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United Kingdom Fund Managers and Institutional Investors’ Attitudes Toward Japanese Equities

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UK Fund Managers and Institutional Investors' Attitudes towards Japanese Equities

Abstract: This article explores UK fund managers and institutional investors' attitudes towards Japanese equities. We find a declining home bias of UK pension funds vis-à-vis Japanese equities since the early 1990s. However, for the most part, this decrease is a reflection of Japan's decreasing equity market and GDP weights. Only in the 2000s did UK pension funds increase their Japanese equity holdings slightly. While our informants showed a comparatively high degree of variance in opinions about market factors, certain macro and institutional factors – namely economic growth, deflation, demographics, and corporate governance – were rated high as explanatory factors for an overall low enthusiasm in Japanese equities. Our discussion confirms that these factors appear to make investments in Japan comparatively less attractive.

Introduction

Since the burst of the so-called bubble economy at the beginning of the 1990s, Japan has been struggling with low and partially negative economic growth, ballooning public debt and lacklustre consumer spending. Nevertheless, the country is still the third largest economy in the world in GDP terms and has with Tokyo the world's second largest stock market in terms of market capitalization (World Federation of Exchanges 2010). For these reasons, institutional investors and their fund managers

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can hardly afford to ignore Japan as an investment destination. This paper explores the attitudes of UK institutional investors and their fund managers to Japanese equities and how they have changed since the burst of the bubble economy twenty years ago. In particular, we seek to answer whether the Japanese equity holdings of these investors have been reflective of asset allocation weightings as suggested by modern portfolio theory and which factors have been influencing their asset allocations into Japanese equities. Our findings relate primarily to UK corporate pension funds which have with US\$ 13,196 billion the world's third largest pension assets (Towers Watson 2010) and constitute the most important group of UK institutional investors, accounting for almost 30% of all equity capital which is professionally managed in the UK (Investment Management Association 2010).

Our key findings are that UK pension funds show still a strong, albeit decreasing home bias investing predominately in UK equities. UK pension funds' investments in Japanese equities have increased slightly over the 2000s, however, the declining home bias vis-à-vis Japanese equities is mainly a reflection of Japan's decreasing equity market and GDP weights. While our informants showed a comparatively high degree of variance in opinions about market factors, certain macro and institutional factors – namely economic growth, deflation, demographics, and corporate governance – were rated high as explanatory factors for an overall declining enthusiasm in Japanese equities.

To examine these issues in detail, this article proceeds as follows: After some methodological remarks, the article reviews the portfolio theory literature, focusing on issues of international portfolio diversification and home country bias. Applying these insights to UK investors' positions in Japanese equities, we begin the findings section with an analysis of how foreign investors' portfolio weightings in Japanese equities have changed over the last two decades. This is followed by a discussion of interview data that illuminate the various factors that have influenced their asset allocation decisions. Finally, the article closes with a short conclusion.

Methodological Remarks

This article is based on secondary literature and statistical data as well as primary data collected through interviews with UK fund managers with Japanese equities mandates. Our quantitative analysis is primarily based on data from Thomson Reuters

Datastream as well as published and unpublished data from BNY Mellon Asset Servicing. Furthermore, in order to understand the reasons behind the varying equity positions of UK institutional investors, we conducted a series of face to face interviews and conference calls with UK professional investors with holdings of Japanese equities.

Informants were those who responded positively to an email request for interview sent to 40 UK-based Japanese equity fund managers in June 2009. These fund managers were identified through a customer relations management system used by investment banks called Big Dough. This information was verified and validated by an information provider called Lipper, which produces data on UK retail funds including fund managers with Japanese equity mandates. The email explained the nature of our project and invited fund managers to participate in a meeting. In total there were 12 positive responses and subsequently nine face to face meetings and three conference calls took place during July 2009. Appendix 1 presents anonymous information on the profiles of the institutions and informants, including their experience with Japanese equities and self-rated Japanese language abilities. Our analysis of Big Dough data suggests that the twelve informants represent assets under management of some £120bn, which equals about 16% of the UK's total pension fund assets.

Our interviews with the informants were semi-structured around a series of generic questions which sought to identify UK investor attitudes towards Japanese equities. This general discussion was followed by a simple quantitative assessment of UK investor attitudes to Japanese equities. The fund managers were presented with a questionnaire which asked them to identify reasons why UK pension funds have had underweight positions in Japanese equities. These included market factors, macroeconomic and institutional factors. Additionally, the informants were offered the opportunity to identify and discuss other factors which were beyond the scope of the questionnaire. The questionnaires were either completed at that point or completed separately and returned by email. Moreover, all informants were later asked to rate also the issues that other informants had raised and rated. Consequently, all informants responded to our initial list, but some failed to rate the additional issues. The results of the analysis of the numerical and interview data are presented in the findings and discussion sections.

Literature Review: International Diversification and the Home Bias

Theoretical models of portfolio selection as developed by Harry Markowitz (1952) and James Tobin (1958) offer explanation and normative rules for the diversification of risky assets. The key argument is that if returns on assets are not correlated, diversification of assets can eliminate risk. Given the tendency of security returns to be higher correlated within countries than across countries, the benefits of international diversification of equity portfolios have been well-documented (e.g., Grubel 1968; Levy and Sarnat 1970). According to the *international capital asset pricing model* developed by Sharpe (1966), Lintner (1965a, b) and Mossin (1966), investors should hold the world portfolio of equities to limit their investment risk (Cai and Warnock 2004; Lewis 1999; Karolyi and Stulz 2001).

However, academic theory and investor practice are wildly apart when it comes to international equity holdings within an investor's equity portfolio. Portfolio investments are frequently highly concentrated in the domestic equity markets of investors, a phenomenon that is referred to as 'home (country) bias.' The home bias has been the subject of numerous studies that have tried to identify its particular nature and contributing factors, but there is no generally accepted explanation (e.g. Dahlquist et al. 2003).

Bertaut and Koe (2004) show that country and regional fixed effects are important determinants of the degree of portfolio diversification. For example, Nordic countries appear overweight in equities from other Nordic countries and the same is true for equity holdings among euro-area countries. Moreover, the home bias is not limited to international portfolios, but persists across geographic areas within the same country. For example, many US investment managers exhibit a strong preference for locally headquartered firms (Coval and Moskowitz 1991). Investors tend to hold stocks they know, in effect thinking that the riskiness of stocks they do not know is very high. Furthermore, investors tend to be more optimistic about their own market than foreign investors (Shiller *et al.* 1990). Language barriers have also been shown to be influential factors (Lane and Milesi-Ferretti 2003, 2008).

Overall, one can distinguish explicit and implicit barriers to international investment. Explicit factors are directly observable and include restrictions on foreign exchange transactions and withholding taxes. While such factors have played a large role before the 1970s, when most countries had restrictions on foreign exchange

transactions, AllianceBernstein (2006), French and Poterba (1991), Cooper and Kaplanis (1994), and Kang and Stulz (1997) argue that such explicit barriers are no longer large enough to explain or justify the home bias.

Instead, the focus has since shifted to implicit barriers that are not directly observable from brokerage statements. Such barriers include political, operational, economic, and investment risks and information asymmetries. Political risks comprise, but are not limited to, government instabilities, limited investor and property rights and other shortcomings in corporate governance. For example, US mutual funds are more likely to invest in equities of countries with stronger shareholder rights, legal systems and accounting disclosure (Aggarwal, Klapper and Wysocki 2005). Operational risks include illiquidity of markets, wide bid-ask spreads, ambiguous regulations and limited transparency (Wilshire Consulting 2008).

The home bias is usually calculated by comparing an investor's holdings of local equities with the investor's country share of the global equity market. Figures 1a and 1b show how the home bias manifests itself in the equity allocation of local pension plans.

For example, Australian pension funds invest 73% of their money in local equities, although the country's weight in the MSCI World Index is only 2%. This means that the Australian pension funds are 71% overweight in local equities. Despite the fact that US pension funds invest 85% in local equities their home bias is with 34% comparatively smaller, because US equities have a large share in the MSCI World Index. UK pension funds are 53% overweight in local stocks.

Figures 1a and 1b about here

Although the home country bias of UK pension funds continues to be substantial at around 50%, the situation has changed markedly since 1979, a year for which French and Porterba (1991) reported foreign assets holdings of UK pension funds of just 6%. Between 1991 and 1997, foreign equity holdings of UK pension funds rose to 27-30% of their total equity exposure (Timmermann and Blake 1999).

Some investors use GDP country weights instead of market capitalisation country weights. This approach serves to sanity check the market capitalisation approach which can skew a country's relative importance in situations where asset bubbles develop. Japan serves here as a major example. In the late 1980s, its stock

market was the biggest in the world representing between 40% to 55% of the global index. However, this reflected premium valuations rather than fundamentals. From a GDP perspective, Japan's GDP remained second to the US in 1989 and represented a more modest 14% of the world (IMF 2010). The GDP approach gives each country a weight relative to its economic strength. However, implementation of this approach can be onerous and costly as it needs portfolios to be rebalanced on each occasion when new GDP figures are published or revised.

The potential benefits for an UK institutional investor from investing in Japanese equities become clear if we consider the correlation of equity markets. Calculations by Solnik and McLeavey (2004) show that only 9% of UK stock price movements are common to the Japanese market. In fact, as can be seen in Figure 2, among the major industrialized countries, the Japanese market has the lowest correlation with the UK market. For risk diversification purposes, Japanese equities should therefore be very attractive for UK investors.

Figure 2 about here

Findings

UK pension funds' investments in Japanese equities

The basis for the interviews with the informants was our observation that UK pension funds have been continuously underweight in Japanese equities if compared to market capitalization and GDP benchmarks. The results of our underlying calculations, which confirm in principle the home bias of UK pension funds as discussed in the literature review, are depicted in Figure 3.

Figure 3 about here

While we need to be careful not to interpret too much into these numbers, they seem to allow three observations. First, the home bias with regards to Japanese equities has decreased since the 1990s. Second, during the 1990s this was not due to increased allocations into Japanese equities, but simply a reflection of Japan's decreasing market capitalization and relative GDP. Thirdly, UK pension funds' holdings of

Japanese equities increased slightly during the 2000s, but a home bias continues to exist.

The purpose of our interviews was to learn more about the reasons why UK pension funds have been underweight in Japanese equities and how perceptions of Japanese equities have changed since the burst of the bubble economy 20 years ago.

General attitudes towards Japanese equities

Before we can examine the attitudes of UK institutional investors and fund managers towards Japanese equities in more detail, we need to explain shortly how pension funds make investment decisions. All pension funds adopt a “policy statement” which sets out the investment objectives with reference to constraints and benchmarks. Reilly and Brown (2003, p. 43) describe the “policy statement” as a “road map” in which investors specify their appetite for risk. Investment decisions are based on these policy statements to ensure that they are appropriate for the investors. Different pension funds will deploy different policy statements and also feature different asset allocation decisions. These, amongst other factors, are likely to be based on the maturity of the pension fund, its state of funding and whether the fund has defined benefit obligations. While a pension fund’s policy statement is likely to reflect a long term view – typically 25 years – investors needs do change over time, and for this reason, the policy statement is periodically reviewed and updated. Once a policy statement has been determined, pension funds are able to decide on realistic investment goals and set a standard by which to judge the performance of the portfolio manager. The latter is evaluated using “benchmarks” which typically refer to the performance of a given asset class during a set time period or the performance of the average fund in a peer group. The policy statement is augmented by the attribution of current financial/economic forecasts of future trends. This will form the judgement of the expected return from each asset class, and, by definition the overall portfolio. The combination of the fund’s policy statement and the financial market forecasts allows professional advisers to implement the investment strategy and determine how to allocate available funds across different countries, asset classes and securities. The process of asset allocation describes how an investor apportions funds into different asset classes.

Figure 4 highlights the average asset distribution of UK pension funds in 1999 and 2009. The data shows a very material shift in asset allocation during these ten years. This highlights the fact that pension funds are maturing – and defined benefit schemes are being closed to new entrants. As a result, the average UK pension fund has reduced its exposure to equities from 72.9% in 1999 to just 48.1% in 2009. While this paper is principally concerned with the Japanese equity exposure within the overall equity allocation, it is important to note that the risk tolerance amongst our universe of investors has decreased with an overall shift to less risky asset classes.

Figure 4 about here

We started our interviews with a discussion of the mechanics of the fund's asset allocation process. All of our informants had specialised in Japanese equities for a minimum of fourteen years. Moreover, ten of the twelve informants were already specializing in Japanese equities during the period of the bubble economy of the late 1980s. All of the informants had a role in formulating the amount of Japanese equity exposure a fund has. Despite the presence of lay personnel on the asset allocation committees of large pension funds, our informants made it clear that the asset allocation decision was made by professionals.

Informant 4 has had a key role in the process of asset allocation with different funds. His perspective was that funds have different approaches when deciding asset allocation. He acknowledged that there was a tendency to move away from the "home country" bias, but noted that the starting point for determining country weightings would vary considerably between funds. Investors acknowledge country market capitalisations, but also accommodate for the relative sizes of the economies before committing to investing in countries. This informant stated that the portion of funds which were to be invested overseas was far from scientific or mechanical. The decision process was often influenced by the committee's view of how important various economies would be in ten to twenty years time. In terms of Japan, this informant suggested that most asset allocation committees took the view that Japan will be less of a global economic player in years to come. He noted a material change in UK investor attitudes over the 1990s and 2000s which contrasts to the 1980s outlook when investors were excited about future prospects for Japan but had little exposure. Such beliefs were followed by a large build up of Japanese expertise within

the UK fund management industry. However, the burst of Japanese bubble at the beginning of the 1990s caused a number of UK based funds to question the merits of investing in Japan on valuation grounds. For example, PDFM (now UBS asset management) allocated a zero weighting to Japan at the beginning of the 1990s. Given the dramatic weakening of Japan's stock market, which saw the Nikkei 225 index collapse from over 38,000 at the end of 1989 to 15,000 at the beginning of 1992 (Thomson Reuters Datastream), there emerged a tendency for some pension schemes to avoid Japan on the grounds of its "irrational" (Informant 2) stock market. This legacy continued as Japan's equity market returns sustained a lacklustre fashion throughout the 1990s. Informant 4 suggested that UK pension funds in the 1990s did not pay much attention to Japan on the grounds that the country "*is a long way away*" and "*there was no real reason to worry about it*".

All of our informants noted that the Japanese market had more volatility and less correlation with Western markets, which would in theory make Japanese equities attractive from a pension fund diversification point of view. However, informant 4 suggested that these factors were countered by a less enthusiastic attitude towards Japan which can be summed up in the following statement: "*People know Japan less now than they did ten to twenty years ago*". This view was echoed by informant 5 who noted that in his twenty year tenure as a Japan specialist, foreigners have tended to have an opinion on Japan, but within the last six to twelve months, "*people just don't care at all*". Informant 5 stated that UK investor apathy in Japan were directly related to the post bubble performance of the Japanese equity market, which saw the Nikkei index underperform the rest of the world by 85% in eight years. He pointed to the post bubble Japanese equity market experience as one of two unequal halves. Broadly speaking, during the first half from 1989 to 1997, Japan halved while the rest of the world doubled: "*Memories of 1989 to 1997 are so painful they still exist. Anyone who had experience of running international money in that period was thinking Japan is a disaster*". However, during the latter half, which Informant 5 describes as the twelve year period from December 1997 to December 2008, Japan's market performed broadly in line with the rest of the world. Yet, according to this informant, despite this more respectable performance, including strong years in 1999, 2003 and 2005, investor perceptions have been clouded by the post bubble experience.

Informant 6 described the level of interest in Japanese equities at the asset allocation committees as varying from zero interest in some periods to high interest in

other periods. For the years 2002-3, he described the attitude of the asset allocation committees to him as the Japanese equity fund manager as one of “*Why are you here?*” This changed to “*frenzied interest*” in October 2005, when hopes of a Koizumi government (2001-2006) propelled recovery caused small-capitalization stocks to surge.

Informant 6 is employed by an asset management firm which requires all fund managers to input a score about their country prospects to pension funds’ asset allocation committees on a frequent basis. Therefore, asset allocation is partly determined by considering changes in the manager’s opinion of that country. In addition, other factors such as economic growth, earnings forecasts and political risk are considered. Informant 7 described a similar approach to asset allocation being practised at his firm.

Informant 8 highlighted that professional investors are aware of the risks involved of being underweight in Japan. He noted that when Asia (ex-Japan) markets have performed well, the Japanese market starts to look relatively attractive. He stated that UK investors tend to “*flood into Japan*” in the later stages of bull markets. To this informant this reflected Japan’s sheer weight in terms of market capitalization, rather than its merits as an investment location.

Informant 9 attributed a lack of UK investor appetite for Japanese equities to its weak record of returns. He also noted that Japan, like the US, is seen by UK investors as an expensive market on traditional valuation metrics such as price-earnings-ratio. He suggested that Japan often suffers because of its geographic proximity to the rest of Asia which has in recent years offered superior growth prospects. Informant 9 cited situations when UK investors had higher allocations to Thailand than Japan, despite the former’s weaker position in terms of GDP and market capitalization benchmarks.

Informants 2 and 3 gave personal anecdotes which seem to capture many of the negative attitudes UK professional investors have developed towards Japan. Informant 3 cited a Japanese equity fund manager at a pension fund encouraging the asset allocation committee to place less capital in Japan. To this informant, this was not an expected behaviour as it undermined the role and requirement of a Japanese equity specialist. Informant 2 stated explicitly that he had no personal holdings in Japan, despite owning equities in other markets. He believed that other UK-based Japanese equities specialists think in the same way.

Informant 2 added an interesting twist to the legacy of the performance issue. Fund managers are naturally often keen to buy shares which have underperformed: *“The Japanese equity market has been such a laggard that we have been reluctant to have an underweight position in Japan”*. Informant 2 added that Japan’s reduced weighting as part of the world index is due to its dramatic underperformance in the 1989-1997 period, which reduced the pressure on asset allocation committees to invest in Japan: *“In 1990, when Japan represented about 40% of the world index, UK pension funds felt compelled to invest in Japan. Today, however, Japan represents a mere 10% of the world index, making it increasingly peripheral in an equity asset allocation decision.”* Informant 4 summed up the UK investor sentiment towards Japan succinctly: *“It is, at the moment, the forgotten market”*.

Common concerns

In order to get a better sense of the variance of opinions among our informants, we asked them to rate factors that in their view have contributed to an underweight position of UK pension funds in Japanese equities. The informants rated these factors on a 10-point Likert scale, with 1 meaning that they considered a factor to be unimportant and 10 that a factor was considered to be an important explanatory variable. The results of this survey are shown in figure 5. While the informants showed a comparatively high degree of variance in opinions about market factors, certain macro and institutional factors – namely economic growth, deflation, demographics, and corporate governance – were rated high by most of them.

All informants expressed negative views about Japan’s recent economic growth and growth potentials, especially when compared to its Asian neighbours. In response to this negative macroeconomic assessment, half of the informants chose to divide Japanese equities explicitly into two categories: exporters and domestic companies. This reflects their opinion that exporters are exposed to competition and have had to strengthen themselves in order to cope within an internationally competitive market.

Figure 5 about here

Informant 1 described the exporters as being like an army exposed to battle while “*most domestic companies are pretty mollycoddled by government regulation. More bankruptcies in Japan would be desirable*”. This informant estimated that more than half of the Japanese market was made up of exporters, reflecting the fact that many domestic companies are not listed. Those that are listed often tended to be small in market value terms, and perhaps not sufficiently liquid to attract non-Japanese investors. Domestic companies in Japan have also been more vulnerable to deflation than the exporters. According to this informant, electronics and automobile producers had presided over price decreases, but these had been more a function of technological change than a result of Japan’s deflationary monetary environment. An underweight position in Japanese equities by UK investors could be easily reconciled by the fact that investors would restrict themselves to only one half of the market.

Informant 2 endorsed this preference of investing in global Japanese companies such as Toyota and Honda “*due to the pretty negative outlook for the Japanese economy*”. However, the recent strength of the Japanese Yen, which has weakened the position of the exporters, had forced this informant to scan domestic Japanese companies as part of the stock selection process.

Informant 9 also considered Japan from the exporter/domestic viewpoint, but suggested that deflation was not such a serious issue, although it added to the overall gloom in economic outlook. Informant 2, on the other hand, stated that most domestic stocks had “*really struggled because of deflation*”, which negatively effected domestic demand due to consumer expectations about lower prices in the future. According to this informant, weak demand was further augmented by Japan’s fast ageing population, with older consumers spending even less than younger ones. These points were also highlighted by informants 4, 5, 10, 11 and 12. Informant 5 stated that Japan’s “*awful demographics*” were a material factor in deterring investors from investing in its domestic stocks.

Informant 3 noted that investors were deterred from Japan not only because of its growth rates but highlighted that Japanese government’s borrowing had stifled the domestic economy. This had resulted in a “*crowding out effect*”, reducing incentives to invest, work and innovate. He mused that there had been no real effort by the Japanese government to correct this situation. Meanwhile, he concurred with informant 2 that the aging population and a conservative approach to spending had created a poor environment for domestic growth. Against this background, informant

3 invests in Japanese exporters and notes that “*most asset allocators see domestic Japan as being dampened by debt, the age profile, and low growth.*”

Informant 7 concurred with informant 3 that Japan’s large government debt had deterred UK investors from investing in Japan, but stressed that informed investors should understand that Japan remained to be a creditor country and that most debt was held internally.

Informant 6 concurred with other informants on deflation and demographics to be “*very important*” factors when making a judgement on Japan. However, he also believed that deflation, while certainly negative from a macro perspective, was in its “*steady state*” less of a threat given that the markets disliked uncertainty even more.

Informant 7 was more cautious on deflation and pointed instead to a general lack of pricing power in Japan. He pointed out that the recent price increase in beer by Asahi Breweries was the first since the 1980s. He also noted that deflation has a negative impact on equities, as it increases the real value of a company’s debt. Furthermore, he believed that it was logical for UK investors to compartmentalize Japan’s stock market into exporters and domestic companies. This reflected the fact that the Japanese economy was actually much less dependent on exports than the stock market itself. However, the informant suggested that choosing to invest in Japanese exporters alone would preclude investors from participating in some of the growth sectors within Japan’s domestic economy.

Besides the macroeconomic factors discussed above, most informants agreed that corporate governance issues were limiting the overall attractiveness of Japanese equities. Informant 1 stated: “*The biggest difficulty is that Japanese companies often like to appoint auditors who were previously officers of the company. UK investors are likely to vote against internal auditors being appointed.*” He also noted that the poison pill takeover defences which have been put in place by Japanese companies in the past few years have tended to backfire. According to this informant it was a well-known fact that these companies subsequently underperformed. Consequently, UK investors would be very cautious about buying a poison pill company and investor tools such as Bloomberg made it very visible if a company had this characteristic.

Informant 2 believed that weak corporate governance was not such an important issue for UK investors who select the large Western-style exporters as portfolio holdings. He noted that these companies are “*signed up to Western corporate governance practice already*”. Furthermore, annual reports and accounts

from such companies addressed explicitly governance issues. He also noted that a lot of companies, such as Takeda and Toyota, have been engaging in investor friendly practices such as share buybacks over the last ten years.

Informant 3 noted that Japanese companies lack a shareholder focus and show minimal sympathy towards Western investors. He suggested that the lack of responsiveness to shareholders at the corporate level reflected the fact that companies tried to optimize outcomes for other stakeholders such as employees, customers and suppliers. Informant 4 echoed this view, but suggested changing practices. He noted that prior to the late 1990s the stable shareholder ratio for Japanese companies was more than 60%. According to this informant, companies showed more respect for these stable cross-shareholders than portfolio shareholders during this time. Japanese companies would always know exactly how much of their equity capital was in the hands of these “friendly” shareholders and were “*terrified about the loss of corporate control*”. However, as for recent developments, the informant noted that “*dividend payments have rocketed*”.

Informant 6 concurred with informant 3 that corporate governance practices were changing. Today, investor presentations would always feature a page on shareholder rewards, while this was not a priority ten years ago.

Informant 8 explained that he had never believed that Japanese companies did not care about their shareholders but fund managers covering other geographies within the same organization were adamant that Japanese companies held little regard for them. He suggested that Japanese companies do work in the interests of shareholders, but have had to be mindful that different stakeholders have different objectives. For example, stable shareholders such as supplier companies might not be entirely motivated by maximizing shareholder value. Moreover, improvements in corporate governance practice developed as the keiretsu cross shareholding structures unwound at the end of the 1990s. This was driven by the requirement for shareholders, such as banks, to liquidate positions in order to bolster their capital ratios. This trend was described by Informant 8 as causing a “*dislocation of the shareholder register*”, as non-institutional holders sold their positions. Subsequently, in the 2001 to 2002 period, there was “*a massive recovery in corporate profits in Japan*”, which appeared to the informant to have been at least partially driven by a change in the composition of the shareholder register.

Discussion

As highlighted above, our informants showed a comparatively high degree of variance in opinions about market factors, while some macro and institutional factors – namely economic growth, demographics, deflation, and corporate governance – were rated high as explanatory factors for UK institutional investors' lack of investment in Japanese equities. In this section we investigate to which extent these opinions correspond with objectively measurable data and assessments in the academic literature. Furthermore, we present additional data which help to put the opinions of our respondents into perspective.

Economic growth, demographics, and deflation

All of our informants expressed concern about Japan's lacklustre economic growth, especially if compared to its Asian neighbours. Figure 6, which shows the GDP growth rates of major industrialized and newly industrializing countries including China and India, confirms this negative assessment. In terms of past and predicted GDP growth rates, Japan trails behind these countries. These low growth rates have influenced domestic demand which in turn has negatively affected corporate earnings. During the ten year period from 1998 to 2008, Japanese company earnings growth has averaged 3% per annum. This compares to 7% in the UK, and 5% in the US. Moreover, Japanese equities have underperformed the world index by some 83% over the past ten years (authors' calculations based on Thomson Reuters Datastream). This performance legacy appeared to attract the most emotional opinions in our interviews. Informant 10 explicitly suggested that *"poor returns over prolonged periods in the past mean low perceived risk in avoiding Japan"*.

Closely related to Japan's recent lacklustre economic growth record are the issues of demographic aging and deflation, rated highly by our informants. Japan has the fastest aging population in the world. As can be seen in figure 7, in the year 2010 the percentage of the population aged 65 and older was the highest among the selected countries. This demographic aging trend will continue for at least another 40 years and have a substantial negative effect on Japan's future growth potential.

Figure 6 about here

Theoretically, one can distinguish six factors that influence the growth of GNP per capita, namely growth in labour efficiency, changes in dependency ratios between economically active and non-active parts of the population, changes in the capital intensity of production, changes in the investment income from abroad, changes in labour force participation rates, and changes in terms of trade (Turner *et al.* 1998). While precise predications about the development of these factors are difficult due to numerous underlying assumptions, all researchers agree that the shrinking of Japan's working age population will result in a substantial increase of its dependency ratio, which can negatively impact living standards per capita. There is, however, disagreement to what extent the impact of this factor can be mitigated by improvements in other factors. While Matsutani (2006) predicts an absolute shrinkage of Japan's real national income, other researchers conclude that living standards per capita will continue to rise, albeit at much lower levels than so far and at comparatively lower levels than in other major industrialised countries (Turner *et al.* 1998; Fougère and Mérette 1999; Kawase and Ogura 2008).

In reaction to the burst of the bubble economy in the early 1990s, Japanese firms engaged in corporate restructuring and wage level growth trailed behind increases in labour productivity (Matsutani 2006). While such strategies were rational from an individual companies' point of view to boost profitability, they have at the national level contributed to a deflationary spiral of weakened consumer demand and lower GDP growth.

Against the backdrop of ongoing deflationary pressures and limited future economic growth potential, foreign investors' diminishing appetite for Japanese equities seems logical. After all, it appears likely that Japanese firms will continue to experience decreasing local demand and earnings growth in the future. Therefore, foreign investors' strategy to invest primarily in export-oriented companies, as suggested by a number of our informants, seems highly rational. Exports are the only element of demand that does not depend on wages in the local economy. Moreover, in the 2000s, Japan's exporters have benefited from weak wage growth of regular labour, a rising supply of cheap non-regular labour, and a rising demand from developing countries.

Figure 7 about here

Corporate Governance

Let us finally address corporate governance as an important institutional factor highlighted by our informants. Japanese corporate governance has been described by various labels, such as bank-based, relationship-oriented, network, insider, stakeholder, or coordinated model of corporate governance (Jackson and Miyajima 2007). These labels indicate that Japanese practices deviate from shareholder-orientation and liberal market principles dominant in Anglo-American economies. Until the early 1990s, a stylized picture of Japanese corporate governance would include the following main features: First, ownership patterns characterized by ‘stable shareholders’ with reciprocally held cross-shareholdings among corporations and banks. These shareholders tended to be stakeholders with long-term interests in the firm in addition to return on their equity investments; second, main banks playing a central role in monitoring management; third, long-term employment and seniority-oriented pay practices of regular male employees; forth, large boards of directors, consisting largely of internally promoted managers and few externally recruited top managers and independent outside board members (Jackson and Miyajima 2007).

Over the 1990s, these patterns underwent substantial changes. Ownership by foreign and institutional investors increased with the erosion of stable and cross-shareholding arrangements, while bank lending in large firms and the importance of main banks decreased. After 1997, board reforms saw an increasing number of outside directors, the introduction of a new optional “American style” board with committees system and stock options. Human resource management reforms included the introduction of performance-based pay practices (Jackson and Miyajima 2007; Ahmadjian 2007; Conrad 2010).

One major driving force behind these changes has been Japan’s increased internationalization. Since the late 1990s, inward foreign direct investment became a key policy priority in Japan and corporate governance reform was intended to facilitate cross-border M&A. In 2004, the Tokyo Stock Exchange (TSE) adopted corporate governance principles spelled out by the OECD in 1998, although the TSE principles do not constitute mandatory listing requirements or British ‘comply or explain’ rules (TSE 2004). The importance of foreign investors has increased

significantly. In terms of market value, foreign investors owned 23.6% of stocks listed on the Tokyo Stock exchange in 2009, compared to just 6% in 1992 (TSE various years).

Which relationship exists between foreign ownership and corporate governance practices in Japan? Half of our informants noted that they concentrate their investments on large export-oriented firms. Calculations by Ahmadjian (2007) and Hiraki *et al.* (2003) confirm this pattern for companies on the first section on the Tokyo Stock Exchange. Kang and Stulz (1997) report similar findings. Foreign ownership is positively correlated with increasing firm size and export/sales ratios. As noted above, this investment pattern appears to make sense in the light of Japan's macroeconomic situation. Moreover, these export-oriented companies tend to adhere stronger to Anglo-American governance standards, as they are measured by the JCGIndex by the Japan Corporate Governance Index Research Institute. This index evaluates how a firm sets its performance objectives, the accountability of the CEO, the structure of the board of directors in terms of size, independence and responsibilities, compensation system, management of subsidiaries, internal audit and control, and disclosure and transparency. The index shows that firms with a high score in each of these components tend to have larger percentages of foreign ownership (Ahmadjian 2007) and, by and large, higher export/sales ratios.

By investing predominately in large export-oriented firms, UK pension funds do thus not only circumvent problems in Japanese domestic economy, they ensure at the same time that these companies subscribe more or less to Western concepts of corporate governance and understand the fiduciary duties of UK pension funds as they are laid down in the UK pension Act of 1995.

A comparative perspective

Despite the fact that our informants expressed largely rather negative opinions on Japanese equities and a home bias unquestionably continues to exist, we concluded that a more meaningful analysis should also look at UK pension funds' investments in other foreign equities. Figures 8 and 9 present the results of our calculations. The method of calculating these figures is essentially the same as in figure 3. However, while figure 3 shows the percentages for equity holdings, market and GDP benchmarks for Japanese equities only, these figures include the numbers for US,

Europe ex UK, and UK equities. Emerging market investments of UK pension funds are still negligible and were thus omitted. Moreover, to make it easier to compare the investments in the different equities with their respective benchmarks, the figures show the percentage point differences between the benchmarks and the actual investment in these equities. For example, in the year 2009, the market capitalisation of the Japanese equity market relative to the world equity market was 8.8 %, while 6.6% of UK pension funds' equity investments were in Japanese equities (Figure 8). The difference of 2.2 percentage points shows the 'underinvestment' in Japanese equities. In contrast, UK pension funds' investments show a strong home bias with investments in UK equities being 41.7 percentage points higher than the world market capitalization of the UK equity market.

Figure 8 about here

Figure 9 shows the same comparisons with reference to the GDP benchmarks.

What can we learn from these numbers? First, it is obvious that the home bias of UK pension funds has decreased substantially during the 2000s on a market capitalization and GDP basis. Second, and perhaps most surprisingly, despite the overall rather negative assessments of our informants about the attractiveness of the Japanese market, we can see that UK pension funds have in strictly numerical terms been less biased against Japanese equities than against US and Europe ex UK equities. However, this is, as pointed out already, less the result of a strongly increased interest in Japan, but rather due to Japan's decreasing market and GDP weights. While the share of UK pension funds' investments in Japanese equities has been comparatively stable between 1990 and 2009 (fluctuating between 3.5% and 7.6%), the share of investments in US equities increased markedly in the 2000s (from 7.3% in 2001 to 18.7% in 2009), although the market capitalization of the US market relative to the world market decreased from 49.7% to 33.1% during the same time period. In other words, the decreasing home bias vis-à-vis US equities is clearly the result of an increased interest in the US equity market.

Figure 9 about here

Conclusion

This article concludes that UK pension funds are continuing to expand their investment horizons overseas as part of modern asset allocation strategies. However, there remains still a strong, albeit decreasing home bias. In terms of investments in Japanese equities, we can witness a decreasing home bias since the early 1990s. However, for the most part, this decrease is a reflection of Japan's decreasing market and GDP weights. Only in the 2000s did UK pension funds increase their Japanese equity holdings slightly.

While our informants showed a comparatively high degree of variance in opinions about market factors, certain macro and institutional factors – namely economic growth, deflation, demographics, and corporate governance – were rated high as explanatory factors for an overall low enthusiasm in Japanese equities. Our discussion has confirmed that these factors make investments in Japan comparatively less attractive than in other markets. A strategy of investing primarily in large Japanese export-oriented companies, as pursued by about half of our informants, allows these investors to limit risks related to Japan's lacklustre domestic economy and limits their exposure to Japan to such companies that adhere stronger to Anglo-American governance standards, as they are measured by the JCGIndex.

References

Aggarwal, R., L. Klapper, and P. Wysocki, 2005. "Portfolio preferences of foreign institutional investors." *Journal of Banking and Finance* 29: 2919–2946.

Ahmadjian, C. 2007. "Foreign investors and corporate governance in Japan." In *Corporate Governance in Japan*, eds. Aoki, M., G. Jackson, and H. Miyajima, 125–150. Oxford: Oxford University Press.

AllianceBernstein. 2006. *Home-country bias: where traditional asset allocation falls short*. New York: AllianceBernstein.

Bertaut, C. C. and L. S. Kile. 2004. "What makes investors over or underweight? Explaining international appetites for foreign equities." *Board of Governors of the Federal Reserve System. International Finance Discussion Papers, Number 819*.

BNY Mellon Asset Servicing. 2009. *UK pension fund analysis to 31 March 2010*. Leeds: BNY Mellon Asset Servicing.

Cai, F. and F. E. Warnock. 2004. "International diversification at home and abroad." *Board of Governors of the Federal Reserve System. International Finance Discussion Papers no. 793*.

Conrad, H. 2010. "From seniority to performance principle – The evolution of pay practices in Japanese firms since the 1990s." *Social Science Japan Journal* 13 (1): 115–135.

Cooper, I. and E. Kaplanis. 1994. "Home bias in equity portfolios, inflation hedging, and international capital market equilibrium." *The Review of Financial Studies* 7 (1): 45–60.

Coval, J. D. and J. T. Moskowitz. 1999. "Home bias at home: local equity preference in domestic portfolios." *Journal of Finance* 54 (6): 2045–2073.

Dahlquist, M., *et al.* 2003. "Corporate governance and the home bias." *Journal of Financial and Quantitative Analysis* 38 (1): 87–110.

Fougère, M. and M. Mérette. 1999. "Population ageing and economic growth in seven OECD countries." *Economic Modelling* 16: 411–427.

French, K. R. and J. M. Poterba. 1991. "Investor diversification and international equity markets." *American Economic Review* 81: 222–226.

Grubel, H. G. 1968. "Internationally diversified portfolios." *American Economic Review* 58: 1299–1314.

Hiraki, T., *et al.* 2003. *Investor biases in Japan*, Working Paper, Niigata: International University of Japan.

Jackson, G. and H. Miyajima. 2007. "Introduction: The diversity and change of corporate governance in Japan." In *Corporate Governance in Japan*, eds. Aoki, M., G. Jackson, and H. Miyajima, 1-47. Oxford: Oxford University Press.

Investment Management Association. 2010. *Asset management in the UK 2009-2010*. London: Investment Management Association.

IMF (International Monetary Fund). 2010. *World economic outlook database* [online]. Available from: <http://www.imf.org/external/data.htm> [Accessed 5 July 2011].

Kang, J.-K. and R. Stulz. 1997. "Why is there a home bias? An analysis of foreign portfolio equity ownership in Japan." *Journal of Financial Economics* 46: 3-28.

Karolyi, G.A. and R. Stulz. 2002. "Are financial assets priced locally or globally?" *National Bureau of Economic Research working paper no. 8994*.

Kawase, A. and S. Ogura. 2008. "Macroeconomic impact and public finance perspectives of the ageing society." In *The demographic challenge – a handbook about Japan*, eds. Coulmas, F. et al., 841-859. Leiden: Brill.

Lane, P. R. and G. M. Milesi-Ferretti. 2003. "International financial integration." *IIIS Discussion Paper no. 03*.

Lane, P. R. and G. M. Milesi-Ferretti. 2008. "International investment patterns." *The Review of Economics and Statistics* 90 (3): 538-549.

Levy, H. and M. Sarnat. 1970. "International diversification of investment portfolios." *American Economic Review* 60: 668-675.

Lewis, K. 1999. "Trying to explain the home bias in equities and consumption." *Journal of Economic Literature* 37: 571-608.

Lintner, J. 1965a. "The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets." *Review of Economics and Statistics* 47: 13-37.

Lintner, J. 1965b. "Security prices, risk and maximal gains from diversification." *Journal of Finance* 20: 587-615.

Markowitz, H. M. 1952. "Portfolio selection." *Journal of Finance* 6: 77-91.

Matsutani, A. 2006. *Shrinking population economics – Lessons from Japan*. Tokyo: International House of Japan.

Mossin, J. 1966. "Equilibrium in a capital asset market." *Econometrica* 35: 768-83.

Reilly, F. K. and K. C. Brown. 2003. *Investment analysis and portfolio management*. Ohio: Thomson South-Western.

Sharpe, W. 1966. "Mutual fund performance." *Journal of Business* 39: 119-38.

Shiller, R.J., F. Kon-ya, and Y. Tsutsui. 1990. *Speculative behaviour in the stock markets: evidence from the U.S. and Japan*, Mimeo, Yale University.

Solnik, B. and D. McLeavey. 2004. *International investments*. New York: Pearson Addison Wesley.

Timmermann, A. and D. Blake. 1999. *Home country bias and institutional investors' foreign equity holdings*. London: London School of Economics and Birkbeck College.

Tobin, J. 1958. "Liquidity preference as behaviour towards risk." *The Review of Economic Studies* 25: 65-86.

(TSE) Tokyo Stock Exchange. various years. *Tokyo Stock Exchange factbook*, Tokyo: Tokyo Stock Exchange.

(TSE) Tokyo Stock Exchange. 2004. *Principles of corporate governance for listed companies*. Tokyo: Tokyo Stock Exchange.

Towers Watson. 2010. *2010 global pension asset study*. London: Towers Watson.

Turner, D. *et al.* 1998. "The macroeconomic implications of ageing in a global context." *OECD Economics Department Working Papers*, no. 193.

United Nations. 2010. *World population prospects: the 2008 revision population database* [online].
Available from: <http://esa.un.org/UNPP/index.asp?panel=2> [Accessed 5 July 2011].

Wilshire Consulting. 2008. *Examining the home-country bias: there is no place like home, ...or is there?* Santa Monica: Wilshire Consulting.

World Federation of Exchanges. 2010. *Time series data* [online].
Available from: <http://www.world-exchanges.org/statistics/time-series> [Accessed 5 July 2011].

Figure 1a: Equity Allocation of Local Pension Plans

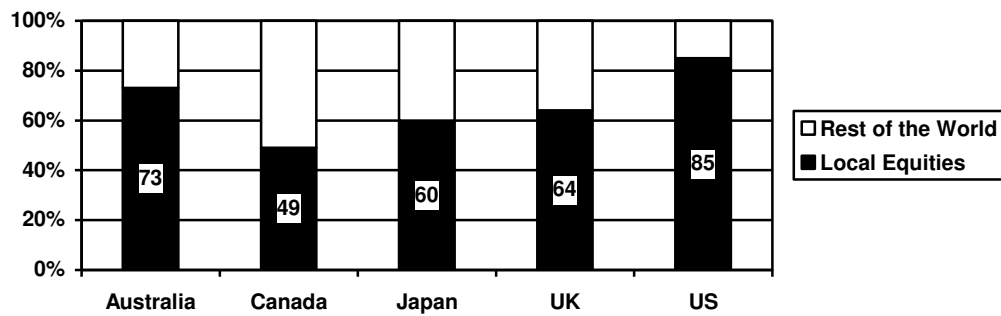
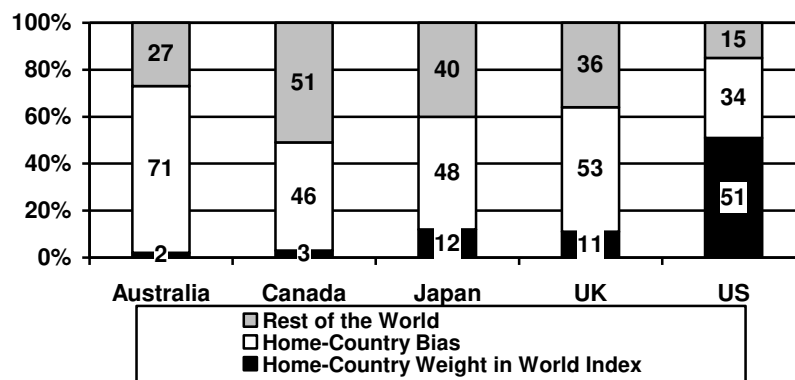


Figure 1b: Equity Allocation of Local Pension Plans vs. Home-Country Weight of MSCI World Index



Notes: 1) Percentages for the US and Canada are for the year 2002; for the UK and Japan for the year 2001. 2) Data for Canada cover only the top 100 pension plans, excluding the Canadian Pension Plan and the Quebec Pension Plan.

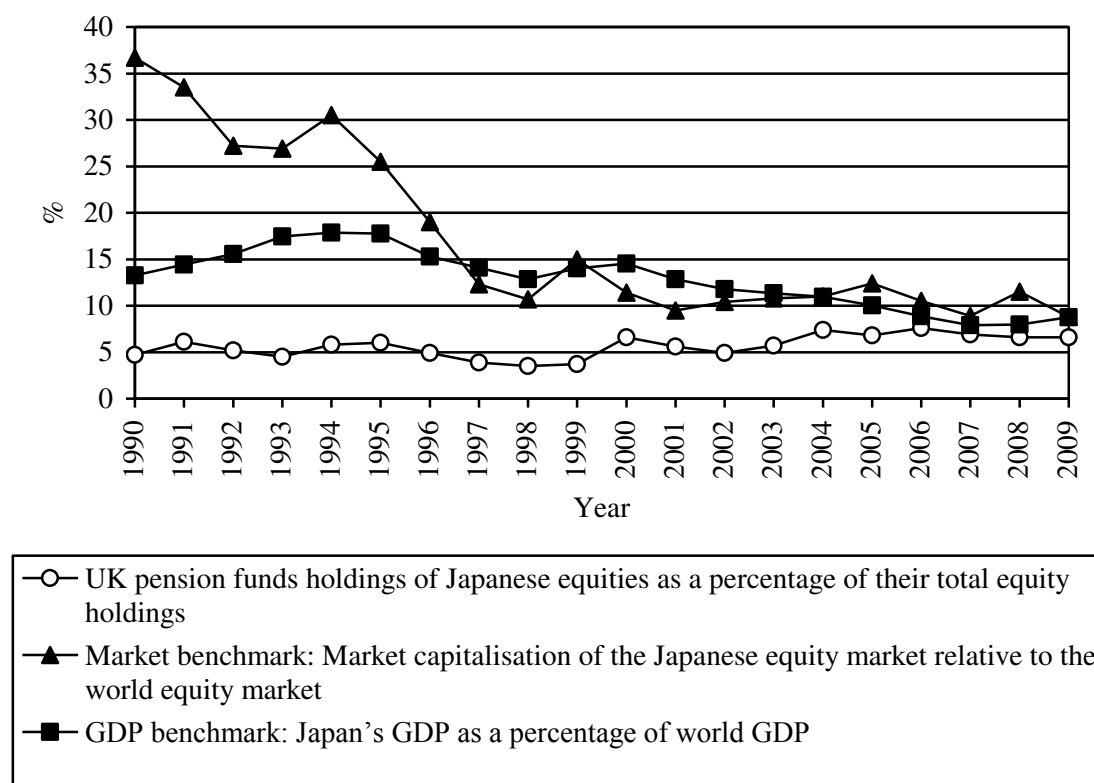
Source: AllianceBernstein 2006

Figure 2: Correlation of Markets: January 1992 to January 2002 (Monthly Returns)

Market (UK)	Correlation Coefficient	R²
UK	1	1
Canada	0.58	0.3364
USA	0.63	0.3969
France	0.74	0.5476
Germany	0.62	0.3844
Italy	0.49	0.2401
Switzerland	0.69	0.4761
Japan	0.3	0.09
Hong Kong	0.53	0.2809

Source: Solnik and McLeavey 2004: 460

Figure 3: UK Pension Funds' Exposure to Japan versus Benchmark



Note: 1) For the calculation of the market benchmark we used the world market benchmark TOTMKWD from Thomson Reuters Datastream. This benchmark is aggregated from individual country market data which include a representative sample of stocks covering a minimum of 75 - 80% of each individual market. This was compared to the Japan index TOTMKJP. 2) For the GDP benchmark we used GDP at current prices in US\$ as reported by the IMF.
Source: Own calculations based on BNY Mellon Asset Servicing (2009) and unpublished data from the same provider for the pension fund holdings; Thompson Reuters Datastream for the market benchmark; IMF (2010) for the GDP benchmark.

Figure 4: UK Pension Fund Asset Distribution

Asset class	Weighting (%) 2009	Weighting (%) 1999
Equities	48.1	72.9
Bonds	30.9	15.4
Other fixed income	13.0	4.0
Cash	3.7	5.8
Property	3.1	1.7
Other	1.2	0.2
TOTAL	100	100

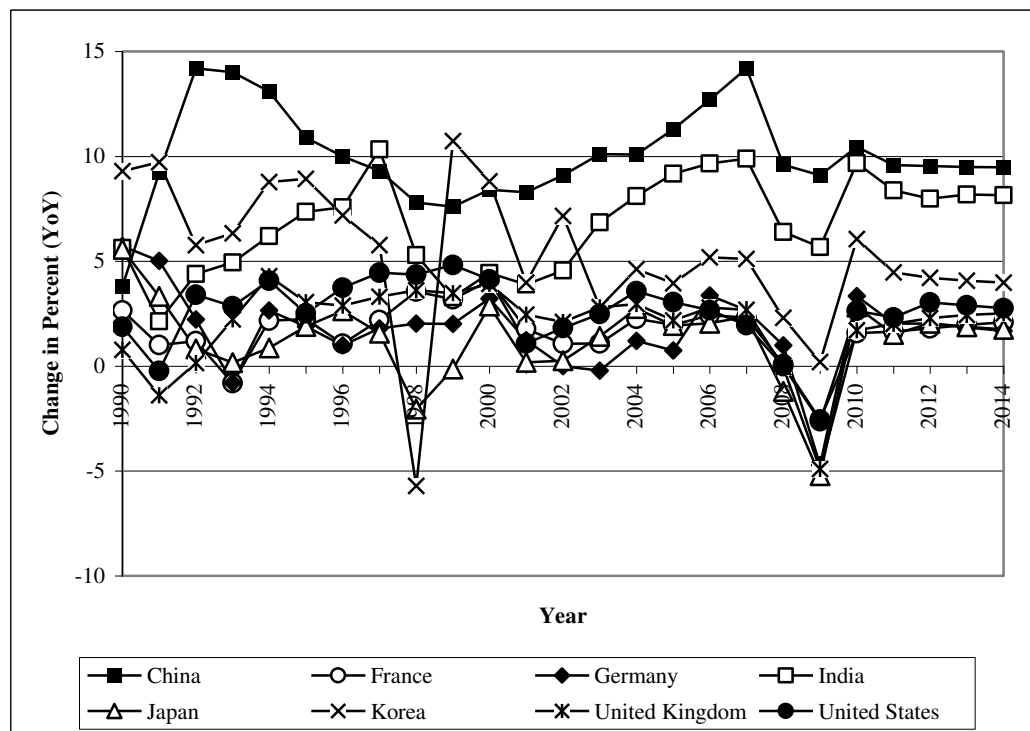
Source: BNY Mellon Asset Servicing (2009)

Figure 5: Investor Questionnaire: Why do you think UK pension funds are underweight Japan? *Please rate the following factors from 1 to 10 (1 = unimportant explanatory factor; 10 = very important explanatory factor)*

INFORMENT	1	2	3	4	5	6	7	8	9	10	11	12
Market Factors												
-Dividend income	8	5	1	2	3	5	4	3	2	7	3	7
-P/E Ratio	9	2	2.5	4	10	7	5	3	6	5	5	7
-P/B Ratio	8	2	7	1	2	1	2	2	1	1	1	5
-Free-float	2	2	2	1	1	1	2	3	2	2	3	5
-Liquidity	7	2	2	1	1	1	1	3	1	2	1	2
Macro Factors												
-Economic growth	8	6	8	8	10	10	9	8	8	8	10	9
-Deflation	2	7	7	8	8	5	6	8	5	5	10	5
-External debt	2	2	6	1	2	1	2	6	1	6	1	3
-Export dependence	5	5	8	1	9	5	5	5	3	3	5	5
-Demographics	10	6	8	9	10	10	10	7	8	7	10	8
Institutional Factors												
-Corporate governance	9	5	6	7	10	8	9	6	7	5	5	9
-Cross-shareholdings	6	5	7	3	8	5	4	6	3	2	3	8
-Investor relations	9	5	5	6	7	10	6	5	2	5	3	5
-Transparency	4	6	5	2	8	10	8	6	3	5	3	7
-Corruption	2	2	4	1	4	1	2	5	1	3	2	2
-Availability of information in English	10	2	5	1	7	3	3	4	2	1	5	5
Other Factors												
-Economic growth in Asia ex Japan		9	7	9	7			9	9	8	10	9
-Corporate debt/equity ratios		2	7	1	7			3	4	5	3	5
-Non-performing loan crisis			7	8	7			4	6	7	3	3
-ROE (Return on Equity)			7	8	7			5	8	5	6	8
-Racism				9	8			2	1	1	5	1
-Political stability				1				8	4	1	3	7

Source: Survey conducted by the authors in July 2009

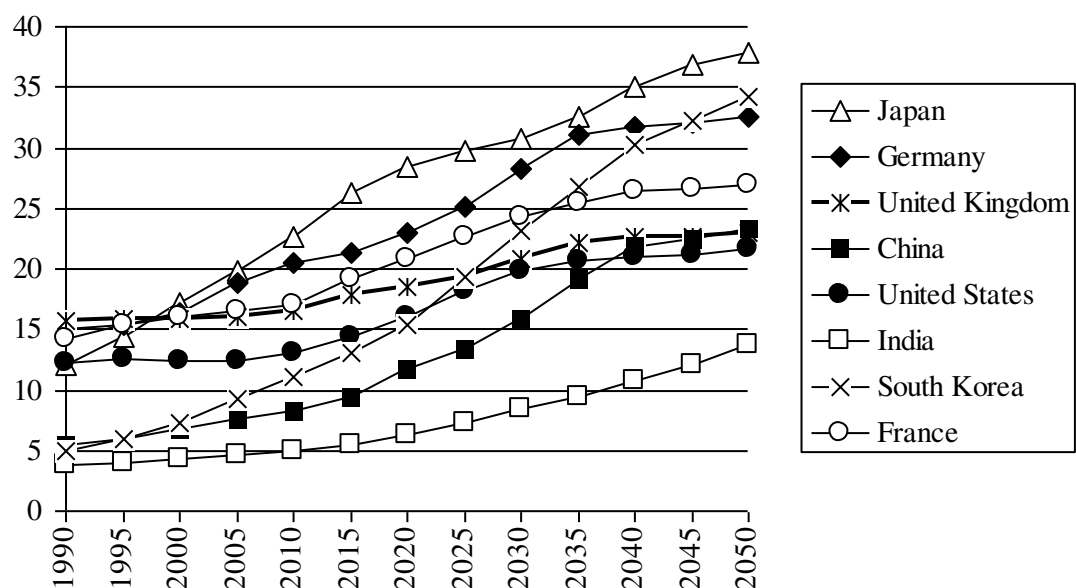
Figure 6: Gross Domestic Product (Constant Prices), Percent Changes (Year on Year), 1990-2014



Note: From 2010 onwards IMF staff estimates

Source: IMF 2010

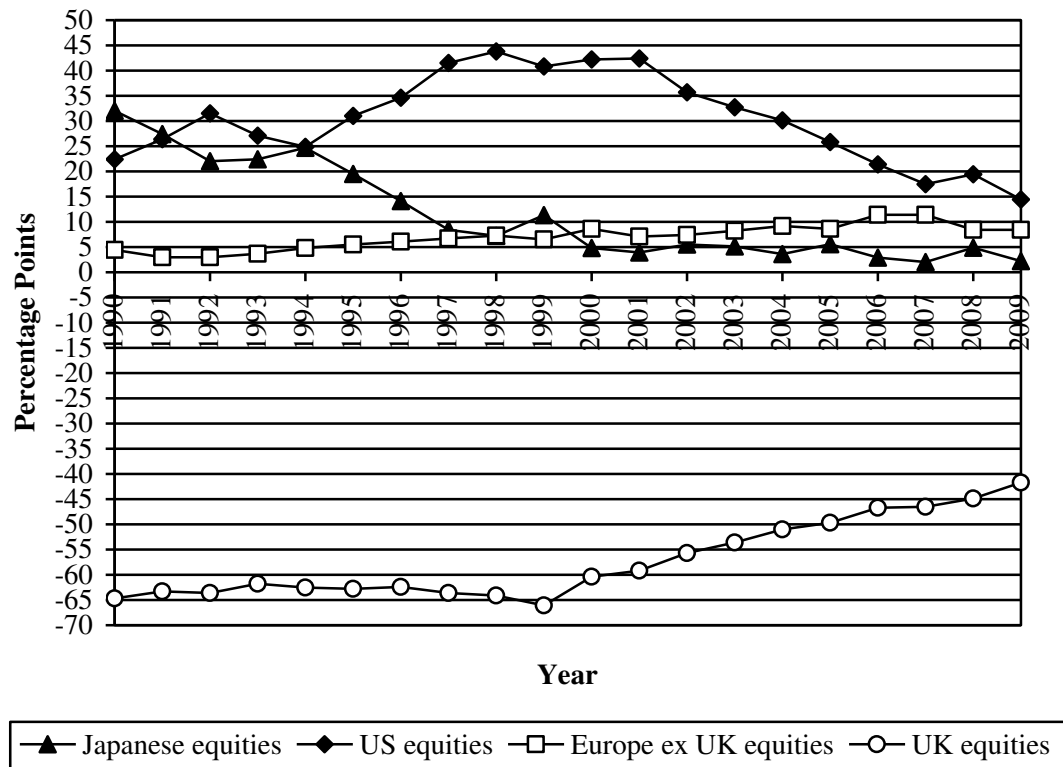
Figure 7: Population aged 65 or over (%)



Note: medium variant of projection

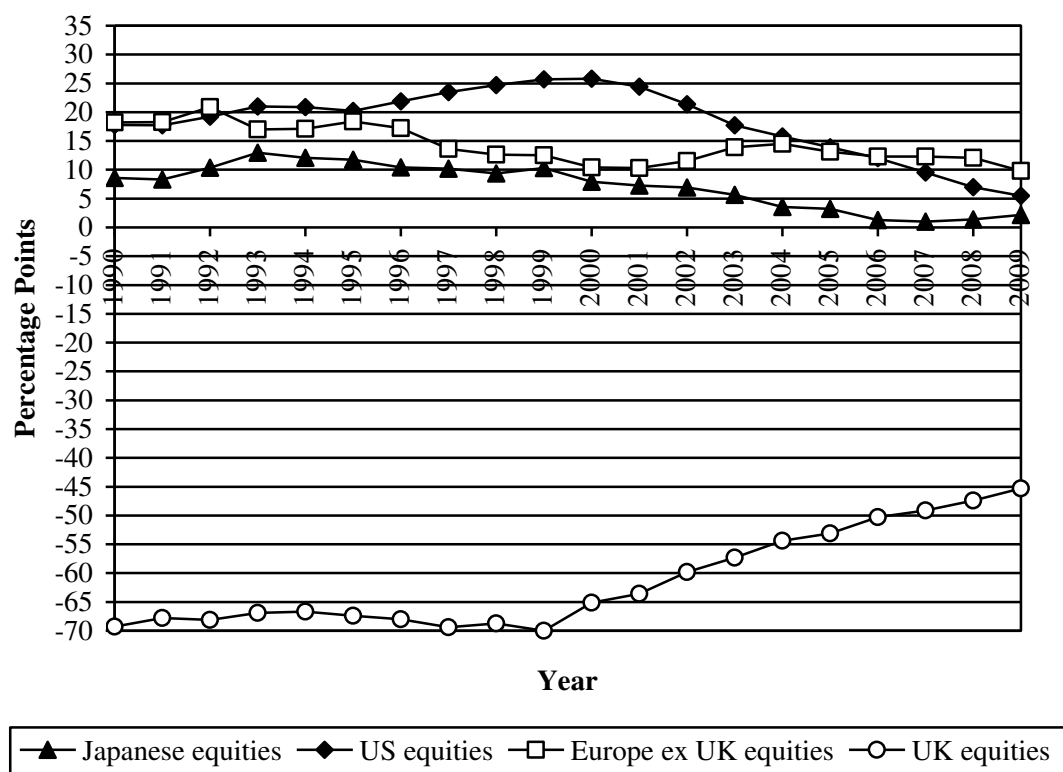
Source: United Nations 2010

Figure 8: Home Bias of UK Pension Funds (Differences between UK Pension Fund Allocations in Global Equities and Their Respective World Market Weightings)



Notes and Sources: same as in figure 3.

Figure 9: Home Bias of UK Pension Funds (Differences between UK Pension Fund Allocations in Global Equities and the GDP Benchmarks)



Notes and Sources: same as in figure 3.

Appendix 1: List of Informants

Informant	Type of Organization	Function of informant	Japanese equity experience of informant (in years)	Japanese language ability of informant (self-stated) (Yes/No)
1	Provider of international asset management services for pension funds, charities, endowments, foundations and high net worth individuals. Has over US\$ 3bn of assets under management.	Portfolio Manager	25	Yes
2	Principal investment manager to a former state owned enterprise. Manages an occupational pension scheme, is sponsored by a FTSE 100 company, and has close to US\$ 20bn of funds under management in all asset classes.	Portfolio Manager	20	No
3	Specialist investment management business. Manages US\$ 16.4bn in active equity portfolios for clients across Europe, North America and elsewhere around the world.	Fund manager	20	No
4	Global investment adviser to corporations, foundations, trustees, and endowments. Assists with every aspect of institutional investing, from strategy, structure and implementation, through to ongoing portfolio management. Manages assets in excess of US\$ 3.5tr.	Principal	26	No
5	International investment management business Has a growing international client base from the Americas, Europe, Asia the Middle East, Australia and Africa. Manages assets in excess of US\$ 50bn.	Fund Manager	23	Yes
6	Large private bank, with assets under management and custody totalling US\$ 285bn. Company focuses solely on managing the wealth of private and institutional investors.	Senior Investment Manager	17	Yes
7	Asset management firm with over US\$ 5bn of assets in long only and hedge fund products, primarily for institutional clients.	Fund manager	20	No
8	Asset management firm with over US\$ 40bn of assets belonging to a major FTSE 100 company. Operates under a multi-specialist structure and is made up of a series of investment capabilities, ranging across a variety of asset classes.	Fund manager	22	No
9	Uses active asset allocation in managed portfolios to meet clients' diverse needs. Its funds and strategies cover a broad range of asset classes and currencies to cater for all market conditions. It has some US\$ 40bn of assets under management.	Fund manager	14	No
10	UK based local authority pension fund with assets under management of around US\$ 12bn.	Fund manager	26	No
11	Global asset management firm with a major presence in London. Manages more than US\$ 18bn of assets.	Fund manager	25	No
12	Assurance society providing financial services to its members and customers. Has over US\$ 7bn of assets under management.	Investment director	20	No