0.0154
	(-4.68)***		(-4.16)***	(-5.85)***		(-5.39)***
Market Correlation	0.0161	-0.0477	0.0173	0.0399	-0.0456	0.0391
	(0.62)	(-1.74)*	(0.56)	(1.95)*	(-1.76)*	(1.66)
Real Exchange Diff.	-0.0004	0.0001	-0.0003	-0.0004	0.0002	-0.0003
	(-1.66)	(0.52)	(-1.09)	(-2.18)**	(1.64)	(-1.45)
GDP Growth	-0.0032	-0.0034	-0.0037	-0.0045	-0.0037	-0.0048
	(-1.96)*	(-1.14)	(-1.73)*	(-2.67)**	(-1.31)	(-2.49)**
GDP per Capita	-0.0139	-0.0093	-0.0131	-0.0125	-0.0063	-0.0111
	(-2.14)**	(-1.24)	(-1.89)*	(-2.62)**	(-1.03)	(-2.21)**
GDP	-0.0047	0.0009	-0.0033	-0.0068	0.0013	-0.0052
	(-1.66)	(0.35)	(-1.03)	(-2.78)***	(0.73)	(-1.99)*
Constant	0.2482	0.1376	0.239	0.2933	0.1246	0.2738
	(3.32)***	(1.74)*	(2.85)***	(3.80)***	(1.54)	(3.37)***
Style, Type indicators Yes/No	No	No	No	Yes	Yes	Yes
Observations	1,039	1,039	1,039	611	611	611
Adjusted R ²	7.97%	5.51%	7.05%	12.6%	8.42%	12.17%

Panel B: Excluding UK Investors

Table C5.1 Determinants of Institutional Investors' Abnormal Performance-Separately for Each Investor Type

Table C5.1 shows the results from cross-sectional OLS regressions that test for determinants of investors' abnormal performance in US securities from 1999:4 to 2010:1. Excess returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. Analysis is repeated separately for growth investors (GARP, aggressive growth, growth), value investors (value, core value, deep value), and hedge funds. We perform the analysis for all investors, foreign investors, and US investors separately. The independent variables include institutional portfolios' *US Weight* (see section II.B), *Industry Concentration* measure (see Equation 4), total market value of the portfolio (*Portfolio Size*), and an indicator variable equal to one if the institution is domiciled in the US and zero otherwise (*US Indicator*). All errors are robust. The *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

		All In	vestors			Foreign Inv	vestors			US In	vestors	
	All	Growth	Value	Hedge	All	Growth	Value	Hedge	All	Growth	Value	Hedge
US Weight	-0.0106	-0.0089	-0.0047	-0.0208	-0.0218	-0.0174	-0.0072	-0.0541	-0.0052	-0.0044	-0.0036	-0.0153
	(-3.35)***	(-2.15)**	(-0.91)	(-2.22)**	(-4.50)***	(-2.56)**	(-0.68)	(-1.95)*	(-1.26)	(-0.81)	(-0.62)	(-1.52)
Industry Concentration	0.015	0.0149	0.0142	0.0073	0.0098	-0.0007	0.0115	-0.0186	0.0163	0.0246	0.0159	0.0082
	(6.18)***	(3.57)***	(2.09)**	(1.06)	(1.98)**	(-0.09)	(0.81)	(-0.50)	(5.88)***	(4.68)***	(2.33)**	(1.15)
Portfolio Size	0.0011	0.0002	0.0025	0.0032	0.0000	-0.0012	0.0024	0.0026	0.0015	0.0008	0.0025	0.0031
	(3.78)***	(0.61)	(4.58)***	(2.90)***	(0.06)	(-1.27)	(1.66)*	(0.42)	(4.54)***	(2.16)**	(4.94)***	(2.82)***
US Indicator	-0.0007	0.0189	0.0074	-0.0109								
	(-0.47)	(5.08)***	(1.74)*	(-2.36)**								
Constant	-0.0181	-0.0218	-0.0585	-0.032	0.0142	0.0176	-0.056	-0.0424	-0.0330	-0.0231	-0.0533	-0.0474
	(-2.54)**	(-2.00)**	(-4.53)***	(-1.29)	(1.03)	(0.81)	(-1.62)	(-0.36)	(-3.72)***	(-2.20)**	(-3.83)***	(-1.68)*
Fixed Effects	country	country	country	country	country	country	country	country				
Observations	3,968	983	505	841	1,245	350	167	58	2,723	633	338	783
Adjusted R ²	7.12%	13.58%	14.91%	3.74%	11.15%	14.26%	8.52%	8.22%	2.28%	10.20%	8.46%	2.07%

Table C5.2 Determinants of Foreign Investors' Abnormal Performance -- Separately for Investor Type

Table C5.2 shows the results from cross-sectional OLS regressions that test for determinants of foreign investors' abnormal performance in US securities from 1999:4 to 2010:1. Excess returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. Analysis is repeated separately for growth investors (GARP, aggressive growth, growth), value investors (value, core value, deep value), and hedge funds. The independent variables are grouped into investor characteristics, including the investor portfolio's *US Weight* (Equation 1), log of the investor's portfolio market value (*Portfolio Size*), and *Industry Concentration* (Equation 4). The information variables include cultural distance between the investor's home market and the US (Equation 2) and geographic distance between the investor's home market and the US. Other variables include macroeconomic and stock market controls. All regressions are run with country clustered standard errors. The robust *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

	Growth	Growth	Growth	Value	Value	Value	Hedge	Hedge	Hedge
US Weight	-0.0138	-0.011	-0.012	-0.0064	-0.0007	-0.0036	-0.0541	-0.0541	-0.0541
	(-1.51)	(-1.40)	(-1.31)	(-0.7)	(-0.09)	(-0.4)	(-0.89)	(-0.89)	(-0.89)
Portfolio Size	-0.0008	-0.0016	-0.0007	0.0019	0.0009	0.002	0.0026	0.0026	0.0026
	(-0.7)	(-1.07)	(-0.55)	(1.69)	(0.86)	(1.84)*	(0.41)	(0.41)	(0.41)
Industry Concentration	0.0004	-0.0041	0.0016	0.0178	0.0149	0.0187	-0.0186	-0.0186	-0.0186
	(0.05)	(-0.5)	(0.23)	(1.55)	(1.31)	(1.63)	(-0.67)	(-0.67)	(-0.67)
Cultural Distance	-0.0032	-0.005		-0.0027	-0.0053		-0.0106	-0.0468	
	(-1.95)*	(-1.85)*		(-0.82)	(-1.43)		(-1.25)	(-5.36)***	
Geographic Distance	-0.0139		-0.0147	-0.0083		-0.0091	-0.0338		-0.0436
	(-11.18)***		(-11.91)***	(-4.19)***		(-4.15)***	(-9.94)***		(-5.36)***
Market Correlation	-0.0103	-0.0304	-0.015	0.0486	0.0152	0.0492		1.9768	-0.5767
	(-0.75)	(-1.41)	(-0.98)	(1.80)*	(0.56)	(1.73)*		(9.94)***	(-1.25)
Real Exchange Diff.	-0.0002	-0.0001	-0.0001	-0.0002	0.00	-0.0001	0.0424	-0.0417	0.0669
	(-2.51)**	(-0.52)	(-0.93)	(-1.00)	(0.06)	(-0.58)	(3.58)**	(-2.72)**	(2.12)*
GDP Growth	-0.004	-0.0037	-0.0043	-0.0075	-0.0077	-0.0079	0.0785	-0.0245	0.1085
	(-1.77)*	(-1.07)	(-1.67)	(-2.10)**	(-2.13)**	(-2.16)**	(13.08)***	(-3.06)**	(3.81)***
GDP per Capita	-0.0081	-0.0067	-0.0056	-0.0184	-0.0172	-0.0182	0.3911	-1.0957	0.8249
	(-1.82)*	(-1.24)	(-1.15)	(-2.12)**	(-1.90)*	(-2.13)**	(8.23)***	(-6.75)***	(2.08)*
GDP	-0.0022	-0.0009	-0.0001	-0.0037	-0.0024	-0.002	0.0101	0.0288	0.0047
	(-1.98)*	(-0.63)	(-0.11)	(-1.47)	(-0.83)	(-0.8)	(2.74)**	(15.37)***	(0.81)
Constant	0.2576	0.1477	0.2223	0.2256	0.1809	0.214	-3.8842	9.7269	-7.8547
	(4.42)***	(1.93)*	(3.77)***	(2.11)**	(1.63)	(2.04)*	(-11.23)***	(7.01)***	(-2.23)*
Observations	350	350	350	167	167	167	58	58	58
Adjusted R ²	13.03%	4.12%	12.37%	4.95%	3.17%	5.31%	8.22%	8.22%	8.22%

Table C6.1 Determinants of Institutional Investors' Abnormal Performance – Separately for Developed and Emerging Markets

Table C6.1 shows the results from cross-sectional OLS regressions that test for determinants of investors' abnormal performance in US securities from 1999:4 to 2010:1. Excess returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. The independent variables include institutional portfolios' *US Weight* (see section II.B), *Industry Concentration* measure (see Equation 4), total market value of the portfolio (*Portfolio Size*), and an indicator variable equal to one if the institution is domiciled in the US and zero otherwise (*US Indicator*). *Developed Indicator* equals 1 if the investor's home country is developed country and equals 0 otherwise. Where indicated, the regressions control for country, investor type, or investor style fixed effects. All errors are robust. *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

	All	All	All	Developed	Developed	Emerging
US Weight	-0.0111	-0.0111	-0.0087	-0.0111	-0.0079	-0.0231
	(-3.24)***	(-3.24)***	(-2.11)**	(-3.25)***	(-2.02)*	(-0.86)
Industry Concentration	0.0151	0.0151	0.0152	0.015	0.0133	0.0966
	(5.14)***	(5.14)***	(5.60)***	(5.10)***	(4.68)***	(2.45)**
Portfolio Size	0.0012	0.0012	0.0009	0.0012	0.0008	0.0016
	(4.00)***	(4.00)***	(2.07)**	(3.96)***	(1.60)	(0.30)
Developed Indicator	-0.0029					
	(-0.61)					
US Indicator	0.0045	0.0377	0.0037	0.0046	0.0039	
	(1.04)	(4.92)***	(2.07)**	(1.05)	(2.67)**	
Constant	-0.0383	-0.0745	-0.0211	-0.0441	-0.0184	-0.0786
	(-2.40)**	(-4.26)***	(-1.94)*	(-2.72)***	(-1.47)	(-0.77)
Fixed Effects	country/style/type	country/style/type		country/style/type		
Observations	3472	3472	3968	3458	3913	55
Adjusted R ²	6.16%	6.16%	1.90%	5.86%	1.42%	12.27%

Table C6.2

Determinants of Foreign Investors' Abnormal Performance - Separately for Developed and Emerging Markets

Table C6.2 shows the results from cross-sectional OLS regressions that test for determinants of foreign investors' abnormal performance in US securities from 1999:4 to 2010:1. Excess returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. The independent variables include institutional portfolios' *US Weight* (see section II.B), *Industry Concentration* measure (see Equation 4), total market value of the portfolio (*Portfolio Size*), and an indicator variable equal to one if the institution is domiciled in the US and zero otherwise (*US Indicator*). *Developed Indicator* equals 1 if the investor's home country is developed country and equals 0 otherwise. The information variables include cultural distance between the investor's home market and the US (Equation 2), the geographic distance between the investor's home market controls. All regressions are run with country clustered standard errors. The robust *t*-statistics are reported in the parentheses (* significant at 1% level).

	All	All	All	Developed	Developed	Developed	Emerging	Emerging	Emerging
US Weight	-0.0216	-0.0211	-0.0203	-0.0215	-0.0211	-0.0201	-0.0523	-0.0605	-0.0362
	(-2.21)**	(-2.22)**	(-2.07)**	(-2.12)**	(-2.11)**	(-1.99)*	(-1.44)	(-1.52)	(-0.89)
Portfolio Size	0.0004	-0.0002	0.0005	0.0002	-0.0005	0.0002	0.0016	0.0012	0.0015
	(0.84)	(-0.27)	(0.87)	(0.37)	(-0.79)	(0.35)	(0.21)	(0.16)	(0.21)
Industry Concentration	0.0146	0.0092	0.0151	0.0108	0.0047	0.0113	0.0848	0.0851	0.0874
	(2.54)**	(1.31)	(2.58)**	(2.06)*	(0.68)	(2.08)**	(1.86)*	(1.86)*	(1.84)*
Developed Indicator	-0.0376	-0.0302	-0.0443						
	(-2.18)**	(-1.62)	(-2.67)**						
Cultural Distance	-0.0028	-0.0049		-0.0031	-0.0056		-0.0145	-0.0143	
	(-1.93)*	(-1.95)*		(-2.12)**	(-1.96)*		(-3.49)***	(-3.41)***	
Geographic Distance	-0.0099		-0.0106	-0.0096		-0.0104	-0.0109		-0.0057
	(-9.12)***		(-8.58)***	(-10.08)***		(-9.03)***	(-0.61)		(-0.26)
Market Correlation	0.0000	-0.0301	-0.0045	-0.0025	-0.0318	-0.0088	-0.1157	-0.1093	-0.0397
	(0.00)	(-1.21)	(-0.4)	(-0.29)	(-1.36)	(-0.87)	(-1.55)	(-1.51)	(-0.31)
Real Exchange Diff.	-0.0001	0.0001	0.0000	-0.0001	0.0000	0.0000	-0.0007	-0.0008	-0.0001
	(-1.47)	(0.45)	(0.13)	(-2.03)*	(0.13)	(0.36)	(-0.67)	(-0.7)	(-0.07)
GDP Growth	-0.0048	-0.0045	-0.0054	-0.0049	-0.0044	-0.0057	0.0234	0.0194	0.0144
	(-3.26)***	(-1.77)*	(-3.12)***	(-3.56)***	(1.77)*	(-3.35)***	(1.61)	(1.60)	(1.12)
GDP per Capita	0.0009	0.0004	0.0042	-0.0012	-0.0034	0.004	0.0506	0.0508	0.0307
	(0.19)	(0.06)	(0.91)	(-0.22)	(-0.47)	(0.75)	(2.97)**	(3.02)**	(1.94)*
GDP	-0.0011	0.0001	0.0004	-0.0016	-0.0008	0.0003	0.0274	0.0286	0.0126
	(-0.95)	(0.05)	(0.39)	(-1.43)	(-0.36)	(0.26)	(2.38)**	(2.33)**	(0.97)
Constant	0.1244	0.0689	0.0945	0.1194	0.0932	0.0643	-0.5642	-0.6481	-0.3899
	(2.46)**	(0.97)	(1.96)*	(1.87)*	(0.96)	(1.08)	(-2.07)*	(-2.75)**	(-1.38)
Observations	1,245	1,245	1,245	1,190	1,190	1,190	55	55	55
Adjusted R ²	8.40%	5.15%	8.18%	6.91%	3.63%	6.67%	12.62%	14.25%	5.89%

Table C7 Determinants of Foreign Investors' Abnormal Performance

Table C7 shows the results from cross-sectional OLS regressions that test for determinants of foreign investors' abnormal performance in US securities from 1999:4 to 2010:1. Excess returns are computed based on Carhart's (1997) four-factor model using subsequent buy and hold quarterly portfolio returns. The independent variables are grouped into investor characteristics, including the investor portfolio's *US Weight* (Equation 1), log of the investor's portfolio market value (*Portfolio Size*), and *Industry Concentration* (Equation 4). The information variables include cultural distance between the investor's home market and the US (Equation 2) and geographic distance between the investor's home market and the US. We also control for country-specific legal and regulatory variables: a measure of disclosure standards, creditor rights, anti-self-dealing index, and legal origin indicators. Legal and regulatory variables are from La Porta, Lopez-de-Silanes, and Shleifer (2006). In specifications 1-3 we perform the analysis with fund type and style indicators. All regressions are run with country clustered standard errors. The robust *t*-statistics are reported in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1% level).

	(1)	(2)	(3)	(4)	(5)	(6)
US Weight	-0.0299	-0.0304	-0.0298	-0.0202	-0.0204	-0.0198
	(-1.83)*	(-1.90)*	(-1.81)*	(-2.00)*	(-2.01)*	(-1.95)*
Portfolio Size	0.0000	-0.0002	0.0000	-0.0001	-0.0003	-0.0001
	(0.02)	(-0.41)	(0.04)	(-0.26)	(-0.58)	(-0.18)
Industry Concentration	0.0031	0.0016	0.0032	0.0091	0.0078	0.0092
	(0.47)	(0.23)	(0.48)	(1.81)*	(1.52)	(1.80)*
Cultural Distance	-0.0017	-0.0018		-0.005	-0.0048	
	(-0.66)	(-0.73)		(-2.27)**	(-2.32)**	
Geographic Distance	-0.0059		-0.006	-0.0043		-0.0039
	(-2.01)*		(-2.18)**	(-2.11)**		(-1.94)*
Disclosure	-0.029	-0.0319	-0.0296	-0.003	-0.0043	-0.0033
	(-2.23)**	(-2.40)**	(-2.26)**	(-0.3)	(-0.4)	(-0.31)
Creditor Rights	-0.0036	-0.0052	-0.0038	-0.0037	-0.0048	-0.0042
	(-2.60)**	(-3.95)***	(-2.76)**	(-2.98)***	(-3.91)***	(3.12)***
Anti-self Dealing	-0.0157	-0.0418	-0.0167	-0.0026	-0.0209	-0.0076
	(-0.81)	(-3.77)***	(-0.91)	(-0.17)	(-1.91)*	(-0.53)
Market Correlation	-0.0011	-0.026	0.0014	-0.0272	-0.0431	-0.0195
	(-0.04)	(-0.99)	(0.05)	(-0.78)	(-1.38)	(-0.49)
Real Exchange Diff.	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001
	(0.05)	(0.67)	(0.09)	(0.06)	(0.54)	(0.28)
GDP Growth	-0.0066	-0.0064	-0.0077	-0.0026	-0.0028	-0.0062
	(-1.6)	(-1.66)	(-2.09)**	(-0.62)	(-0.69)	(-1.65)
GDP per Capita	-0.0057	-0.0025	-0.0059	-0.0086	-0.0068	-0.0097
	(-1.31)	(-0.52)	(-1.22)	(-2.19)**	(-1.69)	(-1.86)*
GDP	0.001	0.0035	0.0014	0.0013	0.003	0.0022
	(0.39)	(1.38)	(0.47)	(0.49)	(1.29)	(0.63)
Constant	0.1158	0.0578	0.1142	0.1694	0.1282	0.1673
	(2.32)**	(1.02)	(2.11)**	(3.90)***	(2.90)***	(2.79)***
Legal Origin Indicator	Yes	Yes	Yes	Yes	Yes	Yes
Style/Type Indicators	Yes	Yes	Yes	No	No	No
Observations	754	754	754	1,221	1,221	1,221
Adjusted R ²	10.93%	10.68%	10.99%	6.88%	6.75%	6.44%