Globalization of Equity Policy Portfolios

A fresh look at strategic asset allocation from a U.S. institutional investor perspective

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Summary

Globalization is an irreversible process, not an option[1]. It has been a driving force of economic and financial integration. For example, over the last decades many trade barriers and tariffs have decreased or been eliminated altogether, foreign direct investments have widely continued to increase year over year, companies are increasingly producing and selling their products abroad, a Financial Accounting Standard has been adopted across more than 100 countries, and many capital markets across the world have become more accessible and efficient for foreign and domestic investors alike.

Institutional investors are increasingly looking for broader and deeper exposure to international equities. Several consultants, recognizing the increased accessibility of international capital markets and the common underlying characteristics of U.S. and foreign equities, have started to question the asset allocation divide between domestic and international equities. Consultants now more frequently recommend a global equity policy benchmark reflecting the investable opportunities of the equity markets worldwide as the starting point for asset allocation.

However, most institutional investors worldwide, including in the U.S., have not yet gravitated towards a global approach in their equity allocation process. Instead, many maintain a strong home bias with a strategic preference for domestic equities in their equity allocation. A higher allocation to domestic equity relative to its share in the world portfolio is in essence an active investment bet on domestic equities. However, the best investment opportunities are not necessarily found in the domestic market. For example, moving from a U.S.-only equity universe to a global equity universe triples the opportunity set.

The potential benefits of global investing are grounded not only in empirical evidence, but also in modern portfolio theory -- in particular the Capital Asset Pricing Model (CAPM), which is based on the diversification benefits of investing in the broadest possible global market portfolio[2]. Globalization and improved access to equity markets around the world, including in many emerging markets, have offered empirical evidence of the potential benefits of global equity investing.

Although an integrated global approach to equity investing is not yet widespread among U.S. institutional investors, recently a number of large and leading U.S. pension plans are now considering Global Equity as a single strategic asset class leading the way to an Integrated Global Equity Investment Process.

This paper identifies trends towards global investing and certain implications for the equity investment process of institutional investors and discusses the rationale underlying an integrated global approach to equity investing by U.S. institutional asset owners.

The paper is structured as follows: Section I presents the theoretical background and evolution of a global market portfolio. Section II reviews selected data and factors illustrating greater global economic and capital markets integration and the implications on companies and equity markets. Section III reviews the evolution of allocation by U.S. institutional investors to domestic and international equities and discusses the traditional arguments for home bias. Section IV analyzes the trend towards, and discusses the potential implications and benefits of, an integrated global equity investment process. Section V offers conclusions.

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[1] Former UN Secretary General, Kofi Annan

[2] Markowitz (1952)

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I. An Evolution of the Market Portfolio

In its original form, the Capital Asset Pricing Model (CAPM) suggested that all investors hold a combination of the risky market portfolio and cash, depending on their risk tolerance.[3] The market portfolio was defined as a combination of all risky assets imaginable, including equities, fixed income, human capital, etc. Clearly, such a portfolio was neither observable nor investable and therefore proxies for the market portfolio were developed.

When the CAPM was further developed, U.S. investors used the S&P 500 as an investable proxy for their market portfolio.[4] Meanwhile, a body of academic research started supporting the case for international investing and extending the domestic CAPM to an international portfolio (I-CAPM).[5] According to the I-CAPM, in an efficient and integrated world capital market, the global market portfolio would replace the domestic proxy for the market portfolio implying that domestic allocations should not exceed the relative country share in the global market portfolio. Since the mid 1970s this global market portfolio was represented by the MSCI World Index, which at that time covered approximately 60% of the market capitalization from 20 developed-market countries, including the U.S.

Beginning in the early 1970s in the U.S., a trend developed to invest in broad U.S. market portfolios, as academic research supported the case for adding small companies to institutional portfolios.[6] To facilitate changes in the investment process, the consultants at Wilshire Associates developed the Wilshire 5000 index, which includes both the large and small capitalization companies and covers close to 100% of the U.S. equity universe. This and other similar broad domestic indices started replacing the S&P 500 as the proxy for the market portfolio in policy benchmarks of U.S. asset owners.

In the late 1980s, as more investors extended their equity opportunity set beyond the developed markets and started investing in securities from emerging markets, the MSCI ACWI Index, which included 23 developed markets and 25 emerging markets countries, started replacing the MSCI World Index as the proxy for the global market portfolio. Beginning in the late 1990s, global investing underwent a further transformation as investors saw the benefits of investing in international small caps and broadening their opportunity set to the overall international market. Now investors are looking at broad global indices like the MSCI ACWI IMI index, which covers approximately 99% of the global investable opportunity set as a proxy for the global market portfolio.

Exhibit 1 compares some characteristics of the MSCI USA, MSCI USA Investable Market (IMI), MSCI World, MSCI All Country World (ACWI) and MSCI ACWI IMI indices using the Barra Global Equity Long-Term Model (GEM2L). It illustrates the increase in the investable equity universe from 2,500 securities in the U.S. to a total of more than 8,000 securities globally. Some of the consequences of such an increase in investable equities are the lower level of concentration risk and the lower risk coming from individual securities. Furthermore, the opportunities for active management improve as a larger and more dispersed universe allows for more investment choices leading to potentially vastly differing outcomes.

The MSCI USA IMI provides exhaustive coverage for the US investable universe and is representative of the U.S. equity opportunity set. As of June 1, 2009, the MSCI USA IMI had 2,507 constituents, with the

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[3] Sharpe (1964) and Linter (1965)

[4] The S&P 500 is a market capitalization weighted portfolio of the U.S.'s largest stocks and covers approximately 75% of the U.S. equity universe.

[5] Adler & Dumas, 1983; Solnik, 1977; Stulz, 1981; Wheatley, 1988.

[6] Dennis A.Tito, A new capital market index (1974)

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largest 10 companies representing 16.6% of the weight of the index. The asset-selection risk accounted for 0.45% of the total forecasted risk for the MSCI USA IMI. By contrast, the MSCI ACWI IMI contained 8,531 constituents, with the largest 10 companies representing 7.4% of the index. Asset-selection risk contributed just 0.15% to the total risk for the index and thus reduced the asset-selection risk by approximately 67% relative to the MSCI USA IMI.

Exhibit 1: Risk Characteristics of Indices Using GEM2L (in USD)

	Number of assets	Weight of top 10 companies (%)	Asset selection Risk (% Std Dev)	Total Risk (% Std Dev)	Asset Selection Risk Contribution (% Total Risk)
MSCI USA	600	19.0	2.47	31.57	0.61
MSCI USA IMI	2,507	16.6	2.16	32.19	0.45
MSCI World	1,655	9.5	1.52	30.54	0.25
MSCI ACWI	2,397	8.4	1.37	30.85	0.20
MSCI ACWI IMI	8,531	7.4	1.21	31.14	0.15

Source: MSCI. Data as of June 1, 2009

The theoretical premise of I-CAPM is based on the existence of a fully-integrated capital market where the same asset pricing relationships apply in all countries, and firms use similar decision rules and evaluation criteria, regardless of their geographical location. Historically, financial market segmentation arose from restrictions on capital flows and ownership of domestic companies, and other differences in treatment between domestic and foreign investors (rights, taxation, etc.). Although some of the market inefficiencies still exist today, globalization has significantly reduced many such limitations that resulted in market segmentation in the past.

In the next section we look at empirical evidence regarding the economic and financial integration of global capital markets. Increasingly integrated and efficient markets support the case for a global approach to strategic equity allocation.

II. The Foundations of Globalization

Globalization has been transforming economies and financial markets globally. Powerful forces have been behind these changes. Structural reforms, free trade agreements and wide scale liberalization have allowed companies to compete for business and resources globally, supported by increasingly interconnected financial centers. The spectacular evolution of international trade has been a catalyst and an effect of the integration of economies around the world.

Exhibit 2 illustrates how world exports (for 142 countries) as a percentage of global GDP have nearly doubled in the last 20 years (left scale). This increase in world exports was made possible as countries removed trade barriers and opened up their economies. For example, average tariffs (right scale) in the world (for 169 countries) declined from 26.3% in 1986 to just 8.8% in 2007[7].

[7] World Bank, IMF, OECD.

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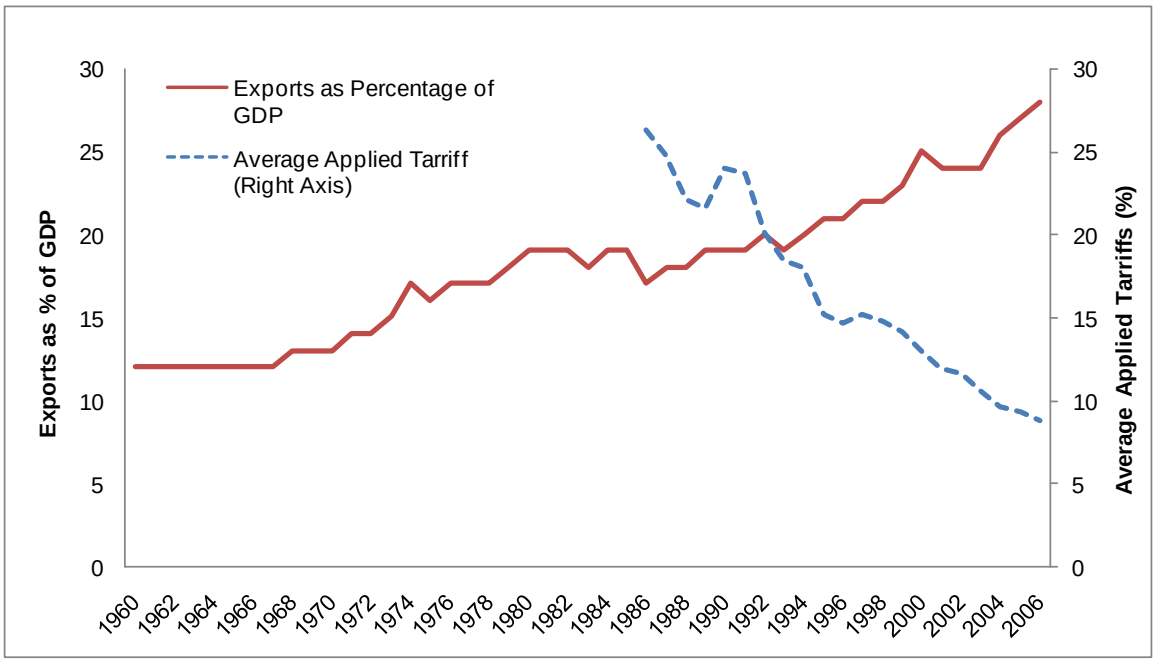
Exhibit 2: World Exports as a Percentage of GDP and Average Tariffs in the World



Source: World Bank.

The decline in tariffs has allowed companies to grow by selling their goods and services beyond their domestic boundaries. But, as the importance of foreign business was growing, many companies moved from being exporters to set up full-scale operations that take full advantage of opened economies. Others shifted their production sites to take advantage of lower costs, or sought access to supplies of natural resources.

This move by companies outside of their home country is illustrated by the trend in FDI (Foreign Direct Investment). Exhibit 3 shows how incoming FDI in the world, and in developing economies in particular, has been growing over the last decades, albeit subject to global investment cycles.

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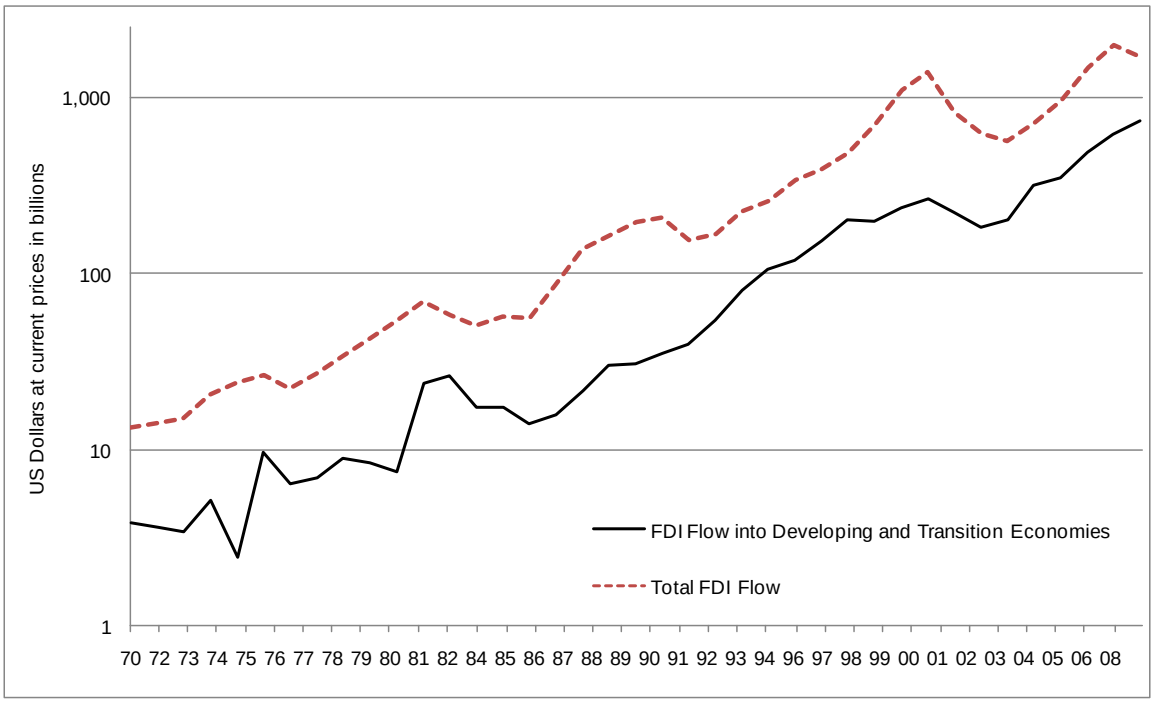
Exhibit 3: Foreign Direct Investment: Total Flows and Flows to Developing Economies



Source: UNCTAD.

As a result of these fundamental transformations in the world economy and in the way companies operate in it, it is today difficult to disentangle companies from their global footprint. Further, it may be perilous to assume that a company's business will always be more reflective of the economy of its country of domicile than of the economy in another part of the world.

As an illustration of the above, Exhibit 4 shows the percentage of foreign sales against total sales, as well as the percentage of foreign assets compared to countries in the MSCI World Index. By buying domestic equities in any of these countries, an investor takes on significant international exposure.

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Exhibit 4: Foreign Sales and Assets as a Percent of Total Sales and Assets for MSCI World Countries

Country	Foreign Sales as Percent of Total Sales	Foreign Assets as a Percent of Total Assets
Australia	33.1%	14.1%
Austria	57.9%	21.4%
Belgium	22.9%	32.0%
Canada	36.7%	34.1%
Denmark	43.9%	7.8%
Finland	71.5%	31.7%
France	48.1%	27.8%
Germany	57.4%	9.3%
Greece	15.4%	17.0%
Hong Kong	52.9%	23.3%
Ireland	79.2%	62.3%
Italy	36.0%	18.9%
Japan	27.7%	15.9%
Netherlands	56.4%	36.0%
New Zealand	33.2%	26.9%
Norway	41.1%	30.1%
Portugal	34.9%	24.9%
Singapore	60.6%	34.6%
Spain	35.9%	30.7%
Sweden	67.9%	60.2%
Switzerland	52.2%	70.6%
United Kingdom	55.9%	33.5%
United States	32.2%	9.8%

Source: MSCI, Worldscope. Data as of May 31, 2009.

Another important dimension of this global integration is the increased integration of financial markets in response to the needs of issuers and global investors. A striking example has been the move to adopt global accounting regulations.

More than 100 countries require or permit International Financial Reporting Standards (IFRS) in varying degrees, either as originally issued by the International Accounting Standards Board (IASB), or as modified and endorsed by a particular jurisdiction. Japan, Canada, Brazil, Argentina, Mexico, South Korea, and India have all set out a time line for the full adoption of IFRS. Since December 2007, the U.S. Securities and Exchange Commission (SEC) adopted rules to allow foreign private issuers to file financial statements prepared in accordance with IFRS (as issued by the IASB) without reconciliation to U.S. GAAP. In November 2008, the SEC published its proposed roadmap for the potential transition to IFRS by U.S. companies. If certain milestones are achieved, the mandated transition to IFRS could occur in stages, beginning with large accelerated filers for fiscal years ending on or after December 15, 2014.

With markets increasingly opening to international portfolio investment, technology improvements and investment in market infrastructure around the world, access to international markets has become much easier and cheaper for investors. Exhibit 5 provides the Annualized Traded Value Ratio (ATVR) for the largest developed and emerging markets. While differences still exist in bid-ask spreads (5 basis points in the U.S., versus 17 in World ex U.S. and 28 bps in EM), the Annualized Traded Value Ratio (ATVR)—a measure of relative liquidity—highlights how all large markets are now quite liquid.

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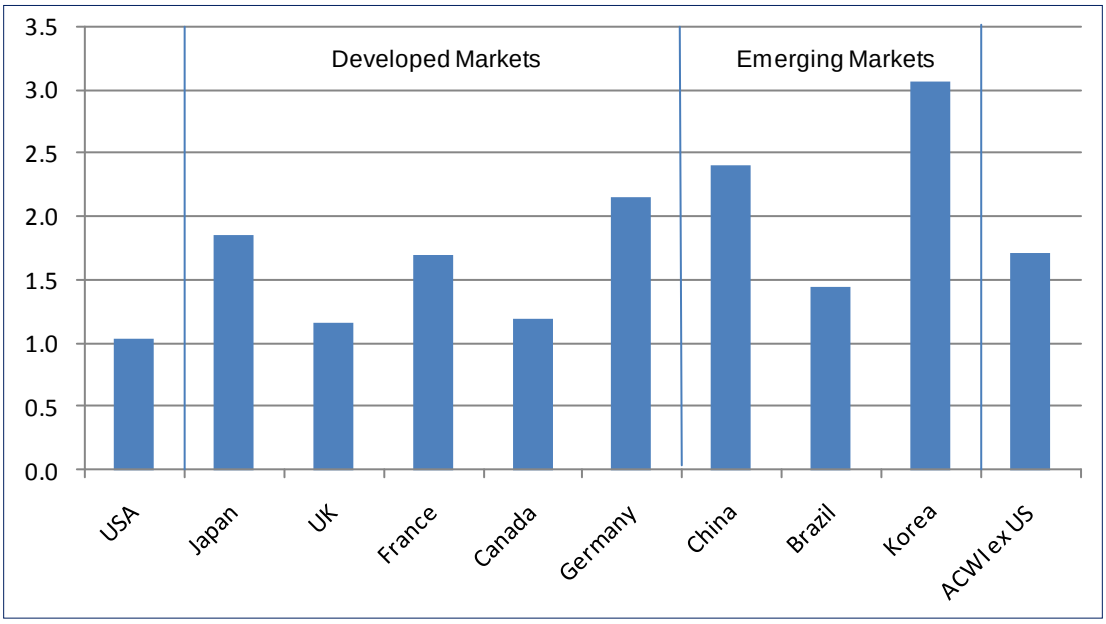
Exhibit 5: Annualized Traded Value Ratio (ATVR) for Top 5 Developed and Top 3 Emerging Markets



Note: The ATVR are market capitalization weighted ATVR calculated from security level information.

Finally, the increased integration of economies and markets globally has resulted in a shift in the balance of economic weights from the traditional developed economies to developing countries. This trend can be observed by the change, both past and projected, of the relative contribution to the world GDP of developed and developing economies.

Exhibit 6 highlights the historical and expected increased contribution of developing economies from 1969 to 2030.

Exhibit 7 further details this trend by focusing on the 10 largest economies. Based on USDA projections, 20 years from now all four BRIC (Brazil, Russia, India and China) countries will be in the top 10 economies as measured by their nominal GDP.

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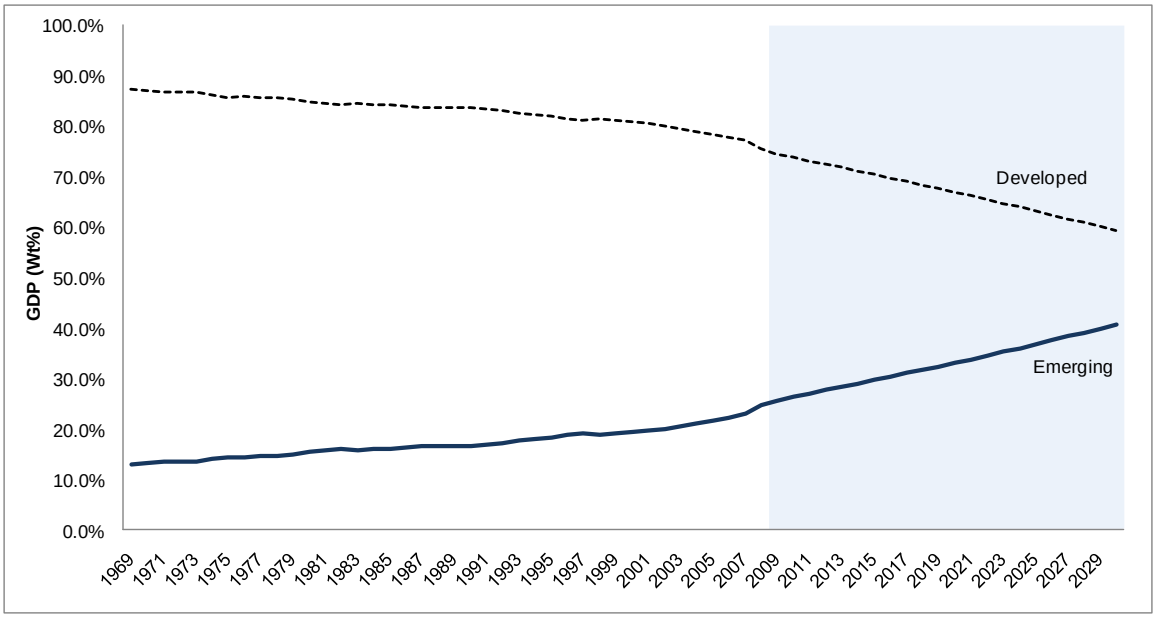
Exhibit 6: GDP Weights of Developed and Emerging Markets: 1969 – 2030 (estimated)



Note: The weights represent the cumulative GDP weights of countries included in the MSCI Developed and Emerging Market Indices based on real GDP shares. For year 2009 and beyond the weights are based on real projected GDP shares as estimated by USDA. Source: World Bank, IMF, USDA.

Exhibit 7: Top Ten GDP Weights: Past, Present and Future?

Rank	1987		2008		2030*	
	Country	GDP Wt	Country	GDP Wt	Country	GDP Wt
1	United States	30.1%	United States	26.7%	United States	22.8%
2	Japan	16.2%	Japan	9.1%	China	15.5%
3	Germany	6.6%	China	6.3%	Japan	5.2%
4	United Kingdom	4.9%	Germany	6.1%	Germany	4.3%
5	France	4.5%	United Kingdom	4.8%	India	4.2%
6	Italy	3.9%	France	4.6%	United Kingdom	3.7%
7	Canada	2.3%	Italy	3.6%	France	3.3%
8	Brazil	2.1%	Canada	2.6%	Brazil	2.6%
9	Spain	1.8%	Spain	2.5%	Russia	2.4%
10	Russia	1.7%	Brazil	2.3%	Italy	2.3%

Source: World Bank, USDA. Note:* Projected

The BRIC acronym—for the four emerging market nations expected to be part of the top ten economies in 2030—has symbolized this expected economic shift, highlighting for US institutional investors that "growth is elsewhere".

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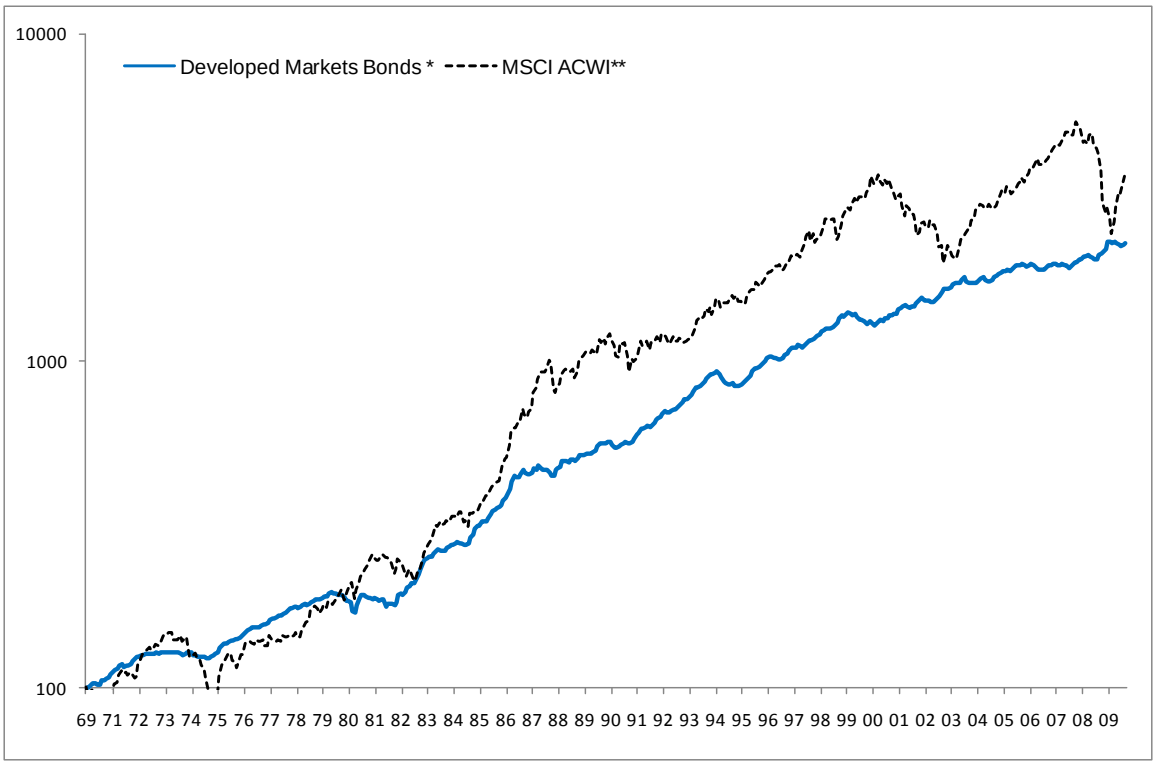
III. Current Approaches in Equity Allocation

In the context of a multi-asset class portfolio, the policy objective of the equity allocation is generally asset growth maximization. Exhibit 8 demonstrates that over the last 40 years, and in spite of two major market crises in the last 10 years, the cumulative return of equities has been higher than for a global bond portfolio, although with higher volatility.

Exhibit 8: Cumulative Returns of Global Equities and Bonds: Dec 1969 – Aug 2009



Source: MSCI.

* The cumulative returns for Developed Market bonds is constructed using long term government bond yields for 10 countries from the OECD.

** MSCI World until 1987, MSCI ACWI afterwards.

Historically, given the large weight of U.S. public equity markets in the global equity opportunity set, many U.S. institutional asset owners have traditionally allocated a higher proportion of money to U.S. public equities while investing a smaller proportion in international equities. However, the U.S. share of global equities has declined since 1970 as shown in Exhibit 9. The share of the U.S. equity market within the MSCI World Index declined from around 70% in 1970 to 48% as of August 2009 (and to 42% of MSCI ACWI).

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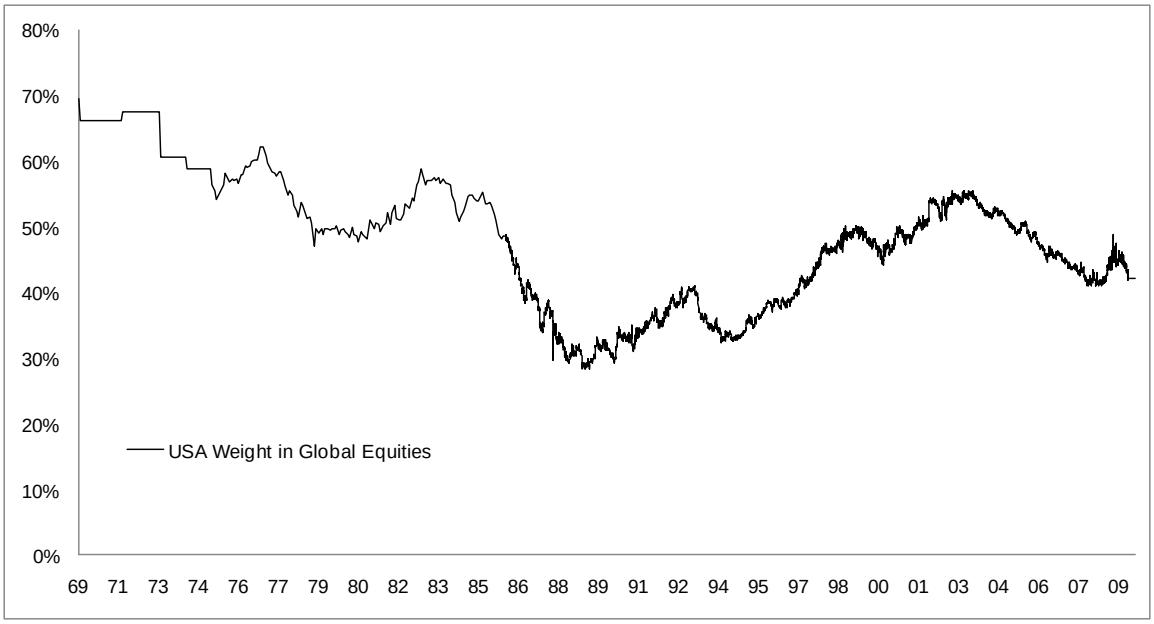
Exhibit 9: U.S. Weight in Global Opportunity Set



Source: MSCI. The USA weight represents the market capitalization weight of the MSCI USA Index in the MSCI World Index until 1987 and its weight in the MSCI ACWI Index after 1987.

The top 200 U.S. pension plans in 2008 on average allocated 67% of their assets to U,S, equities, while U.S. equities had a market capitalization weight of 42% in the global opportunity set, as measured by MSCI ACWI. This gap implies an active bet on U.S. equities. This pattern of investment behavior, where investors allocate a smaller share of their portfolios to foreign assets relative to their actual weights in the global opportunity set is known as "home bias."

Over time more investors have started realizing that the arguments supporting home bias are less valid. A clear, albeit slow, trend has been developing for many years with institutional investors increasingly reducing the home bias in their equity allocation.

Exhibit 10 shows how the share of international equities has steadily increased within the total equity allocation for the largest 200 U.S. defined benefit pension plans. Although the allocation to domestic equities has dropped significantly the total allocation to equities still shows a considerable degree of home bias.

Exhibit 10: Top 200 U.S. Pension Plans Aggregate Allocation to U.S. and non-U.S. Equity

	2004	2005	2006	2007	2008
Proportion of US Equity in Global Equity	73.7%	71.7%	70.5%	66.7%	66.8%
Proportion of Non-US Equity in Global Equity	26.3%	28.3%	29.5%	33.3%	33.2%

Source: Pensions & Investments.

The reduction in home bias has taken various routes. Some pension plans have directly increased their strategic international allocation at the expense of domestic equity allocations. Others may have simply reduced their domestic equity allocation in favor of other asset classes. Finally, many plans have overlaid their domestic/non-domestic allocation with a direct allocation to global equity. This has resulted in a

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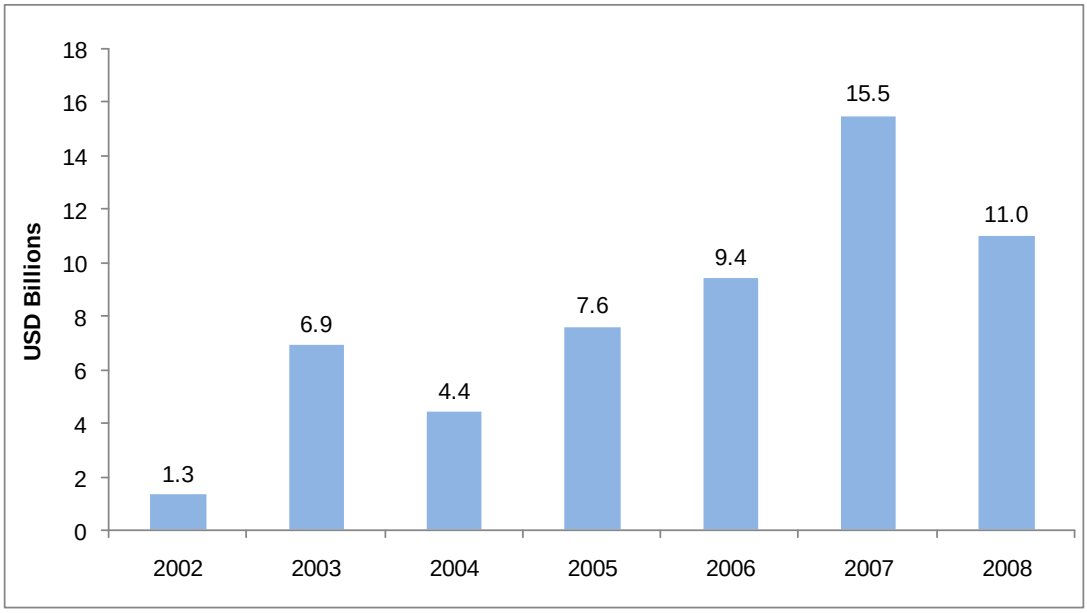
significant growth in the number of so-called "global equity mandates". Exhibit 11 highlights the growing popularity of these mandates with new global equity funding by U.S. tax-exempt institutional investors increasing from a mere USD 1.3 billion in 2002 to USD 11 billion in 2008.

Exhibit 11: Annual New Global Equity Mandate Funding



Source: Intersec.

What have been the arguments for keeping a disproportionally high allocation in domestic equities? The three most common are:

- "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, accessibility to international capital markets has generally improved. Barriers to foreign investment have been lifted or reduced in most countries and market infrastructure improvements have contributed to lower costs and lower operational risks. Most developed markets now trade at similar levels of efficiency. The consolidation of stock exchanges (for example NYSE Euronext or Nasdaq OMX) and competition within markets are likely to accelerate this trend. Similarly in emerging markets accessibility continues to improve with overall quite good levels of liquidity.

With respect to the second argument, some have maintained that a higher allocation to domestic assets provides a better hedge for domestic liabilities. Pension liabilities have many dimensions, including matching expected cash outflows, accounting for cost of living adjustments and changes in life expectancy. While equities by seeking long term growth may also provide some hedge – versus inflation for example – they are not the relevant asset class for cash flow liability matching. In the context of liability matching, domestic fixed income may be a more suitable asset class. As asset growth is the main objective of equity allocation, biasing it towards the domestic market comes with potentially huge opportunity costs. Consider the lost decade in Japan, for example. Domestic equities have demonstrated that they provide no better link to domestic pension liabilities than global equities. Exhibit 12 provides the correlations of U.S., non-U.S., and fixed income to a pension liability index. Both

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U.S. and non-U.S. equities exhibited very low correlations with pension liabilities, indicating that both are equally unsuitable as a short-term hedge for growing pension liabilities.

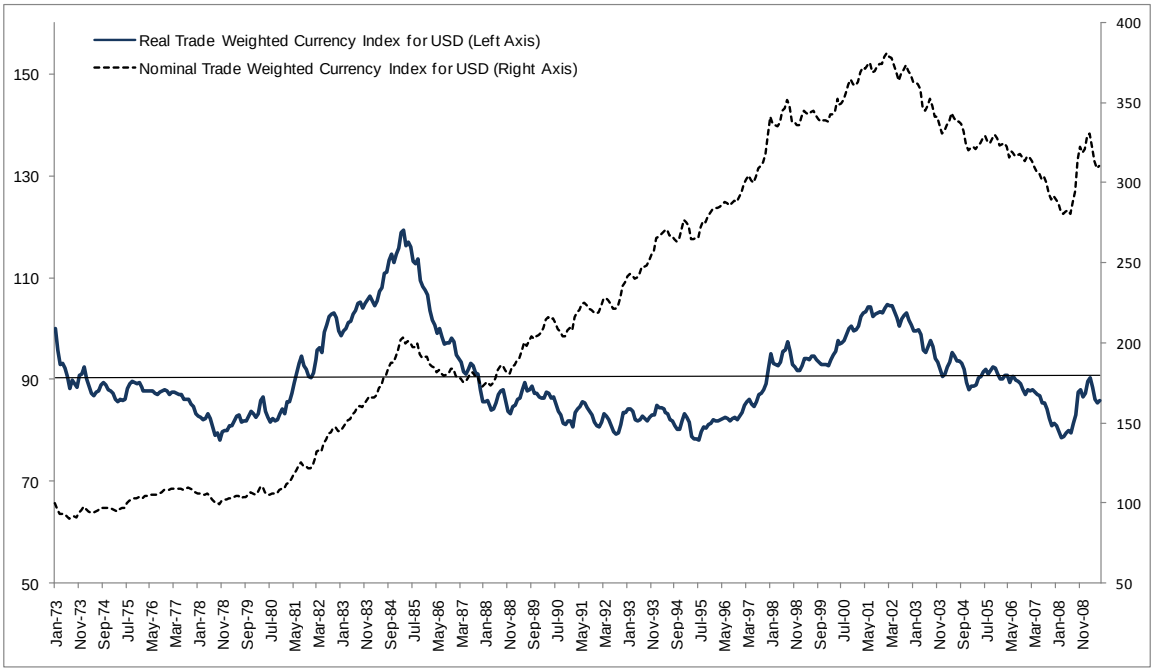
Exhibit 12: Correlations of Pension Liabilities with Equities and Bonds (January 1995 to May 2009)

	MSCI ACWI ex USA IMI Index	MSCI ACWI IMI Index	MSCI USA IMI	Citigroup US Govt. Bond 7-10 Yr.
Correlation with Pension Liability Index	0.10	0.09	0.09	0.71

Source: MSCI, Citigroup. Note: The pension liability index is represented by Citigroup Pension Liability Index.

The third argument for home bias is the supposedly higher risk of international equities due to currency movements. The currency risk for equity is time dependent. The long-term hedged and un-hedged non-U.S. equity performance for U.S. investors has been quite similar, validating the argument that prices of cross-border real assets tend to equilibrate over time. Exhibit 13 shows the performance of the broad real trade-weighted index for the U.S. dollar from January 1973 to June 2009. It highlights that while there are clear cycles, the index has not trended up or down over longer periods. The same could be seen from other major currencies, such as the Euro or the Yen.

Exhibit 13: Real versus Nominal Traded Weighted Index for U.S. Dollar



Source: U.S. Federal Reserve.

Exhibit 14 highlights over the last 40 years that replacing a US-only portfolio with a fully global equity allocation reduced volatility over the long run, even with no currency hedging at all.

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Exhibit 14: Long-term return and volatility of US-only and Global portfolios

	Annualized return	Annualized volatilty
MSCI USA	9.3%	15.6%
MSCI ACWI*, unhedged	9.5%	15.1%
MSCI ACWI*, hedged	9.0%	14.3%

* MSCI World Index until December 1987. Annualized Return for the period from 1969 to August 2009.

Investors who are concerned about short-term currency volatility have traditionally implemented partial or total hedges to reduce or eliminate the source of risk. In this regard, currency markets are the most liquid markets in the world, at least for developed markets and a subset of emerging markets, and foreign exchange exposure can be hedged at relatively little cost.[8] Exhibit 15 indicates that the average cost of hedging foreign currency exposures for U.S. investors ranged from -26 bps to +10 bps.

Exhibit 15: Average Monthly Cost of Hedging Foreign Currency Exposures for U.S. Investors (1987 to 2008)

	Annualized return	Annualized volatilty
MSCI USA	9.3%	15.6%
MSCI ACWI*, unhedged	9.5%	15.1%
MSCI ACWI*, hedged	9.0%	14.3%

Source: MSCI. Hedge impact is defined as the sum of the cost to hedge on the forward contract and the actual gain or loss on the spot FX rate change.

Most institutional investors today make a currency hedging decision once they have defined their relevant investment universe. Therefore the discussion on currency risk does not affect the decision on how to allocate between domestic and non-domestic equities

IV. Towards An Integrated Global Equity Investment Process

The increased integration of economies and markets are causing some institutional investors to view the global equity markets as the relevant Market Portfolio. A number of large and leading U.S. pension plans recently started considering Global Equity as a single strategic asset class.

An integrated equity investment process combines the domestic/ non-domestic silos at these plans and has multiple potential advantages.

First, by eliminating the need for periodic reviews at the strategic level of the domestic/ non-domestic equity allocation, it potentially removes an unnecessary step that was creating market timing risk.

[8] Cooper & Kaplanis (1994).

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Second, by removing this need at the strategic level, it facilitates focusing on important strategic asset allocation issues such as liability hedging and portfolio liquidity management.

Third, from an organizational perspective, an integrated global equity structure may allow for a more efficient use of valuable investment resources, streamline the investment process and improve investment expertise. For example, having one global equity investment process may allow better integration of investment teams and reduce potential conflicts and unintended bets arising from different investment processes. It may harmonize the overall investment decision making process and ease the implementation and oversight of the equity allocations.

A global integrated equity approach that places the global market portfolio as the natural starting point for equity allocation is both theoretically sound and practically viable. It contemplates the entire global investment opportunity set to take advantage of diversification benefits from exposures to different geographical regions, market segments, sectors and currency movements. It acknowledges that deviations from market weights of regions, segments and sectors represent active decisions that need to be taken on the basis of a clear investment responsibility.

A key potential benefit of such an integrated global investment process is that it empowers the team in charge of global equity at an institutional investor to maximize returns without being impaired by domestic versus non-domestic constraints. While by itself this is not an assurance for better portfolios and better returns, its proponents suggest that it is a better process to strive to achieve these results. This higher degree of freedom may be used in various ways, depending on the approach chosen based on the skill set available and investment beliefs, including through:

- Internal or external mandates
- Regional or global mandates
- Passively or actively managed mandates

For a passive approach, a global equity policy benchmark, capturing the global opportunity set, provides the basis for efficient investment vehicles to capture the global market beta.

For an active approach, global equity mandates may provide greater alpha opportunities for active managers as they can benefit from increased breadth. For example, pure bottom-up fundamental managers can extend their research insight beyond country or region boundaries into global sectors in search of best-in-class companies. Exhibit 16 highlights the broad geographical spread of the top twenty energy securities in the MSCI ACWI IMI, ranked by descending order of company market capitalization.

Global equity mandates are neither the only solution nor necessarily the best solution. Institutional investors may prefer regional mandates, for example, if they want to be in a position to make active tactical decisions by varying the exposures of the portfolio relative to the global equity universe benchmark. Regional mandates may also be preferred due to availability, or lack of, manager skill set availability or due to other factors.

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Exhibit 16: Top Twenty Energy Stocks in the MSCI ACWI IMI

Name	Float Adjusted Market Cap	Company Full Market Cap	Country
Exxon Mobil Corp	333,821	333,821	USA
Petrochina Co H	23,575	328,435	China
Royal Dutch Shell A	97,056	169,450	United Kingdom
Royal Dutch Shell B	72,393	169,450	United Kingdom
Petrobras ON	45,532	163,660	Brazil
Petrobras PN	53,106	163,660	Brazil
BP	157,949	157,949	United Kingdom
Chevron Corp	137,280	137,280	USA
Total	119,841	133,156	France
China Petro & Chem H	13,452	129,939	China
Gazprom (Rub)	48,716	121,790	Russia
ENI	60,588	93,212	Italy
China Shenhua Energy H	12,872	82,238	China
Statoilhydro	24,264	69,325	Norway
Rosneft (Rub)	8,040	66,999	Russia
Schlumberger	65,695	65,695	USA
ConocoPhillips	62,140	65,411	USA
Reliance Industries	25,428	63,570	India
CNOOC	23,607	59,018	China
Occidental Petroleum	58,548	58,548	USA

All Market Caps in USD mill. Data as of Sept. 1, 2009.

Source: MSCI. Hedge impact is defined as the sum of the cost to hedge on the forward contract and the actual gain or loss on the spot FX rate change.

V. Conclusions

Globalization has brought about a major rethinking of the equity investment. Thought leaders in the industry are questioning the merit of the existing equity allocation practices and are increasingly looking towards an integrated global equity investment process. The partitioned domestic/non-domestic approach to equity investing may have been built on the grounds of segmented economies, high levels of foreign investment restrictions, and heavily domestically-focused companies but its validity is being challenged by a changing and more integrated global equity landscape. Traditional arguments supporting a home bias equity allocation are less defensible and certain leading institutional investors are realizing that the segmentation between domestic and international equities at a strategic level is a legacy that may come with important market timing risks and opportunity costs. A more integrated approach to equity investing may be the next stage in the evolution of investment processes and a natural consequence of globalization. A broad and investable global equity benchmark is an integral part of such a process.

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