A Fresh Look at the Strategic Equity Allocation of European Institutional Investors

January 2010

Xiaowei Kang
Dimitris Melas

Introduction

Over the past few decades, globalization of economic activity and increased integration of capital markets have led to a dramatic expansion of the equity universe for international investors. Institutional investors now can access a deeper and broader global equity opportunity set. However, most institutional investors have not yet taken a global approach to equity allocation. Typically, they separate the equity allocation into domestic and international equities at the strategic level, and maintain a significant home bias with a strategic overweight in domestic equities.

This "partitioned" approach to equity allocation developed in the context of segmented economies and capital markets. Several large and leading pension plans have recently adopted an integrated global equity approach in asset allocation in which global equity is defined as a single strategic asset class by removing the domestic/international divide and other regional boundaries.

MSCI Barra has recently published three research papers[1] that examine the current equity asset allocation practices in the US, UK, and Japan and identify an increasing adoption of a global approach to equity allocation. This paper reviews the current strategic equity allocation policies of European[2] institutional investors and identifies two typical and important practices that deviate from an integrated global equity investment process.

First, similar to our observations in the US and Japan, European institutional investors traditionally have adopted a partitioned domestic/international approach to equity allocation. Such separation often leads to strong home bias that may come with significant opportunity cost and concentration risk. Second, a practice that is atypical in the US and Japan but often observed in Europe is that many European institutional investors further split the international equity policy portfolio into regional policy portfolios, such as Europe, North America, Japan, Pacific ex Japan, and Emerging Markets. In today's increasingly integrated global equity market, this regional approach to equity allocation deserves a thorough rethink, as it has significant implications for the management of global equity portfolios.

This paper discusses the evidence that challenges the separation of equity policy portfolio into domestic/international allocations or regional allocations at the strategic level, and the rationale and potential benefits of an integrated global approach to equity allocation. Section I reviews the current equity allocation practices of European institutional investors, which can be characterized by significant home bias and a regional approach to global investing. Section II analyzes the inherent risks and potential costs of such home-biased equity allocation. Section III discusses the challenges faced by the current regional approach to equity allocation, and Section IV discusses the increasing adoption of an integrated global equity investment process. Section V offers conclusions.

[1] Please refer to the first three papers on page References. The papers are available at http://www.mscibarra.com/research/.
[2] Developed European markets covered by the MSCI Europe Index, including the UK.

I. Current Equity Allocation Policies of European Investors

Since the emergence of international equity investing in the 1970s, the global equity market has undergone dramatic expansion and transformation. Increased integration of the global economy and financial markets, as well as improved market accessibility, contributed to expand the global equity opportunity set from developed markets to include emerging markets in the late 1980s and international small caps in the late 1990s[3]. The MSCI All Country World Investable Market Index (MSCI ACWI IMI), which includes large-, mid-, and small-cap stocks across Developed and Emerging Markets, is a comprehensive representation of today's broader and deeper global equity opportunity set.

Home Bias

The globalization of the equity opportunity set allowed institutional investors to expand their equity investment universe and allocate assets to international equities. However, most European institutional investors continue to maintain an investment process that separates equity policy portfolios into domestic and international equities at the strategic level, with a significant "home bias" that overweights domestic or European equities.

Exhibit 1 presents the current levels of home bias in selected European equity markets, as well as the US and Japan, using data from the Coordinated Portfolio Investment Survey (CPIS) conducted by the IMF. The data reveals significant levels of home bias in these major markets, with Japan being the most home-biased, and the US and UK both exhibiting a level of home bias around 52% in 2007. Such high levels of home bias represent a significant diversion from a market-cap-based global equity portfolio. However, Exhibit 1 also shows a decline in home bias over the last decade.

Exhibit 1: Equity Home Bias in Selected Markets[4]

Country	1997	2001	2004	2007
Denmark	79.7%	56.1%	51.4%	48.5%
Finland	94.1%	74.4%	51.3%	48.8%
France	83.5%	69.4%	59.5%	62.7%
Germany	NA	49.9%	43.3%	42.3%
Netherlands	70.2%	35.4%	20.1%	12.2%
Norway	84.6%	50.4%	46.1%	46.8%
Sweden	79.2%	51.1%	50.8%	49.7%
Switzerland	NA	57.3%	52.6%	51.1%
United Kingdom	75.9%	64.0%	56.1%	52.2%
USA	79.0%	69.6%	59.1%	52.3%
Japan	92.1%	86.1%	84.7%	83.7%

Source: IMF (CPIS), MSCI Barra. Home bias is defined as 1 - (actual international equity allocation / market-cap based international equity allocation).

[3] In a separate MSCI Barra Research Insight, Subramanian, Nielsen, and Fachinotti (2009) review the globalization of equity policy portfolios and the foundations of globalization.
[4] The calculation of home bias is based on the aggregated equity security holdings of each country published by the IMF in the CPIS, not the equity security holdings of institutional investors.

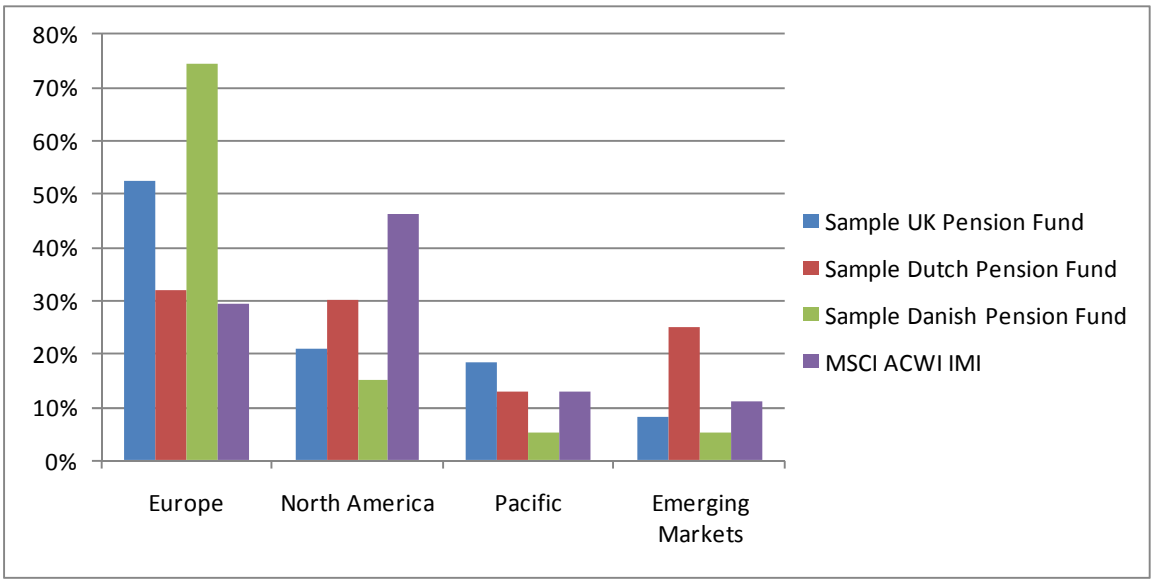
The strong equity home bias observed in Europe may not be due entirely to regulatory reasons. Out of the nine European markets listed in Exhibit 1, only Switzerland, Germany, and Finland impose certain limits on the amount of foreign assets in which a pension fund can invest, according to the 2008 Survey of Investment Regulation of Pension Funds published by the Organization for Economic Co-operation and Development (OECD). In addition, the pension fund foreign investment limits in these three countries have little actual impact on home bias. For example, Switzerland places a 25% limit in foreign equities, and a 50% overall limit in equities. Unless a Swiss pension fund has an overall equity allocation that is much above 25%, such investment limits would not force a significantly home-biased equity allocation. The regulations in Germany and Finland have even less impact on home bias.

Regional Approach to Equity Allocation

A closer look at the equity allocation polices of European institutional investors reveals another common practice in Europe that is atypical in the US and Japan. European asset owners traditionally have adopted a regional approach to equity allocation. They commonly further split the international equity policy portfolio into regional allocations, such as Europe, North America, Japan, Pacific ex Japan, and Emerging Markets, with regional weights determined at the strategic asset allocation level.

Under such a regional approach, European institutional investors often have an equity policy portfolio that significantly deviates from the market-cap-based global equity portfolio. Exhibit 2 compares the regional weights of the equity policy portfolio of three sample European pension plans with the market-cap-based global equity portfolio proxied by the MSCI ACWI IMI. This small sample is not meant to represent the typical equity policy portfolio, as individual European institutional investors tend to have very different regional allocations in their policy portfolios. Nevertheless, it illustrates that the strategic, regional equity weights of European pension funds may differ significantly from a market-cap-based global equity policy benchmark.

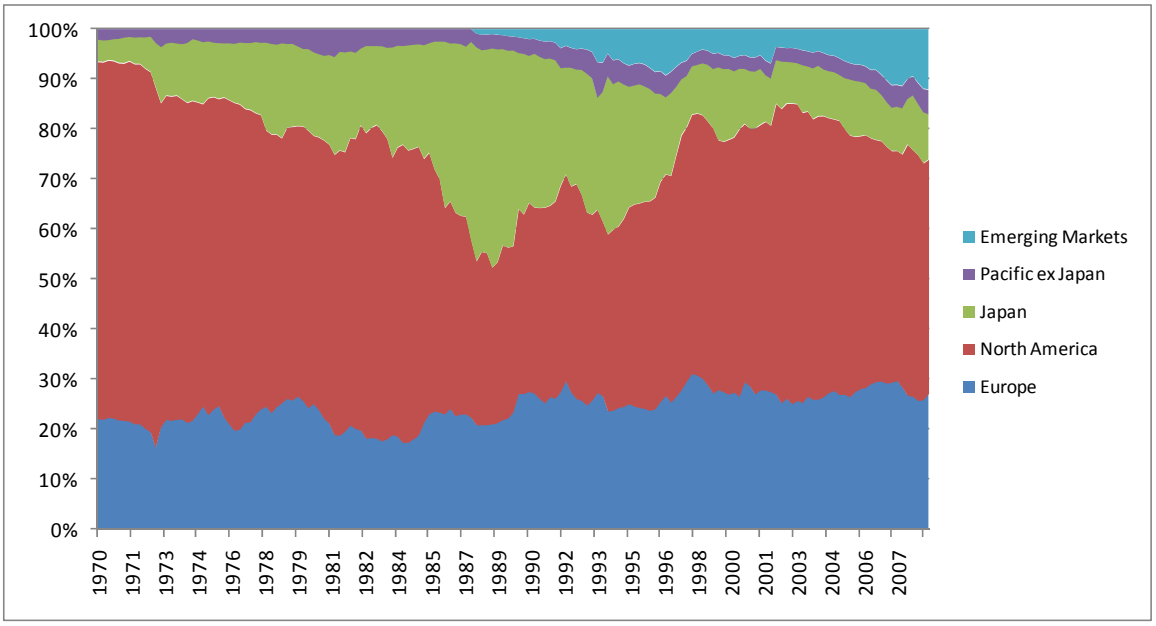
Exhibit 2: Regional Allocation of the Equity Policy Portfolio of Sample European Pension Funds vs. MSCI ACWI IMI



Source: Public websites of sample pension funds, MSCI Barra. Data as of 2008.

Exhibit 3 shows that the regional weights of a market-cap-based global equity portfolio could significantly change over time. This implies that the partitioned regional approach to equity allocation may create market-timing risk linked to the periodic review of the regional allocations at the strategic level.

Exhibit 3: Changing Market-cap Regional Weights of Global Equity



Source: MSCI Barra. Data as of September 30, 2009.

II. Inherent Risks of Home-Biased Equity Allocation

Home bias in equity policy portfolios can result in significant concentration risks and opportunity costs. This section analyzes the inherent risks and potential costs of a home-biased equity allocation and discusses the traditional arguments for home bias.

Portfolio Concentration Risks

Home-biased equity allocation can lead to portfolio concentration in a few large domestic companies. Exhibit 4 illustrates that individual European equity markets are highly concentrated. Especially in countries like Denmark, Finland, Netherlands, and Norway, the investable equity universe contains only around 50 securities, with the top 10 securities in each country representing more than 70% of the total market capitalization. As a result of this high level of concentration, these country indices tend to have higher total risk, with asset selection risk contributing a significant portion of the total risk. As the opportunity set broadens from domestic markets to the European market and ultimately to the broad global equity market, the level of concentration and specific risk coming from security selection significantly decrease.

Exhibit 4: Improved Diversification Potential of Broader Equity Opportunity Set

	Number of Securities	Weight of Top 10 Companies (%)	Asset Selection Risk (% Std Dev)	Total risk (% Std Dev)	Asset selection Risk Contribution (% Total Risk)
MSCI Denmark IMI	43	79.14	9.56	34.84	7.52
MSCI Switzerland IMI	118	77.82	7.35	27.77	7.01
MSCI Finland IMI	46	75.84	12.78	34.85	13.46
MSCI Netherlands IMI	58	73.84	7.7	32.17	5.73
MSCI Norway IMI	56	72.96	8.67	39.02	4.93
MSCI Germany IMI	165	60.97	5.85	32.53	3.24
MSCI Sweden IMI	104	56.72	6.02	31.72	3.60
MSCI France IMI	182	48.96	4.93	29.75	2.75
MSCI UK IMI	385	44.12	4.74	27.82	2.91
MSCI Europe	467	20.43	2.46	28.65	0.74
MSCI Europe IMI	1575	18.39	2.22	28.91	0.59
MSCI World	1658	9.13	1.45	27.65	0.28
MSCI ACWI	2412	8.03	1.31	27.78	0.22
MSCI ACWI IMI	8471	7.05	1.15	28.08	0.17

Source: MSCI Barra. Data as of September 2009. This risk analysis uses Barra Global Equity Model (GEM2L), from local currency perspective for country indices and Euro perspective for regional and global indices.

MSCI ACWI IMI provides exhaustive coverage for the global investable equity universe and is a proxy for a well diversified global portfolio, with asset selection risk contributing only 0.17% of the total risk. As of September 1, 2009, MSCI ACWI IMI contained 8,471 constituents, with the largest 10 companies representing only 7.05% of the weight of the index, highlighting the dramatically reduced concentration risk.

Unintended Sector Bets

Home-biased equity allocations may experience significant sector concentration, especially for European investors whose domestic markets are dominated by certain sectors. For example, Exhibit 5 presents the active sector exposures of three 50/50 home-biased equity allocations relative to the global equity portfolio proxied by MSCI ACWI IMI. It shows that such home-biased allocations would lead to a significant bet on the Energy sector (18.2% overweight) for a Norwegian investor and a significant underweight in the same sector for German and Finnish investors. Similarly, it would result in high exposure to the Information Technology sector (14.3% overweight) for a Finnish investor and a significant underweight in the same sector for German and Norwegian investors.

Exhibit 5: Active Sector Exposures of Home-biased Policy Benchmark vs. MSCI ACWI IMI

GICS Sector	50% Germany IMI + 50% ACWI IMI	50% Finland IMI + 50% ACWI IMI	50% Norway IMI + 50% ACWI IMI
Energy	-5.3	-4.5	18.2
Materials	1.7	2.0	1.2
Industrials	2.6	2.9	0.7
Consumer Discretionary	2.0	-2.4	-4.2
Consumer Staples	-3.0	-3.4	-3.0
Health Care	0.6	-3.7	-4.4
Financials	-0.8	-5.8	-4.9
Information Technology	-2.6	14.3	-4.0
Telecommunication Services	0.0	-1.3	2.4
Utilities	4.8	1.9	-2.1

Source: MSCI Barra. Data as of October 1, 2009.

The concentration of certain home-biased allocations in a small number of companies and industries can have a significant impact on the risk of such equity portfolios. Exhibit 6 shows that the three 50/50 home-biased allocations historically experienced higher volatility and higher exposure to tail risk and extreme events, compared with the market-cap-weighted global equity portfolio.

Exhibit 6: Historical Risk Profile of Home-biased Policy Benchmarks vs. MSCI ACWI IMI

	Annualized risk	VAR	Expected shortfall	Maximum drawdown
50% Germany IMI + 50% ACWI IMI	20.58%	-2.10%	-3.12%	63.29%
50% Finland IMI + 50% ACWI IMI	26.00%	-2.65%	-3.85%	67.31%
50% Norway IMI + 50% ACWI IMI	23.12%	-2.23%	-3.79%	62.81%
MSCI ACWI IMI	18.86%	-1.95%	-2.86%	56.23%

Source: MSCI Barra. The horizon for VAR and expected shortfall is 1-day. Based on gross total return index levels in Euro, for the 10 years to September 30, 2009.

The Potential Opportunity Cost of Home Bias

Home-biased equity allocation may come at a significant opportunity cost resulting from the under-representation of the investment opportunities outside the domestic market. A notable example relates to the increasing degree of international industrial specialization. Free trade and capital flows have made it possible for both developed and emerging economies to capitalize on their competitive advantages to make more efficient use of labor, natural resources, capital and technology. Two often-cited trends are that Asia has become a manufacturing powerhouse, while the US has shifted its resources to technology and service-focused industries.

The global industry distribution of the equity opportunity set naturally reflects such international specialization and competitiveness of industries. Exhibit 7 shows that Asian companies represent 50% to 84% of the index market cap of the selected global manufacturing industries, weights which are significantly higher than Asia's 21% weight in the global equity universe. Similarly, US companies dominate global technology industries with weights that may be double the 42% share of US equities in the global equity universe. For European investors, this indicates that the vast majority of investment opportunities in these important global manufacturing industries and technology industries are outside Europe, and they can be captured fully only by adopting a global equity opportunity set.

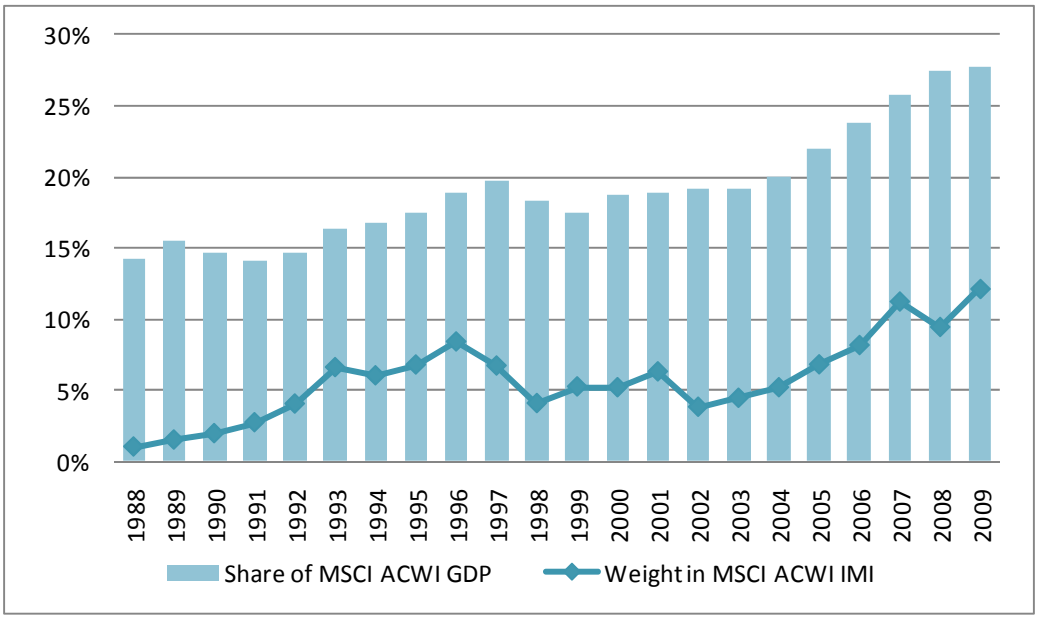
Exhibit 7: Selected Global Industries Dominated by Asian and U.S. Companies

Selected Manufacturing Industries Dominated by Asian Companies	Weight of Asian Companies in MSCI Industry	Selected Technology Industries Dominated by U.S. Companies	Weight of U.S. Companies in MSCI Industry
Auto Components	55.8%	Biotechnology	84.6%
Automobiles	62.8%	Communications Equipment	66.0%
Electronic Equipment & Instruments	65.6%	Computers & Peripherals	83.1%
Household Durables	50.8%	Internet Software & Services	82.9%
Leisure Equipment & Products	56.9%	IT Services	67.1%
Office Electronics	84.2%	Software	78.0%

Source: MSCI Barra. Data as of October 1, 2009.

Another example is the growth of the emerging markets equity universe. Exhibit 8 shows that Emerging Markets have expanded from less than 1% of the global equity opportunity set in 1988 to more than 12% in 2009, which accompanied their growing economic importance during this period. European investors with home-biased equity allocation might have at least partially missed the growth and investment opportunities in these Emerging Markets, which now represent more than 27% of the world's GDP (based on the MSCI All Country World GDP Index).

Exhibit 8: Expansion of Emerging Markets Equity Opportunity Set Partly Reflects Their Growing Economic Importance



Home Bias Rationale

Home bias in equity investing is in effect an active investment decision. The often-cited reasons for keeping a disproportionally high allocation in domestic equities include:

- "International markets are hard to access"
- "Domestic equities are a better match for domestic liabilities"
- "International equities are more risky due to currency risk"

With respect to the first argument, market accessibility has generally improved with the opening and integration of financial markets globally. Due to advances in market infrastructure, increasing ease of accessing foreign information, gradual removal of foreign investment restrictions, and improved market liquidity, institutional investors are today able to access many international equities markets, including many Emerging Markets.

With respect to the second argument, empirical evidence suggests that domestic and international equities may be equally unsuitable for short-term cash flow liability matching, and that liability matching may be better served by fixed income allocation rather than equity allocation. The role of equity allocation is generally to provide growth and to capture the perceived equity risk premium. For European investors, restricting the equity allocation to the domestic or European equity market may result in missing the growth potential and investment opportunities in the much broader international equity market.

With respect to currency risk, historically currency risk has not significantly altered the long-term risk profile of a diversified global equity portfolio. Exhibit 9 shows that the long-term historical risk and return of hedged and unhedged global equity portfolios have been quite similar, especially from the perspective of investors in large equity markets, such as the US, UK, France, and Germany. It also shows that the global equity portfolio has had lower volatility than the various domestic-only portfolios over the last four decades, even without currency hedging.

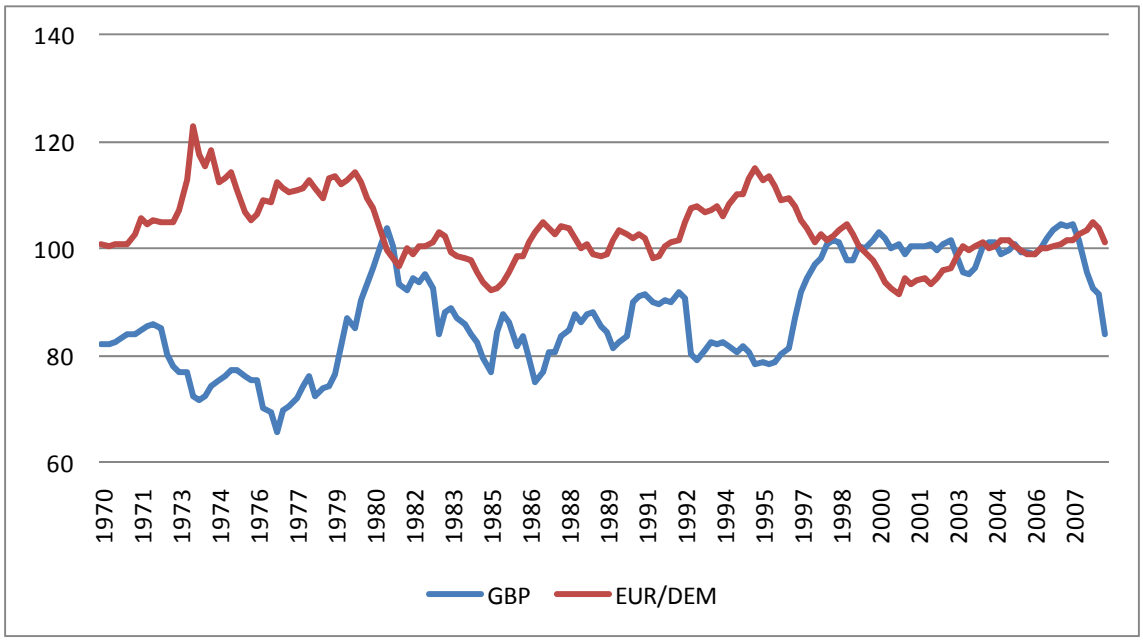
Exhibit 9: Historical Long-term Risk and Return Characteristics of Domestic and Global Portfolios

Domestic Country	Reporting Currency	Domestic Portfolio[1]		MSCI ACWI, unhedged[2]		MSCI ACWI, hedged[2]	
		Return	Volatility	Return	Volatility	Return	Volatility
Denmark	DKK	12.2%	18.2%	8.5%	16.1%	10.7%	14.4%
France	EUR/FRF	10.2%	20.6%	9.0%	16.1%	9.7%	14.3%
Germany	EUR/DEM	7.5%	19.9%	6.8%	16.3%	7.9%	14.3%
Netherlands	EUR/NLG	10.2%	18.3%	7.2%	16.2%	7.7%	14.4%
Norway	NOK	10.9%	25.6%	9.0%	15.5%	10.0%	14.4%
Sweden	SEK	14.8%	23.1%	10.4%	15.5%	9.8%	14.4%
Switzerland	CHF	7.8%	16.9%	5.7%	17.5%	6.0%	14.3%
UK	GBP	11.5%	20.3%	10.6%	15.9%	10.7%	14.3%
USA	USD	9.3%	15.6%	9.5%	15.1%	8.9%	14.3%
Japan	JPY	6.2%	18.6%	5.8%	16.5%	6.4%	14.2%

1) Proxied by the respective MSCI Standard Country Indices.
2) Annualized return and volatility for period from December 1969 to August 2009. MSCI World Index until Dec 1987.

In addition, from the theoretical perspective, one would expect the real exchange rates to revert to the mean in the long run, to ensure that the real price of assets will be similar across borders. Exhibit 10 demonstrates that the real, trade-weighted currency indices for GBP and EUR/DEM have varied around 100 over the last four decades, rather than trending up or down over the long term. We observe the same phenomenon for other major currencies, such as USD or JPY, as well as other European currencies.

Exhibit 10: Real Trade Weighted Currency Index of Sterling and Euro/Deutschmark



Source: Eurostat

Short-term currency volatility may have an impact on the risk and return profile of the global equity portfolio. Investors who are concerned with such short-term currency risk can choose to hedge the foreign currency exposure often at relatively little cost, which is what many institutional investors practice today.

III. Regional Approach to Equity Allocation Faces Fundamental Challenges

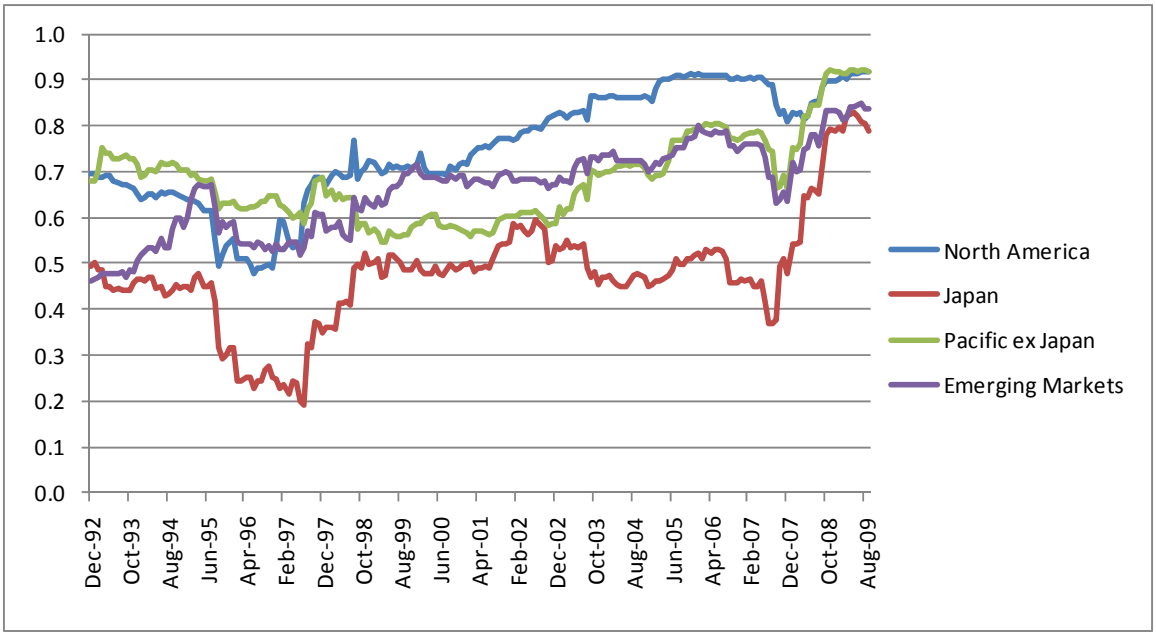
This section discusses the evidence that challenges the separation of equity policy portfolios into regional allocations at the strategic level.

The regional approach to equity allocation may reflect, in part, the historical path that European institutional investors took in expanding their equity opportunity set, first from domestic equities to European equities, then to international developed markets with regional mandates, and finally to emerging markets. It may also reflect the perception that regional/country factors are of foremost importance to equity allocation, and therefore regional weights should be determined at the strategic level.

The regional divides in equity allocation developed in the context of segmented economies and capital markets, where regional or country factors were indeed the main determinants of global security returns. In today's globalized economy, there is growing evidence that regional equity markets are converging, and that country factors are becoming relatively less important in driving the variations in global security returns.

One of the fundamental drivers behind the convergence of global equities is the increasingly global nature of business activities. More companies now operate globally and derive a significant portion of their revenues from foreign countries; their country of domicile can no longer fully capture the scope and risk of their business activities. Furthermore, the increased integration between global financial markets has also contributed to the convergence among regional equity markets. Exhibit 11 shows that over the last two decades, the correlation between European equities and other regional equity markets has risen significantly.

Exhibit 11: Rising Correlation between European Equities and Other Regional Equities

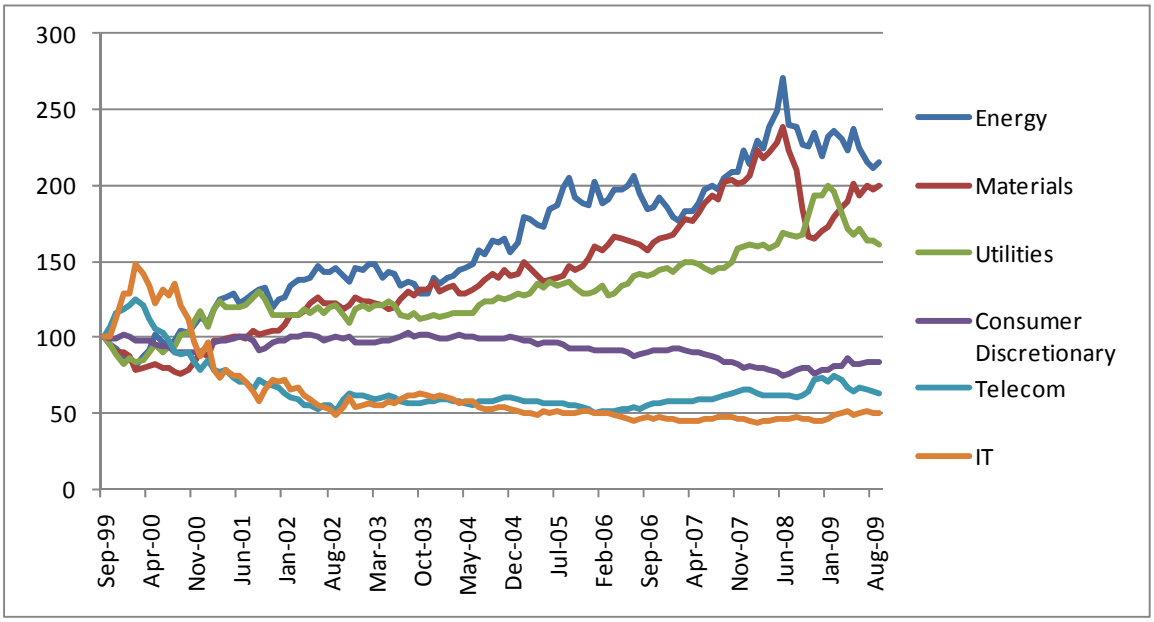


Source: MSCI Barra. Data as of September 30, 2009.

Increased Importance of Global Industry Effects

Global equity convergence has resulted in industry factors becoming increasingly important determinants of global security returns. The "IT bubble" in 1998-2001, the energy and commodities bull market over the recent years, and the financial crisis in 2007-2009 all illustrate that individual global sectors/industries can perform very differently from the broad market and even drive the market over certain periods. Exhibit 12 shows the dramatically different performance of the three best-performing global sectors (Energy, Materials, and Utilities) and the three worst-performing sectors (Information Technology, Telecommunications Services, and Consumer Discretionary) over the last ten years, relative to global equities (as measured by MSCI ACWI IMI). It highlights that global sector allocation decisions would have had a major affect on the risk and return of global equity portfolios over the last decade.

Exhibit 12: Performance of Selected Global Sectors Relative to Global Equity



Source: MSCI Barra. Data as of September 30, 2009.

Global Comparison of Companies Challenges the Regional Divides

At the same time, the global nature of businesses and the geographical diversity of the leading companies within global industries are making the global comparison of companies an increasingly essential element of a global equity investment process. As companies compete for market shares and resources globally, the performance and potential of a company may be affected more by the global supply and demand in its industry, its international competitiveness, as well as the relative valuations of its global competitors, rather than its domicile.

As an example, Exhibit 13 lists the top companies by float market cap in the Metals & Mining and Semiconductor industries to highlight the geographical diversity of global industries. For such global industries, it is difficult to imagine how investors can identify the best investment opportunities without comparing the leading companies within the industry globally.

Exhibit 13: Largest Metals & Mining Companies and Semiconductor Companies in MSCI ACWI

Top Metals & Mining Companies		Top Semiconductor Companies	
Name	Country	Name	Country
BHP Billiton Ltd	Australia	Intel Corp	USA
Vale	Brazil	Samsung Electronics Co	Korea
Rio Tinto Plc	United Kingdom	Taiwan Semiconductor Mfg	Taiwan
Anglo American	United Kingdom	Texas Instruments	USA
Barrick Gold Corp	Canada	Applied Materials	USA
Arcelormittal	France	Mediatek Inc	Taiwan
Goldcorp	Canada	ASML Hldg	Netherlands
POSCO	Korea	Broadcom Corp A	USA
Freeport Mcmoran	USA	Tokyo Electron	Japan
Xstrata	United Kingdom	Hynix Semiconductor	Korea

Source: MSCI Barra. Data as of October 1, 2009.

Global Equity as a Single Asset Class

The convergence of regional equity markets and the growing importance of global sectors have significant implications for equity asset allocation. These trends suggest that the approach of separating the equity policy portfolio into regional allocations at the strategic level faces fundamental challenges, as the regional dimension alone cannot fully capture the dynamics of global equities. By removing the regional boundaries or the domestic/international divide at a strategic level, a global approach defines global equity as a single strategic asset class and leaves the determination of regional and global sector allocations as investment decisions at the tactical level. Such a global approach is more flexible, as it can capture the risk and return dynamics of global investing along the regional/ country dimension and the global sector/industry dimension. For example, it would enable the asset owner equity team to organize the management of a global equity portfolio along both important dimensions to capitalize on the additional flexibility.

Exhibit 14 compares these two important dimensions of global equity investing and reveals a few key observations.

First, all the regional equity markets except Japan were highly correlated with global equities over the last ten years. On the other hand, a few global sectors experienced relatively low correlation with global equities, especially sectors that tend to be more affected by domestic demand, such as Consumer Staples, Health Care, and Utilities. This suggests that there may have been more diversification potential along global sectors than regions. For example, exposure to the global Utilities sector could have brought more diversification potential to a global equity portfolio than exposure to Pacific ex Japan equities during this period.

Second, the high active risk of global sector indices relative to global equities suggests that over the observed period there were more potential opportunities to add value through active decisions on global sector allocation than active decisions on regional allocation.

Exhibit 14: Two Dimensions of Global Equity: Regions vs. Global Sectors

	Correlation to Global Equity	Annualized Active Risk to Global Equity	Annualized Active Return to Global Equity
Regional Indices			
MSCI Europe IMI	0.94	5.9%	1.4%
MSCI North America IMI	0.97	4.1%	-1.3%
MSCI Japan IMI	0.69	14.4%	-3.4%
MSCI Pacific ex Japan IMI	0.87	9.4%	7.9%
MSCI Emerging Markets IMI	0.88	12.4%	9.3%
Global Sector Indices			
Energy	0.67	15.3%	7.9%
Materials	0.81	12.1%	7.5%
Industrials	0.94	6.5%	1.6%
Consumer Discretionary	0.94	6.7%	-1.2%
Consumer Staples	0.64	13.1%	2.4%
Health Care	0.64	13.3%	0.1%
Financials	0.87	9.9%	0.7%
Information Technology	0.88	18.6%	-2.9%
Telecommunication Services	0.80	13.1%	-3.2%
Utilities	0.70	12.2%	3.9%

Source: MSCI Barra. Data as of September 1999 to September 2009

These observations reinforce the notion that taking global equity as a single strategic asset class may bring more flexibility to the equity investment process due to the removal of regional constraints.

Global equity mandates are neither the only solution nor necessarily the best solution. Institutional investors may prefer regional mandates due to various considerations. For example, regional mandates may be preferred due to the availability of manager skills, or lack thereof, or due to other factors beyond the scope of this paper.

IV. Potential Merits of an Integrated Global Equity Investment Process

Structural changes in the global economy and capital markets have prompted some institutional investors to rethink or review their equity allocation approach and investment process. By removing the domestic/international divide, several large and leading pension plans recently have adopted a global equity approach in asset allocation.

Such an integrated global equity approach takes global equity as a single strategic asset class, and it places the entire global equity universe as the natural starting point for equity allocation. It recognizes that deviations from market-cap weights (e.g., overweighting certain regions) represent active investment decisions. It also views both regional allocation and global sector allocation as important tactical decisions, rather than strategic asset allocation decisions.

The integrated global equity investment process contemplates the entire global equity opportunity set and considers exposures to different geographical regions, countries, industries, and currency movements. Additionally, an integrated global equity investment process may allow the global equity team to maximize risk-adjusted performance without being impaired by regional or domestic/international constraints. It would enable the global equity team to better capture the risk and return dynamics of global equity investing along two dimensions: the regional/country dimension, and the global sector/industry dimension. These additional flexibilities may be capitalized in various ways, depending on the current investment process and the skill set available, including internal or external mandates, regional or global mandates, and passive or active mandates.

For active managers, operating from a broader global equity universe may increase the opportunity for delivering alpha. The wider universe represents more investment opportunities and enables the fundamental managers to compare and identify the best investments within global sectors. For the proponents of passive investing, the market-cap-based global equity portfolio is a very diversified and comprehensive representation of the global equity beta.

The integrated global equity investment process also brings potential operational benefits. Defining global equity as a single strategic asset class removes the need for periodic reviews of the regional allocations or domestic/international allocations at the strategic level. This facilitates a focus on the important strategic asset allocation issues such as asset liability matching, and the relative allocation of equities, fixed income, and alternatives. In addition, from an organizational perspective, an integrated global equity investment process may enable a more efficient use of valuable investment resources and streamline the investment process.

V. Conclusions

The globalization of economies and the increased integration of capital markets are prompting some institutional investors to rethink their equity investment process. Some European institutional investors believe that it is time to break the regional and domestic/international divide in equity allocation that is already blurred today. Several large and leading pension plans recently have adopted a global equity approach in asset allocation, defining global equities as a single, strategic asset class. A more integrated global approach to equity investing may be the next stage in the evolution of investment processes. A broad and investable global equity benchmark defines the natural starting point for equity allocation and is an essential part of the integrated global equity investment process.

References

Raman Aylur Subramanian, Frank Nielsen, and Giacomo Fachinotti. “Globalization of Equity Policy Portfolios — A fresh look at strategic asset allocation from a US institutional investor perspective.” MSCI Barra Research Insights, October 2009.

Chin Ping Chia. “Quantifying the Cost of Home Bias — A fresh look at the equity allocation policy of Japanese institutional investors.” MSCI Barra Research Insights, October 2009.

“Home Is Where the Hurt Is: The Effects of Equity Policy Benchmark Decisions in the UK.” MSCI Barra Research Bulletin, October 2009.

S. Cavaglia, J. Diermeier, V. Moroz, and S. Dezordo. “Investing in Global Equities: Changing Determinants of Returns.” Journal of Portfolio Management, Vol. 30, No. 3 (Spring 2004).

Jeff Applegate, Arun Motianey, Nicolas Richard, and Douglas Schindewolf. “The Case for Global Equity Diversification, 2008. Making the Most of Opportunities in Global Equities.” Citigroup Research.

Gary P. Motyl and Cindy L. Sweeting. “Why Global Equity?” Franklin Templeton Investments, December 2004.

“Global Equity — An Integrated Approach to Active Portfolio Management.” Ennis Knupp + Associates, Inc., 2003.

Michael Cantara, Richard Chiu, Ben Kottler, and Sanjay Natarajan. “Why global? Adding value through integrated global equity portfolios.” MFS White Paper Series, 2009.

Geert Bekaert and Xiaozheng Wang. “Home bias revisited.” Columbia Business School, February 2009.

Contact Information

clientservice@mscibarra.com

Americas	
Americas	1.888.588.4567 (toll free)
Atlanta	+ 1.404.551.3212
Boston	+ 1.617.532.0920
Chicago	+ 1.312.675.0545
Montreal	+ 1.514.847.7506
Monterrey	+ 52.81.1253.4020
New York	+ 1.212.804.3901
San Francisco	+ 1.415.836.8800
Sao Paulo	+ 55.11.3706.1360
Stamford	+1.203.325.5630
Toronto	+ 1.416.628.1007

Europe, Middle East & Africa	
Amsterdam	+ 31.20.462.1382
Cape Town	+ 27.21.673.0100
Frankfurt	+ 49.69.133.859.00
Geneva	+ 41.22.817.9777
London	+ 44.20.7618.2222
Madrid	+ 34.91.700.7275
Milan	+ 39.02.5849.0415
Paris	0800.91.59.17 (toll free)
Zurich	+ 41.44.220.9300

Asia Pacific	
China North	10800.852.1032 (toll free)
China South	10800.152.1032 (toll free)
Hong Kong	+ 852.2844.9333
Seoul	+ 822.2054.8538
Singapore	800.852.3749 (toll free)
Sydney	+ 61.2.9033.9333
Tokyo	+ 81.3.5226.8222

www.mscibarra.com

Notice and Disclaimer

- This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. ("MSCI"), Barra, Inc. ("Barra"), or their affiliates (including without limitation Financial Engineering Associates, Inc.) (alone or with one or more of them, "MSCI Barra"), or their direct or indirect suppliers or any third party involved in the making or compiling of the Information (collectively, the "MSCI Barra Parties"), as applicable, and is provided for informational purposes only. The Information may not be reproduced or redisseminated in whole or in part without prior written permission from MSCI or Barra, as applicable.

- The Information may not be used to verify or correct other data, to create indices, risk models or analytics, or in connection with issuing, offering, sponsoring, managing or marketing any securities, portfolios, financial products or other investment vehicles based on, linked to, tracking or otherwise derived from any MSCI or Barra product or data.

- Historical data and analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction.

- None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), or a promotion or recommendation of, any security, financial product or other investment vehicle or any trading strategy, and none of the MSCI Barra Parties endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies. None of the Information, MSCI Barra indices, models or other products or services is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such.

- The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information.

- NONE OF THE MSCI BARRA PARTIES MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, MSCI AND BARRA, EACH ON THEIR BEHALF AND ON THE BEHALF OF EACH MSCI BARRA PARTY, HEREBY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

- Without limiting any of the foregoing and to the maximum extent permitted by law, in no event shall any of the MSCI Barra Parties have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or wilful default of itself, its servants, agents or sub-contractors.

- Any use of or access to products, services or information of MSCI or Barra or their subsidiaries requires a license from MSCI or Barra, or their subsidiaries, as applicable. MSCI, Barra, MSCI Barra, EAFE, Aegis, Cosmos, BarraOne, and all other MSCI and Barra product names are the trademarks, registered trademarks, or service marks of MSCI, Barra or their affiliates, in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.

About MSCI Barra

MSCI Barra is a leading provider of investment decision support tools to investment institutions worldwide. MSCI Barra products include indices and portfolio risk and performance analytics for use in managing equity, fixed income and multi-asset class portfolios.

The company's flagship products are the MSCI International Equity Indices, which include over 120,000 indices calculated daily across more than 70 countries, and the Barra risk models and portfolio analytics, which cover 59 equity and 48 fixed income markets. MSCI Barra is headquartered in New York, with research and commercial offices around the world.