# Are Financial Market Expectations Driven by Some Form of National Preference

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## Abstract

Past research has shown that investors exhibit some relative optimism for their home equity market. We extend the analysis by looking at a comprehensive database that includes individual asset managers' forecasts for equity, bonds and currency in various regions. The general finding is that national optimism for the home equity market does not extend to other types of home assets. We confirm that investors exhibit relative optimism for their home equity even over the most recent period, but not for other financial assets such as bonds and currencies. Our findings are consistent with the existence of information asymmetry or with some cognitive biases, but we find little evidence of pure nationalism among professional investors.

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## 1. Introduction

A bias towards home equity has been repeatedly observed worldwide<sup>1</sup>. Investors from all countries tend to hold a disproportionate share of domestic stocks relative to foreign stocks. This home bias is large in every single country. Many explanations have been advanced for the persistent existence of the home equity bias, including institutional constraints, cost and tax considerations, information asymmetries, risk considerations and cognitive biases. But it is hard to find a rational observation for the magnitude of the observed home bias. A fair representation of the existing literature on the home bias can be found in Kho, Stulz and Warnock (2006, p. 4). They state: "However, except for behavioral biases, the reasons for the home bias advanced by this literature cannot explain the magnitude of the home bias".

One interesting behavioral explanation advanced is "*relative optimism*". Shiller, Kon-Ya and Tsutsui (1996) studied market expectations of asset managers during the Nikkei crash of the early nineties. They found striking differences in expectations between U.S. and Japanese investors: Japanese investors were uniformly more optimistic in their one-year expectations for the Japanese stock market than were the Americans. Shiller et alia wondered whether the difference has something to do "*with some irrationality related to patriotism*" (page 159). Strong and Xu (2003)<sup>2</sup> studied expectations formulated by equity fund managers from Japan, Europe, U.K. and U.S.A. They also found that domestic investors were more optimistic about their home markets than foreign investors. This does not mean that managers uniformly expect their home stock market to outperform foreign markets (absolute optimism). But managers' expectations about their home equity market are more optimistic than that of foreign managers (relative optimism). We call "*national optimism*" this form of relative optimism. The past evidence that professional asset managers in all countries tend to be more optimistic about their domestic country is surprising. These expectations cannot be simultaneously realized worldwide.

The objective of our work is to determine if national optimism extends beyond equity markets. We broaden the previous empirical studies by looking at a much more detailed expectation dataset that includes individual respondents and cover a variety of assets. Getting expectations on "real" assets (equity) and "monetary" assets (government bonds and currencies) allows getting a more complete view of investors' preference for home assets. While pure nationalism (British agents like to buy "British") should extend to all types of national assets, other optimism explanations based on some other cognitive biases or on information theory would generally not

<sup>&</sup>lt;sup>1</sup> See reviews in Jeske (2001), Strong and Xu (2003), Kho, Stulz and Warnock (2006) or Solnik (2006).

<sup>&</sup>lt;sup>2</sup> Both papers have been published in the *Review of Economics and Statistics*.

justify a bias for monetary assets. Our findings suggest that nationalism cannot explain the observed expectations pattern.

We use a database on market expectations that has never been used for academic research. Investment & Pension Europe (IPE) has been tracking asset manager's expectations on a monthly basis since February 1997. Each month IPE collects the 6-12 months equity, bond and currency views of a large number of asset managers in a consistent fashion. The database tracks the expectations of each manager and over a longer period of time than previous studies. For example, Strong and Xu (2003) did not have individual expectations but only the monthly balance of bulls minus bears as a percentage of all respondents within a region. Their time-period from October 1995 to October 2000 saw a sustained worldwide bull market in equity. Shiller et alia (1996) only covered the period of the Nikkei crash in the early nineties.

Our time-period (monthly data from February 1997 to August 2005) covers several market phases and we can test whether the findings are consistent across market phases. Given the longer time period, we can also test whether the recent trend in globalization of financial markets has led to a disappearance of national optimism. We have data not only on equity, as in previous studies, but also on bonds and currencies. Finally, we have the history of market expectations for each survey participant, so we can design more powerful tests than simply using the regional average of all participants as done in previous studies.

The paper is structured as follows. In the next section we briefly review various possible causes for national optimism. Section 3 details the IPE Survey, our source of data, and define the variables used. Section 4 tests the existence of national optimism for the various asset classes. Various robustness tests are provided in Section 5. In Section 6, we use data on individual investors to provide correlation test for levels and revisions in investment views. The final section offers some conclusions.

## 2. Possible Explanations for National Optimism

We now review some possible explanations for the existence of national optimism. Our research objective is not to test various possible explanations, but rather to see whether our empirical findings are consistent with some of these explanations. Two types of explanations could shed some light on the observed expectations pattern: a rational approach based on information theory and a behavioral approach based on some cognitive biases.

Asymmetric information, where local investors have better information on their home markets than foreign investors, could justify a bias towards home equity. Gehrig (1993) develops a model where the information signal is more precise for domestic stocks than for foreign stocks; this makes foreign stocks appear more risky than domestic stocks and leads to home bias (see also Brennan and Cao, ,1997, and Brennan, Cao, Strong and Xu, 2005)). Empirical evidence on the

existence of national information asymmetry can be found in Kang and Stulz (1997), Grinblatt and Keloharju (2000), Dvorak (2005), Massa and Simonov (2006). Note that asymmetric information does not mean that the domestic market is expected to yield a higher return on average; domestic investors get a more precise signal on domestic stocks, but the signal's mean is generally assumed to be zero. While information asymmetry could justify some allocation bias towards (less risky) domestic investments, it could hardly explain why domestic investors have systematically more positive expectations on their home market. However, it could be that the surveyed asset managers get information that allows them to build actively-managed portfolios of domestic firms that outperform the domestic passive market index. Asset managers are in closer contacts with executives of local corporations and might get quicker access to local information. So if the survey respondent considers himself as an informed trader, he may rightly believe that he will make higher profit from trading in the local equity market than from trading in foreign markets where he does not have an information advantage. Hence locals would formulate return forecasts about their home market that are more optimistic than those of foreign investors. Informational cascades<sup>3</sup> could reinforce the phenomenon. Local asset managers could engage in rational herding if they believe that their national colleagues have good information on local corporations.

While an argument can be made that locals may possess superior information about domestic corporations, it seems difficult to build a similar case for interest rates or currencies. Central bankers are very careful in their release of information on interest rate policy. Hence, asymmetric information theory would suggest, at best, the existence of national optimism for stocks, not government bonds or currencies.

*Psychology* can provide some justifications for the observed expectations formation. Several cognitive biases could lead to national optimism in expectations. "*wishful thinking*" refers to the tendency for interested parties to overestimate the likelihood of desirable outcomes. Wishful thinking often arises in the form of biased self-perception and prediction. People tend to overestimate the likelihood of desirable outcomes and translate their wishes in their predictions. Why would investors be more optimistic for their home market than foreign investors? It could be that investors have more at stake in the local economy (real estate, human capital, etc..) and "wish" even more strongly that it performs well. Kilka and Weber (2000) and Graham, Harvey and Huang (2006) stress the potential importance of "*perceived competence*" in forming expectations. In a laboratory experiment with German and US students, Kilka and Weber (2000) conclude that people on average feel more competent in judging domestic stocks than in judging

<sup>&</sup>lt;sup>3</sup> See Banerjee (1992) and Bikhchandani, Hirshleifer and Welch (1992).

foreign stocks and that they are more optimistic about domestic stocks than about foreign stocks<sup>4</sup>. The behavioral finance literature often uses the concept of "familiarity" (see Huberman-2001)<sup>5</sup>: investors are more familiar with domestic stocks than with foreign stocks and, therefore, prefer to invest in them as they are perceived as less risky and more attractive. This concept is linked to the concepts of "accessibility" and "salience" analyzed by Kahneman and Tversky. The fact that investors tend to prefer local stocks is also true within a country (see Coval and Moskowitz, 1999; Ivkovic and Weisbenner, 2005). Investors are more familiar with local companies and hence tend to find them less risky and more attractive. Foreign investors could be disadvantaged because of distance, because of differences in language and culture, and because of time zone differences. Asset managers are usually in close contact with executives of corporations who are sometimes their former university pals or golf partners. They have faith in them, maybe simply because they know them, inducing optimism about the prospects of local corporations. As stressed by Massa and Simonov (2006), familiarity could be induced by some behavioral heuristic, but it could be also based on better access to information. Such a cognitive bias has been periodically mentioned for stocks, but it is harder to understand why it would also apply to interest rates and exchange rates. Everyone is familiar with the dollar, the euro or the yen.

A final psychological explanation could simply be "nationalism", the feeling of belonging to a nation that is "better" than others. One would expect pure nationalism to apply equally to all domestic assets: stocks, bonds and the currency. This is probably what Shiller, Kon-Ya and Tsutsui (1996) had in mind when they referred to "patriotism" as an irrational explanation of the observed national optimism of Japanese investors.

To summarize, there are many overlapping potential explanations for national optimism. Except for pure nationalism, most explanations would only justify a bias for equity assets, not monetary assets. Using a novel database, we intend to test whether the preference for domestic assets applies solely to productive economic assets such as equity or to any form of domestic assets such as government bonds and currencies.

## **3.** The IPE Survey and Defining Variables

Investments & Pension Europe (IPE) publishes a monthly magazine for institutional investors and asset managers. Prior to the month of publication, it collects the equity, bond and currency views of more than 100 institutional asset managers. Asset managers are asked whether they

<sup>&</sup>lt;sup>4</sup> Note that perceived competence is a cognitive bias that does not require information asymmetry

<sup>&</sup>lt;sup>5</sup> This concept is linked to the concepts of ""accessibility" and "salience" analyzed by Kahneman and Tversky.

believe that various regional markets will rise, fall or remain stable in the next 6-12 months. For equity, the markets are: Euro-zone, UK, US, Japan and rest of Asia. For government bonds the markets are defined by the currency of denomination: euro, UK pound, US dollar, and yen. Currency views are given for the same currencies as bond markets.<sup>6</sup> Because no asset managers belong to the "Rest of Asia" category, we dropped this equity market. Hence, equity, bond and currency investment views are formulated for the same four country/regions. Our sample period is from February 1997 to August 2005 (103 months). A further description of the IPE database can be found in van Dijk and Geels (2005).

The number of asset managers responding increased over time. It was around 58 until the end of 2003, and doubled in January 2004 to reach 117. The total number of asset managers was 105 in August 2005, the end of our sample period. IPE assigns each manager to a base country (e.g. Bank Degroof is Belgian and Threadneedle Investments is British). We grouped all (continental) European managers into a single region called Europe<sup>7</sup>. In terms of regional base, the sample is heavily biased towards Europe and UK as can be seen in Figure 1 which gives the breakdown of asset managers per regional base of domicile. The limited number of Japanese asset manager implies that our results for Japan lack reliability. Participants in the survey are many of the largest asset managers but also several smaller managers. The focus is on professional asset managers not private investors, so that participants would be less subject to some behavioral bias, such as "limited knowledge" or "limited attention", which could directly lead to a home bias.

The IPE survey has never been used in academic research. Its advantage is to survey asset managers from many countries in a consistent way. It also report expectations on four regions not only for equity but also for bonds and currencies. Another advantage of this survey is that it reports expectations for each individual manager, not just some average figures over the sample of respondents. So we can track the evolution over time of expectations of each manager. We are not aware of alternative surveys that could be used for the purpose of our study. In April 2001, the Merrill Lynch Fund Manager Survey, used by Strong and Xu (2003), discontinued reporting the investment views for each region, broken down by domicile of asset managers (e.g. market expectations about Japan formulated by British managers). Other surveys of market expectations tend to be confined to respondents in one region. In many cases, respondents are "experts", such as economists, not market participants.

<sup>&</sup>lt;sup>6</sup> In the questionnaire, managers are asked to give their views about the value of the euro, UK pound and yen against the dollar. Views about the dollar are derived by taking the inverse of the average views on the three other currencies.

<sup>&</sup>lt;sup>7</sup> We use the British tradition of equating "Europe" with continental Europe.

The IPE survey provides market expectations in a nonparametric form: bullish, neutral and bearish. We chose to assign a score to each investment view, namely -1 for bearish, 0 for neutral and +1 for bullish. Let's introduce some notations:

Regarding the asset managers, let us note:

- *i* : an asset manager (AM) and *I* the total set of asset managers
- j: a region (denoted UK, US, EUR for Europe and JAP for Japan) and  $I_j$  the subset of asset managers domiciled in region j.

Regarding the markets, let us note:

- *k* : an asset class (EQ for equity, BO for bond and CU for currency).
- *m* : a regional market (denoted € for Europe, £ for UK, \$ for US, and ¥ for Japan) belonging to the set of regional markets *M*
- *km* : a specific asset. Hence EQ€ would refer to European equity, BO\$ to US bonds, etc..

Regarding the investment views, let us note:

- t: to indicate the month when an investment view is given, t varying from 1 to T
- $v_t(i,k,m) = -1$  (bearish), 0 (neutral), or 1 (bullish): the investment view given by the asset manager *i* about market *m* of asset class *k* at time *t*.

For each time period we compute the average investment view given by all managers domiciled in the same region, called *region-based view*:

$$v_t(I_j, k, m) = \frac{1}{\dim(I_j)} \sum_{i \in I_j} v_t(i, k, m)$$
(1)

Taking European equity (EQ€) as an example, we get investment views given by managers based in Europe, UK, US and Japan. The average investment view of managers of any region lies between -1 and +1. A positive v(.) implies that asset managers were bullish on average. Similarly, we can compute the average investment view aggregated over all managers (i.e. based in all four regions). To control for the differences in number of asset managers per region, this overall average is measured as the average of the regional averages. This *overall view*, noted v(overall), is computed the following way:

$$v_t(overall, k, m) = \frac{1}{4} \sum_{1 \le j \le 4} v_t(I_j, k, m)$$
(2)

In order to provide some description of the investment views, we present two set of graphs. Figure 2 gives the evolution of the overall investment views for each market. The top panel gives the overall views for the four equity markets. For example, the line "EQ€" is the overall investment view for European equity. We can see that managers have been rather bullish about equity, but there are marked differences across regional markets. Managers were on the average

bearish about the US equity market until the end of 2001, when they turned bullish for the rest of the period. While there was a wide diversity of views across national equity markets until the end of 2001, investment views became more homogeneous starting in 2002. The reduced dispersion of investment views for different national equity markets could be linked to the increased international correlation observed recently among equity markets.

Table 1 gives the mean over time of the overall investment view for each market as well as its standard deviation (in parentheses). Over the total 2/1997-8/2005 period, the mean investment view is positive for each regional equity market, although close to zero for the US.

The middle panel of Figure 2 presents similar data for bond markets. Managers have been quite bearish on bond markets, especially Japanese bonds. Again, there was a diversity of views across national bond markets until the end of 2001, investors turned bearish on all bond markets in 2002 and thereafter. So, investment views in the later period can be characterized as bullish in equity and bearish in bonds. As seen in Table 1, investors have been on average bearish on all bond markets over the eight-year period.

The bottom panel of Figure 2 presents similar data for currencies. Investment views on currencies are diverse over time and across currencies<sup>8</sup>. Managers have been bullish on the euro and bearish on the yen, except since the end of 2003. On average over the whole period (Table 1), managers have been bullish on the euro and pound, and bearish on the yen and the dollar.

To provide an illustration on how the managers' domicile affects investment views, we focus on the European market (equity, bond and currency). Figure 3 plots the investment views for the three European asset types: the dark line (with  $\bullet$ ) gives the evolution of the views given by European managers (EUR) and the lighter line (with  $\bullet$ ) gives the evolution of the average views given by managers from the other three regions (OTH). In the top panel of Figure 3, we can see that European managers have been systematically bullish about European equity from 1997 to 2005. They have been much more bullish than non-European managers until mid-2004. The difference is less pronounced in recent years, in part because Japanese have been very bullish on European equity. European managers have been rather bearish on European bonds. They were bullish at the start of 1997, quickly turned bearish until mid-1998. They were mostly bullish until late 2001 and became bearish thereafter. But non-Europeans have been even more bearish. Finally, European managers have been bullish about the euro, except for a couple of months at the start and end of our sample period. Views on the euro given by non-Europeans follow the same pattern, except that they became systematically bearish at the start of 2004.

<sup>&</sup>lt;sup>8</sup> This is expected because being bullish on some currencies necessarily implies being bearish on others.

## 4. Measures and Tests of National Optimism

Just looking at raw investment views does not allow concluding that investors are more or less optimistic about their own market. For example, it could well be that European managers are simply very bullish about the equity asset class, not particularly about European equity. While being bullish on European equity, they could even be more bullish about US or Japanese equity. So we define a measure of "rating" by asset managers of one market relative to other markets in the same asset class. The rating of manager i for one market m is measured by taking the difference of the view given by the manager on one market and the average views given by the same manager on all markets in the same asset class:

$$r_t(i,k,m) = v_t(i,k,m) - \frac{1}{\dim(M)} \sum_{m \in M} v_t(i,k,m)$$
(3)

Similarly, we can aggregate over all managers of a given region of domicile  $I_j$  to derive a *region*based rating:

$$r_t(I_j, k, m) = \frac{1}{\dim(I_j)} \sum_{i \in I_j} r_t(i, k, m)$$
(4)

A positive rating for the home market,  $r_t(I_j, k, j) > 0$ , implies that managers domiciled in this region *j* are more optimistic about their home market (*m* equals *j*) than about foreign markets in the same asset class.

Even patriotic managers will not necessarily express a positive preference for the home market relative to foreign markets. It could be a time that foreign economies are booming relative to the home economy and their financial markets more attractive. But national optimism implies that domestic investors will have a higher rating for their home market than that of foreign investors. Relatively speaking, they will find their home market more attractive than foreign investors do. So the test of the national optimism bias will be whether the rating for one market is higher among home investors than among foreign investors.

Table 2 reports descriptive statistics for the ratings on each market as well as tests of national optimism. Each row corresponds to one market. For example, the top panel of the table gives the ratings for each of the four equity markets. For each market the table reports the means (over time) of the ratings of the home-based managers and of the foreign managers; standard deviations appear in parentheses below. The next column gives a t-test of the mean difference between home and foreign managers; the p-value appears in the next column. As ratings are formulated for the next 6 to 12 months, time-dependence in successive ratings increases standard errors. In

the tests, we used a Newey-West (1987) correction with six months overlap<sup>9</sup>. As can be seen in the top panel of Table 2, there is strong evidence of national optimism for equity markets. For example, European managers had a mean rating of 0.1650 for European equity. Hence they were more bullish on European equity than on other equity markets. Non-Europeans were also more bullish on European equity than on other equity markets, but less so (mean rating of 0.1115). The difference in ratings between Europeans and non-Europeans is significantly positive with a pvalue of 0.003. For all regions, the mean difference in ratings is positive and significant at the 1% level. The difference is particularly strong for Japan, but we should remember that our sample of Japanese managers is extremely small. Note that American managers tend to be bearish about US equity over the period (mean rating of -0.1918), but they are much less bearish than foreign managers (mean rating of -0.3295). Our results confirm the findings of Shiller et alia (1996) and Strong and Xu (2003) for equity markets. Note that national optimism seems smaller for European investors than for investors of other nationalities, especially Japanese investors. A quick and dirty look at the difference in mean ratings given in Table 2 would suggest that Europeans are less patriotic (difference of 0.05) than British and Americans (0.14), and much less than Japanese (0.47). It could be that the concept of a single European nation is still not very strong.

The evidence on national optimism for bonds is weaker. In all cases, the mean difference in ratings is positive, but it is very small and insignificant for Europe and UK. It is significant at the 1% level for the US market and the p-value for Japan is 8.6%. One should remember that the vast majority of participants in the IPE survey is European and British. Hence, the finding of no national optimism in bond market for those managers is a strong one. Being optimistic on bonds means expecting a drop in interest rates. A drop in interest rates could be good for the real economy and the stock market. But this is clearly not the cause for national optimism on home equity markets observed earlier for British and European investors.

The evidence on national optimism for currencies is mixed. European managers appear to be more bullish on the euro than foreign managers, but home managers tend to be less bullish (or more bearish) than foreign managers on the pound, dollar and yen. British, American and Japanese investors are relatively pessimistic on their own currency and the relation is highly significant for American and Japanese investors.

<sup>&</sup>lt;sup>9</sup> Strictly speaking, region-based ratings are not normally distributed as they are bounded by -1 and +1. But the distribution seems reasonably well approximated by a normal distribution. We performed some nonparametric tests with similar results.

To summarize, we have strong evidence of national optimism for equity, confirming previous findings, but quite weak evidence for bonds and no evidence for currencies. This would suggest that patriotism is limited to local companies and real assets. There is little evidence that investors simply favor their home assets or governments.

These results seem consistent with explanations of national optimism advanced in section 2. There is no evidence that investors exhibit pure nationalism for all home assets.

## 5. Robustness Checks

#### **Bull and Bear Market Phases**

Previous studies on relative optimism have relied on data from particular market phases. Shiller, Kon-Ya and Tsutsui (1996) studied expectations during the Japanese market crash of the early nineties. Strong and Xu (2003) study covered a period (October 1995 to October 2000) of sustained worldwide bull market in equity. Our longer time period allows testing the robustness of the results and whether the same degree of national optimism apply in bull and bear market phases. There are three distinct equity market phases in the period under study: a bull market from the beginning of the observation window, February 1997 to May 2000, followed by a period of bear market from June 2000 to April 2003, and then by a new bull market period from May 2003 to the end of the observation window, August 2005. We group the data in two samples: bull and bear market phases. Table 3 give the equity results for the two market phases in a format similar to Table 2. In all cases the difference in ratings is positive. The level of significance drops slightly because of the reduced number of observations, but the difference is significantly positive at the 5% level for six out of eight cases. The conclusion is that national optimism on equity applies both in bear and in bull markets.

We do not report the results for bonds, but the difference in ratings is positive in six cases and significant at the 5% level in only one case out of eight. There is no discernable pattern for currencies. We tried other time-segmentation for bonds, e.g. rising and dropping yields, without little success.

In summary, our results appear robust in down and up markets.

#### Trend

Financial markets are getting integrated and many companies listed on stock exchanges have extensive international activities. Asset managers are increasingly global; many of them have clients and offices outside of their home base. Hence, we would expect national preference to have decreased, and possibly disappeared, over the recent years. To test whether national optimism has disappeared in recent years, we estimated the model over the period from October

2000 to August 2005. The choice of the starting date is somewhat arbitrary. We chose the starting to coincide with the ending date of the Strong and Xu (2003). This allows to test whether the findings of Strong and Xu hold over a successive non-overlapping period<sup>10</sup>. October 2000 is roughly in the middle of our total time period and allows having a sufficient number of observations for statistical significance purposes. We tried somewhat different cutoff dates with similar qualitative conclusions.

Results of the tests for the period 2000-2005 are reported in Table 4 in a format similar to Table 2. The difference in ratings is positive and significant at the 5% level for all equity markets. While national optimism is still strong in this recent period, this is not the case for bonds and currencies.

In summary, our results appear robust over time.

### 6. Correlation Tests

We now look at national optimism across asset classes using data on individual managers. Expectations formulation could be dominated by factors related to the asset class, or by factors related to nationality. Pure nationalism should apply to all domestic assets. Do investors become more bullish simultaneously on all domestic assets in the three asset classes (equity, bond, currency), suggesting that nationality is the main driver of expectations? Or do investors tend to become more bullish on one asset class across all regions (e.g. equity)?

#### **Investment views levels**

For individual managers, we can compute the correlation of their 'bullishness" level across the various assets. This is a time-series correlation of their investment views across assets. For example, a high correlation between views on European and UK equity would mean that the manager's views on Europe and UK equity tend to be bullish or bearish at the same time (relative to their long-term averages). As individual views are nonparametric (-1, 0 or +1), we use nonparametric correlation estimation (Spearman r and Kendall tau). Using data on individual managers, this correlation is also computed for all managers domiciled in each region, as well as for the whole universe of managers.

In Table 5, we report the Spearman correlation<sup>11</sup> for the whole universe of managers, as well as a significance test (p-level). Some asset managers do not formulate investment views for all

<sup>&</sup>lt;sup>10</sup> Interestingly, the number of observations (59) for our recent period and for the older period of Strong and Xu are similar.

<sup>&</sup>lt;sup>11</sup> Results with Kendal tau method or with traditional correlation are very close and available upon request.

markets and asset classes, so the number of observations varies between 5,983 and 6,386 depending on the asset pair. There is a strong and positive correlation within the equity asset class; for example, the correlation of views on European and US equity is 0.543. All correlations within the equity asset class are significantly positive at the 1% level. The correlations within the bond asset class are also large and significant; for example, the correlation of views on European and US bonds is 0.658. The correlations within the currency asset class are positive or negative, but tend to highlight the central role of the dollar. All foreign currencies are quoted against the dollar, so it is not surprising to find that the views on the euro, pound and yen are positively correlated between themselves, but negatively correlated with the dollar views. Interestingly, the correlations of views across asset classes are much weaker. Correlations of investment views between stocks and bonds are negative and mostly significantly so. This implies that managers tend to be bearish on bonds when they are bullish on equity. The interesting result is that "region of investment" does not appear to be a significant parameter: the correlation of views between European bonds and equity, or between UK bonds and equity, is not particularly high. As mentioned before, an expected drop in interest rates is not associated with optimism on the real economy and the stock market. To interpet the correlation within the currency asset class, one must remember the key role played by the dollar. The exchange rates of all foreign currencies are measured against the dollar. Hence, it is not surprising to find that the correlation of all foreign currencies with the dollar is negative. The correlation of investment views on currencies and other assets tend to be small and do not follow a specific pattern.

We also compute correlations separately for managers domiciled in each region and the conclusions are broadly consistent with those for the overall universe of managers (results available upon request). The correlations within asset classes are much larger than across asset classes for managers of all nationalities; and the correlation between equity and bond views is mostly negative.

#### **Investment views changes**

In Table 5 we looked at the correlation of investment view *levels* for each asset manager. Because investments views are not changed very frequently, more information can be gained by looking at *changes* in investment views from the previous month. Again, we get the monthly information for each manager. Table 6 gives the Spearman correlations of investment view changes for the whole managers' universe in a format similar to Table 5. The conclusion is quite strong and consistent with previous findings: correlations of investment view changes within the equity asset class, or within the bond asset class, are large and positive, but the correlations between changes in bond and equity views are very small (all less than 0.05). In other words, when managers

become more optimistic on a country equity market, they tend to become more optimistic on all equity markets, but not on the same-country bond market.

It could be that we are missing some information by looking at the whole universe of manager, so we perform the same calculations for investors domiciled in each of the four regions (by domicile of managers). Of particular interest is the correlation of investment view changes on the home markets (equity, bond and currency). In all cases these correlations are weak and insignificant. Table 7 gives the correlation of investment view changes on the home markets with investment view changes on all other markets. Each panel corresponds to one domicile of managers<sup>12</sup>. For example, the top panel presents results for the universe of European asset managers. The first line of the panel gives the correlation of investment changes on European equity and on all other assets. The correlation with other equity markets ranges between 0.217 and 0.394, but all correlations across asset classes are under 0.05. The correlation with investment view changes on European bonds is only -0.006 and that with changes in views on the euro is only 0.015. It appears that any change in optimism on the home equity market does not extend to changes in optimism on other home assets.

A similar result obtains for investment view changes on European bonds. The correlation with other bond markets is strong, but the correlation with other assets is always less than 0.05, even for European equity or the euro. A similar conclusion applies to investment view changes on the euro. The next panels give a similar analysis for investors from different regions. The conclusions are quite similar; for all domiciles, revision in investment views on one home asset do not extend to other home assets. But the correlation of investment views changes within an asset class is strong. The results of Japan should be taken with extreme caution as there are few revisions in investment views for Japanese asset managers.

## 7. Conclusions

Past research has shown that investors exhibit some relative optimism (national optimism) for their home equity market. We extend the analysis by looking at a comprehensive data base that includes forecast of individual asset managers for equity, bonds and currency detailed by regions and over a long period of bull and bear markets. The general finding seems to be that national optimism for the home equity market does not extend to other types of home assets. We confirm

<sup>&</sup>lt;sup>12</sup> The number of observations depends on the number of asset managers in each region. For European asset managers, the number of observations ranges from 3,138 to 3,302. The number of observations is around 2,300 for British asset managers, around 620 for U.S. managers and around 100 for Japanese managers. But many of these observations are "no change". Hence the results for Japanese asset managers are not reliable.

that investors exhibit relative optimism for their home equity even over the most recent period, but not for other financial assets such as bonds and currencies. Hence we find little evidence of pure nationalism among professional investors. Our findings are consistent with both a rational information-based explanation and a behavioral familiarity-based explanation.

The finding that national optimism for equity markets persists among professional asset managers over the recent period is nevertheless puzzling. Market integration and globalization should progressively eliminate such phenomenon.

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# Table 1: Mean and Standard Deviation of Overall Investment Views for each Market

February 1997-August 2005: 103 Months. For each manager, the investment view is scored +1 (bullish), 0 (neutral) or -1 (bearish). The table reports the mean investment view of all managers for each asset class.

	Europe	UK	US	Japan
Equity	0.42	0.31	0.01	0.46
	(0.24)	(0.32)	(0.43)	(0.21)
Bond	-0.21	-0.26	-0.20	-0.70
	(0.26)	(0.32)	(0.40)	(0.15)
Currency	0.31	0.08	-0.07	-0.15
	(0.30)	(0.30)	(0.17)	(0.28)

Table 2: Mean	<b>Rating and</b>	Tests by	Asset Manager	<b>Domicile for</b>	each Asset
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February 1997-August 2005: 103 Months. For each asset class, this table reports the mean ratings and standard deviations (in parentheses) of Home and Foreign managers, as well as a test of the difference in mean ratings.

	Mean	rating	Test				
Market	Home	Foreign	t-test	p-value			
	managers	managers					
Equity							
- Europe	0.1650	0.1115	2.99	0.003			
	(0.116)	(0.140)					
- UK	0.1193	-0.0271	5.34	0.000			
	(0.112)	(0.126)					
- US	-0.1918	-0.3295	4.15	0.000			
	(0.195)	(0.211)					
- Japan	0.5170	0.0420	5.07	0.000			
	(0.473)	(0.184)					
Bond							
- Europe	0.1342	0.1332	0.04	0.965			
	(0.115)	(0.121)					
- UK	0.0942	0.0803	0.53	0.595			
	(0.127)	(0.162)					
- US	0.2034	0.1228	2.69	0.008			
	(0.204)	(0.211)					
- Japan	-0.2646	-0.3421	1.74	0.086			
	(0.480)	(0.208)					
Currency							
- Europe	0.3390	0.2508	2.10	0.038			
	(0.212)	(0.278)					
- UK	-0.0015	0.0478	-1.45	0.151			
	(0.157)	(0.266)					
- US	-0.2920	-0.0505	-3.60	0.000			
	(0.376)	(0.268)					
- Japan	-0.5291	-0.0869	-4.23	0.000			
	(0.647)	(0.220)					

# Table 3: Mean Rating and Tests by Asset Manager Domicile for Equity Markets:

Bull and Bear Market Phases. For each asset class, this table reports the mean ratings and standard deviations (in parentheses) of Home and Foreign managers, as well as a test of the difference in mean ratings.

	Mean	rating	Test			
Market	Home	Foreign	t-test	p-value		
	managers	managers				
Bull						
Market						
- Europe	0,1871	0,1532	1.59	0.115		
	(0,119)	(0,140)				
- UK	0,1132	-0,0404	4.17	0.000		
	(0,127)	(0,131)				
- US	-0,2256	-0,3936	4.36	0.000		
	(0,197)	(0,215)				
- Japan	0,4890	0,0929	4.49	0.000		
	(0,439)	(0,188)				
Bear						
Market						
- Europe	0,1220	0,0304	2.35	0.024		
	(0,098)	(0,099)				
- UK	0,1311	-0,0013	3.55	0.001		
	(0,076)	(0,114)				
- US	-0,1262	-0,2049	1.52	0.137		
	(0,173)	(0,137)				
- Japan	0,5714	-0,0570	3.22	0.003		
-	(0,534)	(0,126)				

# Table 4: Mean Rating and tests by Asset Manager Domicile for each Asset.

October 2000-August 2005: 59 Months. For each asset class, this table reports the mean ratings and standard deviations (in parentheses) of Home and Foreign managers, as well as a test of the difference in mean ratings.

	Mean	rating	Test				
Market	Home	Foreign	t-test	p-value			
	managers	managers					
Equity							
- Europe	0.0952	0.0512	2.59	0.012			
	(0.070)	(0.093)					
- UK	0.1065	0.0002	3.85	0.000			
	(0.086)	(0.088)					
- US	-0.0964	-0.1859	2.23	0.029			
	(0.150)	(0.140)					
- Japan	0.3432	-0.0149	2.56	0.013			
	(0.447)	(0.124)					
Bond							
- Europe	0.1320	0.1502	-1.06	0.292			
	(0.066)	(0.056)					
- UK	0.0211	0.0326	-0.77	0.446			
	(0.094)	(0.051)					
- US	0.1276	0.0418	2.14	0.037			
	(0.166)	(0.182)					
- Japan	-0.2119	-0.2475	0.46	0.644			
	(0.385)	(0.138)					
Currency							
- Europe	0.3463	0.2012	2.72	0.009			
	(0.183)	(0.281)					
- UK	0.0631	0.1445	-1.73	0.090			
	(0.151)	(0.250)					
- US	-0.4239	-0.0808	-5.92	0.000			
	(0.274)	(0.239)					
- Japan	-0.6483	-0.0441	-4.81	0.000			
	(0.614)	(0.258)					

		EQ€	EQ£	EQ\$	EQ¥	BO€	BO£	BO\$	BO¥	CU€	CU£	CU\$	CU¥
								+				••••	•••
EQ€	Correlation	1.000	.521	.543	.301	130	090	123	036	.010	.011	.022	049
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.438	0.374	0.085	0.000
EQ£	Correlation	.521	1.000	.564	.295	100	099	126	083	.022	.018	.014	068
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.081	0.157	0.267	0.000
EQ\$	Correlation	.543	.564	1.000	.275	234	231	238	013	002	.052	-0.010	018
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000	0.000	0.304	0.845	0.000	0.435	0.159
EQ¥	Correlation	.301	.295	.275	1.000	228	198	213	119	.064	.105	124	.166
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BO€	Correlation	130	100	234	228	1.000	.654	.658	.272	.049	.027	.038	120
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.035	0.003	0.000
BO£	Correlation	090	099	231	198	.654	1.000	.682	.235	.020	031	.040	104
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	_	0.000	0.000	0.113	0.014	0.002	0.000
BO\$	Correlation	123	126	238	213	.658	.682	1.000	.210	.039	038	.073	160
	Sig (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.002	0.003	0.000	0.000
BO¥		- 036	- 083	-0.013	- 119	272	235	210	1 000	006	008	012	- 020
	Sig (2-tailed)	0.005	0.000	0.304	0.000	0.000	0.000	0.000	1.000	0.654	0.548	0.336	0.106
CU€	Correlation	0.005	0.000	-0.002	0.000	0.000	0.000	0.000	006	1.000	494	- 704	302
000	Sig. (2 toiled)	0.010	0.022	0.002	0.000	0.000	0.020	0.002	0.654	1.000	0.000	0.000	0.000
CITE	Sig. (2-tailed)	0.438	0.081	0.845	105	0.000	0.113	0.002	0.654	404	1.000	685	284
COL		0.011	0.018	.032	.105	.027	051	058	.008	.494	1.000	005	.204
	Sig. (2-tailed)	0.374	0.157	0.000	0.000	0.035	0.014	0.003	0.548	0.000		0.000	0.000
LU\$	Correlation	0.022	0.014	-0.010	124	.038	.040	.0/3	.012	/04	085	1.000	686
	Sig. (2-tailed)	0.085	0.267	0.435	0.000	0.003	0.002	0.000	0.336	0.000	0.000		0.000
CU¥	Correlation	049	068	-0.018	.166	120	104	160	020	.302	.284	686	1.000
	Sig. (2-tailed)	0.000	0.000	0.159	0.000	0.000	0.000	0.000	0.106	0.000	0.000	0.000	

# Table 5: Correlation of Investment Views across Markets and Asset Classes

Universe of all managers, February 1997 – August 2005. The number of observations varies between 5,983 and 6,386 depending on the asset pair.

# Table 6: Correlation of Investment View Changes across Markets and Asset Classes

Universe of all managers, February 1997 – August 2005. The number of observations varies between 5,983 and 6,386 depending on the asset pair.

		EQ€	EQ£	EQ\$	EQ¥	BO€	BO£	BO\$	BO¥	CU€	CU£	CU\$	CU¥
EQ€	Correlation	1.000	.344	.349	.178	004	009	017	007	001	.005	.000	.001
	Sig. (2-tailed)		0.000	0.000	0.000	0.741	0.487	0.187	0.585	0.933	0.693	0.982	0.950
EQ£	Correlation	.344	1.000	.385	.186	.002	.005	003	023	003	.013	004	0.012
	Sig. (2-tailed)	0.000		0.000	0.000	0.871	0.689	0.814	0.072	0.822	0.299	0.753	0.329
EQ\$	Correlation	.349	.385	1.000	.190	032	045	012	.004	035	.008	.019	013
	Sig. (2-tailed)	0.000	0.000		0.000	0.013	0.000	0.359	0.783	0.006	0.524	0.126	0.298
EQ¥	Correlation	.178	.186	.190	1.000	026	022	030	072	033	002	.023	.019
	Sig. (2-tailed)	0.000	0.000	0.000		0.046	0.085	0.018	0.000	0.010	0.870	0.072	0.137
BO€	Correlation	004	.002	032	026	1.000	.481	.462	.184	.038	010	.025	020
	Sig. (2-tailed)	0.741	0.871	0.013	0.046		0.000	0.000	0.000	0.002	0.416	0.049	0.109
BO£	Correlation	009	.005	045	022	.481	1.000	.452	.198	.018	023	.012	028
	Sig. (2-tailed)	0.487	0.689	0.000	0.085	0.000		0.000	0.000	0.166	0.076	0.347	0.029
BO\$	Correlation	017	003	012	030	.462	.452	1.000	.210	004	.014	010	.018
_	Sig. (2-tailed)	0.187	0.814	0.359	0.018	0.000	0.000	•	0.000	0.734	0.284	0.448	0.164
BO¥	Correlation	007	023	.004	072	.184	.198	.210	1.000	024	022	.027	015
	Sig. (2-tailed)	0.585	0.072	0.783	0.000	0.000	0.000	0.000		0.059	0.092	0.036	0.240
CU€	Correlation	001	003	035	033	.038	.018	004	024	1.000	.355	623	.272
	Sig. (2-tailed)	0.933	0.822	0.006	0.010	0.002	0.166	0.734	0.059		0.000	0.000	0.000
CU£	Correlation	.005	.013	.008	002	010	023	.014	022	.355	1.000	580	.203
	Sig. (2-tailed)	0.693	0.299	0.524	0.870	0.416	0.076	0.284	0.092	0.000		0.000	0.000
CU\$	Correlation	.000	004	.019	.023	.025	.012	010	.027	623	580	1.000	597
	Sig. (2-tailed)	0.982	0.753	0.126	0.072	0.049	0.347	0.448	0.036	0.000	0.000		0.000
CU¥	Correlation	.001	.012	013	.019	020	028	.018	015	.272	.203	597	1.000
	Sig. (2-tailed)	0.950	0.329	0.298	0.137	0.109	0.029	0.164	0.240	0.000	0.000	0.000	

# Table 7: Correlation of Investment View Changes on Home Assets relative to All Assets

Universe of regional managers, February 1997 – August 2005. The number of observations depends on the asset managers region and the asset pair. (\*) and (\*\*) mean significantly different fro zero at the 5% and % level.

		EQ€	EQ£	EQ\$	EQ¥	BO€	BO£	BO\$	BO¥	CU€	CU£	CU\$	CU¥
<b>European</b> Asset Managers	EQ€	1.000	.362(**)	.394(**)	.217(**)	006	031	045(*)	018	.015	020	.012	005
	BO€	006	.005	012	031	1.000	.527(**)	.514(**)	.229(**)	.049(**)	.001	.007	016
	CU€	.015	.002	051(**)	049(**)	.049(**)	.041(*)	.040(*)	023	1.000	.331(**)	605(**)	.280(**)
British Asset Managers	EQ£	.316(**)	1.000	.386(**)	.165(**)	.002	.059(**)	.007	021	.000	024	.003	.042(*)
	BO£	.024	.059(**)	066(**)	006	.416(**)	1.000	.411(**)	.110(**)	005	.001	.012	012
	CU£	.022	024	.034	.008	015	.001	.008	028	.346(**)	1.000	582(**)	.189(**)
<b>U.S.</b> Asset Managers	EQ\$	.367(**)	.351(**)	1.000	.151(**)	.006	030	031	.039	.021	.092(*)	039	011
	BO\$	.021	.018	031	.051	.464(**)	.433(**)	1.000	.228(**)	016	.031	.050	015
	CU\$	.008	004	039	007	.125(**)	.043	.050	.078(*)	736(**)	618(**)	1.000	640(**)
Japanese Asset Managers	EQ¥	.000	.175	.000	1.000	071	217(*)	.135	139	.161	.327(**)	004	.094
	BO¥	001	.000	.006	139	.294(**)	.201(*)	.100	1.000	233(*)	242(*)	.447(**)	391(**)
	CU¥	159	.006	003	.094	200(*)	275(**)	.011	391(**)	.215(*)	.086	606(**)	1.000



Figure 1: Number of Asset Managers per Regional Base

Figure 2: Overall Views per Asset Class









Figure 3: Comparison between Local and Foreign Views - The European Case.

