



C A M B R I D G E A S S O C I A T E S L L C

GLOBAL EQUITY INVESTING

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ABSTRACT

1. In an increasingly broad and integrated global equity market offering a rich opportunity set, asset allocation strategy is just a starting point. Realization of portfolio goals increasingly requires adopting both an appropriate global equity investment strategy and a well-thought-out implementation plan that includes decisions regarding portfolio structure and how much of the portfolio should be devoted to seeking alpha rather than beta. Treating global equities as a single asset class should increase investors' ability to craft their strategy explicitly on the basis of which bets they wish to take and which risks they want to incur.
2. The adoption of a global strategy puts the question of alpha front and center, with the key issues becoming: (1) In what areas should we use active management strategies in pursuit of alpha? and (2) In seeking alpha, which decisions should we be making about regions, sectors, countries, styles, and capitalization and which should we defer to our managers? Managers can be employed (or deferred to) to express a view or make a bet (e.g., emerging or frontier regions versus the U.S. and/or other developed markets; commodity producers versus users; growth versus value; small cap versus large cap).
3. A well-crafted portfolio structure should enable investors (or their managers) to easily dial exposure up or down among sectors, regions, styles, and capitalization sizes. It should include some direct exposure to emerging markets, given their increasing importance, unless the investor has made an affirmative tactical decision to temporarily avoid such markets. A global equity portfolio can be managed through either a regional or global manager structure, but the search for alpha and use of active management, not the structure, will be the principal causes of differences in performance.
4. There are three major theoretical rationales for creating a global equity portfolio as part of an asset allocation strategy. First, exposure to markets whose returns are less than perfectly correlated with those of the investor's home market results in a portfolio that should have lower volatility than that of a purely domestic equity portfolio over the long term, which in turn should increase compound returns. Second, active managers have shown a greater ability to add value in some markets than in others, and the scope to add value is certainly increased by a larger opportunity set. For many investors a third rationale is the idea that over time higher growth in less developed economies will translate into larger, more transparent, and more investor-friendly capital markets that generate strong returns. However, it is by no means clear that any correlation exists between a country's GDP growth and the performance of its stock market and the prospect of *potentially* higher returns from markets in countries experiencing rapid economic growth is never a justification for buying equities at unreasonable valuations. Theory aside, investing outside of the home market seems very attractive from a practical perspective, as it expands the opportunity set significantly.
5. The strategic case for a global portfolio rests first and foremost on the diversification it provides, which has in the past and *may* in the future result in a significantly lower standard deviation of returns. However, U.S. investors have historically benefited less than non-U.S. investors from diversification into foreign markets both because U.S. equity returns have long been less volatile than those of other

countries and because of the huge size and broad diversification of the U.S. market. In addition, the high correlations among markets in recent years have muted diversification benefits to all investors. Meanwhile, return data since 1970, both for the whole time period and for subperiods, do *not* support the strategic case for all investors to invest globally. In fact, over the long term, investing globally rather than just at home would likely have lowered the returns of U.K., French, and Swiss investors while U.S. and German investors may also have gained little or nothing once the fees and expenses associated with a global equity portfolio were taken into account.

6. Global equity markets grew rapidly from 1990 to mid-2008. A small number of stock exchanges dominate the market and a small number of companies make up a disproportionately high percentage of these and other stock exchanges. The weight of such firms is even higher in the investment indices, a phenomenon that has significant implications for investors (and for managers) considering where to find alpha and what decisions to make concerning active versus passive management.
7. While absolute valuations should always be paramount in an investor's thinking, investors with a global equity portfolio will also have a deep interest in *relative* valuations. Such comparisons may allow investors (or their managers) to add value through manager and/or country and regional selection. The discerning investor will seek to understand the reasons such disparities may exist and then make investments *based* on this knowledge. Whatever the reason for historical valuation differences among markets, investors must focus on the future, not the past.

SUMMARY

Introduction

The global equities train left the platform some time ago, but its final destination remains unclear. Spurred by both the expectation of reduced risk through diversification and the lure of potentially higher returns from other markets, many investors have steadily increased their exposure to equities outside their home market. On average, non-U.S. equities accounted for 20.7% of the portfolios of our U.S. endowed clients as of June 30, 2008, compared with about 4% in 1990 and 13% just five years ago (Exhibit 1). Almost 41% of our U.S. endowed clients have a *greater* allocation to non-U.S. than to U.S. public equities, compared with less than 1% in 2000. On average, these clients are “underweight” non-U.S. equities by about 12 percentage points today, compared with approximately 57 percentage points in 1990 (Exhibit 2).¹

Perhaps more important than the actual percentages is the fact that sophisticated investors, whether in the United States or elsewhere, increasingly regard all public equities (whether in developed, emerging, or frontier markets) as making up *one* global market rather than two markets (domestic and foreign). This is reflected in policy portfolios that have one line item for public equities, labeled “Global Equities,” rather than separate line items for “U.S. Equities” and “Global ex U.S. Equities.”² The distinction connotes something more than just semantics: in an increasingly globalized world, investors that regard global equities as a single asset class may be best prepared to exploit the full range of opportunities, in both beta exposures and alpha seeking, that the global markets have to offer.

The opening and growth of markets across the globe, the burgeoning influence of heretofore less important markets such as China and India, a proliferation of global and regional managers and of product offerings, and a decline in investment-related costs (at least for passive investments) have all contributed to, and can be expected to further the shift toward, “global” portfolios. Non-U.S. equity markets accounted for about 58% of the investable (i.e., accessible to foreign investors) market at the end of 2007, compared with only 31% in 1970. Emerging and frontier markets companies were the source of 13 of the top 20 initial public offerings (IPOs) in 2007, a record year for IPOs,³ and China, Brazil, and India alone accounted for almost one-fourth of IPOs (by value) in the first half of 2008.

In light of these momentous changes, this paper is designed to help investors better understand the global equity market, both as a whole and as a set of component parts (countries, regions, and sectors) and to provide recommendations for investment strategy and implementation.

¹ The underweight is calculated on the basis of relative market-cap weights of U.S. and non-U.S. firms in the MSCI All Country World Index (ACWI). The actual allocation to non-U.S. equities will of course differ since the 20.7% figure does not include exposure gained via alternative asset allocations. Based upon a much smaller sample, non-U.K. equities on average account for 25.3% of the portfolio of our U.K. endowed clients and such clients are underweight non-U.K. equities by 65.1 percentage points.

² We use U.S. clients as an illustration, but the same point is applicable to the policy portfolios of non-U.S. clients as well.

³ *Global IPO Trends Report 2008*, Ernst & Young, p. 14.

Rationales for a Global Equity Portfolio

There are three major theoretical rationales for creating a global equity portfolio as part of an asset allocation strategy. First, exposure to markets whose returns are less than perfectly correlated with those of the investor's home market results in a portfolio that should have lower volatility than that of a purely domestic equity portfolio over the long term, which in turn should increase compound returns.⁴

Second, active managers have shown a greater ability to add value in some markets than in others, and the scope to add value is certainly increased by a larger opportunity set. In addition, in inefficient markets (e.g., those with segments where analyst coverage is relatively thin) managers with a local presence may enjoy informational advantages over nonresident managers and be able to employ strategies that have proven effective in developed markets.

For many investors a third rationale for a global equity portfolio is the idea that over time higher growth in less developed economies will translate into larger, more transparent, and more investor-friendly capital markets that generate strong returns. Several immediate caveats are necessary here. First, it is by no means clear that any correlation exists between a country's GDP growth and the performance of its stock market and, in any case, the fastest growing economies are not necessarily those with the best equity performance. Economies also differ in the extent to which they rely on public markets for capital formation. Second, some emerging markets governments may subordinate the development of robust markets to political goals. Third, locally-listed firms (and their investors) may not necessarily be the greatest beneficiaries of such growth as they must compete (to varying degrees) with multinationals. Nevertheless, investors have viewed strong economic growth, improved governance, and stock market expansion as strongly positive and have poured money into emerging and frontier markets in recent years. Still, a final caveat is in order: the prospect of *potentially* higher returns from markets in countries experiencing rapid economic growth is never a justification for buying equities at unreasonable valuations.

Theory aside, investing outside of the home market seems very attractive from a practical perspective. After all, why should an investor limit its opportunity set to domestic firms when there are world-class companies across the globe? As we will see, investing in foreign markets may offer additional opportunities to create portfolio structures geared toward the pursuit of alpha and the optimal use of managers.

Structure of the Global Equity Market

Global equity markets grew rapidly from 1990 to mid-2008. A small number of stock exchanges dominate the market and a small number of companies make up a disproportionately high percentage of these and other stock exchanges. The weight of such firms is even higher in the investment indices, a

⁴ However, for U.S. investors (but not investors from other countries, whose home markets have tended to be more volatile), we believe there is a point at which adding greater foreign equity exposure can *increase* total volatility, which would likely result in lower compound returns over the long term.

phenomenon that has significant implications for investors (and for managers) considering where to find alpha and what decisions to make concerning active versus passive management.

Growth of the Global Equity Market

As of the end of 2007, equities accounted for 42.5% of the total global investable capital market, according to UBS (Exhibit 3). Over the last 20 years this number has ranged between 33.6% and 49.7%, while averaging about 40%.⁵ In U.S. dollar terms, the global equity market increased from \$8.9 trillion in 1990 to \$60.7 trillion⁶ at the end of 2007, an annual growth rate of 12.0% (Exhibit 4). U.S. growth powered the market in the 1990s—more than making up for the steep decline in Japanese equity prices—while emerging markets have been the big story in recent years. However, this growth has by no means been linear: after the dot-com bubble burst, market size dropped sharply in 2000–02 and did not recover until 2004. Again, by June 2008 virtually all markets had entered bear territory, but total market capitalization (cap) was still above that of December 31, 2006.

As of June 30, 2008, global equity market cap was \$52.7 trillion. However, this figure includes shares, primarily in emerging markets, that are illiquid because they are held by governments or strategic investors, restricted to domestic shareholders, or carry other restrictions. The “investable” equity universe is therefore significantly smaller than \$53 trillion even though many markets have opened up considerably since 2002 (Exhibit 5). It is also worth noting that a large number of markets, including a bare majority of the 25 emerging markets for which S&P/Citigroup provides data, have seen their investable market caps *decline* during this six-year period, evidence that globalization of equity markets is by no means a one-way path. Using a free float–adjustment methodology, five different global indices all end up with an investable universe of between \$32.8 trillion and \$40 trillion in market cap.⁷

The development of the equities market has been part and parcel of a rapid expansion in the capital markets around the world caused by economic growth, globalization, and the search for higher returns. In fact, while in the past developed markets generally boasted higher equity market caps as a percentage of GDP than did emerging markets, this was no longer the case as of the end of 2007 (Exhibit 6).

⁵ UBS’ global investable capital market covers public investments and, with respect to non-U.S. assets, includes only public equities and bonds. Note that UBS calculates a slightly larger investable public equities market than do the five indices discussed in footnote 7.

⁶ This is the figure used by the World Federation of Exchanges (WFE) for what it calls the “main markets” (e.g., the NYSE). Adding the December 31, 2007, market cap of the less investable small and medium enterprises (SME) markets (e.g., London’s Alternative Investment Market) (\$717 billion) and “Other Markets” (e.g., the “Russian Trading System” Stock Exchange) (\$4.2 trillion) would have brought the total to \$65.8 trillion. The WFE only reports figures for the SME and Other Markets on an annual basis. Unless otherwise indicated, all WFE figures used in this paper refer only to those reported for main markets.

⁷ The five major global indices are the MSCI All Country World Investable Market Index, the S&P Citigroup Global Equity Index, the FTSE Global Equity Index Series, the Dow Jones Wilshire Global Total Market Index, and the Russell Global Equity Index. For details concerning some of the differences between them please see our May 2007 Market Commentary *Battle of the Benchmarks*.

The Outsized Role of the Largest Individual Markets and Exchanges

While there are now 15 stock exchanges whose market cap exceeds \$1 trillion (Exhibit 7), a handful of countries and exchanges account for the bulk of global market cap reported by the WFE. As of June 30, 2008, for example, the market cap of U.S. equities listed on the New York Stock Exchange (NYSE), Nasdaq, and the American Stock Exchange made up 34.6% of the total (with the NYSE alone accounting for 27.3%), while Japanese and U.K. equities made up an additional 13.9%. Three countries alone thus account for almost half of total equity capitalization. If one adds to these the equities listed on the Euronext⁸ exchange as well as the national exchanges for Canada, China, Germany, Hong Kong, and Spain, the percentage of total global equity market cap represented by these 12 markets (and 12 exchanges) rises to 75.0% (Exhibit 8).

On an investable market basis, using free float-adjusted market cap, the role of these markets and exchanges in the global equity indices is even greater. In the MSCI ACWI,⁹ for example, the United States alone accounts for 41.6% of market cap, Japan and the United Kingdom for another 18.4%, and the six countries with the largest market caps for 72.7% of the total. The same phenomenon holds true in the MSCI Emerging Markets Index, where eight countries—Brazil, China, South Korea, Russia, Taiwan, South Africa, India, and Mexico—account for 83% of total market cap (Exhibit 9).¹⁰

A Regional Perspective

The composition of investable global equity markets since 1970 appears to show a secular decline in the relative weight of the United States (Exhibit 10).¹¹ As a result of the bursting of the Japanese bubble in 1990 and Japan's subsequent protracted decline, meanwhile, the developed Asia Pacific markets have been far less important over the last decade than they were during the prior 20 years. In fact, for the last ten years these markets have been weighted in aggregate at levels corresponding to those of the early 1970s. Europe, however, has become increasingly important during this period. Among emerging markets, the most arresting developments have been the rapid rise of China since early 2003 and Brazil's more recent emergence as the largest constituent of the MSCI Emerging Markets Index—thanks to the commodity boom and the fact that its equity market is considerably more open than that of China.

As Exhibit 10 shows, the relative weights of the different equity markets vary significantly over time. Not only do different markets outperform and underperform during any given time period, but currency movements also affect their relative weights. Despite this ebb and flow, emerging markets will continue to take market share from developed markets should their higher potential growth translate into both liberalized investment regimes (for foreign as well as domestic investors) and a broad base of listed companies. As of June 30, 2008, emerging markets had an 11.6% weight within the MSCI ACWI—compared to just 3.8% six

⁸ Euronext includes equities from Belgium, France, the Netherlands, and Portugal.

⁹ MSCI includes only 48 countries in the ACWI. The coverage of the global index providers ranges from 48 (MSCI and FTSE) to 70 (Russell).

¹⁰ All percentages are as of June 30, 2008. MSCI is presently in the process of determining whether to switch South Korea's status to that of a developed market and has announced its intention to make a decision by June 2009.

¹¹ Of North America's current 45.9% share of the ACWI as of June 30, 2008, the United States accounted for 41.6% while Canada made up the remaining 4.3%.

years ago. Notwithstanding our long-term view, however, it is important to remember that they enjoyed an 8.5% share in 1997, prior to the onset of the Asian financial crisis.

Some Ways to Compare Country and Regional Markets

Markets differ substantially in terms of economic sector weights (Exhibit 11). For example, in the MSCI Pacific ex Japan Index, financials (42.0%) and materials (21.4%) each have more than double the representation they do in the MSCI ACWI, while information technology (0.9%) holds just one-twelfth the weight it boasts in the ACWI. Whereas energy, materials, and telecommunications account for 29.1% of the ACWI, they made up 48.5% of the MSCI Emerging Markets Index as of June 30, 2008. Industrials make up 19.5% of the MSCI Japan Index and consumer discretionary stocks account for another 18.7%, compared with sector weights in the ACWI of 10.7% and 8.2%, respectively.

Primarily, such differences reflect the fact that the world's economies are driven by different companies and are characterized by different blends of publicly listed, privately held, and government-owned corporations (e.g., Pemex is not even listed on the Mexican Stock Exchange), as well as the reality that the world's resources are not distributed equally. In addition, relative sector outperformance in any given market plays a role (expanding the weight of the outperforming sector within the index). Likewise, the weights of various economic sectors fluctuate broadly over time, as shown by the sharp increase in the value of the information technology sector in the late 1990s, the rise and fall in the weight of the financial sector this decade, and the increased strength of the energy sector in recent years (Exhibit 12).

The level of foreign ownership also varies significantly across markets. However, although developed markets are more open to foreign capital than are emerging markets, it would be wrong to assume that they also invariably have a higher percentage of foreign stock ownership. For example, whereas foreign investors hold only 13.1% of all U.S. equities and 27.6% of Japanese issues listed on the first section of the Tokyo Stock Exchange,¹² they owned between 30% and 42% of South Korea's stocks for over four years until a sharp sell-off by foreign investors in summer 2008.

Companies in the Global Equity Market

There were 45,460 listed firms¹³ as of June 30, 2008, compared with 21,585 at the close of 1990, an annual growth rate of 4.2% (Exhibit 4).¹⁴ The average market cap of listed companies grew to \$1.16 billion (\$709 million in 1990 dollars) as of June 30, 2008, compared with \$412 million in 1990. The average market

¹² Data for the U.S. and Japanese markets are as of March 31, 2008.

¹³ The total includes common and preferred shares, and excludes investment funds, rights, warrants, and convertibles. The number of companies is exaggerated slightly because the WFE double counts companies listed in different markets.

¹⁴ Exhibit 4 shows a spike in the number of firms after 2006, which resulted from the WFE's decision to include the companies listed on the BME Spanish Exchanges in its data. Excluding the 3,615 companies listed on the BME Spanish Exchanges, the annual growth rate in the number of listed companies was 3.7%.

cap of companies in the MSCI ACWI, meanwhile, rose from \$3.3 billion in 1990 to \$14.7 billion (\$9.0 billion in 1990 dollars) as of mid-2008.¹⁵

A relatively small number of firms dominate the world's various equity markets, both developed and emerging (Exhibit 13). For example, the largest two companies on the São Paulo Stock Exchange and the Shanghai Stock Exchange account for 24.8% and 25.0% of their respective total market cap, while the top ten firms on each exchange account for slightly under half of total market cap. Although there are notable exceptions (e.g., London and Switzerland), developed markets tend to be less concentrated. Even so, the top ten firms on the New York and Tokyo Stock Exchanges account for 12.9% and 19.0% of those exchanges, respectively.

Such concentration is even more pronounced in the global indices. The largest five firms presently account for 30.7% and 52.6%, respectively, of the MSCI U.K. and MSCI Brazil indices, while the top ten firms make up 18.3% of the MSCI U.S. Index and 23.3% of the MSCI Japan Index (Exhibit 14). This results from the fact that the global indices include only about 17% to 28% of the total number of listed companies. Indeed, until mid-2007 MSCI Barra covered just 4,778 companies, approximately 11% of the total.¹⁶ MSCI Barra's All Country World Index Investable Market Index now covers about 8,647 *securities*, which is a rough proxy for the number of companies. These numbers suggest that it is much harder to build and maintain a firm of sufficient size and liquidity to attract global investors than it is to create an investment vehicle (e.g., a mutual fund or a hedge fund) for such investors!

Investors should note that the domination of the different indices by a limited number of firms has important implications for global fund managers that, in order to counter the larger weights assigned to bigger companies in cap-weighted benchmark indices, are likely to construct portfolios that are more equal-weighted than such indices.¹⁷ Such a strategy is the logical result both of the process of portfolio construction and of attempting to beat the index,¹⁸ a bet the other way (i.e., overweighting the index's larger-cap stocks) also makes the portfolio less diverse and therefore more risky under normal circumstances. The bet against the largest stocks in the index will counter the overweighting inherent in index construction, but will not address the systemic exclusion of many listed firms (unless the manager affirmatively ventures outside the index).

The smallest firms in the indices, of course, are less likely than are the larger ones to be covered by analysts and may therefore offer the greatest opportunity for active managers—and for those investors looking hardest for alpha and willing to tolerate higher tracking error. Indeed, the vast number of companies *outside* the indices suggests fertile hunting grounds for quality managers. However, managers running large funds will find it difficult or impossible to include in their portfolios those firms too small or too thinly

¹⁵ The average market cap for companies in the MSCI All Country World Investable Market Index, which includes small caps, is much smaller, of course. This index did not exist in 1990.

¹⁶ This was the total number of companies contained in the MSCI ACWI and the MSCI Small Cap Index. It should be noted that at the time the MSCI ACWI alone covered about 85% of the market cap of each industry group on a free float-adjusted basis.

¹⁷ A more in-depth discussion of these issues, for U.S. equity managers as well as global ex U.S. equity managers, can be found in our 2007 report *Active or Passive Management? It's Not That Simple*.

¹⁸ Managers are therefore likely to go through difficult periods when the largest stocks outperform.

traded to meet index inclusion standards. Given this, investors may in many cases find it preferable for alpha generation purposes to focus on managers running smaller-size funds. This also highlights the importance of continuing to find newer managers with smaller mandates. Of course, investors should also recognize that a focus on companies not included in the indices may result in an unintended small-cap bet (although it may be possible to hedge such a bet using futures or to adjust for such a bet by investing in low-cost, large-cap index funds).

Other good opportunities may lie in markets that have extremely small weights within broader indices or that are not included in such indices—witness investors suddenly flocking to frontier markets after eight years of significant outperformance. Indeed, just as EAFE-mandate managers¹⁹ have often sought a kicker by including some emerging markets names in their portfolios, emerging markets managers have more recently been dipping their toes into frontier markets. Investors should determine how much “non-benchmark” exposure they desire and should monitor the extent of such exposure in their portfolios (whether from companies inside or outside the market(s) tracked by their benchmark indices).

Valuations

Valuations are central to the process of investment decision making. While absolute valuations should always be paramount in an investor’s thinking, investors with a global equity portfolio will also have a deep interest in *relative* valuations. Such comparisons may allow investors to add value through manager and/or country and regional selection.

Exhibit 15 shows some key current and historical valuation ratios by region and country. Taking a broader perspective, we can see from Exhibit 16 that valuations of developed markets equities fell dramatically during the 1970s, bottoming out in 1982. On a 36-month rolling basis price-earnings (P/E) ratios for the MSCI World Index reached 8.8 in mid-1982, compared with 17.2 in November 1973. Valuations in the United States fell even more sharply during this period, to 7.9 from 17.8. MSCI World and MSCI U.S. P/E ratios subsequently rose steadily and almost without interruption over the next two decades, topping 35 in 1999 (for developed markets as a whole) and 34 in 2001 (for the U.S. market), before beginning an extended decline. P/E ratios for developed equity markets as a group have now sunk to levels last seen in 1985 (and, before that, 1974) while the P/E ratio for U.S. equities is the lowest it has been since 1995.

While the foregoing provides a useful historical perspective, we hasten to add that trailing P/E ratios can be a misleading indicator. For this reason, we often look at normalized and/or return on equity (ROE)-adjusted ratios, which smooth out recent results or incorporate expectations of a convergence of valuations among markets, to help inform our understanding of equity prices.²⁰ Such ratios indicate that, thanks to corporate earnings having reached cyclical highs in recent years, developed markets are significantly more expensive than trailing P/E ratios would suggest.

¹⁹ An “EAFE-mandate manager” is one that invests primarily in developed markets outside the United States and measures performance against the MSCI EAFE Index (Europe, Australasia, Far East).

²⁰ Please see our monthly *Notes on Current Valuations* for insights into our valuations process.

Our data set for emerging markets, which dates back to late 1995, is much shorter, but shows that while investors have traditionally demanded a discount for emerging markets equities compared to their developed markets counterparts (reflected in lower P/E, price-to-book, and price-to-cash earnings ratios) relative metrics have changed significantly in the last few years. Indeed, emerging markets traded at a *premium* to developed markets in 2007 and are at comparable levels today (Exhibit 17).

Relative valuations among markets have varied dramatically over the years. For example, the historical ROE of Japanese companies in the MSCI World Index as of June 30, 2008, is only 6.8%, less than half the 14.4% ROE of their U.K. counterparts. Asian constituents in the MSCI Emerging Markets Index have a historical P/E ratio of 20.4, almost 44% more than their Latin American counterparts.

Of course, this does not merit the conclusion that the U.K. market should be preferred over the Japanese market or that Latin American equities generally are undervalued relative to Asian equities. The discerning investor will seek to understand the reasons such disparities may exist and then make investments *based* on this knowledge. For example, markets such as the United Kingdom (energy, materials, and financials) and Latin America (materials) tend to be very concentrated in highly cyclical economic sectors that traditionally sport low P/E ratios. Sector weights may explain investors' willingness to grant higher P/Es to emerging Asian markets than to Latin American countries, but a better explanation might lie in Asia's lower inflation and greater macroeconomic stability.²¹ Historical Japanese ROEs are low in part because of protracted efforts by Japanese firms following the bubble to extract themselves from massive debt burdens—while the supposedly long-term thinking of Japanese corporate managers helps explain the higher P/Es traditionally accorded to Japanese firms.

Whatever the reason for historical valuation differences among markets, investors must focus on the future, not the past. Are current valuations skewed (and therefore misleading in relative as well as absolute terms) because of unusually high or low recent earnings? Or is historical data not compelling in certain cases? For example, an investor convinced that, say, the commodity boom has many more years to run might conclude that Latin American equities are undervalued relative to Asian equities, notwithstanding comparative historical valuation data. Have there been broad economic, regulatory, or political changes that have fundamentally changed the risk in a market or the long-term earnings expectations for firms in that market, indicating a secular shift in valuations? It is useful to explore such questions with current and prospective managers.

Performance

Return data since 1970, both for the whole time period and for subperiods, do *not* support the strategic case for all investors to invest globally.²² In fact, over the long term, investing globally rather than

²¹ It is also worth noting that MSCI P/E valuations for regional emerging markets only date back to 1995, long enough to include the Asian financial crisis of 1997–98 (which featured sky-high P/E ratios in regional markets due to the drastic decline in corporate earnings), but not the presumably comparable period for Latin America (the 1980s).

²² Higher return *expectations* may, however, provide investors a sound tactical reason to invest globally.

just at home would likely have lowered the returns of U.K., French, and Swiss investors while U.S. and German investors may also have lost out once the fees and expenses associated with a global equity portfolio were taken into account. The strategic case for a global portfolio therefore rests first and foremost on the diversification it provides, which has in the past and *may* in the future result in a significantly lower standard deviation of returns. However, U.S. investors have historically benefited less than non-U.S. investors from diversification into foreign markets both because U.S. equity returns have long been less volatile than those of other countries and because of the huge size and broad diversification of the U.S. market. In addition, the high correlations among markets in recent years have muted such benefits for all investors.

Returns

From 1970 through mid-2008 the average annual compound return (AACR) of the MSCI World Index was 8.4% (in nominal local currency terms) (Exhibit 18).²³ The AACRs for major developed markets and regions over this 38.5-year period range from a low of 7.0% for Japan to a high of 11.3% for the United Kingdom, with U.S. equities returning 9.2% annually. Since the MSCI World ex U.S. Index returned 10.4% in U.S. dollar terms, the United States thus underperformed other large developed markets and regions in such terms (Exhibit 19). U.S. dollar returns for the major non-U.S. markets were remarkably similar, with Europe ex U.K. the best performer by a slim margin, with an AACR of 10.8%.²⁴ U.S. equities have also substantially underperformed foreign equities, both developed and emerging, over the last five and ten years, especially in U.S. dollar terms.

Among the six markets (France, Germany, Japan, Switzerland, the United Kingdom, and the United States) for which we examined real returns in local currencies, AACRs for the period from 1970 through mid-2008 ranged from 3.7% for the MSCI Japan Index to 4.6% for the MSCI France Index (Exhibit 20). The MSCI U.S. and U.K. indices returned 4.3% and 4.4%, respectively.

Emerging markets equities have significantly outperformed developed markets equities as a whole since 1988 (when MSCI began coverage) in both U.S. dollar and local currency terms, with annual returns, respectively, of 15.2% and a stunning 38.1%. In the past five and ten years, the MSCI ACWI (which includes emerging markets), has outperformed most developed markets in both local currency and U.S. dollar terms thanks to poor U.S. returns. However, as a result of the anemic performance of Japanese equities, the ACWI has slightly *underperformed* most major developed markets indices over its 20.5-year history.

Emerging markets' outperformance has come at the cost of significantly higher volatility in local currency terms, although in U.S. dollar terms the volatility of emerging markets *as a group* has not been that

²³ We use the MSCI World Index rather than the MSCI ACWI because the latter index, which includes emerging markets, began only in 1988. From 1988 through June 2008 the MSCI World Index and MSCI ACWI had respective AACRs of 8.0% and 8.7% (in U.S. dollar terms) and 7.5% and 8.9% (in local currency terms).

²⁴ The MSCI U.K., Japan, and Pacific ex Japan indices returned 10.7%, 10.4%, and 10.0%, respectively, in U.S. dollars. Within Europe, Switzerland was an outlier, returning 11.6% in U.S. dollars (versus only 7.5% in Swiss francs), but France and Germany returned 10.7% and 10.5%, respectively, in U.S. dollars. Note that while currency plays a large role in returns (at least in the short and medium term), our analysis in Exhibit 19 assumes that investments outside the United States were unhedged.

much higher than that of Japan or the Pacific markets (Exhibits 18 and 19).²⁵ U.K. volatility has also been relatively high, while U.S. equity returns have been significantly less volatile than those of other markets in both U.S. dollar and local currency terms.²⁶

Diversification

For U.S. investors, Japan, Asia, and emerging markets traditionally have been the best sources of diversification, assuming unhedged returns (Exhibit 21). For U.K. investors, Japan has also offered the greatest source of diversification and the U.K. market has been less correlated with developed markets than with emerging markets (Exhibit 22). The Japanese market has been more highly correlated with emerging markets as a whole than with any other major market or region (Exhibit 23). Over the past 38.5 years, the Europe ex U.K. market has been most highly correlated with the U.S. market and with emerging markets and less so with either the U.K. or Japanese markets (Exhibit 24). In part, differences in correlations reflect different levels of fluctuations among currencies.

Equity market correlations can be highly volatile, however. Investors should consider how levels have changed over time and not assume that historical correlation levels will hold in the future. For example, in recent years European equities have become very highly correlated with U.K. equities (Exhibits 25 and 26). In general, equity market correlations have risen worldwide over the last ten years, reflecting the globalization of the world's economy and, increasingly, of investors (Exhibits 25–28).

Over short time periods, the range of performance among markets and market segments is strikingly wide, which enhances the benefits of diversification if investors rebalance and presents opportunities for tactical asset allocation. Exhibits 29 and 30 illustrate this from the perspective of a U.S. investor. Exhibits 31 and 32 are illustrative of the sorts of theoretical tactical opportunities that may be available. However, we emphasize that the full benefits of diversification are most likely to be realized over the long term.

Returns Based on Style, Cap Size and Sector

All five major global indices offer or will offer style breakdowns for global equities²⁷ and each differentiates large-, mid-, and small-cap stocks, although the methodologies differ.²⁸ From 1990 through mid-2008 small-cap and, especially, value stocks outperformed their large-cap and growth counterparts globally.²⁹ For the first 11 years of this period, growth and large caps outperformed significantly. Subsequently, from 2000 to 2006, value and small caps outperformed even more dramatically (Exhibits 33

²⁵ Volatility in large, individual emerging markets such as Brazil, China, Mexico, Russia, South Korea, and Taiwan, however, has been high.

²⁶ However, in local currency terms the volatility of the broad-based MSCI EAFE Index has been the same as that of the United States.

²⁷ Russell's valuation methodology is still in the developmental stage.

²⁸ Please see our May 2007 Market Commentary *Battle of the Benchmarks*.

²⁹ The United Kingdom was a significant exception, with small caps underperforming dramatically.

and 34).³⁰ A reversal has since ensued, with growth stocks sharply outperforming value issues and large caps outperforming small caps to a much lesser degree.

While academics continue to debate the relative importance of sectors versus countries, investor policy target allocations are still based much more on countries and regions than on sectoral targets. Nevertheless, investors do use sector analysis to better understand their portfolios and the market as a whole, which may reflect the fact that regional and global *managers* often use a sector-based approach in their organizational structure (i.e., one person covers the financial sector, another telecoms, etc., regardless of the companies' domiciles).

The global indices report sector returns under the Global Industry Classification Standards system (GICS), Industry Classification Benchmark (ICB) system, or their own systems. Both the GICS and ICB systems classify companies within one of ten industry or economic sectors and then within narrower subdivisions of these sectors. There are 147 “sub-industries” (GICS) or 104 “sub-sectors” (ICB), which permit correlation and other analysis at a micro level. Industry correlations may be particularly relevant for investors whose home markets have high sector concentrations. For example, as of June 30, 2008, the financial and energy sectors made up a combined 43.3% of the MSCI U.K. Index while the financial sector alone made up 42.0% of the MSCI Pacific ex Japan Index.

For the 13.5 years for which we have S&P/Citigroup Global Broad Market Index data, energy (17.9% AACR) has easily been the top sector performer, followed by materials (11.9%) and utilities (11.8%). Consumer discretionary equities (6.0%) and information technology (8.2%) have been the worst performers, as the total index returned 9.5% (Exhibit 35).³¹

A recent MSCI study that decomposed asset returns from 1999 to 2007 concluded that “while industry selection sometimes matters as much as country selection in explaining returns in Developed Markets, country selection plays a much more significant and consistent role [than either industry or style] in Emerging Markets.”³² In fact, country selection appeared to have accounted on average for more than 60% of returns.

Investment Strategy and Implementation

In an increasingly broad and integrated global equity market offering a rich opportunity set, how can investors best position their portfolios to capture value? While analysis often centers around asset allocation

³⁰ To analyze returns by market cap and style we use returns from S&P/Citigroup, for which we have a longer history than for MSCI. However, MSCI and S&P/Citigroup results are similar for the shorter period for which we have data from both providers.

³¹ We use the S&P/Citigroup Global Broad Market Index because its data for emerging markets date back six years further than that of the MSCI ACWI. The post-2000 results for the two indices are similar.

³² Arun A. Kumar, “The World Is Not Enough,” MSCI Barra Research Institute, July 2008, p. 9. The quotation above refers to the findings of a second MSCI study referenced in the Kumar paper.

strategy (e.g., increasing the allocation to foreign securities), this is just a starting point.³³ Realization of portfolio goals increasingly requires adopting both an appropriate global equity investment strategy and a well-thought-out implementation plan that includes decisions regarding portfolio structure and how much of the portfolio should be devoted to seeking alpha rather than beta.

Home Bias and a Global Equity Strategy

It is sometimes argued that globalization makes home bias less of an issue than it once was. However, it can be difficult or impossible to determine what percentage of revenue—and of income—firms earn outside their home market. Overweighting domestic firms with extensive overseas sales is also likely to create a large-cap bias in an investment portfolio and can magnify sector biases present in the home market. Thus, it may well result in a *less* diversified set of equity holdings—undercutting one of the very rationales for a global portfolio. Regardless of whether there may be a bullish case for multinationals,³⁴ buying the shares of domestic multinationals is therefore *not* a substitute for investing globally.

Treating global equities as a single asset class should increase investors' ability to craft their strategy explicitly on the basis of which bets they wish to take and which risks they want to incur. In particular, the adoption of a global strategy puts the question of alpha front and center, with the key issues becoming: (1) "In what areas should we use active management strategies in pursuit of alpha?" and (2) "In seeking alpha, which decisions should *we* be making about regions, sectors, countries, styles, and cap and which should we defer to our managers?"³⁵

Active Versus Passive Management

The growth of investment products and vehicles has given investors more options to customize their portfolios, obtaining beta through passive vehicles, and focusing on active managers as potential sources of alpha. Decisions regarding the extent to which active management is used should reflect the investors' attitudes toward and ability to bear risk, their views on where managers are likely to add value, and their broader outlook on equity markets. Managers can be employed (or deferred to) to express a view or make a bet (e.g., emerging or frontier regions versus the U.S. and/or other developed markets; commodity producers versus users; growth versus value; small cap versus large cap).

While a global strategy should include a benchmark or benchmarks that truly encompass the broad spectrum of global equities, it is important to recognize that the opportunity set available to investors today is far more nuanced than even the MSCI ACWI, the most commonly used global index, can hope to capture. As

³³ In a world in which general concepts of asset allocation have become conventional wisdom, this point is particularly true for investors interested in relative performance against their peers.

³⁴ Please see our June 2006 Market Commentary *Investing Abroad While Staying at Home: The Case of the United Kingdom*. Note also that in some instances multinationals may be poised to reap greater benefits than local firms in certain emerging markets.

³⁵ In considering home bias (and other aspects of a global equity strategy) readers should bear in mind that public equities constitute just one part of the investment portfolio. Decisions regarding the use of managers and search for alpha in the global equity market should complement allocations to hedge fund, private equity, and other asset classes, which will also help determine the makeup of total portfolio exposure to home- versus foreign-based assets.

we have seen, a large majority of listed companies in constituent markets are not even included in the index. Frontier markets, meanwhile, which many see as the next big area of growth, are not included at all. A decision to use active managers to gain exposure to such areas therefore requires a willingness to accept high tracking error versus traditional equity benchmarks or to adopt much more recently created (and less-used) benchmarks such as the MSCI All Country World Investable Market Index (which includes small-cap companies) or the MSCI All Country World and Frontier Markets Index.

In an earlier study we found that from a U.S. perspective a majority of global ex U.S. equity managers and emerging markets managers added value on a net basis over the period from 1999 through 2006, whereas a majority of their U.S. mid-/large-cap and small-cap counterparts did not.³⁶ However, since only eight years of data were available, this is not statistically significant. Moreover, even ex U.S. developed and emerging markets managers underperformed their benchmarks over the last three years of the study.

Implementation and Portfolio Structure

In light of the foregoing it should be readily apparent that portfolio structure (and, by extension, selection) is an area that demands considerable investor attention. A well-crafted portfolio structure should enable investors (or their managers) to easily dial exposure up or down among sectors, regions, styles, and cap sizes. It should include some dedicated exposure³⁷ to emerging markets, given their increasing importance,³⁸ unless the investor has made an affirmative tactical decision to temporarily avoid such markets.

Exhibits 36–39 illustrate one way of thinking through some possible portfolio structures, from the simplest structure to more complicated approaches. The simplest structure uses one or more global managers with either similar or complementary mandates. Investors with a large home market such as the United States might also use different managers to focus on domestic and foreign securities, while making sure the total portfolio is managed in a manner consistent with their global equity strategy.

A regional structure is more complicated. For example, we have written about dividing the world for investment purposes into (1) Asia, (2) Europe, the Middle East, and Africa, and (3) the Americas.³⁹ Such an approach lets investors take advantage of research insights into and/or pick managers with specific knowledge of, and capabilities in, local and regional markets. The regional approach also lends itself to making country-specific bets (e.g., China or India) although the investor must be particularly careful in such cases to monitor overall portfolio exposure to such countries.

A regional structure is perhaps more conducive to hands-on investor involvement in seeking alpha, since it typically involves hiring more specialized managers to gain extremely targeted exposures. Bottom-up,

³⁶ Please see our 2007 report *Active or Passive Management? It's Not That Simple*. Fees of 60 basis points (bps) were imputed to U.S. mid- to large-cap managers and fees of 100 bps were imputed to U.S. small-cap managers, ex U.S. developed markets managers, and emerging markets managers.

³⁷ Some EAFE managers invest a small portion of their assets under management in emerging markets.

³⁸ As of June 2008 emerging markets constituted a larger percentage of the investable universe than any country other than the United States.

³⁹ Please see our November 2005 Market Commentary *Increasing Strategic Equity Allocations to Asia* and our 2006 report *Cutting Strategic Allocations to U.S. Equity*.

stock-picking regional managers are more likely than global managers to have expertise in smaller-cap securities and might also be a better choice for investing in Japan, since a market that was underweighted by managers for so many years requires more specialized knowledge and expertise than is likely to be found among managers with broad, global mandates.

On the other hand, a regional portfolio structure might make it hard to gain exposure to emerging markets *within* one or more regions. For example, given the size of the U.S. market, how likely is it that a manager focused on the Americas will be equipped to invest productively in Latin America? A possible solution is to use a separate manager for Latin America or other emerging markets, but the breadth and quality of product offerings for such small markets is unclear.

A regional portfolio structure also might imply a need or willingness to have regional weights that are dissimilar to those of commonly used benchmarks such as EAFE. The investor would therefore need to be able to tolerate returns (on the part of managers or for the portfolio as a whole) that are very different from those of its peers, something unacceptable for many institutions.⁴⁰ However, a similar issue may also arise in the case of a global structure. In the implementation context, the search for alpha and use of active management, not the structure, will be the principal causes of differences in performance.

A global structure provides managers with the greatest flexibility and is also likely to be less costly because (1) fees of EAFE-mandate managers (which might be used in a global portfolio structure) are often lower than those of regional managers, some of which charge incentive fees, and (2) it is likely to involve fewer managers than a regional strategy. A global portfolio structure will also probably mean that an investor can devote far fewer resources to overseeing asset allocation among regions and handling rebalancing questions. For reasons related to both costs and resources, the global approach tends to be favored by investors outside the United States and United Kingdom. Global portfolio structures have also become more popular over the past few years as a result of the increased breadth of multinationals (making some global strategies more viable), greater investor demand (particularly from outside the United States), and such structures' compatibility with manager infrastructures that are more sectorally based than in the past. For taxable investors, an added consideration is that certain global structures will be more tax efficient than complex regional structures involving many managers.

While some non-U.S. investors look to global managers for basic global exposure, many such managers hold highly concentrated portfolios (say 40 to 50 stocks) geared toward alpha seekers that look much different than any index. The risks of overly high tracking error and excessive volatility can potentially be reduced through the use of core-satellite or complementary structures (e.g., global style and value managers), but this will reduce manager flexibility. Still, while there are an increasing number and variety of global products and the general level is superior to that of previous offerings, concerns remain about global managers having adequate depth in larger markets such as the United States. Indeed, global managers are likely to underweight the United States.

⁴⁰ This point is discussed in *CA Perspectives*, Vol. 2, Issue 2 (Summer 2007).

The comparative performance record of managers using regional, global, or traditional (home/foreign) portfolio structures is not clear. Certainly, from a U.S. investor perspective, global managers, by underweighting U.S. stocks, performed poorly in the late 1990s vis-à-vis the traditional U.S./EAFE manager model. Two recent studies of global versus regional manager alpha found that global managers added higher value than regional managers.⁴¹ Yet one of these studies also found that regional managers added more alpha in Japan and emerging markets than did global managers.⁴²

Decisions regarding portfolio structure will likely hinge on how investors answer several important questions. How much passive exposure does the investor want? A heavy bias toward passive exposure might suggest using a core-satellite strategy in which the “core” is handled through passive vehicles while alpha strategies are pursued through more specialized managers. One such strategy is a global core with satellite regional or country managers.

Another key question is how willing an investor is to delegate decision making to managers. An investor less committed to a particular region or emerging market will normally be prepared to hire managers with broader rather than narrower mandates. And, of course, investors always face the practical question of whether they can actually populate their desired structure with suitable managers.

Finally, we note that in practice many investors have not fundamentally revised their portfolio structures, even as they have expanded their opportunity sets globally. Instead, they have tended to adopt “hybrid” structures that place targeted global exposure (focused on a specific region or country or, increasingly, on the broader opportunity set accessible via a global manager) on top of an existing, traditional home market/non-home-market portfolio structure.

Currency Hedging

Exposure to foreign equities creates currency risk, even when foreign currencies are pegged to the dollar. In contrast to foreign bond mandates, where this risk is more obvious due to bonds’ lower volatility, foreign equity mandates (at least for U.S.-based investors) have typically been unhedged. However, as investors adopt a more global approach, the currency risk associated with foreign equities becomes increasingly important, particularly because the typical investor spends primarily in one currency.

Notwithstanding a recent MSCI study of developed markets returns from 1970 to 2007, which found that U.S. investors *not* hedging foreign currency exposure would have received a higher return than hedgers (albeit at a higher risk), our view is that *over the longest term* the expected return from passive exposure to currencies should be zero (i.e., currency risk is not diversifying and investors therefore do not expect to be compensated for it). However, we do not believe that investors need not worry about currency issues. For many, if not most, investors there is a point at which the risks of shorter-term, currency-induced volatility can overwhelm the benefits of a globally diversified portfolio. This point will vary according to investors’

⁴¹ “Home Country Bias: Where Traditional Asset Allocations Falls Short,” Alliance Bernstein, March 2006, and “Global Versus Regional Equity Investing,” Wellington Management, March 2007.

⁴² “Global Versus Regional Equity Investing,” Wellington Management, March 2007.

spending needs and tolerance for volatility, as well as the overall composition of their portfolios. Investors should consider at what level exposure to foreign equities begins to create serious currency risk and determine how much of such risk to hedge.⁴³

The Implications of Some Newer Developments in the Global Equities Market

Sovereign Wealth Funds

Although governments such as those of Norway, Singapore, and some of the Gulf states have for some time invested “excess” foreign reserves or other funds in global equity markets, the scale of potential investment by newer players, particularly China, Russia, and, possibly, Brazil and Japan, suggests strong price support for global equities in the years ahead.⁴⁴ Diversification of huge government pension holdings may provide a further tailwind.

On the other hand, the growth in sovereign wealth funds (SWFs) could inspire governments to protect certain companies or industries from foreign government control. Many countries have expressed alarm about foreign government–controlled entities controlling their “strategic” resources and this may well morph into the adoption of investment restrictions that impact some equity markets. Tellingly, however, in recent months we have heard much less alarm expressed on this score, suggesting that as governments confront falling equity markets and slowing economies they see the value that SWFs can provide. Of course, the apparent reluctance of SWFs to pony up new funds for the beleaguered financial sector lately shows that changes in sentiment work both ways. In sum, we would judge that while governments’ concerns about SWF investment may translate into some restrictions and while SWFs will not always be interested in adding to their equity stakes, SWF investments should support equity valuations.

Government Interventions

Since governments in many developing (and some developed) markets still control substantial percentages of national or corporate assets, accelerated privatization would create more opportunities for investors and make local bourses more representative of the broader economy. Yet such privatizations can also have a disruptive impact in the shorter term, diluting the value of existing issues, and impeding market development as long as the overhang of unissued shares concerns investors—as it certainly has, for example, in China. Moreover, privatization will not necessarily carry the day: the trend toward nationalization of the hydrocarbon industry, particularly in Russia, is but one sign that not all governments are fully committed to free markets.

⁴³ For an in-depth discussion of currency management issues, see our forthcoming report *Currency Hedging*.

⁴⁴ For more details, please see our June 2007 Market Commentary *Potential Implications of Foreign Exchange Reserve Diversification*. As of early 2008 Asian reserves alone were more than \$4.5 trillion. The International Monetary Fund, *Regional Economic Outlook: Asia and Pacific* (April 2008), p. vii.

Indeed, some would argue that the substantial government intervention by the U.S. and other governments in response to the financial crisis that has roiled markets since the summer of 2007 also poses a significant challenge to free markets. After the free-market euphoria of the 1990s the pendulum in developed markets certainly seems to have swung back in favor of greater government regulation and control, which may impede the growth of public equity markets. Rightly or wrongly, “deregulation” is now blamed by many for the market’s ills. Regulations such as Sarbanes-Oxley and those that might be adopted in response to the ongoing financial crisis increase corporate expenses, drive down public equity valuations, and encourage the growth of private markets. Thus, there has been an enormous volume of public to private transactions in the United States over the last few years, much larger than the monies raised by corporate America via initial and secondary stock offerings. Nasdaq officials’ prediction that in a few years stock offerings on private markets will far exceed IPOs is plausible given the volume of uninvested capital now committed to private equity firms; at some point this should create a huge overhang in the IPO market.

Higher Economic Growth and Enhanced Trading Opportunities

High global economic growth, particularly in major developing markets such as China and India, has provided hundreds of millions more people with the money both to invest and to consume (which supports corporate earnings). At the same time, trading is becoming easier and less expensive, at least for investors in developed markets such as the United States. Online trading and 24-hour trading may well boost the activity of individual investors, which supports the global market.⁴⁵ Likewise, the ongoing consolidation of and partnership among the world’s stock exchanges should increase the opportunity set available to all investors. All of these trends are supportive of global equity markets.

However, economic growth is cyclical and uncorrelated with equity returns. In addition, the effect of plunging equity prices on investor psychology can last a generation or more (e.g., the United States after the Great Depression or Japan following the bubble of the late 1980s), with a profound impact on further market development. The danger of an extremely sharp downturn that results in investor disillusion with equity investments may be compounded by the very high correlations among different equity markets in recent years.

Conclusion

Equity valuations are more reasonable now than they have been for some time, but the fallout from the crisis in the U.S. housing and credit markets, slump in developed markets economies, uncertain effect of massive government intervention, and strong deflationary and (until recently) inflationary pressures globally make today’s investment environment a particularly challenging one. Meanwhile, the benefits of equity diversification have become common wisdom—even as such benefits decrease due to higher correlations

⁴⁵ U.S.-domiciled global and international exchange-traded funds (ETFs) have grown at an annual 72.7% clip since 2000. Almost 28% of U.S. equity ETFs assets were invested in global and international equity funds in 2008, compared with just 3.1% in 2000.

among equity markets. Nevertheless, it is clear that strategic and tactical opportunities are available for those investors with clear, well-thought-out equity investment strategies.

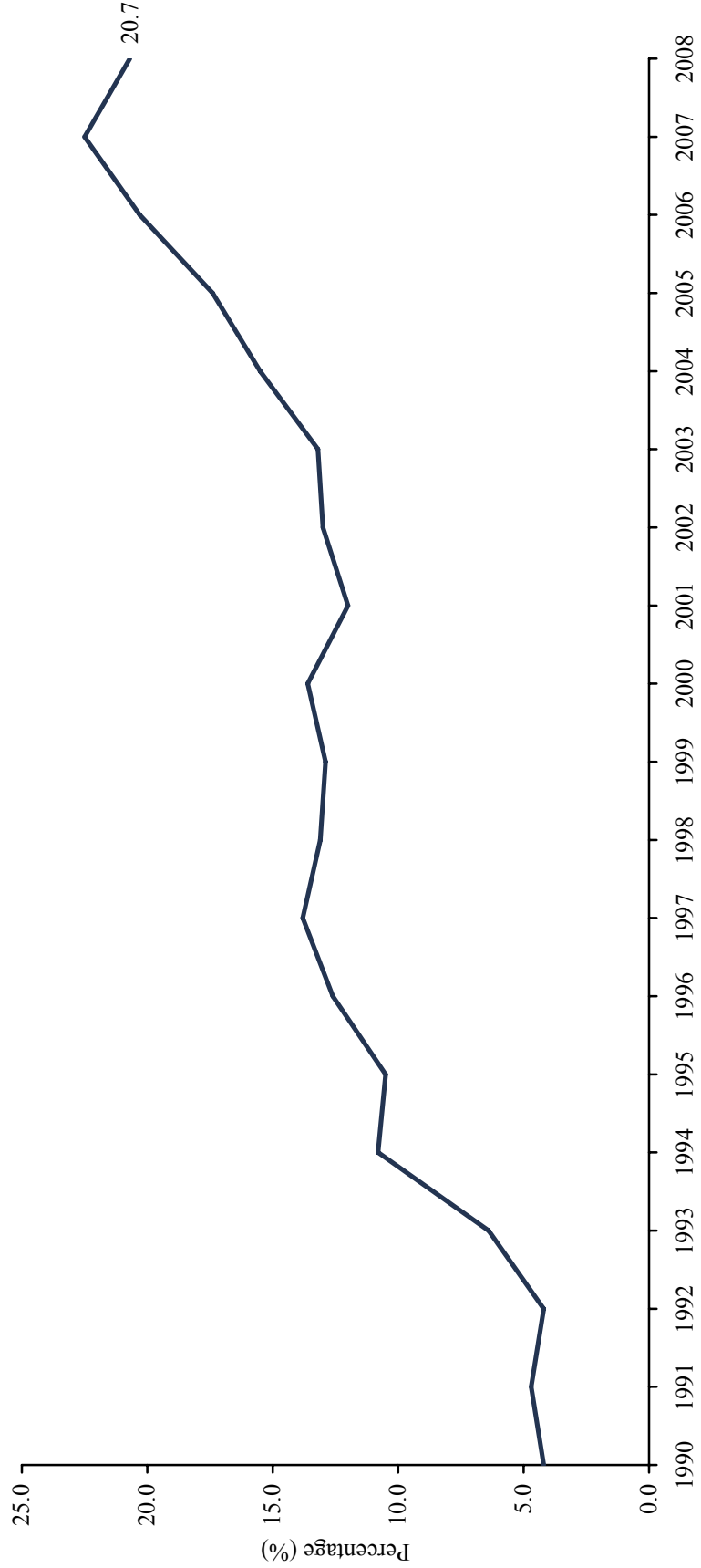
Such strategies are based on the recognition that global equities are best seen as a single asset class. A global equity strategy should reflect the investor's spending needs, risk profile, and views on which areas to target for alpha. While the increasing number of passive options provides a strong argument for making substantial use of low-cost, beta vehicles, there are also good reasons for seeking alpha in the right places and through the right managers.

Proper implementation of investment strategy is crucial and involves questions such as portfolio structure and currency hedging. Portfolio structure includes creating an integrated portfolio that allows the investor to make bets when and where it desires and finding quality managers, particularly those that focus on smaller-cap stocks (those within and outside the global indices). The investor should look not only at established managers, but also at newer, smaller managers with more incentive to perform (as opposed to just collecting fees).

A successful global equity investment strategy requires not only the adoption and implementation of an appropriate strategy but also the allocation of the necessary resources. As an investor considers strategies centered on the use of a relatively larger number of managers and/or the search for more alpha it should consider both existing capabilities and its ability to supplement such capabilities as necessary to support such strategies.

EXHIBITS

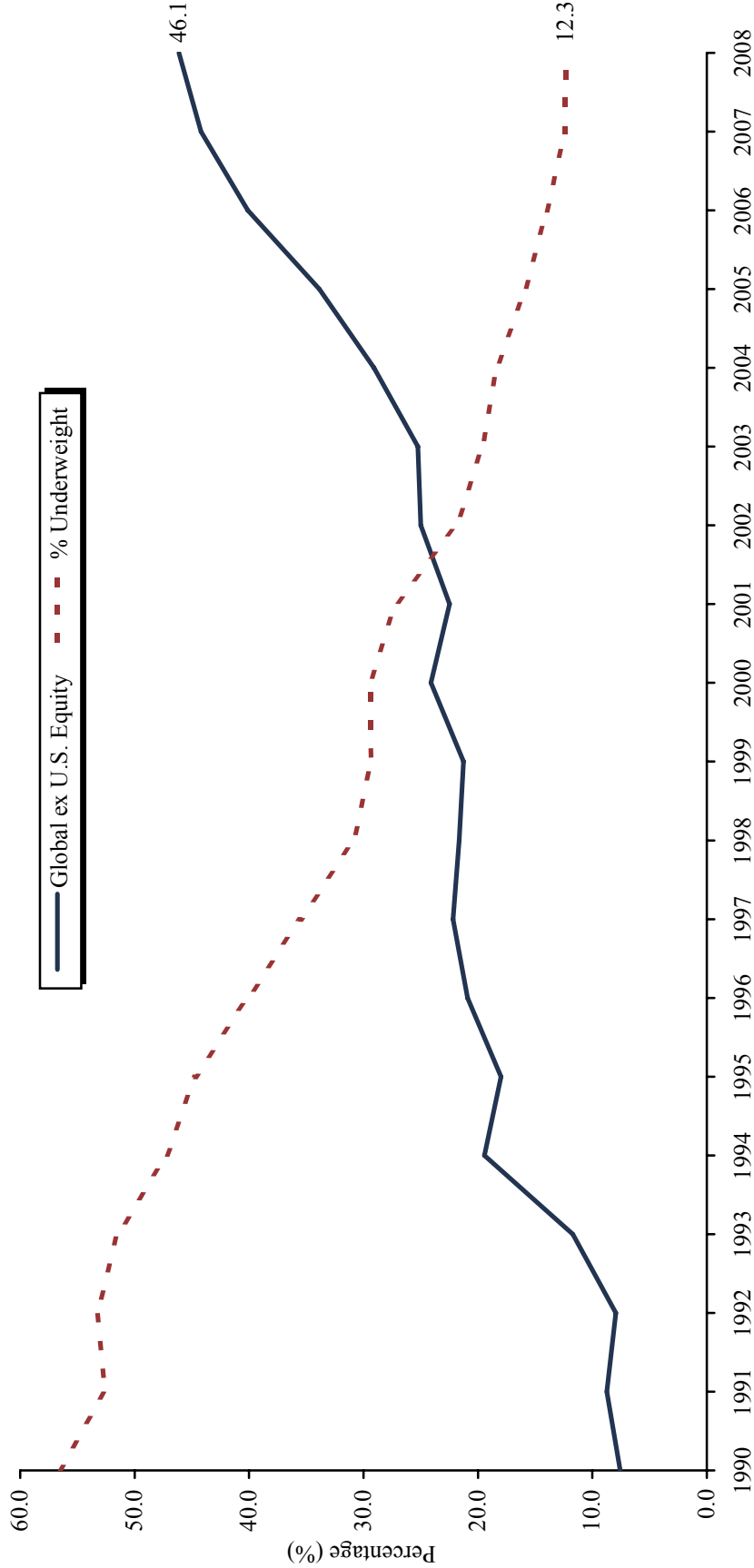
Exhibit 1
AVERAGE ALLOCATION TO GLOBAL EX U.S. EQUITIES (CA U.S. ENDOWMENTS)
1990-2008



Source: Cambridge Associates LLC.

Note: Data are as of June 30 of each year.

Exhibit 2
UNDERWEIGHTING OF GLOBAL EX U.S. EQUITIES (CA U.S. ENDOWMENTS)
1990–2008



Sources: Cambridge Associates LLC, FactSet Research Systems, and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

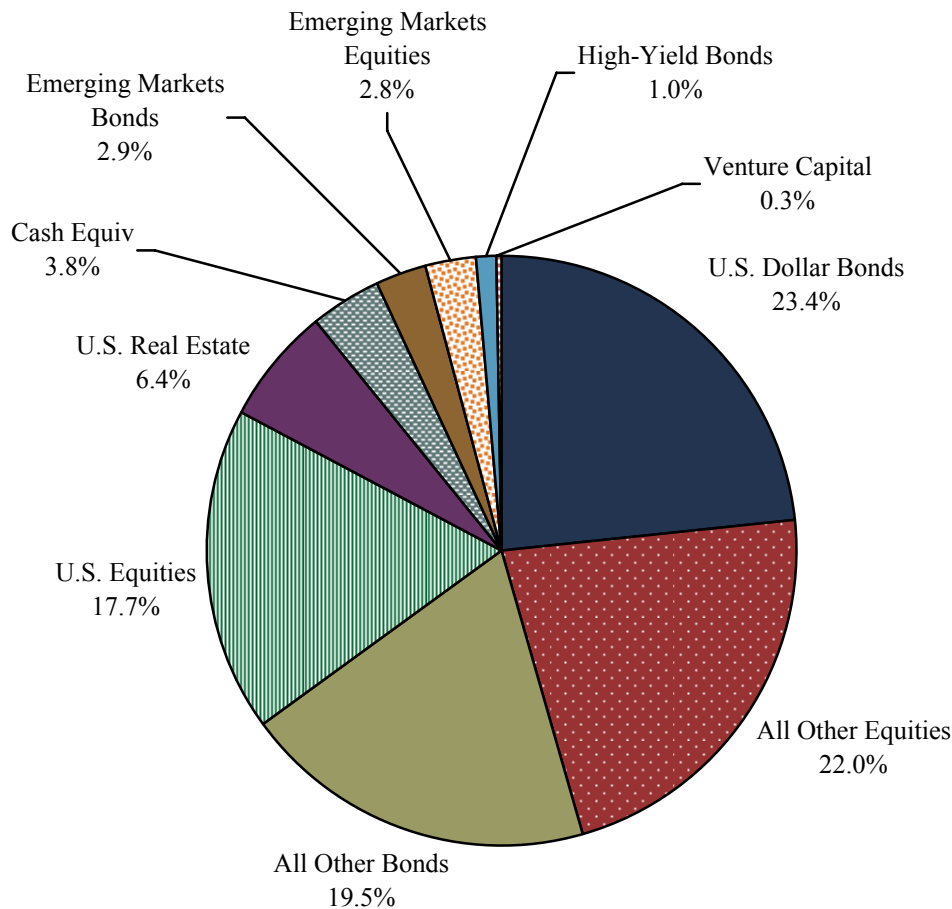
Notes: Global ex U.S. equity is a percentage of the dedicated total equity allocation and does not include other sources of equity exposure, like that from marketable alternatives. Data are as of June 30 of each year.

Exhibit 3

GLOBAL INVESTABLE CAPITAL MARKET ASSET BREAKOUT

As of December 31, 2007

US\$109.0 Trillion

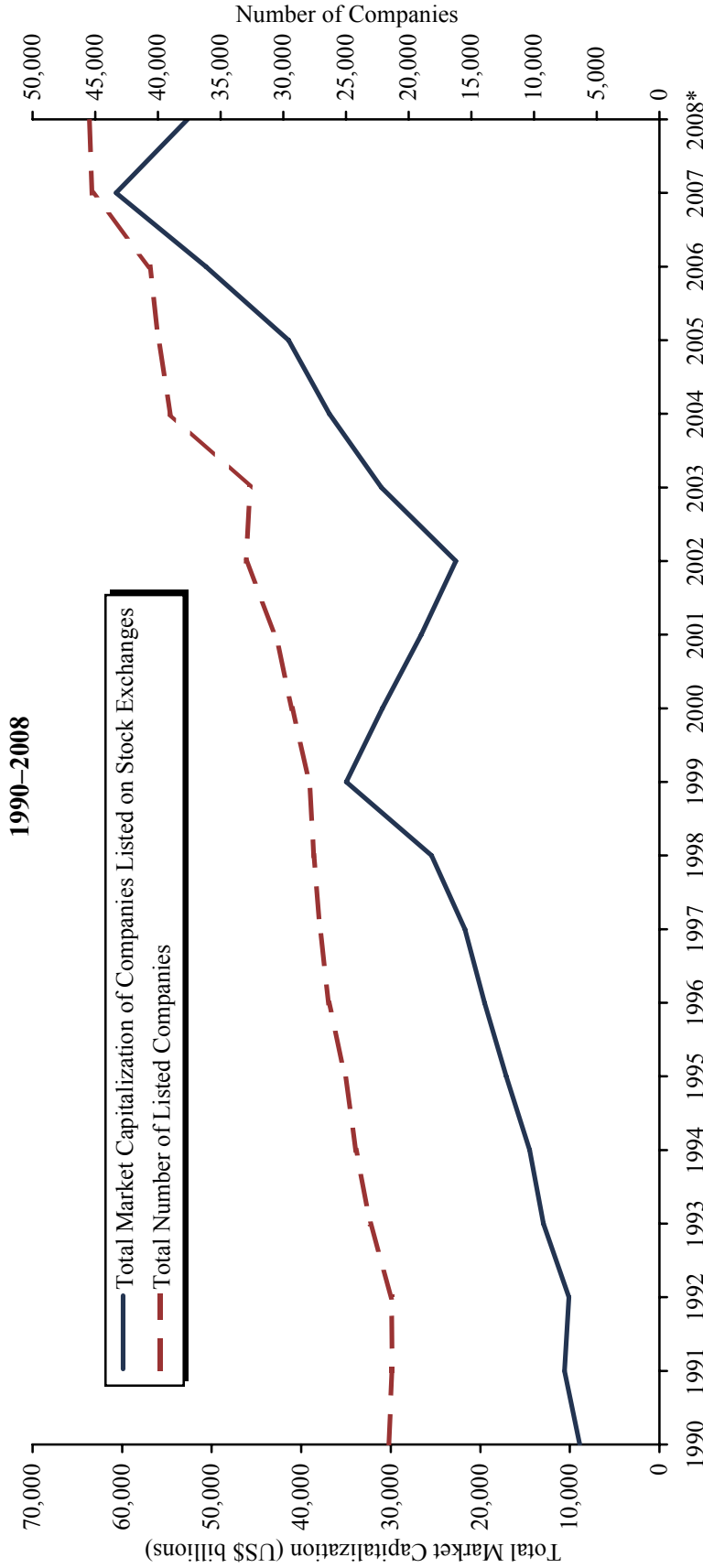


Source: UBS Global Asset Management.

Notes: December 31, 2007, data are preliminary. UBS does not provide a breakdown of non-U.S. equities by market. The U.S. real estate calculation is based on data from the Bureau of Economic Analysis' Survey of Current Business and Federal Reserve's Flow of Funds Accounts. U.S. real estate does not include corporate land and structures, since they are already included in the companies' market value; data for the value of land and structures come from the annual flow of funds data for residential, non-corporate, and non-farm. Figures may not total due to rounding.

Exhibit 4

NUMBER AND TOTAL MARKET CAPITALIZATION OF GLOBAL STOCK EXCHANGE-LISTED COMPANIES



Source: World Federation of Exchanges.

Notes: Data are based on exchange-reported numbers listed in the "main markets" section of the World Federation of Exchanges report. Total market capitalization excludes the National Stock Exchange of India from 2002-06 and Osaka Stock Exchange from 2004-06 to prevent double counting with the Bombay Stock Exchange and Tokyo Stock Exchange, respectively. Data include common and preferred shares, and exclude investment funds, rights, warrants, convertibles, and foreign companies.

* Data for 2008 are through June 30.

Exhibit 5
INVESTABLE PERCENTAGE OF DEVELOPED MARKETS

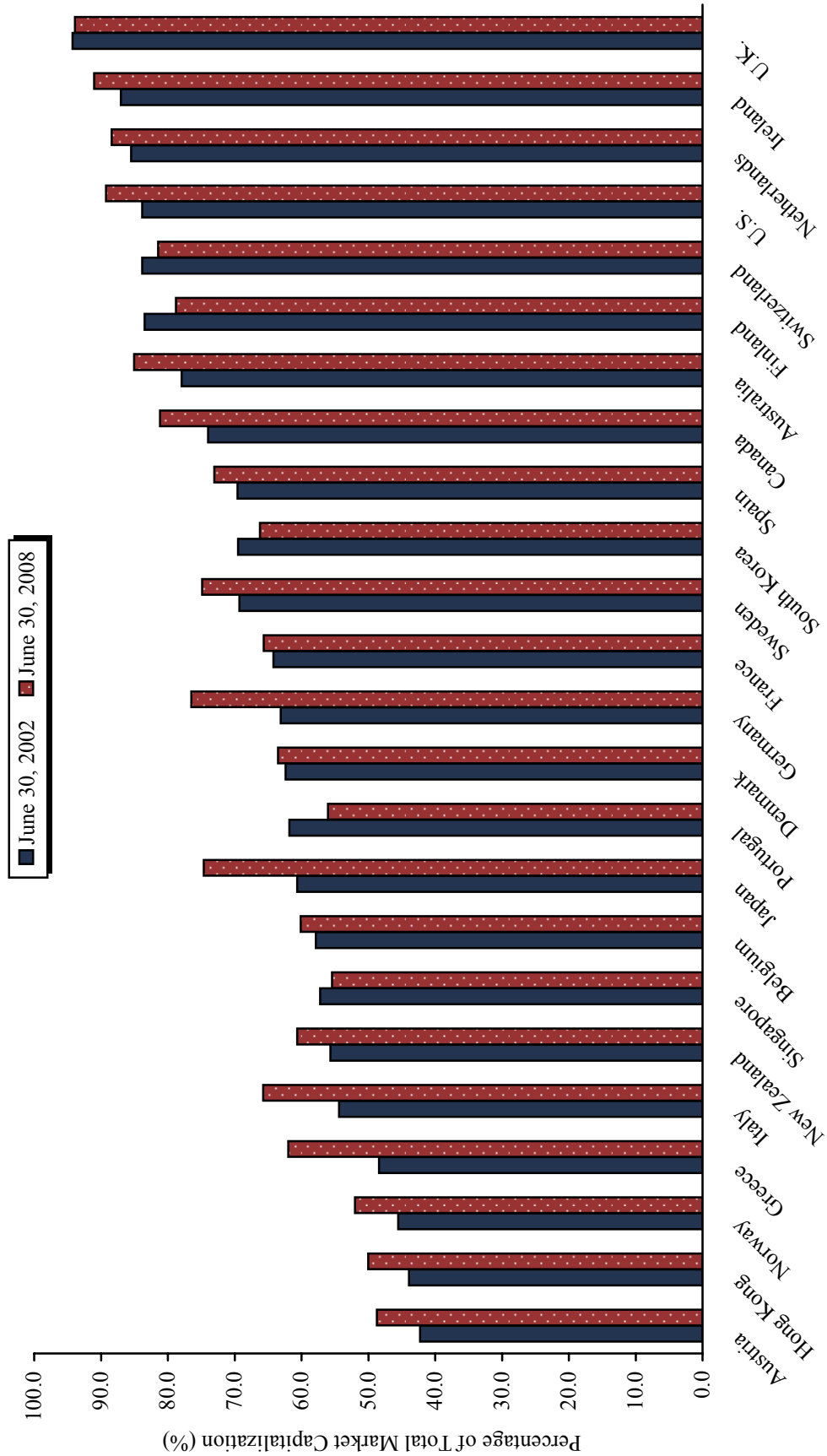
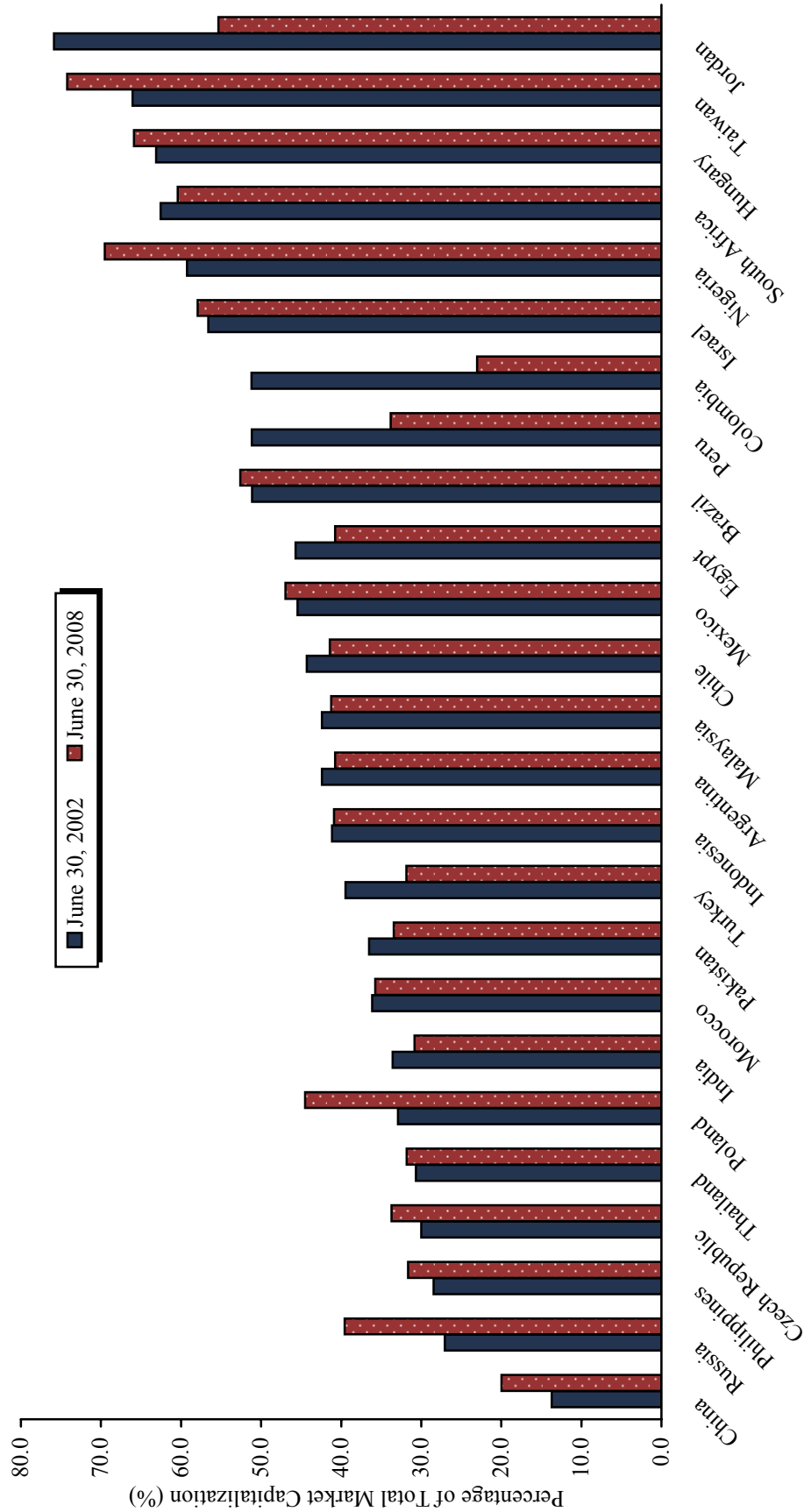


Exhibit 5 (continued)

INVESTABLE PERCENTAGE OF EMERGING MARKETS

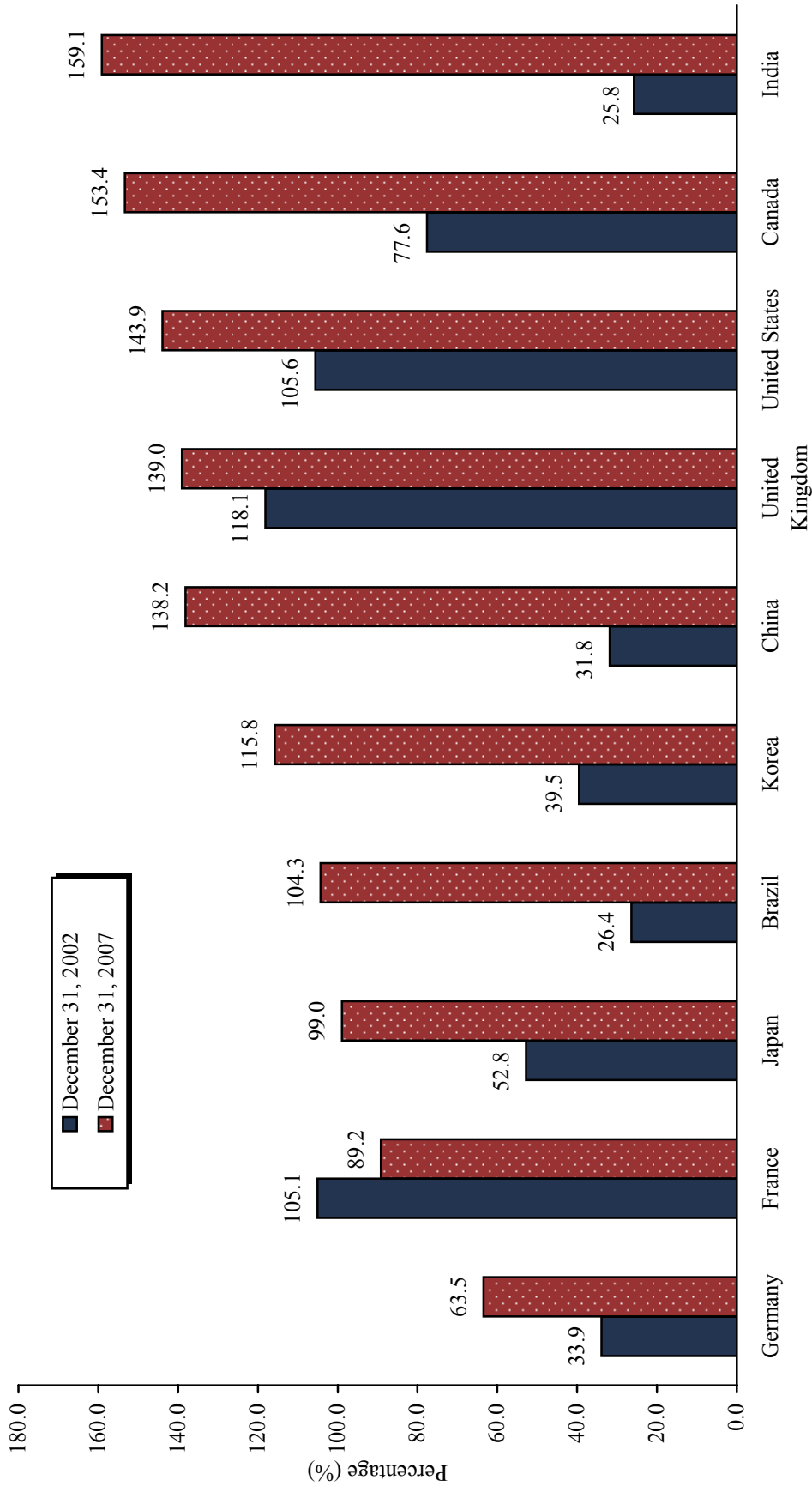


Sources: S&P/Citigroup Global Equity Indices and Standard & Poor's.

Notes: Data are from the S&P/Citigroup Global Broad Market Index. "Investable," or float-adjusted, represents the market capitalization that is available for purchase in the open markets.

Exhibit 6

MARKET CAPITALIZATION AS A PERCENTAGE OF GDP



Sources: Economist Intelligence Unit, NYSE Euronext, Thomson Datastream, and World Federation of Exchanges.

Note: France's 2002 data are derived from the market capitalization of the Euronext exchange, while 2007 data are derived from the Euronext Paris exchange.

Exhibit 7

WORLD EXCHANGES EXCEEDING \$1 TRILLION

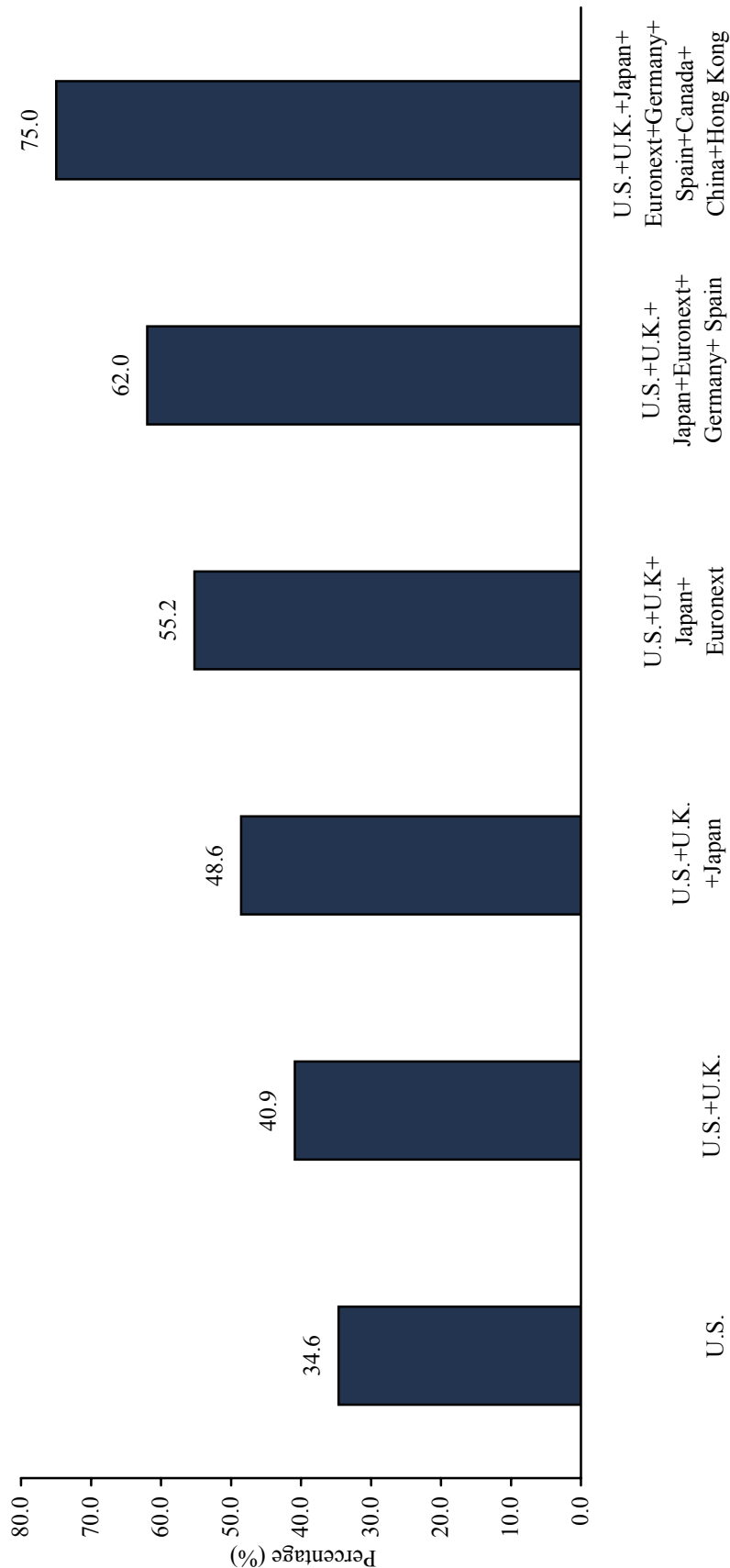
As of June 30, 2008

<u>Rank</u>	<u>Exchange</u>	<u>Market Capitalization (US\$ billions)</u>	<u>Percentage of World Market Cap (%)</u>
1	NYSE Group	14,413.3	27.3
2	Tokyo SE	4,042.8	7.6
3	NASDAQ	3,603.2	6.8
4	Euronext	3,500.9	6.6
5	London SE	3,308.7	6.3
6	TSX Group	2,168.0	4.1
7	Shanghai SE	2,105.9	4.0
8	Hong Kong Exchanges	2,096.4	4.0
9	Deutsche Börse	1,811.8	3.4
10	BME Spanish Exchanges	1,749.0	3.3
11	São Paulo SE	1,495.1	2.8
12	Australian SE	1,238.1	2.3
13	Swiss Exchange	1,182.7	2.2
14	OMX Nordic Exchange	1,043.5	2.0
15	Bombay SE	1,020.3	1.9

Source: World Federation of Exchanges.

Exhibit 8
MAJOR MARKETS AS A PERCENTAGE OF GLOBAL EQUITY MARKET

As of June 30, 2008



Source: World Federation of Exchanges.

Notes: Total market capitalization excludes National Stock Exchange of India and Osaka Stock Exchange to prevent double counting with the Bombay Stock Exchange and Tokyo Stock Exchange, respectively. It includes common and preferred shares, and excludes investment funds, rights, warrants, convertibles, and foreign companies. Euronext includes Belgium, France, the Netherlands, and Portugal.

Exhibit 9

MSCI ALL COUNTRY WORLD INDEX COUNTRY ALLOCATIONS

As of June 30, 2008

	Percent of Index (%)			Percent of Index (%)	
	<u>MSCI EAFE</u>	<u>MSCI ACWI</u>		<u>MSCI EM</u>	<u>MSCI ACWI</u>
MSCI Austria	0.6	0.3	MSCI Argentina	0.7	0.1
MSCI Belgium	1.0	0.4	MSCI Brazil	17.6	2.0
MSCI Denmark	1.0	0.4	MSCI Chile	1.1	0.1
MSCI Finland	1.6	0.7	MSCI Colombia	0.4	0.0
MSCI France	10.7	4.6	MSCI Mexico	4.9	0.6
MSCI Germany	9.1	3.9	MSCI Peru	0.7	0.1
MSCI Greece	0.7	0.3	MSCI EM Latin America	25.5	2.9
MSCI Ireland	0.6	0.2			
MSCI Italy	3.8	1.6	MSCI Czech Republic	0.9	0.1
MSCI Netherlands	2.6	1.1	MSCI Hungary	0.8	0.1
MSCI Norway	1.1	0.5	MSCI Israel	2.5	0.3
MSCI Portugal	0.3	0.1	MSCI Jordan	0.1	0.0
MSCI Spain	4.1	1.7	MSCI Poland	1.6	0.2
MSCI Sweden	2.2	0.9	MSCI Russia	11.0	1.3
MSCI Switzerland	7.1	3.0	MSCI Turkey	1.3	0.2
MSCI United Kingdom	21.9	9.3	MSCI EM Europe & ME	18.2	2.1
MSCI Europe	68.4	29.1			
			MSCI China	14.1	1.6
MSCI Australia	6.8	2.9	MSCI India	5.7	0.7
MSCI Hong Kong	2.1	0.9	MSCI Indonesia	1.6	0.2
MSCI Japan	21.4	9.1	MSCI Korea	12.6	1.5
MSCI New Zealand	0.1	0.0	MSCI Malaysia	2.3	0.3
MSCI Singapore	1.2	0.5	MSCI Pakistan	0.2	0.0
MSCI Pacific	31.6	13.5	MSCI Philippines	0.3	0.0
			MSCI Taiwan	10.5	1.2
MSCI EAFE	100.0	42.5	MSCI Thailand	1.3	0.2
			MSCI EM Asia	48.6	5.6
MSCI Canada	---	4.3			
MSCI United States	---	41.6	MSCI Egypt	0.7	0.1
			MSCI Morocco	0.4	0.0
MSCI North Am	---	45.9	MSCI South Africa	6.6	0.8
			MSCI EM	100.0	11.6

Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Note: Figures may not add to totals due to rounding.

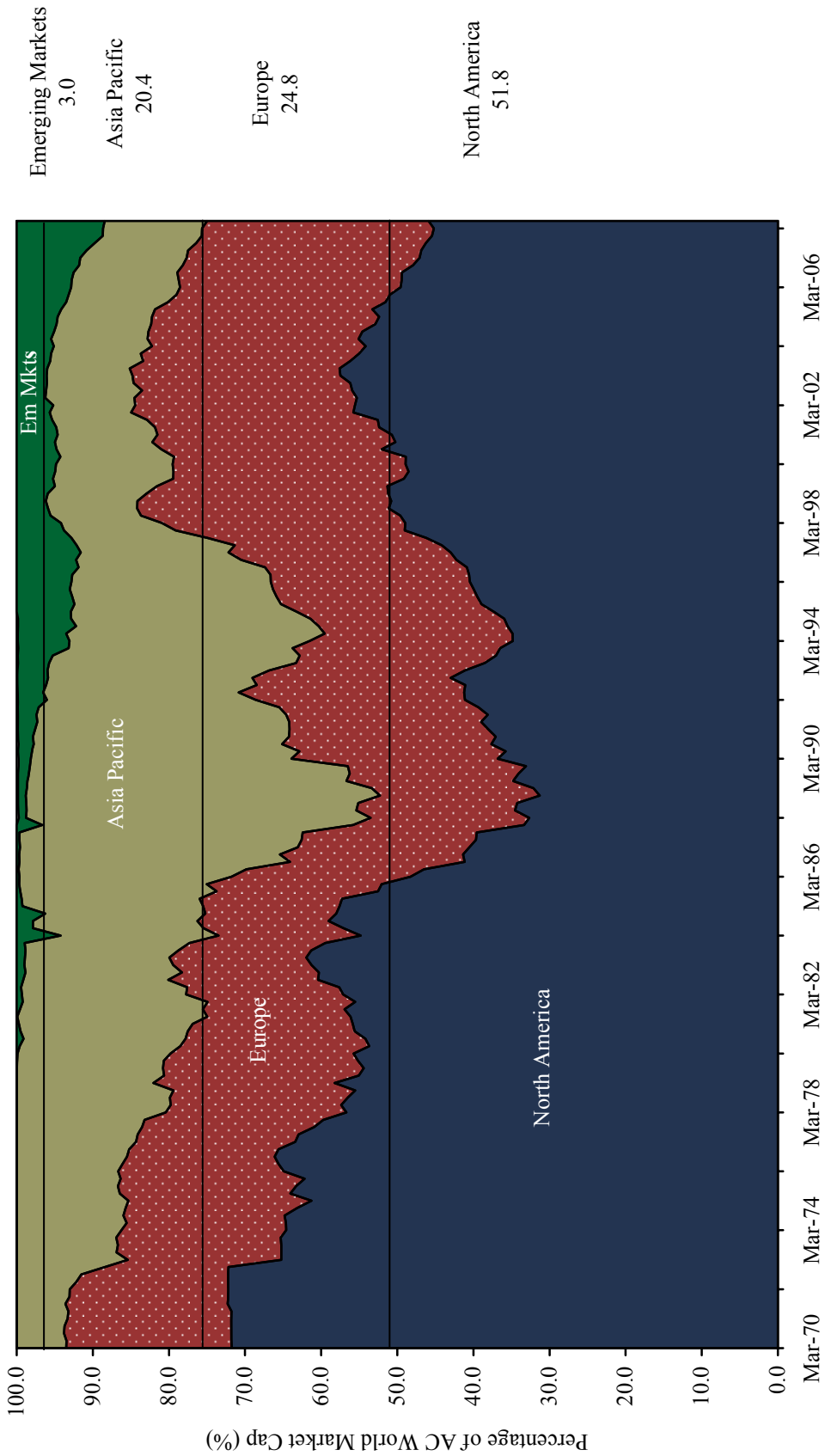
uk_073m

Exhibit 10

REGIONAL WEIGHTS OF WORLD EQUITY MARKETS

Historical Average Weight

January 1, 1970 – June 30, 2008



Sources: Alliance Bernstein, MSCI Inc., and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Note: Data are based on market capitalizations for the various MSCI indices.

Exhibit 11

ECONOMIC SECTOR WEIGHTS OF VARIOUS MSCI INDICES

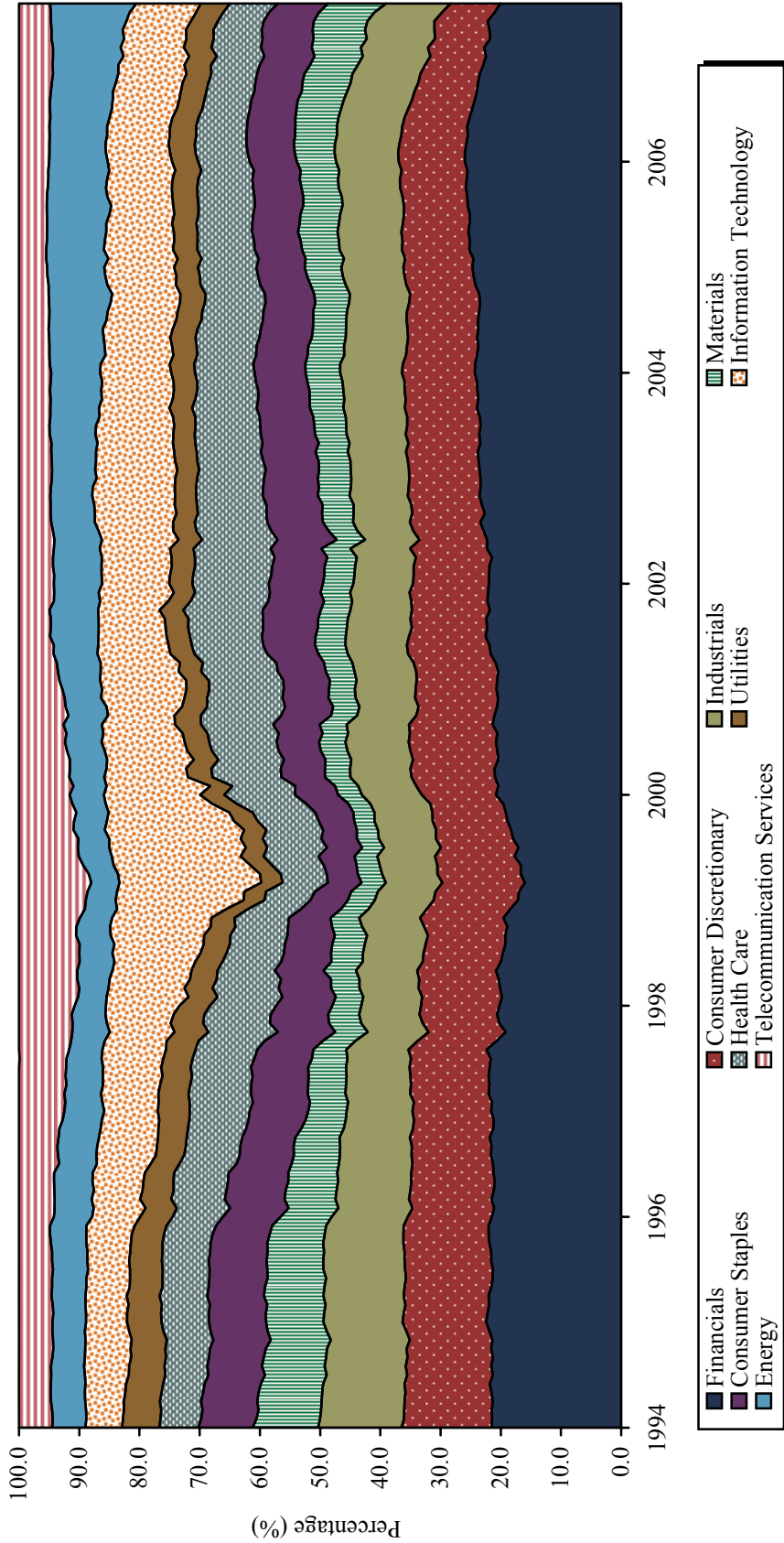
As of June 30, 2008

Economic Sector	MSCI All Country World	MSCI U.S.	MSCIEAFE	MSCI U.K.	MSCI Europe ex U.K.	MSCI Japan	MSCI Pacific ex Japan	MSCI Emerging Markets	Percentage of Index (%)	
Consumer Discretionary	8.2	8.3	9.7	5.2	8.9	18.7	4.4	4.5		
Consumer Staples	8.3	10.3	8.1	12.2	8.0	4.9	6.7	4.3		
Energy	14.4	16.0	9.3	22.0	7.7	1.3	5.8	20.7		
Financials	20.1	14.2	25.1	21.3	25.8	19.3	42.0	20.1		
Health Care	8.0	11.8	6.8	7.5	8.1	5.5	2.1	1.6		
Industrials	10.7	10.9	12.0	4.7	12.5	19.5	9.3	7.5		
Information Technology	10.7	16.9	5.2	0.3	4.2	14.3	0.9	10.4		
Materials	9.6	4.1	11.9	14.8	9.9	8.6	21.4	16.9		
Telecommunication Services	5.1	3.3	5.6	7.3	6.4	3.0	3.8	10.9		
Utilities	4.8	4.1	6.4	4.7	8.6	4.8	3.6	3.0		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Exhibit 12
MSCI ALL COUNTRY WORLD INDEX CHANGES IN SECTOR WEIGHTINGS

December 31, 1994 – June 30, 2008



Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Exhibit 13

PERCENTAGE WEIGHTS OF LARGEST COMPANIES IN VARIOUS GLOBAL EXCHANGES

As of June 30, 2008

Company Rank	New York Stock Exchange	London Stock Exchange	Euronext	Tokyo Stock Exchange	Korean Stock Exchange	Shanghai Stock Exchange	São Paulo Stock Exchange
	Percentage of Index (%)						
1	2.6	7.0	5.9	4.1	10.4	16.3	13.9
2	1.6	6.1	5.0	2.4	5.6	8.6	10.8
3	1.2	5.9	4.3	2.0	3.2	5.4	3.9
4	1.2	5.0	4.1	1.7	2.6	4.8	3.1
5	1.1	4.9	2.6	1.7	2.4	3.6	2.9
6	1.1	4.3	2.5	1.6	2.3	3.6	2.8
7	1.1	3.2	2.4	1.5	2.0	1.9	2.7
8	1.0	2.5	2.2	1.4	2.0	1.4	2.7
9	1.0	2.5	1.9	1.3	1.9	1.4	2.6
10	1.0	2.3	1.9	1.3	1.6	1.3	2.6
Total	12.9	43.8	32.7	19.0	33.9	48.3	48.2

Sources: Bloomberg L.P., Euronext, Hong Kong Exchanges, Korean Stock Exchange, London Stock Exchange, New York Stock Exchange, São Paulo Stock Exchange, Shanghai Stock Exchange, and Tokyo Stock Exchange.

Notes: Total market capitalization of the Euronext exchange is approximated using the top 450 listed companies, which includes all large- and mid-cap equities. Total market capitalization for the London Stock Exchange is based on market capitalization of the top 1,413 listed equities and excludes exchange-listed funds.

Exhibit 14

PERCENTAGE WEIGHTS OF LARGEST COMPANIES IN VARIOUS MSCI INDICES

As of June 30, 2008

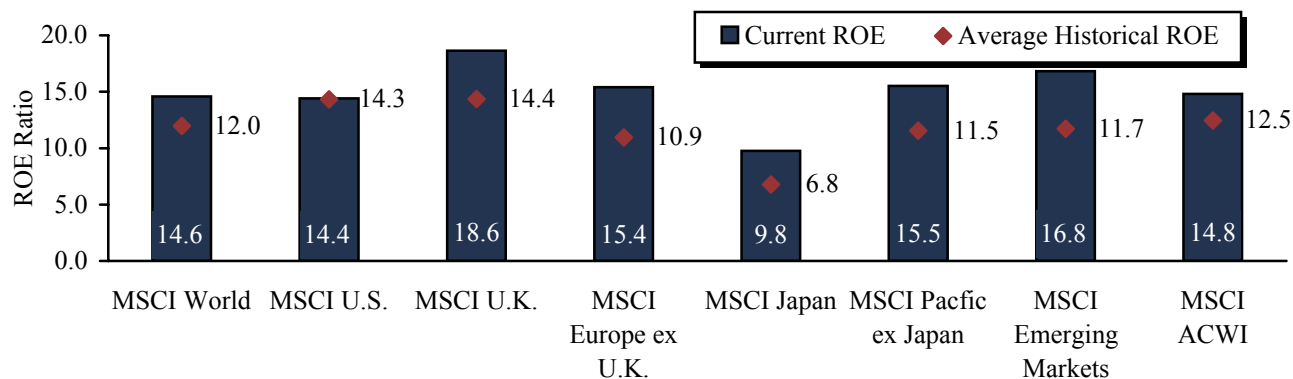
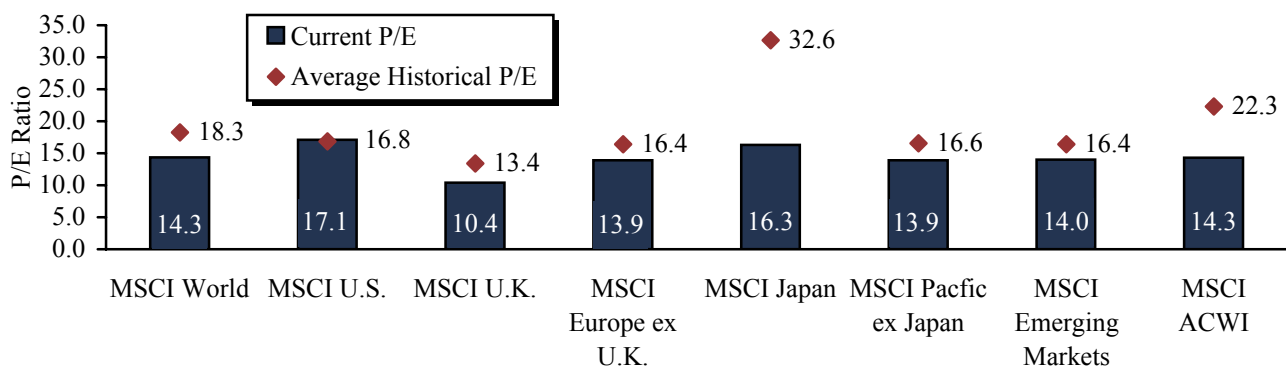
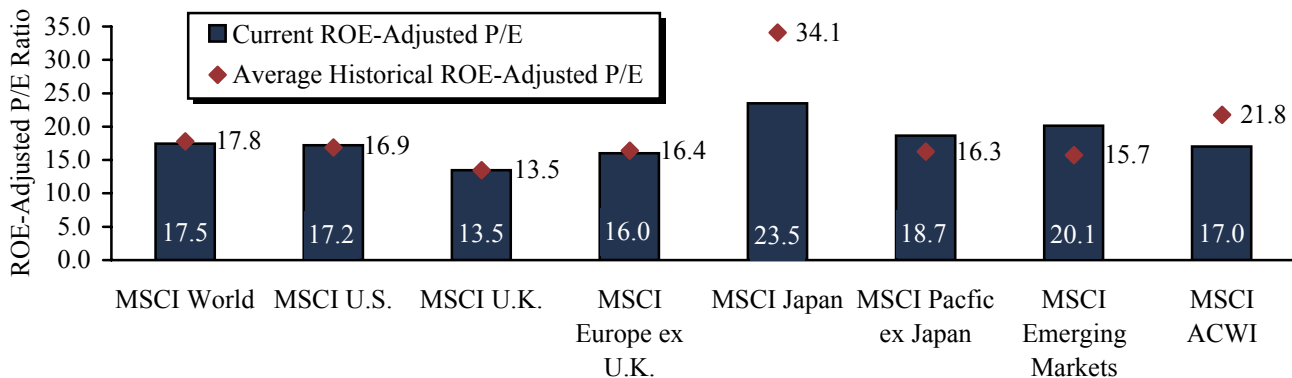
Company Rank	MSCI U.S.	MSCI U.K.	MSCI Europe ex U.K.	MSCI Japan	MSCI Korea	MSCI China	MSCI Brazil
1	3.9	8.1	3.2	4.9	15.6	17.2	15.5
2	2.2	6.8	3.1	3.5	7.5	6.0	13.8
3	1.9	5.9	2.2	2.1	4.7	5.8	9.8
4	1.7	5.4	2.2	2.1	3.6	5.8	8.3
5	1.7	4.5	2.2	2.1	3.1	5.7	5.2
6	1.6	4.4	2.0	1.9	2.5	5.3	4.3
7	1.5	4.1	2.0	1.7	2.5	3.3	2.8
8	1.4	3.4	1.7	1.7	2.3	2.7	2.6
9	1.2	3.2	1.7	1.7	2.1	2.5	2.3
10	1.2	3.1	1.7	1.6	1.9	2.0	2.2
Total	18.3	49.1	22.1	23.3	45.7	56.3	66.8

Sources: FactSet Research Systems and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

Exhibit 15

CURRENT AND HISTORICAL P/E AND ROE RATIOS OF VARIOUS MSCI INDICES

December 31, 1974 – June 30, 2008



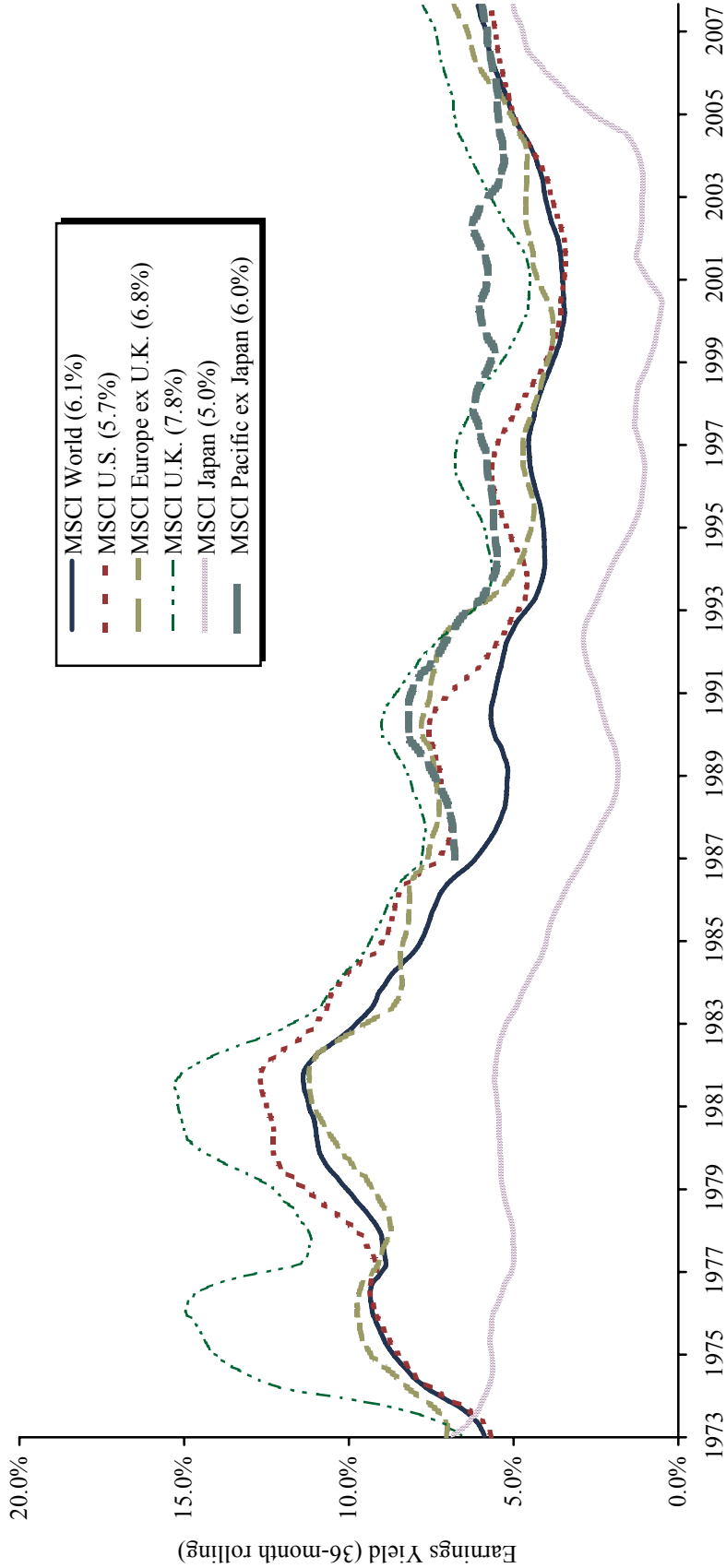
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Return on equity (ROE) is calculated by dividing the earnings per share by the book value per share. Price-earnings (P/E) and ROE data for the MSCI Pacific ex Japan Index begin on December 31, 1984. P/E and ROE data for the MSCI Emerging Markets Index and All Country World Index begin on November 30, 1995. Ratios use 12-month trailing earnings. The ROE-adjusted P/E ratio is the current P/E multiplied by the ratio of the current ROE to the long-term historical average ROE of each index.

Exhibit 16

ROLLING 36-MONTH EARNINGS YIELDS OF DEVELOPED MARKETS

November 30, 1973 – June 30, 2008



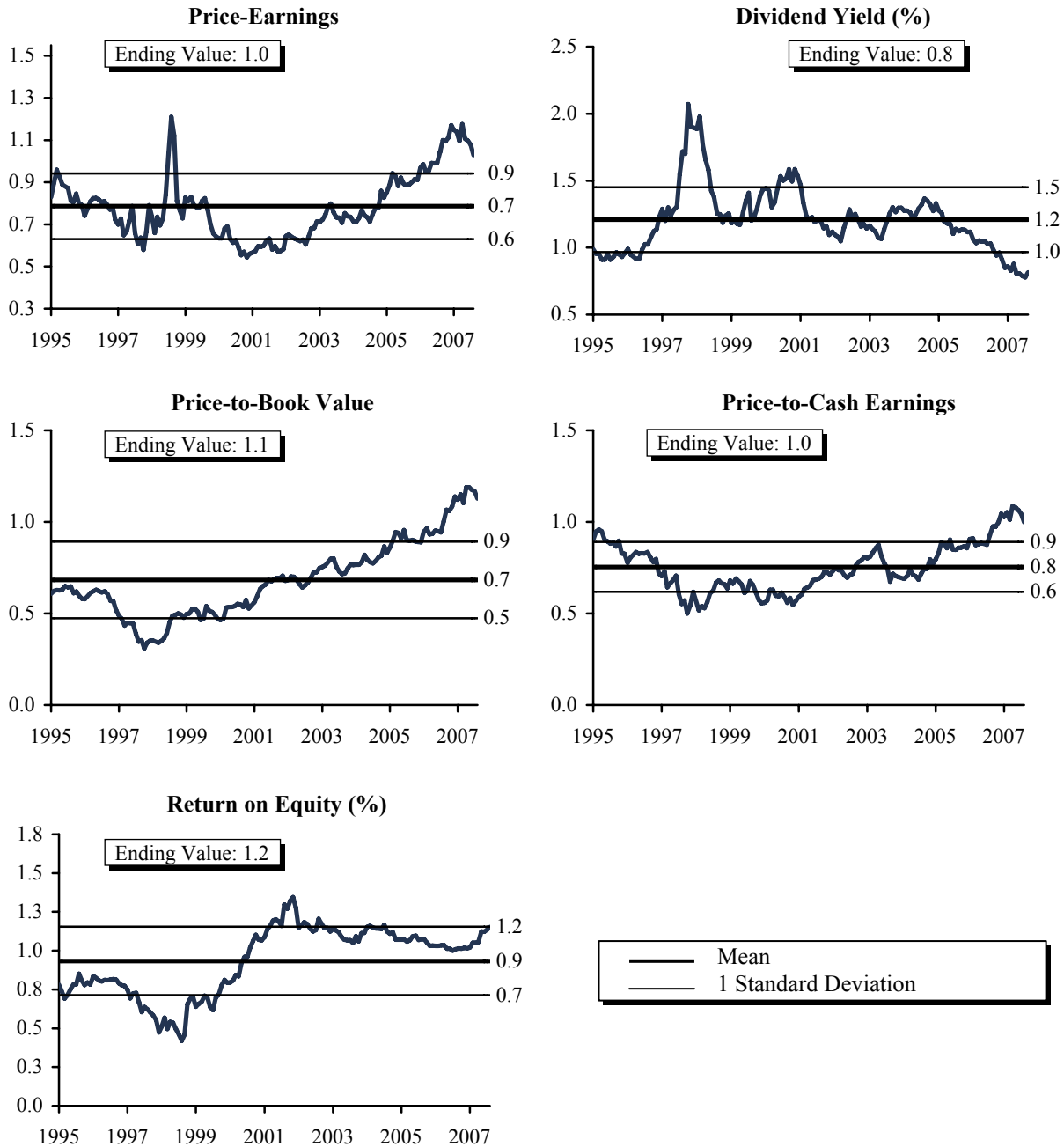
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Earnings yield is calculated as the inverse of the price-earnings ratio. Earnings yield is used due to the fact that at times earnings for the MSCI Japan and MSCI Pacific ex Japan indices have been negative.

Exhibit 17

MSCI EMERGING MARKETS INDEX RELATIVE TO MSCI WORLD INDEX

November 30, 1995 – June 30, 2008



Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Note: Return on equity is calculated by dividing the index's price-to-book ratio by its price-earnings ratio.

Exhibit 18

MAJOR MSCI INDICES

Nominal Returns in Local Currency

Year	Annual Returns (%)												
	MSCI World	MSCI World ex U.S.	MSCI U.S.	MSCI EAFE	MSCI EM	MSCI Japan	MSCI Pacific ex Japan	MSCI U.K.	MSCI Europe ex U.K.	MSCI Germany	MSCI France	MSCI Switzerland	MSCI ACWI
1970	-3.4	-15.3	3.6	-11.7	---	-12.2	-13.6	-7.4	-13.0	-24.6	-6.9	-13.8	---
1971	15.7	23.0	12.4	19.1	---	34.3	5.1	37.2	2.8	10.3	-6.6	14.8	---
1972	22.1	37.7	15.6	36.4	---	116.3	61.3	11.5	21.6	15.0	21.5	23.1	---
1973	-18.1	-19.5	-17.0	-21.1	---	-26.2	-35.3	-26.3	-6.4	-20.1	-2.0	-17.7	---
1974	-26.3	-21.7	-28.6	-24.5	---	-9.9	-37.1	-52.7	-17.3	3.2	-30.5	-32.3	---
1975	36.3	39.3	34.2	44.1	---	21.1	67.5	144.8	30.7	40.2	43.9	44.5	---
1976	14.1	3.8	21.9	4.1	---	20.2	11.2	1.6	-6.8	-4.8	-12.7	2.1	---
1977	-3.9	4.5	-9.3	4.3	---	-5.5	-1.6	38.8	0.9	11.1	-1.5	4.4	---
1978	9.4	15.0	4.3	14.4	---	23.7	22.2	5.0	10.0	7.3	51.5	-2.3	---
1979	13.2	13.9	12.5	9.6	---	8.1	54.9	9.1	4.7	-10.0	22.5	9.2	---
1980	23.5	19.3	27.9	18.0	---	10.3	55.6	28.0	11.1	0.6	9.1	1.8	---
1981	1.0	8.1	-5.7	10.8	---	24.7	-11.1	9.9	2.6	1.5	-12.0	-9.1	---
1982	15.7	10.0	20.0	9.0	---	5.9	-20.7	26.4	13.8	15.8	10.7	13.4	---
1983	25.0	31.2	20.4	31.6	---	22.8	44.7	28.9	44.5	41.1	63.0	29.1	---
1984	10.6	15.5	4.5	20.9	---	26.7	-3.1	31.6	12.6	8.9	20.4	4.8	---
1985	28.5	27.3	31.1	28.5	---	14.4	26.9	23.0	59.2	83.8	42.7	64.2	---
1986	29.8	40.5	16.3	42.5	---	58.7	53.0	24.3	24.7	6.7	52.1	4.8	---
1987	0.0	-1.6	2.9	-2.3	---	8.7	-2.3	6.4	-26.9	-38.7	-28.3	-28.9	---
1988	26.2	32.2	14.6	33.7	164.3	39.5	19.2	9.6	37.3	35.4	56.1	24.9	27.7
1989	24.1	21.6	30.0	21.5	245.0	17.0	18.5	36.6	28.2	39.5	29.9	29.5	26.4
1990	-21.4	-29.3	-3.1	-29.8	40.7	-39.6	-11.6	-7.7	-21.9	-19.7	-23.9	-22.2	-20.1
1991	16.3	8.8	30.1	8.7	118.1	0.1	35.0	19.8	13.6	9.7	20.1	23.4	18.8
1992	-1.3	-6.1	6.4	-6.2	64.8	-21.5	10.7	18.7	3.7	-4.5	9.2	26.2	1.0
1993	20.9	29.2	9.1	29.2	184.9	12.2	81.4	27.4	43.7	45.5	29.3	47.6	26.1
1994	-0.8	-1.9	1.1	-2.0	27.7	8.6	-19.5	-7.0	-6.1	-6.6	-14.3	-8.8	1.6
1995	19.4	9.6	37.1	9.5	0.8	4.1	13.6	22.2	11.6	7.5	4.6	26.7	18.7
1996	16.6	12.0	23.2	11.3	13.5	-4.9	17.8	15.6	26.7	22.3	28.8	19.4	16.7
1997	22.5	13.7	33.4	13.5	4.8	-14.5	-19.5	27.5	43.3	45.3	29.5	56.7	22.4
1998	20.7	11.7	30.1	12.3	-19.6	-8.9	-2.3	16.5	24.9	19.9	31.4	16.3	18.9
1999	27.7	33.9	21.9	33.5	77.5	46.6	38.7	16.1	36.5	40.6	51.4	8.4	29.8
2000	-9.9	-6.7	-12.8	-7.3	-25.3	-19.8	-8.4	-4.5	-1.6	-9.9	2.2	7.2	-10.5

Exhibit 18 (continued)

MAJOR MSCI INDICES

Nominal Returns in Local Currency

Year	Annual Returns (%)												
	MSCI World	MSCI World ex U.S.	MSCI U.S.	MSCI EAFE	MSCI EM	MSCI Japan	MSCI Pacific ex Japan	MSCI U.K.	MSCI Europe ex U.K.	MSCI Germany	MSCI France	MSCI Switzerland	MSCI ACWI
2001	-14.2	-16.2	-12.4	-16.3	7.9	-19.0	-5.5	-11.8	-18.3	-18.2	-18.1	-19.5	-13.0
2002	-24.1	-25.5	-23.1	-26.1	-7.1	-18.8	-12.4	-23.4	-32.7	-43.3	-33.1	-25.3	-23.1
2003	24.9	20.6	28.4	20.3	46.7	22.7	19.3	18.8	20.3	36.3	16.7	19.9	26.4
2004	11.3	12.7	10.1	12.7	16.4	10.8	24.3	11.5	12.6	7.8	9.9	5.7	12.0
2005	15.8	28.7	5.1	29.0	35.8	44.6	19.2	20.1	27.7	26.7	26.6	34.8	17.4
2006	15.6	16.5	14.7	16.5	28.9	7.3	24.8	14.6	21.6	21.6	20.3	18.0	17.0
2007	4.7	4.0	5.4	3.5	33.5	-10.2	20.7	6.5	5.8	21.9	2.1	-2.3	7.7
2008*	-12.8	-14.0	-11.5	-15.7	-12.3	-10.4	-17.2	-11.2	-19.6	-20.1	-18.3	-16.8	-12.5
Std Dev	15.8	16.5	16.4	16.5	31.3	20.8	22.7	21.4	18.0	21.8	22.6	18.9	15.4

Average Annual Compound Returns (%)

Periods Ended June 30, 2008	Average Annual Compound Returns (%)												
	MSCI World	MSCI World ex U.S.	MSCI U.S.	MSCI EAFE	MSCI EM	MSCI Japan	MSCI Pacific ex Japan	MSCI U.K.	MSCI Europe ex U.K.	MSCI Germany	MSCI France	MSCI Switzerland	MSCI ACWI
38.5 Yrs	8.4	8.4	9.2	8.2	---	7.0	10.1	11.3	8.9	7.4	9.9	7.5	---
30 Yrs	10.0	9.5	11.2	9.4	---	5.5	12.1	12.7	11.2	9.0	12.4	9.6	---
25 Yrs	8.9	8.3	10.5	8.4	---	4.0	11.1	11.1	10.9	9.3	11.9	10.6	---
20 Yrs	6.9	5.1	9.9	4.8	35.1	-1.3	8.9	9.1	9.4	9.0	8.9	10.5	8.2
15 Yrs	7.2	6.1	8.8	5.7	17.7	0.2	7.7	7.7	9.5	9.0	8.2	8.9	8.2
10 Yrs	2.7	3.1	2.3	2.6	15.7	1.4	10.3	2.8	2.2	1.3	2.7	0.6	3.9
5 Yrs	9.3	11.8	7.3	11.2	25.8	10.3	16.5	10.3	11.4	14.9	9.9	9.3	11.0
4 Yrs	6.8	9.2	4.8	8.5	24.7	5.2	14.7	9.2	8.8	12.0	6.9	7.0	8.6
3 Yrs	5.7	7.5	4.3	6.7	23.9	7.0	11.5	6.4	5.9	11.7	4.1	5.1	7.6
2 Yrs	1.3	0.3	2.3	-0.9	19.1	-6.5	7.6	1.4	-0.6	6.4	-3.2	-3.2	3.3
1 Yr	-15.6	-18.2	-12.7	-20.3	1.7	-24.5	-10.6	-12.5	-23.5	-19.6	-24.3	-23.5	-13.6

Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes. Annualized standard deviations are based on quarterly returns from January 1, 1971, through June 30, 2008.

* Data for 2008 are as of June 30.

Exhibit 19

MAJOR MSCI INDICES

Nominal Returns in U.S. Dollars

Annual Returns (%)

Year	MSCI World	MSCI World ex U.S.	MSCI U.S.	MSCI EAFE	MSCI EM	MSCI Japan	MSCI Pacific ex Japan	MSCI U.K.	MSCI Europe ex U.K.	MSCI Germany	MSCI France	MSCI Switzerland	MSCI ACWI
1970	-3.1	-14.4	3.6	-11.7	---	-12.2	-13.6	-7.4	-13.0	-24.6	-6.9	-13.8	---
1971	18.4	31.8	12.4	29.6	---	53.6	9.9	46.0	11.8	23.4	-0.5	26.6	---
1972	22.5	39.1	15.6	36.3	---	125.8	65.7	2.6	24.5	17.6	23.6	27.8	---
1973	-15.2	-11.4	-17.0	-14.9	---	-20.5	-24.4	-27.1	4.5	-5.4	2.8	-4.5	---
1974	-25.5	-19.6	-28.6	-23.2	---	-16.1	-41.4	-52.1	-9.3	15.9	-23.7	-13.4	---
1975	32.8	31.0	34.2	35.4	---	19.4	61.2	111.1	23.0	28.7	43.1	39.9	---
1976	13.4	2.3	21.9	2.5	---	25.1	4.7	-14.5	-4.8	5.8	-21.3	9.3	---
1977	0.7	16.1	-9.3	18.1	---	15.4	2.2	55.1	8.9	24.5	4.2	27.5	---
1978	16.5	31.4	4.3	32.6	---	52.8	22.6	12.3	27.3	24.2	70.8	20.6	---
1979	11.0	9.4	12.5	4.8	---	-12.2	50.6	19.6	8.7	-4.9	27.0	11.2	---
1980	25.7	23.5	27.9	22.6	---	29.7	60.1	37.2	-1.7	-12.0	-3.3	-8.3	---
1981	-4.8	-3.9	-5.7	-2.3	---	15.5	-16.2	-12.7	-12.4	-10.9	-30.2	-10.6	---
1982	9.7	-1.3	20.0	-1.9	---	-0.9	-28.7	7.5	1.4	9.2	-6.2	2.3	---
1983	21.9	23.8	20.4	23.7	---	24.5	33.4	15.7	25.0	23.3	31.9	18.1	---
1984	4.7	2.9	4.5	7.4	---	16.8	-7.9	5.3	-2.6	-5.7	4.3	-12.0	---
1985	40.6	50.8	31.1	56.2	---	43.1	16.6	53.0	98.7	135.2	82.0	105.7	---
1986	41.9	65.3	16.3	69.4	---	99.4	47.5	27.0	53.5	35.3	78.3	33.4	---
1987	16.2	24.2	2.9	24.6	---	43.0	3.7	35.1	-11.2	-24.7	-13.8	-9.5	---
1988	23.3	27.5	14.6	28.3	40.4	35.4	29.6	6.0	22.7	20.6	37.9	6.2	24.0
1989	16.6	11.1	30.0	10.5	65.0	1.7	15.1	21.9	32.3	46.3	36.2	26.2	17.6
1990	-17.0	-23.1	-3.1	-23.4	-10.6	-36.1	-11.0	10.3	-11.2	-9.4	-13.8	-6.2	-16.5
1991	18.3	12.0	30.1	12.1	59.9	8.9	35.6	16.0	11.3	8.2	17.8	15.8	19.9
1992	-5.2	-12.3	6.4	-12.2	11.4	-21.5	6.5	-3.7	-5.4	-10.3	2.8	17.2	-4.2
1993	22.5	32.2	9.1	32.6	74.8	25.5	79.8	24.4	32.6	35.6	20.9	45.8	24.9
1994	5.1	7.3	1.1	7.8	-7.3	21.4	-14.3	-1.6	4.7	4.7	-5.2	3.5	5.0
1995	20.7	11.4	37.1	11.2	-5.2	0.7	12.9	21.3	21.8	16.4	14.1	44.1	19.5
1996	13.5	6.9	23.2	6.0	6.0	-15.5	20.5	27.4	18.0	13.6	21.2	2.3	13.2
1997	15.8	2.3	33.4	1.8	-11.6	-23.7	-31.0	22.6	24.4	24.6	11.9	44.2	15.0
1998	24.3	18.8	30.1	20.0	-25.3	5.1	-6.6	17.8	33.4	29.4	41.5	23.5	22.0
1999	24.9	27.9	21.9	27.0	66.4	61.5	42.6	12.5	17.3	20.0	29.3	-7.0	26.8
2000	-13.2	-13.4	-12.8	-14.2	-30.6	-28.2	-15.6	-11.5	-7.5	-15.6	-4.3	5.9	-13.9

Exhibit 19 (continued)

MAJOR MSCI INDICES

Nominal Returns in U.S. Dollars

Year	Annual Returns (%)												
	MSCI World	MSCI World ex U.S.	MSCI U.S.	MSCI EAFE	MSCI EM	MSCI Japan	MSCI Pacific ex Japan	MSCI U.K.	MSCI Europe ex U.K.	MSCI Germany	MSCI France	MSCI Switzerland	MSCI ACWI
2001	-16.8	-21.4	-12.4	-21.4	-2.4	-29.4	-9.9	-14.0	-22.4	-22.4	-22.4	-21.4	-15.9
2002	-19.9	-15.8	-23.1	-15.9	-6.0	-10.3	-6.4	-15.2	-20.3	-33.2	-21.2	-10.3	-19.0
2003	33.1	39.4	28.4	38.6	56.3	35.9	45.8	32.1	42.6	63.8	40.2	34.1	34.6
2004	14.7	20.4	10.1	20.2	26.0	15.9	28.5	19.6	21.6	16.2	18.5	15.0	15.8
2005	9.5	14.5	5.1	13.5	34.5	25.5	13.8	7.4	10.5	9.9	9.9	16.3	11.4
2006	20.1	25.7	14.7	26.3	32.6	6.2	32.0	30.6	35.4	36.0	34.5	27.4	21.5
2007	9.0	12.4	5.4	11.2	39.8	-4.2	30.7	8.4	16.7	35.2	13.2	5.3	12.2
2008*	-10.6	-9.8	-11.5	-11.0	-11.6	-5.5	-11.7	-11.2	-13.0	-13.9	-12.0	-7.6	-10.4
Std Dev	16.2	18.3	16.4	18.4	25.9	24.6	25.0	23.2	19.0	23.1	24.6	20.1	15.3

Average Annual Compound Returns (%)

Periods Ended June 30, 2008	Average Annual Compound Returns (%)												
	MSCI World	MSCI World ex U.S.	MSCI U.S.	MSCI EAFE	MSCI EM	MSCI Japan	MSCI Pacific ex Japan	MSCI U.K.	MSCI Europe ex U.K.	MSCI Germany	MSCI France	MSCI Switzerland	MSCI ACWI
38.5 Yrs	9.5	10.4	9.2	10.4	---	10.4	10.0	10.7	10.8	10.5	10.7	11.6	---
30 Yrs	10.9	11.0	11.2	11.0	---	7.8	11.7	12.9	12.3	10.9	12.7	11.8	---
25 Yrs	10.5	11.0	10.5	11.3	---	7.5	11.7	12.3	13.7	12.5	14.6	13.9	---
20 Yrs	7.6	6.6	9.9	6.3	13.8	-0.2	10.0	10.0	11.2	11.1	11.0	12.7	8.3
15 Yrs	7.9	7.6	8.8	7.2	10.3	0.2	9.4	9.7	11.8	11.3	10.5	11.8	8.5
10 Yrs	4.2	6.3	2.3	5.8	15.5	4.2	14.0	4.6	6.0	5.1	6.6	4.7	5.3
5 Yrs	12.0	17.3	7.3	16.7	30.1	13.0	23.0	14.5	18.6	22.4	17.1	15.7	13.7
4 Yrs	9.2	13.9	4.8	13.0	29.3	6.0	21.9	11.8	15.8	19.5	14.1	12.7	11.0
3 Yrs	8.9	13.7	4.3	12.8	27.5	8.6	18.2	10.1	15.4	22.0	13.6	13.5	10.8
2 Yrs	5.1	7.7	2.3	6.5	23.5	-2.9	18.3	5.2	10.0	18.2	7.5	6.2	7.1
1 Yr	-10.7	-8.8	-12.7	-10.6	4.9	-12.0	-1.8	-13.2	-10.4	-6.2	-11.7	-7.9	-8.8

Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes. Annualized standard deviations are based on quarterly returns from January 1, 1971, through June 30, 2008. All returns are unhedged. Various countries moved from a fixed to a floating exchange rate system in 1970 and 1971.

* Data for 2008 are as of June 30.

Exhibit 20

REAL RETURNS FOR MAJOR MSCI INDICES IN LOCAL CURRENCY

Year	Annual Returns (%)					
	<u>Japan</u>	<u>U.K.</u>	<u>U.S.</u>	<u>France</u>	<u>Germany</u>	<u>Switzerland</u>
1970	-18.8	-14.1	-1.8	-11.8	-27.4	-18.1
1971	27.4	25.9	8.9	-11.8	4.5	7.7
1972	105.7	3.6	11.8	14.1	7.9	15.0
1973	-36.3	-33.3	-23.6	-9.5	-25.5	-25.7
1974	-26.9	-60.3	-36.5	-39.6	-3.1	-37.8
1975	11.4	96.0	25.5	30.9	33.0	39.0
1976	9.7	-11.7	16.2	-20.6	-8.1	1.0
1977	-11.1	23.7	-15.0	-9.8	7.4	3.0
1978	19.3	-3.1	-4.4	38.4	4.8	-2.9
1979	3.0	-6.9	-0.7	9.9	-14.7	4.0
1980	2.4	11.2	13.7	-3.9	-4.3	-2.2
1981	19.8	-1.9	-13.4	-22.9	-5.1	-15.0
1982	3.4	20.0	15.6	1.1	10.6	7.2
1983	20.8	22.4	16.0	48.5	37.4	26.8
1984	23.8	25.8	0.5	12.6	6.6	1.7
1985	12.6	16.3	26.3	36.1	81.1	59.3
1986	59.1	19.9	15.0	48.9	7.7	4.7
1987	7.8	2.6	-1.5	-30.5	-39.3	-30.3
1988	38.1	2.7	9.8	51.5	33.1	22.7
1989	13.9	26.8	24.2	25.4	35.4	24.0
1990	-41.7	-15.6	-8.7	-26.5	-22.1	-26.5
1991	-2.6	14.7	26.2	16.6	3.7	17.2
1992	-22.3	15.7	3.4	7.2	-7.5	22.1
1993	11.0	25.0	6.2	26.7	39.6	43.7
1994	7.7	-9.6	-1.5	-15.7	-8.9	-9.2
1995	4.7	18.4	33.7	2.6	5.9	24.3
1996	-5.4	12.8	19.3	26.7	20.5	18.4
1997	-16.4	23.1	31.1	28.1	42.3	56.1
1998	-9.3	13.4	28.1	31.1	19.4	16.4
1999	48.0	14.1	18.7	49.9	39.4	6.9
2000	-19.1	-7.3	-15.7	0.3	-11.4	5.5
2001	-18.2	-12.4	-13.7	-19.3	-19.5	-19.8
2002	-18.4	-25.6	-24.9	-34.5	-44.0	-26.1
2003	23.1	15.7	26.0	14.2	34.7	19.3
2004	10.2	9.7	6.7	7.7	5.6	4.3
2005	45.6	17.8	1.7	24.6	24.7	33.4
2006	6.9	11.3	11.8	18.7	20.1	17.5
2007	-10.7	4.3	1.3	-0.2	18.3	-4.0
2008*	-11.1	-13.5	-15.0	-20.0	-21.3	-18.4
Std Dev	20.9	20.7	16.8	22.5	21.8	19.0

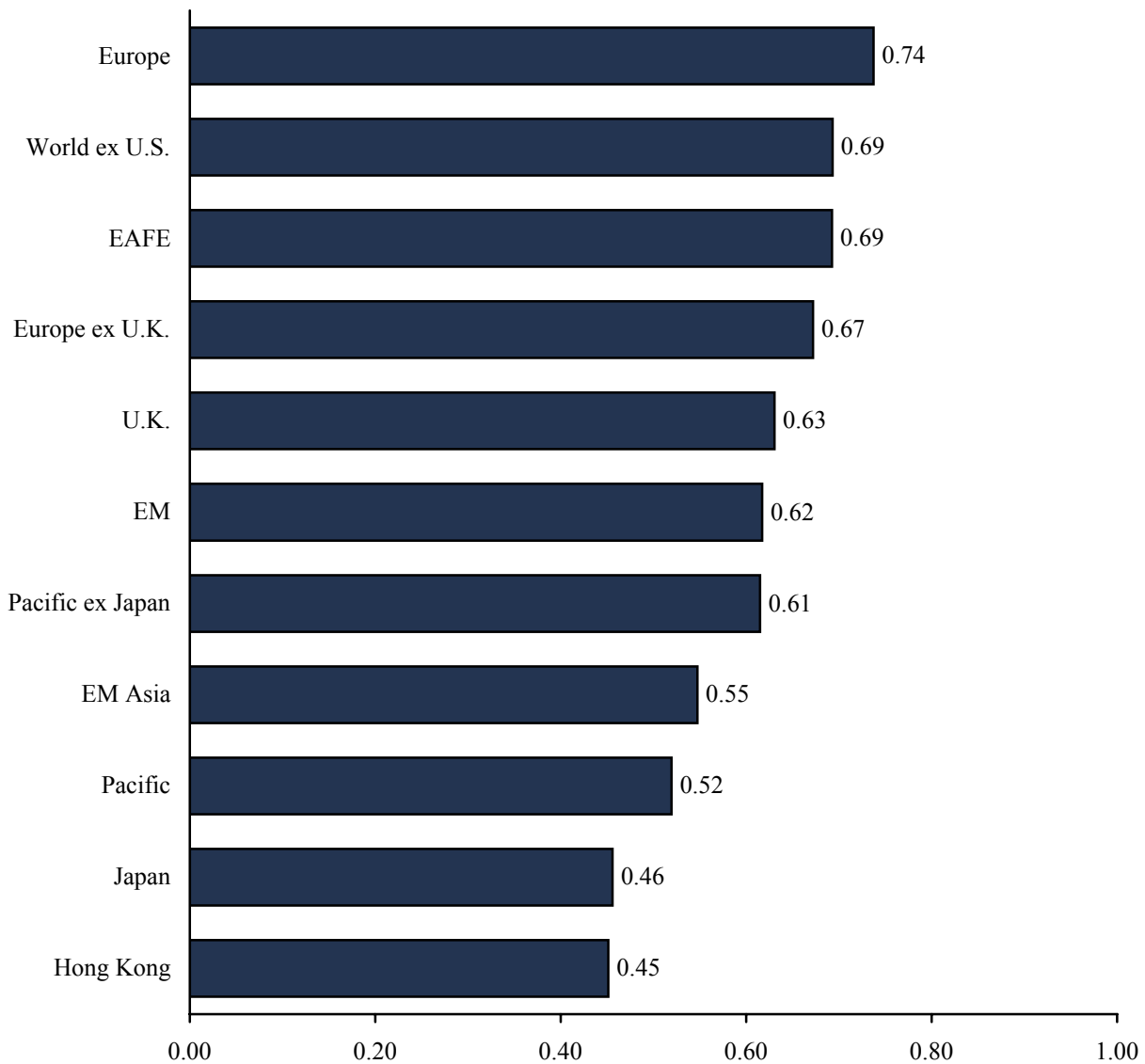
Average Annual Compound Returns (%)

Periods Ended	Average Annual Compound Returns (%)					
	<u>Japan</u>	<u>U.K.</u>	<u>U.S.</u>	<u>France</u>	<u>Germany</u>	<u>Switzerland</u>
June 30, 2008						
38.5 Yrs	3.7	4.4	4.3	4.6	4.2	4.4
30 Yrs	4.1	7.5	6.8	8.1	6.4	7.1
25 Yrs	3.3	7.3	7.0	9.2	7.2	8.6
20 Yrs	-2.0	5.6	6.6	6.7	6.7	8.5
15 Yrs	0.1	5.0	5.8	6.4	7.2	7.8
10 Yrs	1.6	0.5	-0.6	0.9	-0.3	-0.5
5 Yrs	10.0	7.7	3.6	7.7	12.7	7.9
2 Yrs	-7.1	-1.7	-1.5	-5.3	3.9	-4.7
1 Yr	-25.5	-15.7	-16.9	-26.8	-21.8	-25.5

Sources: Global Financial Data, Inc., MSCI Inc., Thomson Datastream, and U.S. Department of Labor - Bureau of Labor Statistics. MSCI data provided "as is" without any express or implied warranties.

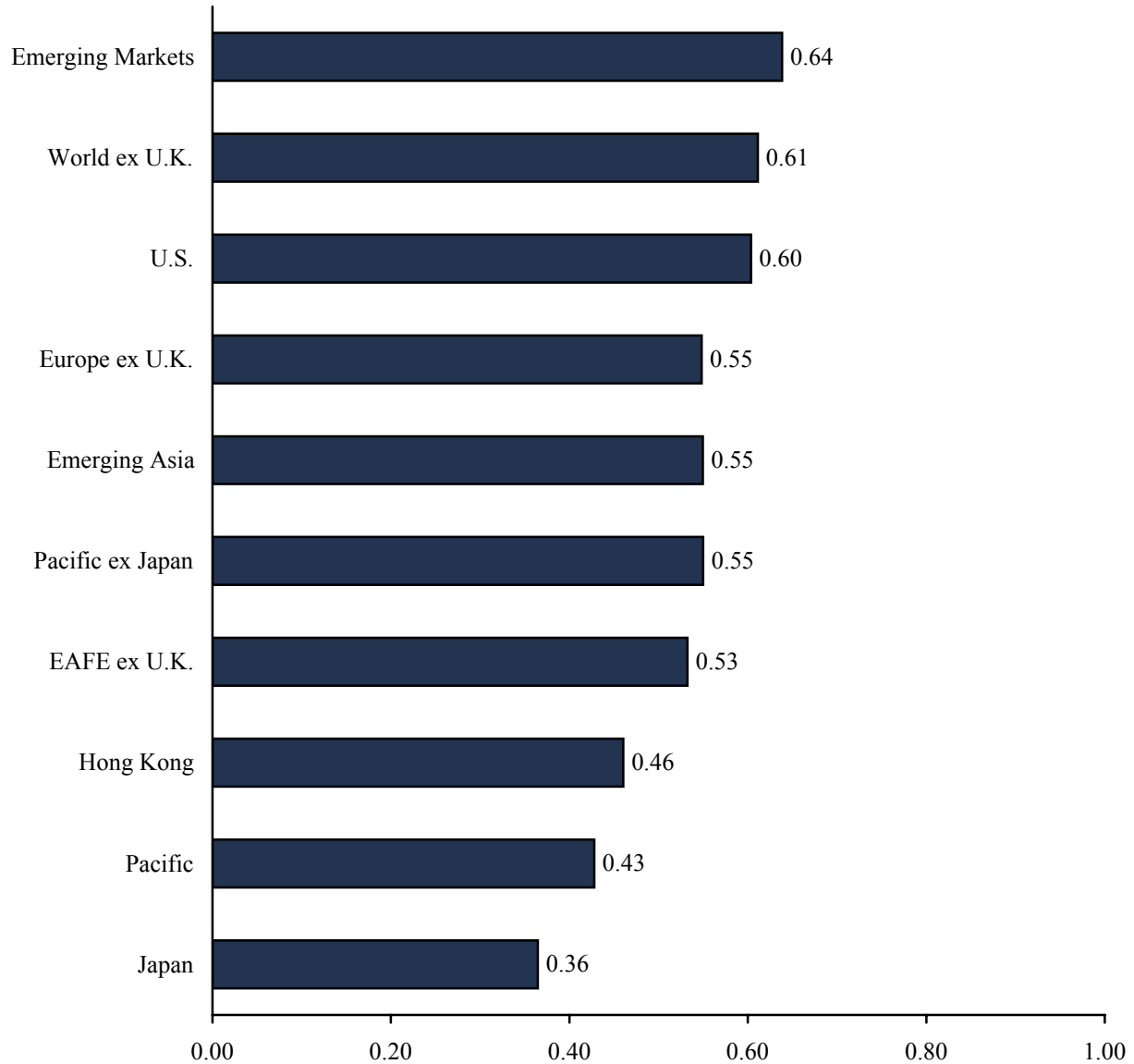
Notes: Annualized standard deviations are based on quarterly returns since 1973. U.K. inflation data represent the Retail Price Index from 1974 through September 2003 and the U.K. CPI from October 2003 onward.

* Data for 2008 are as of June 30.

Exhibit 21**MSCI GLOBAL INDEX CORRELATIONS WITH THE MSCI U.S. INDEX****July 1, 1971 – June 30, 2008****U.S. Dollars (\$)**

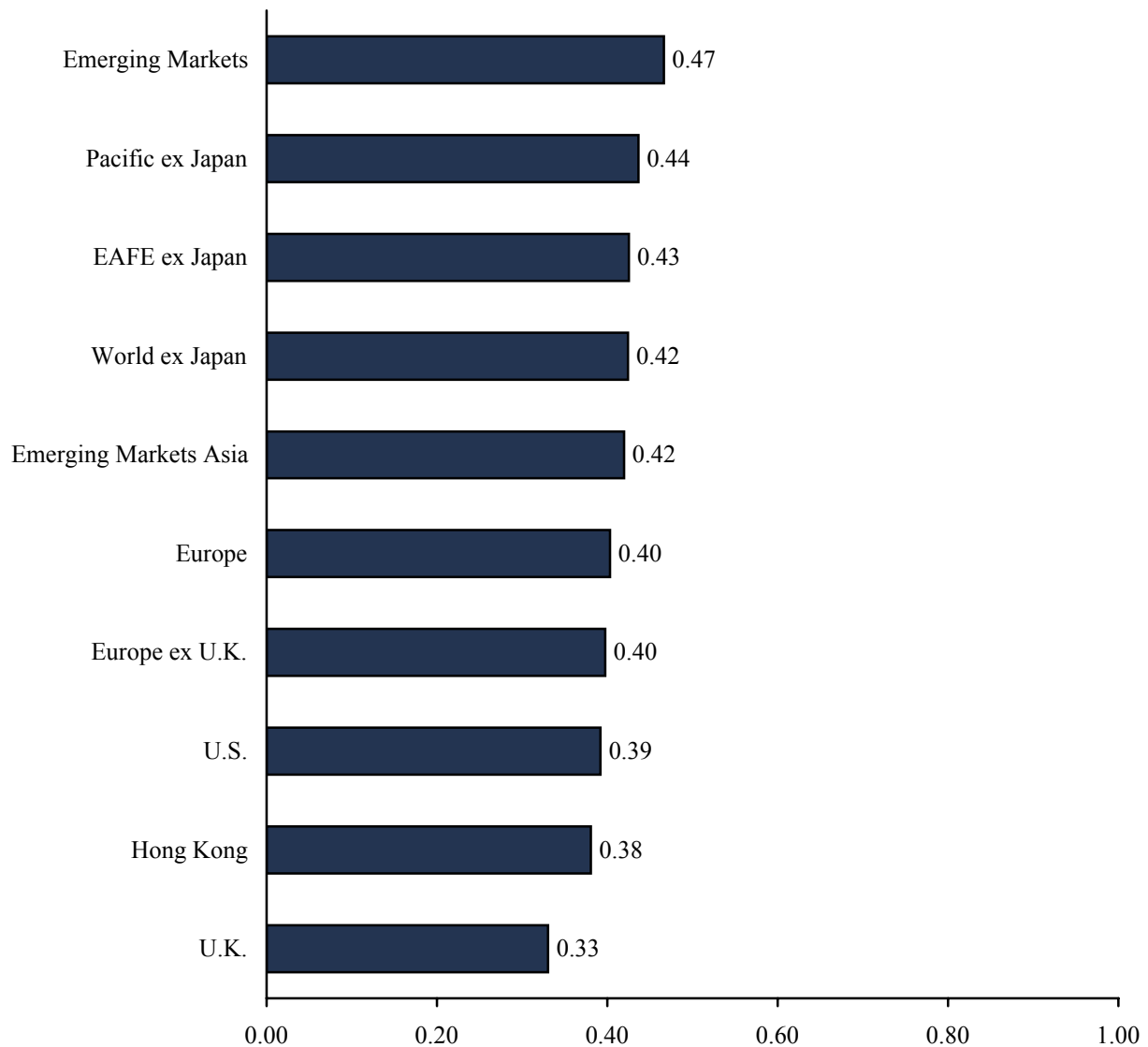
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Correlations are based on unhedged quarterly data. Data for Emerging Markets begin March 31, 1988. Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes.

Exhibit 22**MSCI GLOBAL INDEX CORRELATIONS WITH THE MSCI U.K. INDEX****July 1, 1971 – June 30, 2008****Sterling (£)**

Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Correlations are based on unhedged, quarterly data. Data for Emerging Markets begin March 31, 1988. Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes.

Exhibit 23**MSCI GLOBAL INDEX CORRELATIONS WITH THE MSCI JAPAN INDEX****July 1, 1971 – June 30, 2008****Japanese Yen (¥)**

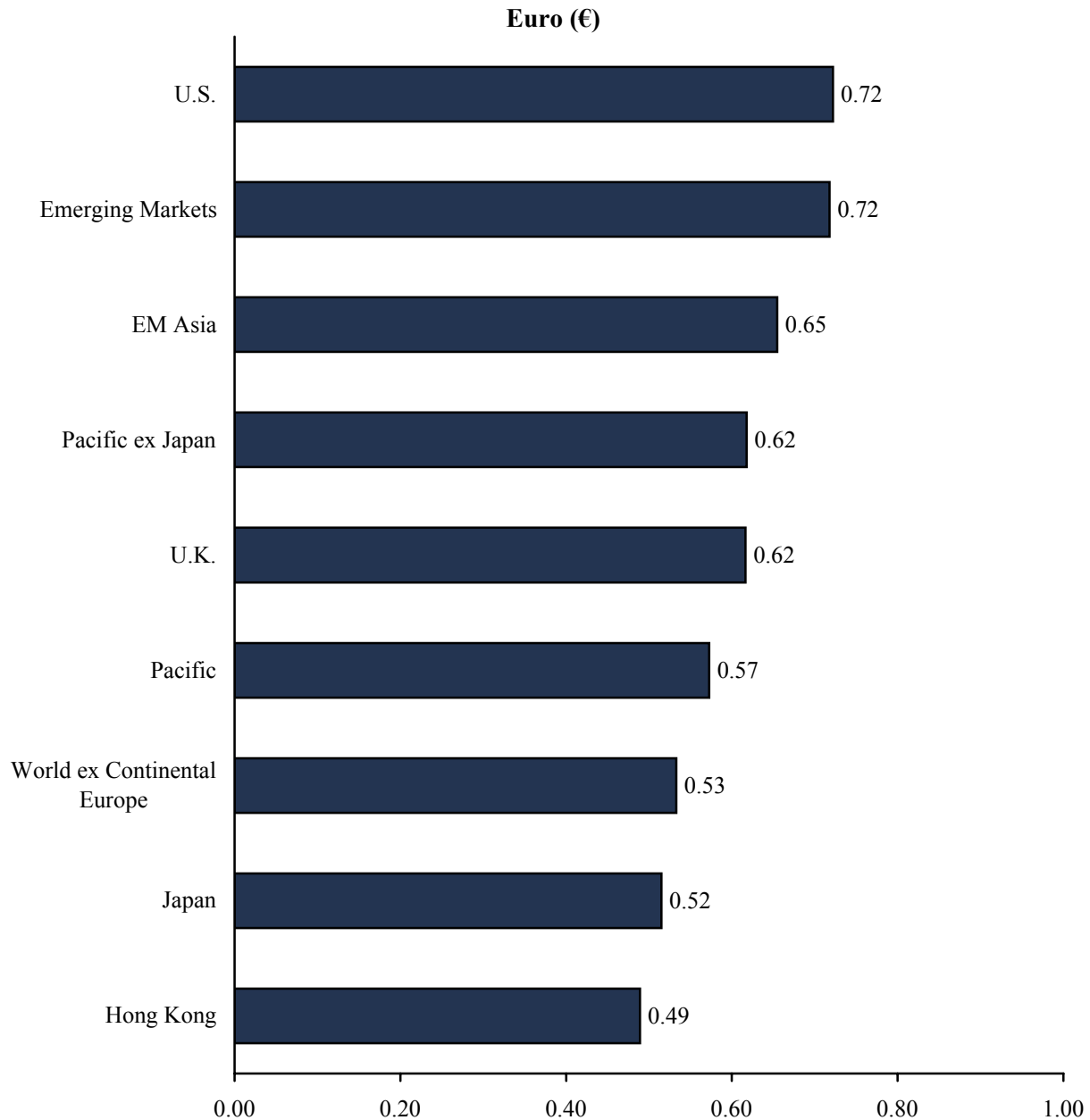
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Correlations are based on unhedged quarterly data. Data for Emerging Markets begin March 31, 1988. Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes.

Exhibit 24

MSCI GLOBAL INDEX CORRELATIONS WITH THE MSCI EUROPE EX U.K. INDEX

July 1, 1971 – June 30, 2008



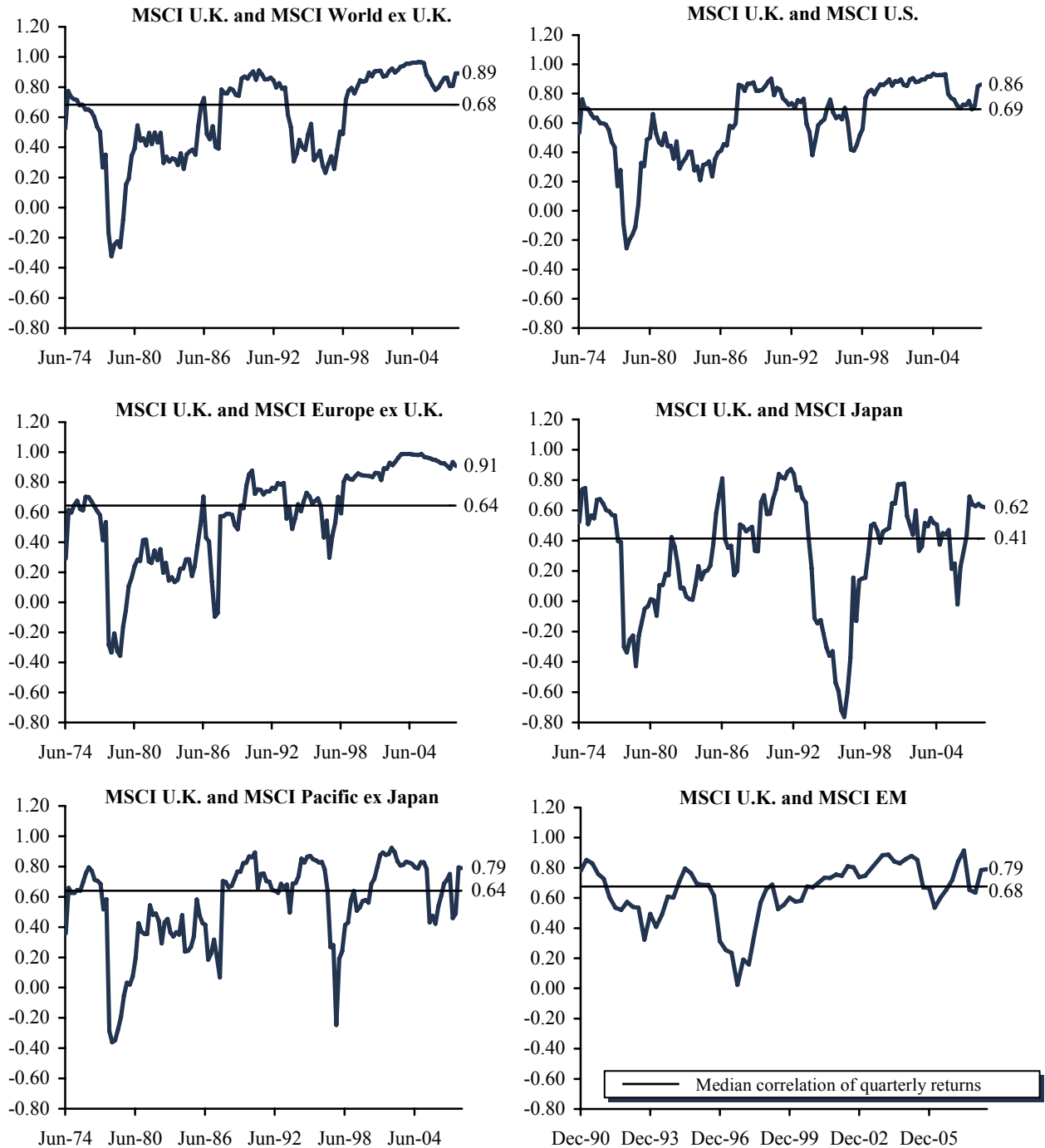
Sources: FactSet Research Systems, MSCI Inc., and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Correlations are based on unhedged quarterly data. The World ex Continental Europe Index was created by FactSet Research Systems for this report; data for this index begin June 30, 1985. Data for Emerging Markets begin March 31, 1988. Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes.

Exhibit 25

**ROLLING 36-MONTH CORRELATION ANALYSIS:
MSCI U.K. AND MSCI GLOBAL INDICES**

July 1, 1971 – June 30, 2008



Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

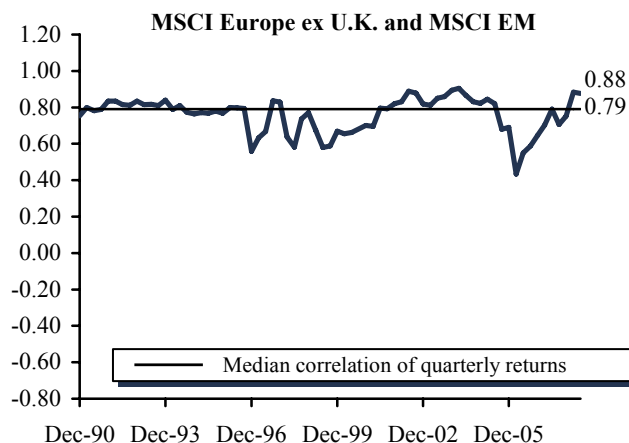
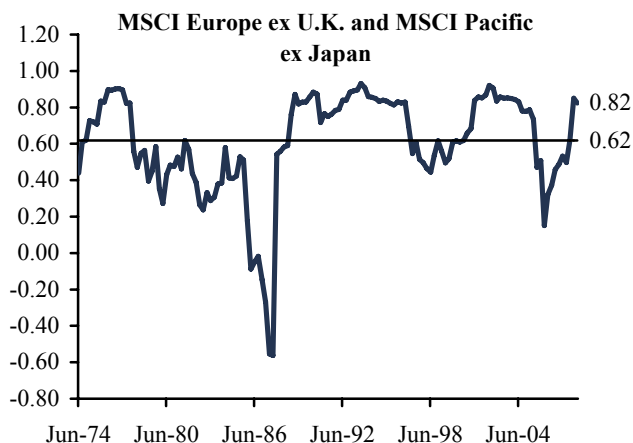
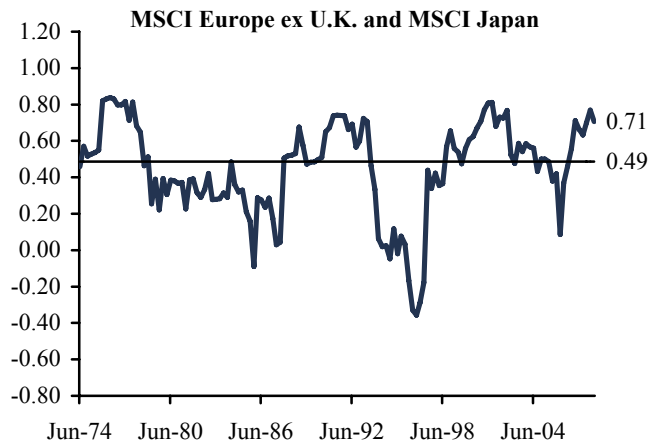
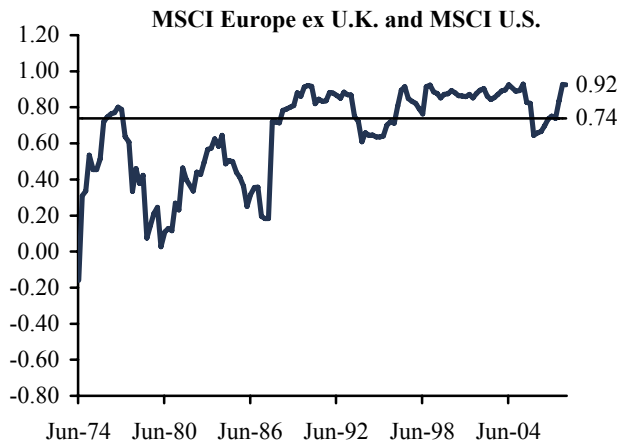
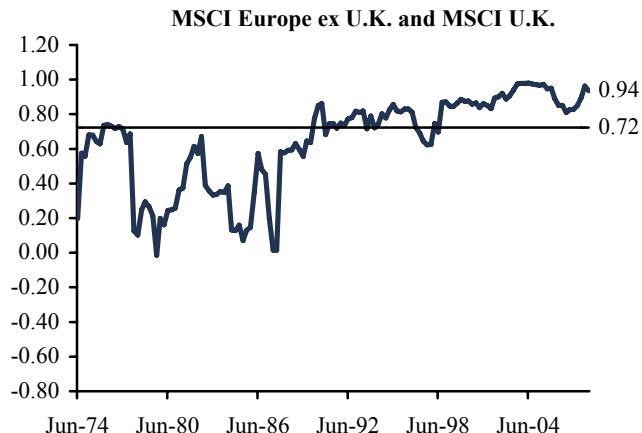
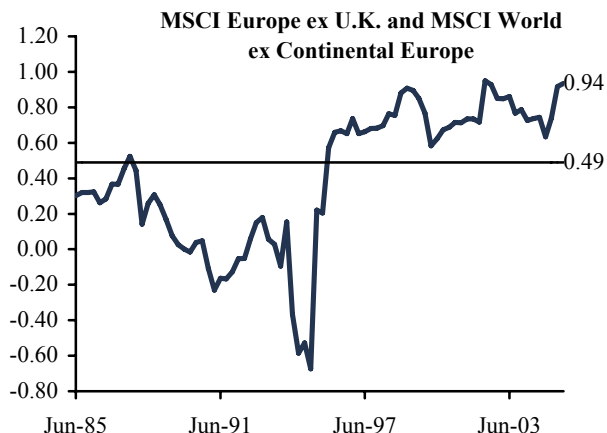
Notes: All data are in unhedged sterling. Data for Emerging Markets begin March 31, 1988. Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes.

uk_077q

Exhibit 26

**ROLLING 36-MONTH CORRELATION ANALYSIS:
MSCI EUROPE EX U.K. AND MSCI GLOBAL INDICES**

July 1, 1971 – June 30, 2008



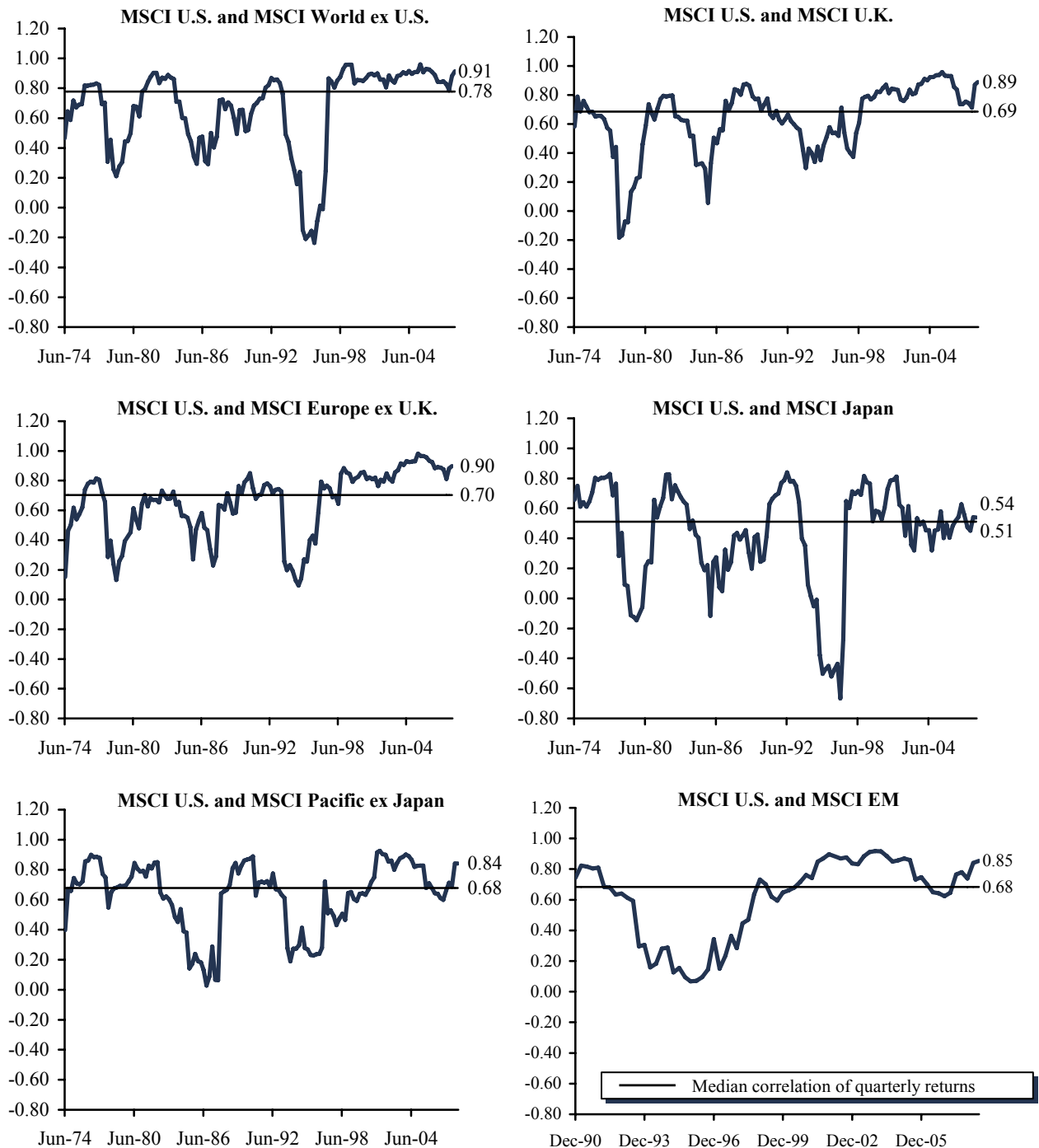
Sources: FactSet Research Systems, MSCI Inc., and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: All data are in unhedged euros. The World ex Continental Europe Index was created by FactSet Research Systems for this report; data for this index begin June 30, 1985. Data for Emerging Markets begin March 31, 1988. Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes.

Exhibit 27

**ROLLING 36-MONTH CORRELATION ANALYSIS:
MSCI U.S. AND MSCI GLOBAL INDICES**

July 1, 1971 – June 30, 2008



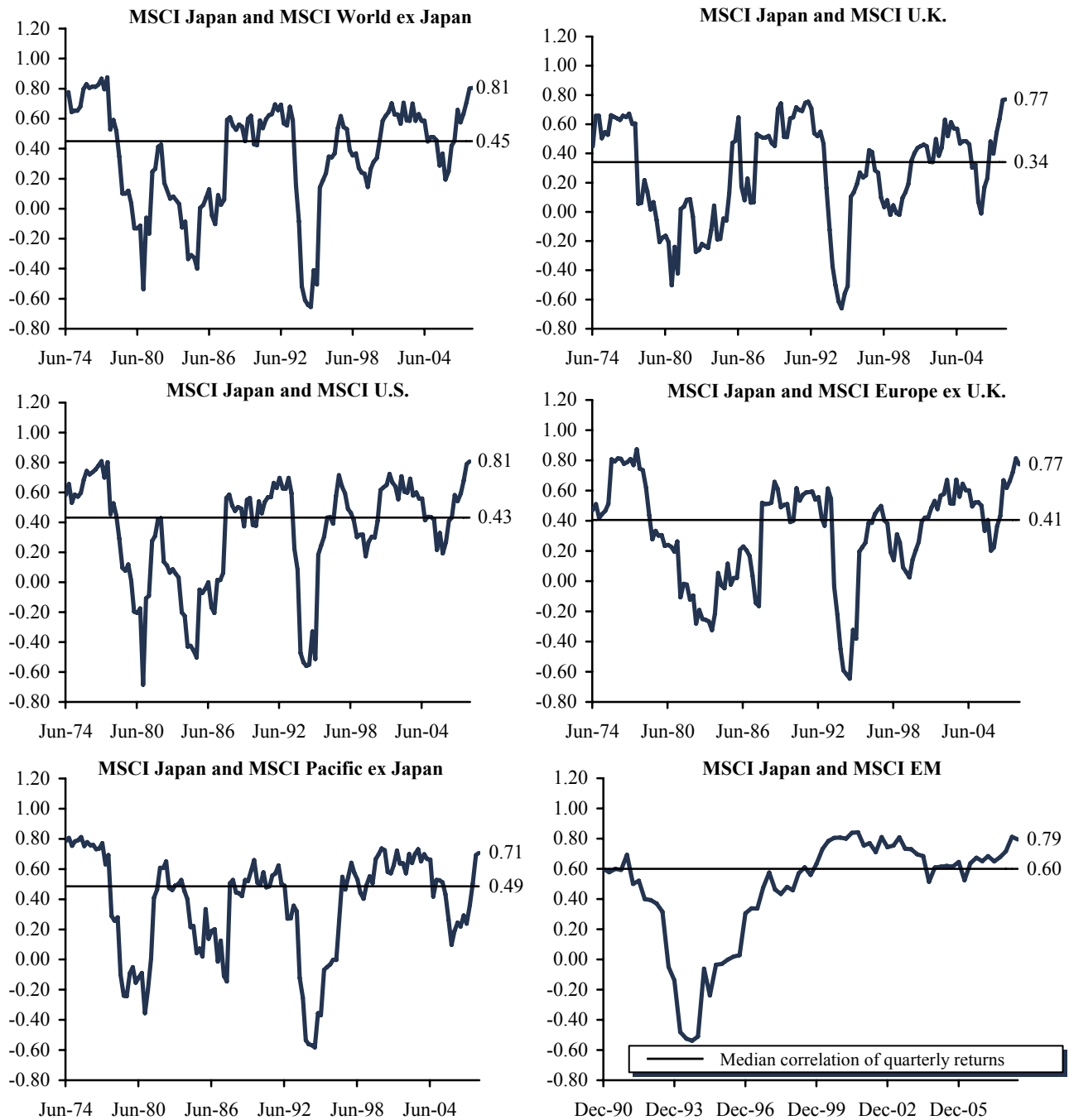
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: All data are in unhedged U.S. dollars. Data for Emerging Markets begin March 31, 1988. Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes.

Exhibit 28

**ROLLING 36-MONTH CORRELATION ANALYSIS:
MSCI JAPAN AND MSCI GLOBAL INDICES**

July 1, 1971 – June 30, 2008



Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: All data are in unhedged yen. Data for Emerging Markets begin March 31, 1988. Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets indices are gross of dividend taxes.

Exhibit 29
ANNUAL PERFORMANCE FOR MSCI EMERGING ASIA COUNTRIES (%)

U.S. Dollars (\$)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
MSCI Taiwan	40.30	MSCI Pakistan 28.11	MSCI Korea 141.15	MSCI Malaysia 114.33	MSCI Pakistan -11.34	MSCI Korea 48.71	MSCI Pakistan 155.81	MSCI Thailand 144.56	MSCI Indonesia 52.21	MSCI Pakistan 64.91	MSCI China 82.87	MSCI India 73.11	MSCI Taiwan -5.81
MSCI China	37.46	MSCI India 11.27	MSCI Philippines 13.45	MSCI Indonesia 93.46	MSCI Malaysia -15.95	MSCI Taiwan 10.47	MSCI Indonesia 42.82	MSCI China 87.57	MSCI Philippines 26.58	MSCI Korea 58.00	MSCI Indonesia 74.83	MSCI China 66.23	MSCI Thailand -8.83
MSCI Indonesia	27.51	MSCI Taiwan -6.3	MSCI Thailand 11.6	MSCI Korea 92.42	MSCI India -21.74	MSCI Thailand 5.25	MSCI Thailand 27.6	MSCI India 78.4	MSCI Korea 22.86	MSCI India 37.6	MSCI Philippines 59.65	MSCI Indonesia 55.02	MSCI Indonesia -10.68
MSCI Malaysia	25.55	MSCI China -25.25	MSCI Taiwan -20.64	MSCI India 87.35	MSCI China -30.54	MSCI Malaysia 4.56	MSCI Korea 8.62	MSCI Indonesia 78.20	MSCI India 19.11	MSCI Philippines 23.92	MSCI India 51.00	MSCI Thailand 46.63	MSCI Malaysia -17.58
MSCI Philippines	17.75	MSCI Philippines -62.59	MSCI India -21.24	MSCI Taiwan 52.71	MSCI Taiwan -44.90	MSCI Indonesia -8.48	MSCI India 8.37	MSCI Philippines 42.76	MSCI Pakistan 17.99	MSCI China 19.77	MSCI Malaysia 37.14	MSCI Malaysia 46.07	MSCI Pakistan -18.17
MSCI India	-2.17	MSCI Korea -66.67	MSCI Malaysia -30.81	MSCI Pakistan 49.62	MSCI Philippines -45.01	MSCI Philippines -19.29	MSCI Malaysia -0.66	MSCI Taiwan 42.55	MSCI Malaysia 15.17	MSCI Indonesia 15.76	MSCI Taiwan 20.90	MSCI Philippines 41.68	MSCI Korea -19.36
MSCI Pakistan	-17.29	MSCI Malaysia -67.98	MSCI Indonesia -31.53	MSCI Thailand 47.16	MSCI Korea -49.62	MSCI India -19.45	MSCI China -14.05	MSCI Pakistan 42.37	MSCI Taiwan 9.83	MSCI Thailand 9.16	MSCI Korea 13.19	MSCI Pakistan 38.39	MSCI China -26.33
MSCI Thailand	-36.59	MSCI Thailand -73.43	MSCI China -42.37	MSCI China 13.33	MSCI Thailand -56.27	MSCI Pakistan -23.77	MSCI Taiwan -24.45	MSCI Korea 35.94	MSCI China 1.89	MSCI Taiwan 7.25	MSCI Thailand 11.61	MSCI Korea 32.58	MSCI Philippines -37.53
MSCI Korea	-38.14	MSCI Indonesia -74.06	MSCI Pakistan -56.61	MSCI Philippines 3.32	MSCI Indonesia -61.90	MSCI China -24.70	MSCI Philippines -28.98	MSCI Malaysia 26.61	MSCI Thailand -0.92	MSCI Malaysia 2.29	MSCI Pakistan 3.58	MSCI Taiwan 9.13	MSCI India -41.38
Spread of Returns Between Second-Highest and Lowest-Performing Markets by Year													
	75.6	85.3	70.1	90.1	45.9	35.2	71.8	61.0	27.5	55.7	71.3	57.1	32.5

Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Total returns for MSCI Emerging Markets indices are gross of dividend taxes. Data for 2008 are through June 30.

Exhibit 30

ANNUAL PERFORMANCE FOR MSCI DEVELOPED COUNTRIES AND REGIONS (%)

U.S. Dollars (\$)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
MSCI U.K.	27.42	MSCI U.S.	MSCI Europe ex U.K.	MSCI Japan	MSCI Europe ex U.K.	MSCI Pacific ex Japan	MSCI Pacific ex Japan	MSCI Pacific ex Japan	MSCI Pacific ex Japan	MSCI Japan	MSCI Europe ex UK	MSCI Pacific ex Japan	MSCI Japan
		33.38	33.38	61.53	-7.47	-9.88	-6.42	45.77	28.46	25.52	35.41	30.73	-5.53
MSCI U.S.	23.24	MSCI Europe ex U.K.	MSCI U.S.	MSCI Pacific ex Japan	MSCI U.K.	MSCI U.S.	MSCI Japan	MSCI Europe ex U.K.	MSCI Europe ex U.K.	MSCI Pacific ex Japan	MSCI Pacific ex Japan	MSCI Europe ex U.K.	MSCI U.K.
		24.41	30.14	42.58	-11.53	-12.39	-10.28	42.62	21.61	13.81	32.02	16.66	-11.24
MSCI Pacific ex Japan	20.54	MSCI U.K.	MSCI U.K.	MSCI U.S.	MSCI U.S.	MSCI U.K.	MSCI U.K.	MSCI Japan	MSCI U.K.	MSCI Europe ex U.K.	MSCI U.K.	MSCI U.K.	MSCI U.S.
		22.62	17.80	21.92	-12.84	-14.05	-15.23	35.91	19.57	10.54	30.61	8.36	-11.47
MSCI Europe ex U.K.	18.04	MSCI Japan	MSCI Japan	MSCI Europe ex U.K.	MSCI Pacific ex Japan	MSCI Europe ex U.K.	MSCI Europe ex U.K.	MSCI U.K.	MSCI Japan	MSCI U.K.	MSCI U.S.	MSCI U.S.	MSCI Pacific ex Japan
		-23.67	5.05	17.35	-15.56	-22.37	-20.30	32.06	15.86	7.35	14.67	5.44	-11.73
MSCI Japan	-15.50	MSCI Pacific ex Japan	MSCI Pacific ex Japan	MSCI U.K.	MSCI Japan	MSCI Japan	MSCI U.S.	MSCI U.S.	MSCI U.S.	MSCI U.S.	MSCI Japan	MSCI Japan	MSCI Europe ex U.K.
		-31.00	-6.64	12.45	-28.16	-29.40	-23.09	28.41	10.14	5.14	6.24	-4.23	-12.95

Spread of Returns Between Highest- and Lowest-Performing Markets by Year

42.9	64.4	40.0	49.1	20.7	19.5	16.7	17.4	18.3	20.4	29.2	35.0	7.4
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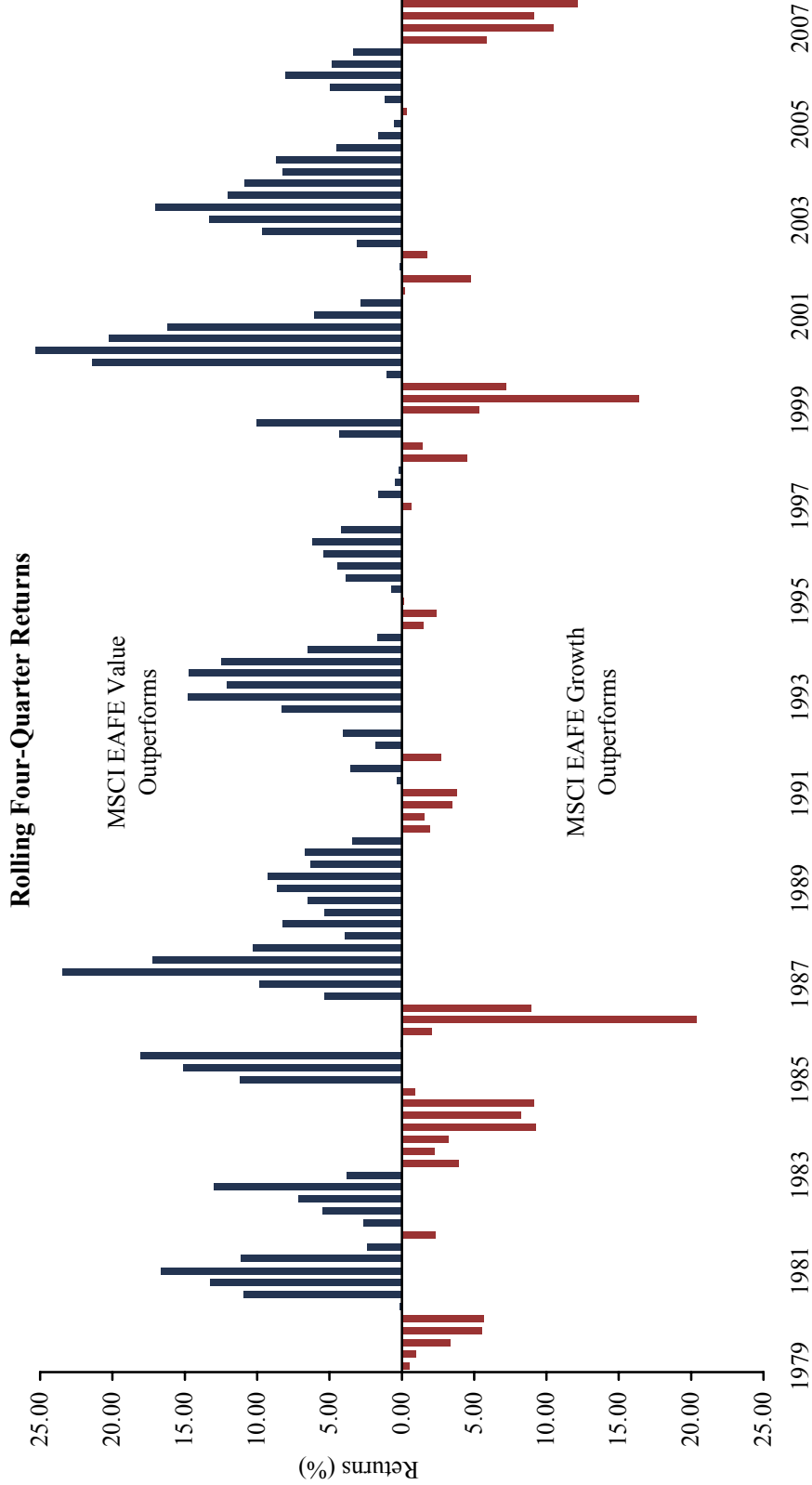
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Total returns for MSCI developed markets indices are net of dividend taxes. Data for 2008 are through June 30.

Exhibit 31

MSCI EAFE GROWTH VERSUS MSCI EAFE VALUE

January 1, 1979 – June 30, 2008



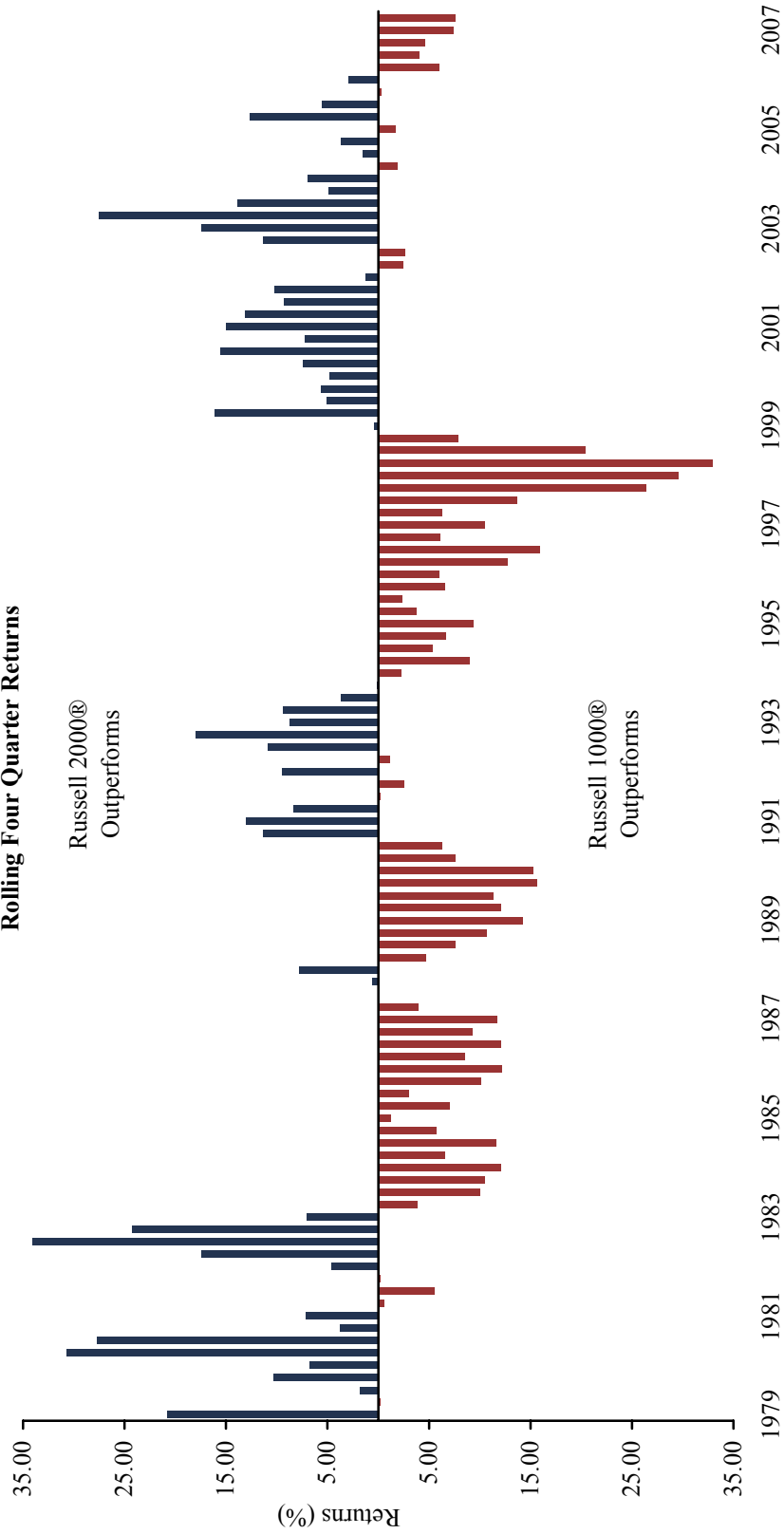
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Exhibit 32

RUSSELL 1000® VERSUS RUSSELL 2000®

January 1, 1979 – June 30, 2008

Rolling Four Quarter Returns

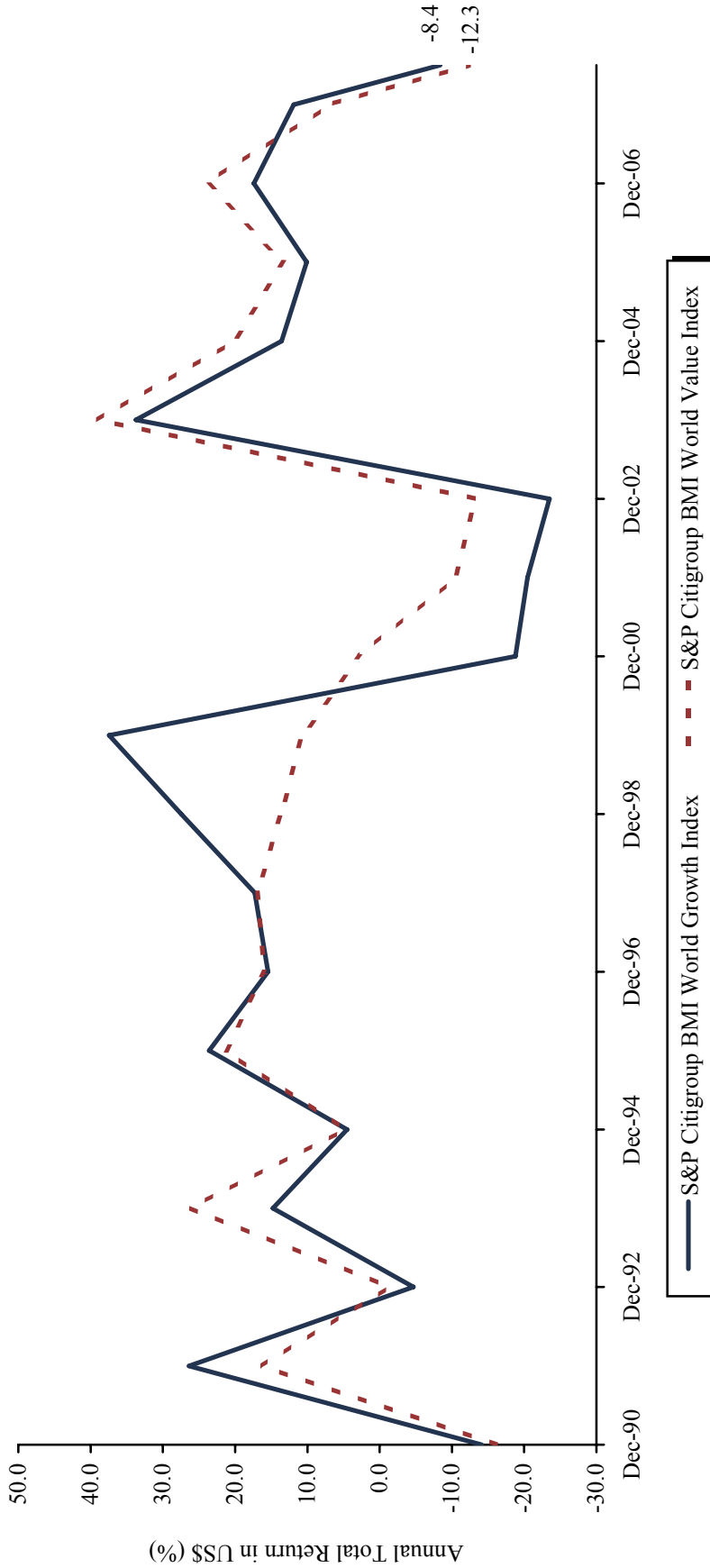


Sources: Frank Russell Company and Thomson Datastream.

Exhibit 33

ANNUAL RETURNS FOR THE S&P/CITIGROUP WORLD BMI GROWTH AND VALUE INDICES

January 1, 1990 – June 30, 2008



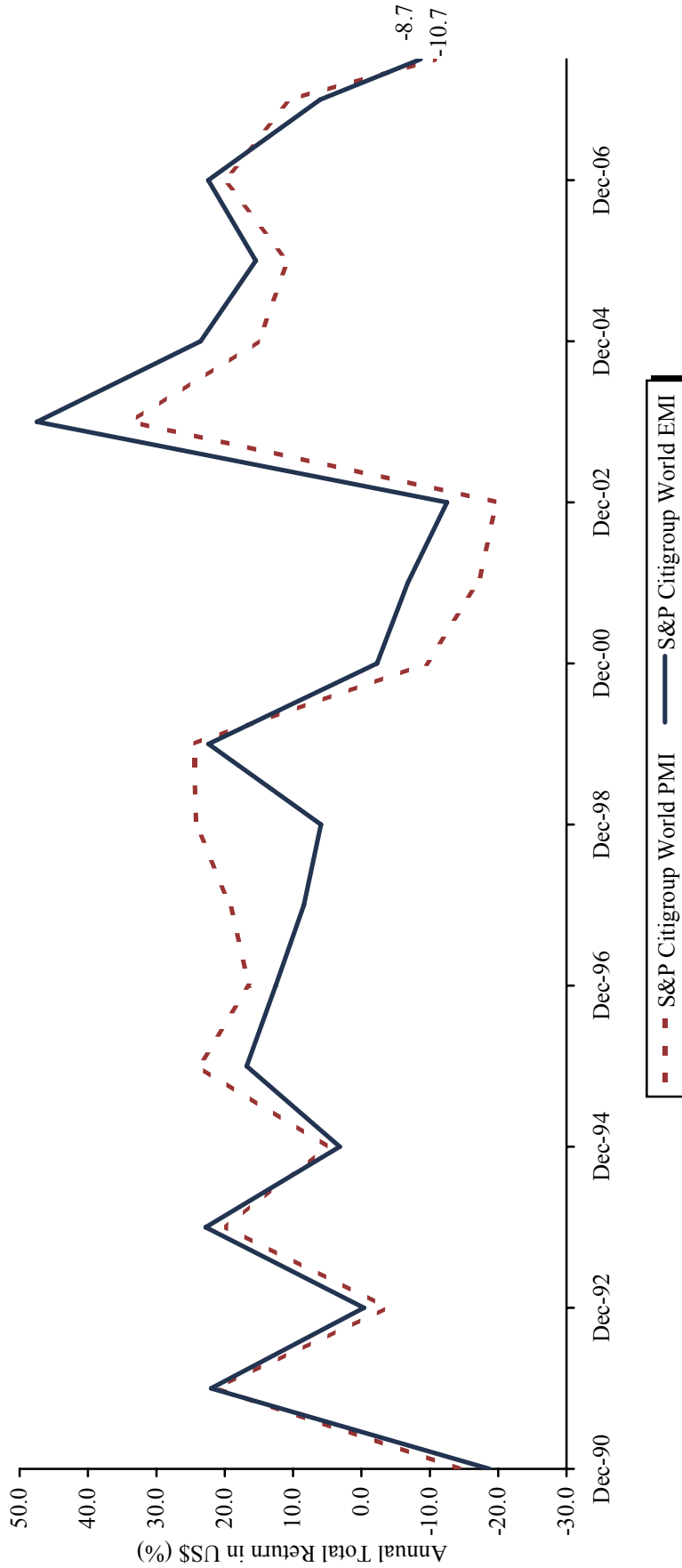
Source: S&P/Citigroup Global Markets.

Notes: The Broad Market Index (BMI) covers 26 developed and 26 emerging markets countries. It includes all listed shares of companies with available market capitalization of at least US\$100 million. The cumulative returns for the S&P/Citigroup World BMI Growth and Value Indices over the entire period are 262.0% and 361.8%, respectively.

Exhibit 34

ANNUAL RETURNS FOR THE S&P/CITIGROUP WORLD PMI AND EMI INDICES

January 1, 1990 – June 30, 2008

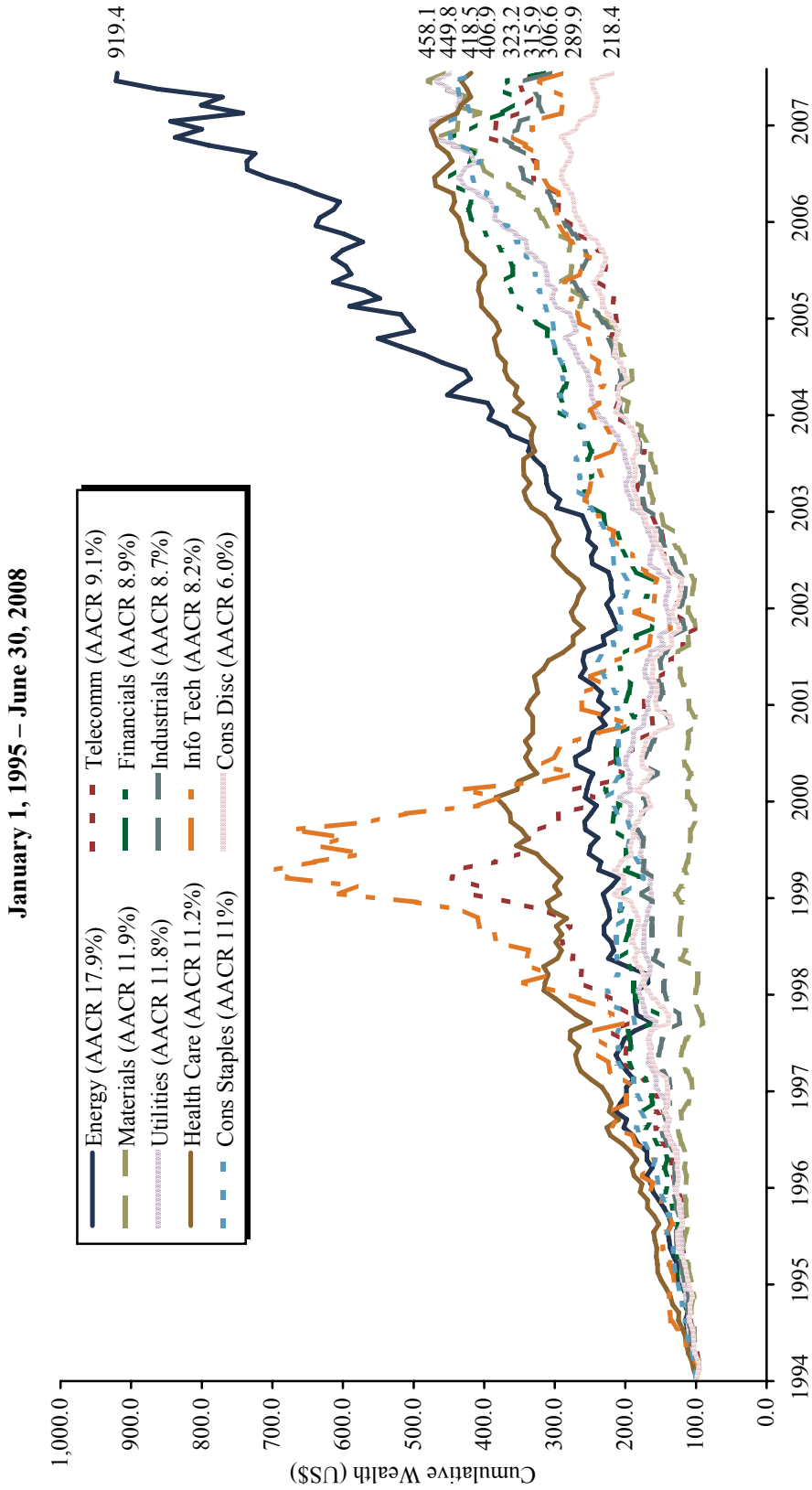


Source: S&P/Citigroup Global Markets.

Notes: The Primary Market Index (PMI) consists of the larger-capitalization stocks, representing the upper 80% of available market capital for each individual country while the Extended Market Index (EMI) consists of the smaller-capitalization stocks, representing the bottom 20% of available market capital for each individual country. The cumulative returns for the S&P/Citigroup World PMI and EMI indices over the entire period are 306.1% and 359.2%, respectively.

Exhibit 35

CUMULATIVE WEALTH OF THE S&P/CITIGROUP GLOBAL BROAD MARKET INDEX ECONOMIC SECTORS



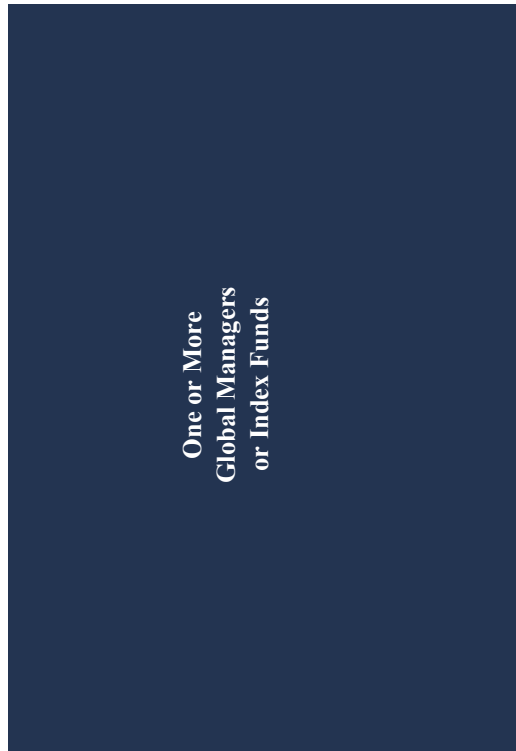
Source: S&P/Citigroup Global Markets.

Notes: Index levels rebased to 100 as of December 31, 1994. Average annual compound returns (AACRs) are from January 1995 through June 2008. The AACR for the total index as of June 30, 2008, is 9.5%.

Exhibit 36

BUILDING A GLOBAL EQUITY PORTFOLIO

The Very Simple Approach

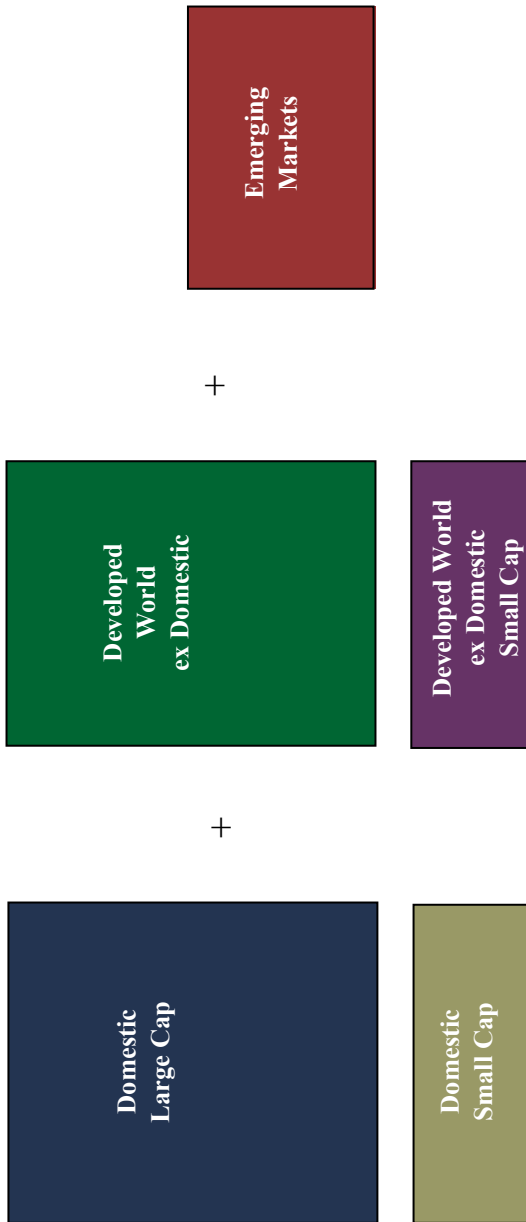


Benchmark: MSCI All Country World Index

Exhibit 37

BUILDING A GLOBAL EQUITY PORTFOLIO

The Quite Simple Approach

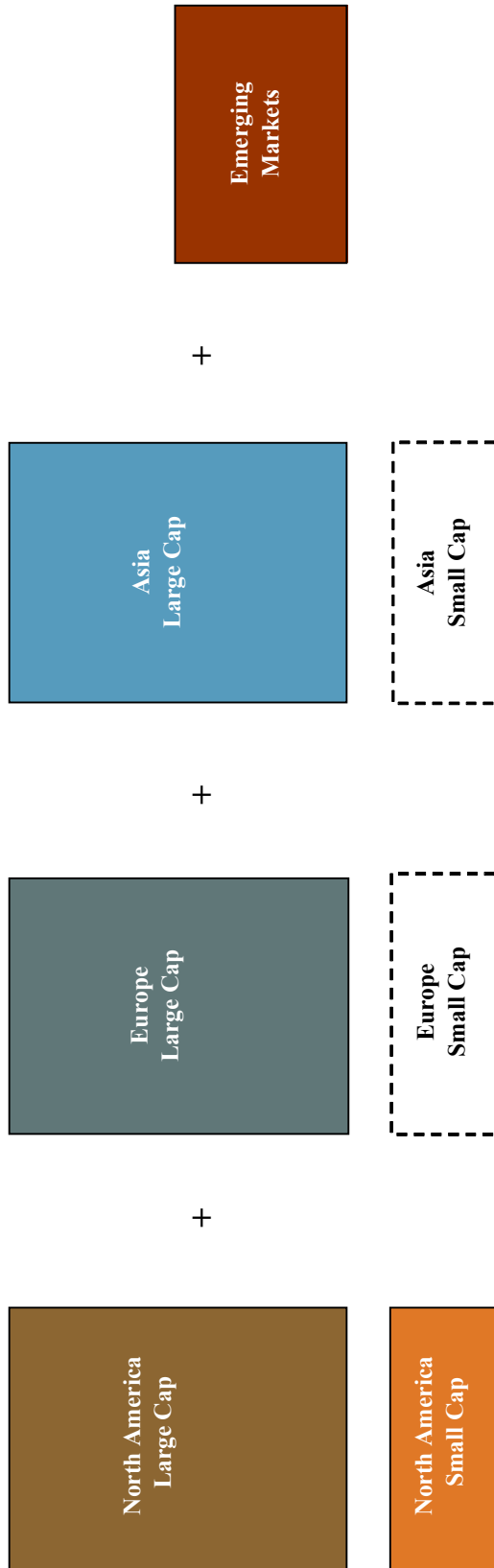


Benchmark: $A\%$ Domestic Index + $B\%$ Developed World ex Domestic Index + $C\%$ MSCI Emerging Markets Index

Exhibit 38

BUILDING A GLOBAL EQUITY PORTFOLIO

The Regional Approach



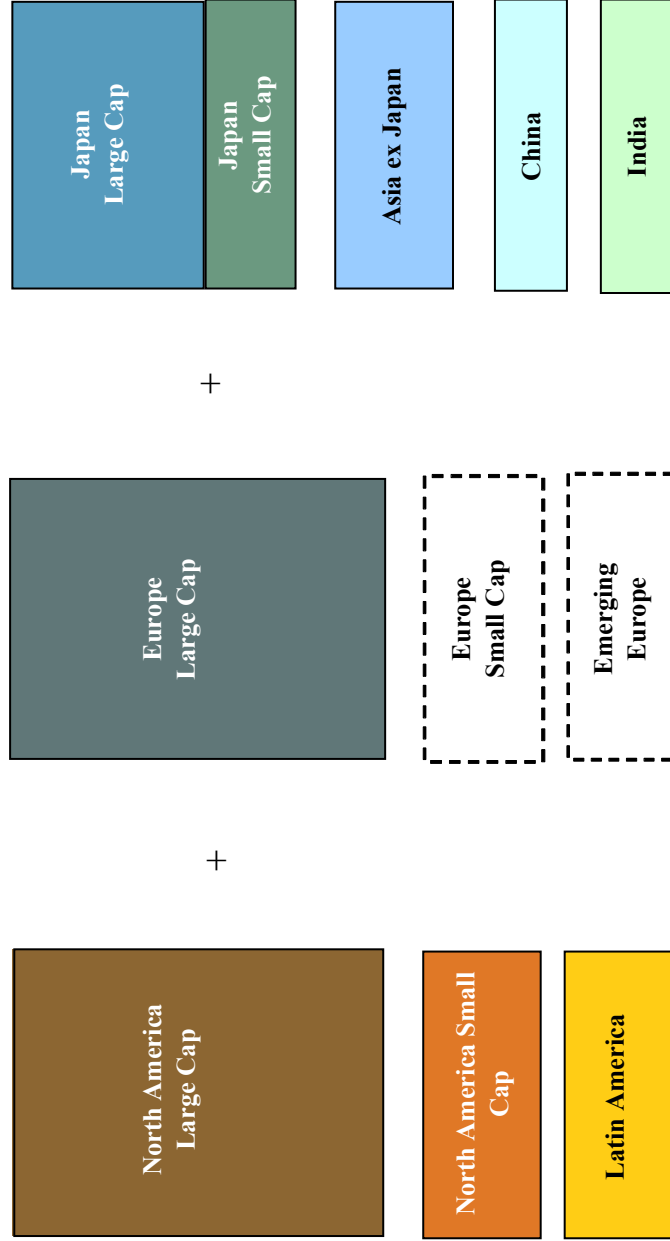
Benchmark Option 1: $\underline{A}\%$ Russell 3000® Index + $\underline{B}\%$ MSCI Canada Index + $\underline{C}\%$ MSCI Europe Index + $\underline{D}\%$ MSCI Asia Pacific Index + $\underline{E}\%$ MSCI Emerging Markets Index

Benchmark Option 2: MSCI All Country World Index

Exhibit 39

BUILDING A GLOBAL EQUITY PORTFOLIO

The More Regional Approach + Country-Specific Approach



Benchmark Option 1: MSCI All Country World Index

Benchmark Option 2: $A\%$ Russell 3000® Index + $B\%$ MSCI Canada Index + $C\%$ MSCI Europe Index + $D\%$ MSCI Asia Pacific Index + $E\%$ MSCI Emerging Markets Index

Benchmark Option 3: MSCI Country- (or Region-) Specific Indices