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The case for global equities: Diversifying risk in a volatile world

US INVESTORS HOLD A MAJORITY OF THEIR EQUITY ALLOCATION IN

US EQUITIES, a far higher weighting than the global equity benchmarks. The allocation is even higher for US defined contribution (DC) investors in aggregate. In recent years, this has worked in their favor: The MSCI USA Index is up 76% for the five years ending in June 2016, while the MSCI AC World ex US is up only 3%, as the US has been at the forefront of technological innovation while sluggish growth in Europe and Japan, broad political risks, and fears of a Chinese hard landing have held back non-US markets and economies. We believe investors should reevaluate the reasons for their US concentration and consider the merits of a more diversified, global approach to investing. While the trend of US outperformance may continue in the near term, US equities have reached extremes on various metrics, suggesting that a reversion to the mean is likely at some point. So now may be a good time for long-term investors to consider allocating a larger proportion of their portfolio to non-US equities. Perhaps most important, investors with a home-country bias are missing out on the only true free lunch in investing: diversification.

Why the focus on the US?

Before considering any shifts in asset allocation based on valuation or the fundamental outlook, investors need a starting point to anchor their allocation to. Within an asset class, this is typically the market capitalization (market cap is the dominant type of benchmark used): Absent any active view, investors would tend to hold more of the larger assets. This is logical enough. A larger company or country is more important to the economy and therefore should play a larger role in portfolios.

Key points

- US investors hold a significantly higher allocation to US equities than an unbiased portfolio-construction methodology based on any fundamental variable would indicate. This is especially true of defined contribution pension plans.
- Historically, portfolios with closer to a 50% weighting in non-US equities have had better risk/return profiles, and we consider this to be a more efficient allocation for US investors.
- As geopolitical and economic concerns have been weighing on non-US equities for several years, relative valuations would suggest that now is a good time to consider making the transition to a more globally diversified equity allocation.

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GDP

About the authors

Nick is a multi-asset portfolio manager within Global Multi-Asset Strategies and co-manages the firm's target-date portfolios. He contributes to the research and portfolio management of Wellington Management's real return multi-asset strategies, including inflation hedging and real total return solutions. Nick's research covers strategic and tactical asset allocation as well as manager selection.

Chris is a multi-asset portfolio manager and co-manages the firm's target-date strategies. As the Associate Director of Global Multi-Asset Strategies, Chris also partners with the portfolio management team on a variety of tactical, absolute-return, and risk-based strategies for the firm's clients. This includes multiple areas of the investment process across research, modeling, portfolio construction, and risk management, as well as working with clients on customized solutions.

As a portfolio specialist in Multi-Asset Product Management, **Thomas** is responsible for the target-date fund approaches. He helps ensure the integrity of the investment approaches by providing oversight of portfolio positioning, performance, and risk exposures. He also contributes to developing new products and client solutions.

Additionally, under the efficient-market hypothesis (EMH), a market-cap-weighted index would be the optimal allocation. However, there is plenty of evidence that the EMH doesn't fully hold, so active managers will seek excess returns by deviating from that starting point. Alternatively, "smart beta" approaches may use a fundamental variable such as sales or earnings to weight allocations in order to avoid chasing outperformers, which have growing market caps. Figure 1 shows the US weighting as a percentage of global equity market cap, as well as weightings based on various other financial and economic variables. At the high end, the market-cap-based US weighting as a percentage of the ACWI is 53%; at the low end, the US accounts for only 22% of global GDP. Measures based on earnings and sales fall between the two extremes.

However, US equity allocations for most US-based investors are not, and never have been, within this range. US pension investors in aggregate have 62% of their equity allocation in US equities (according to Towers Watson's Global Pension Assets Study 2016). For US DC plans, the equity allocation to the US is even higher, at 82% (Northern Trust, Home Country Bias 2015).

 $\rm F_{IGURE~I}$ The US accounts for 53% of global equity market cap but only 22% of global GDP

US weighting on different metrics

US % of total

50

40

20

10

Earnings

Sales

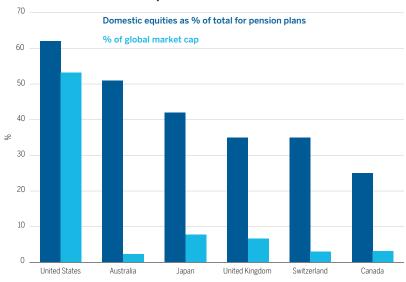
Sources: MSCI, Datastream | As of 31 May 2016

Market cap

FBITDA

While a few investors may have been prescient enough to overweight the US in portfolios several years ago based on the active view that it had the best outlook, most were simply sticking with the status quo in their portfolios. The aggregate overweight to the US has persisted over many decades. Additionally, this home-country bias is well documented and is not confined to the US. As Figure 2 shows, investors in all countries tend to be overweight their domestic markets. Home bias is likely due to comfort rather than to any investment rationale based on an unbiased assessment of return and risk. Arguably, investors should underallocate to domestic equities. As their future income and employment prospects are likely tied to the local economy and market, domestic equities are less than optimally diversifying to their wealth.

FIGURE 2
Home bias is entrenched and persistent across countries



Sources: Towers Watson 2016 survey, Datastream | As of 31 May 2016

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Historical data suggests a higher non-US allocation

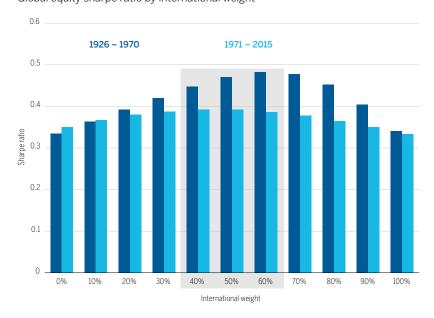
We have data on international equity returns going back as far as 1926. However, some of the older data is of questionable reliability — and relevance, given the many changes to the economy and markets over the last century. MSCI provides more reliable data, which starts in 1970. Figure 3 breaks out the Sharpe ratio into US and non-US weightings over the two 45-year periods (1926 - 1970 and 1971 - 2015). The non-US allocation used is 80% developed markets and 20% emerging markets, which is roughly the historical average market-cap split. Interestingly, in both periods the optimal Sharpe ratio is found with a non-US equity allocation in the range of 40% - 60%. This is consistent with the various weighting schemes (excluding GDP) from Figure 1. An allocation of roughly 50% to non-US equities has the support of both theory and the data and is therefore the weighting we recommend. This conclusion should be seen in the context of the US's outperformance over the last century, which was far from a given at the start of the period. Even so, a geographically diversified equity portfolio performed well.

FIGURE 3

A non-US allocation of 40% – 60%

has historically led to an optimal sharpe ratio

Global equity sharpe ratio by international weight

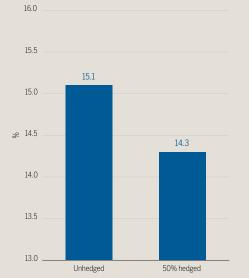


Source: Global Financial Data

To hedge or not to hedge?

One additional consideration for any international investor is how to handle currency risk. Since 1987, currency risk within the MSCI AC World ex US Index has been 7.5% per annum. compared with 14.8% for local equities. As the impact from currencies can be large but tends to wash out over time, currency is an additional source of volatility with no long-term incremental return. We believe it makes sense to hedge some of this risk, so that participants who retire and therefore withdraw funds after a period of US-dollar strength (which is bad for unhedged international equity returns) are not hurt unnecessarily. As FIGURE 5 shows, our policy of hedging half of the currency risk within our core global equity portfolios in our targetdate funds would have reduced risk by almost 1 percentage point historically, compared with an unhedged portfolio. Importantly, we do not want to blindly hedge currencies that have high interest rates and are therefore expensive to hedge. Instead, we implement the hedge through currencies where we are paid to hedge or where the cost is very low.1

Figure 5 Volatility of global portfolio



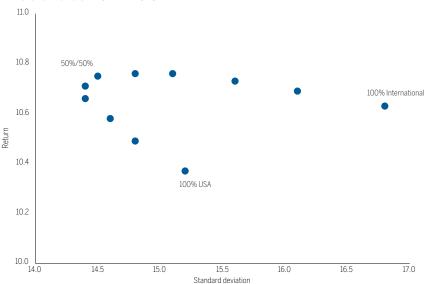
Sources: Datastream, MSCI AC World (1988 – June 2016). MSCI AC World in local currency terms used as a proxy for a 50% hedged portfolio.

¹See "Currency hedging considerations for US target-date strategies" https://www.wellington.com/en/pub/currency-hedging-considerations-us-target-date-strategies

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The efficient frontier in Figure 4 highlights the diversification benefits of investing globally and minimizing single-country risk factors. Since 1971, non-US equities have had a slightly higher return than US equities, but their risk has been almost 2 percentage points higher. However, allocating 50% of the US portfolio to non-US equities reduces portfolio risk from 15.2% to 14.5%, due to the regional diversification benefit. For example, the three worst 10-year periods for US equity returns since 1926 have been -5.4% per annum (for the 10 years to the end of August 1939), +0.4% (September 1974), and -3.4% (February 2009). In each case, non-US equities outperformed, with returns of 1.8%, 5.7%, and 1.2%, respectively, more than 4 percentage points per annum higher than US equities, helping mitigate the US's poor performance.

FIGURE 4
Efficient frontier: 1971 – 2015



Source: Global Financial Data

Conversely, the worst period for non-US equities was the 10 years to the end of August 1952, when they returned -4.2% per annum as Europe and Asia suffered from the devastation of World War II. Over that period, the US returned 17.7%, helping a 50/50 US/international portfolio return 7.7%. This is diversification at work. Not only does it help reduce risk, but mitigating these drawdowns actually leads to higher returns as it allows compounding to do the work for investors. Figure 4 shows that the return from a portfolio of US and non-US stocks combined has been higher than that from a portfolio of either US or non-US stocks. This may seem like financial alchemy, but the ability to harvest higher compounded returns through diversification is one of the only true free lunches in investing and the driving force behind our goal of providing participants with a glidepath that maximizes the benefits of diversification.

Another notable aspect of Figure 4 is that, while US equities have a lower volatility than non-US equities, a global portfolio has the lowest volatility, again highlighting the diversification benefit. This is especially pertinent in today's environment of heightened geopolitical risk. Although we tend to

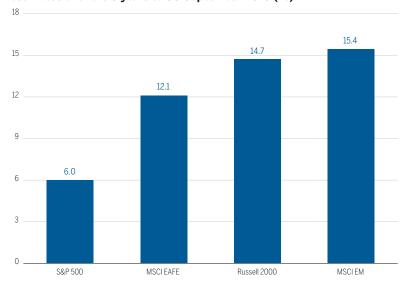
think of less developed countries as more risky, the recent election in the US and the Brexit vote in the UK have reminded us that developed markets can also be a source of geopolitical instability.

When investors allocate the majority of their assets to any one country, they are effectively betting that the political backdrop in that country will remain supportive of equities. While the US has historically been relatively favorable to corporations and is probably one of the safer countries to place that bet, a US-biased portfolio will be heavily exposed to any shift in the country's policies. For example, investors are currently focused on the potential benefits of any tax cuts and deregulation under president-elect Donald Trump. However, we could easily face the opposite situation in four years, with a backlash against inequality leading to higher taxes in order to redistribute wealth, as well as Wall Street unfriendly policies. This could have a significantly adverse impact on a portfolio that has an 82% allocation to the US (the typical weighting in DC portfolios). By contrast, a globally diversified portfolio would have experienced a negative impact from Brexit, as UK equities declined in US-dollar terms, but the UK allocation would be only around 6% of a global portfolio, making the shock very manageable.

Alpha opportunities

The weight of evidence suggests that an allocation to non-US equities of roughly 50% (close to the market-cap-weighted index) makes sense for investors over the long term. However, our analysis so far has focused on benchmark returns. The expected return from active management is also worth considering. Again, we see a strong case for investing globally. The US is a relatively efficient market (especially for large caps), with every stock subjected to significant coverage. Figure 6 shows that analysts have typically been much more accurate in the US historically, while inefficiencies appear to be larger in non-US and smaller-cap markets. Expanding the opportunity set for managers to include niche, more inefficient areas outside the US provides additional active return potential. For this reason, we focus our active risk budget on small-cap and non-US markets in our target series.

FIGURE 6
Median error in analysts' estimates from 9 months prior estimates over the 5 years to 30 September 2016 (%)



Sources: IBES, Wellington Management

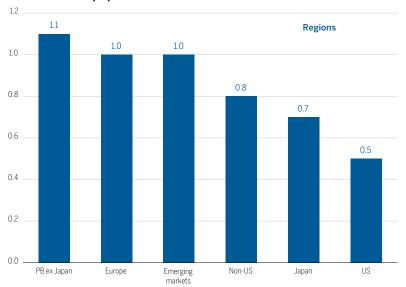
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These reasons for favoring the US appear to be largely priced in, and we question investors' confidence, given the historical tendency toward mean reversion.

As Figure 7 shows, this broader, less efficient opportunity set has historically translated into higher alpha for active managers with global mandates.

 $\rm F_{IGURE}\,7$ Hypothetical value added by median active equity manager, 10 years ended December 2015 (%)



Sources: Mercer Performance Analytics, Wellington Management

The current outlook

So far, we have been focusing on the long-term policy portfolio that we believe makes sense absent an active view on future returns. However, we also think the current market outlook suggests now may be a good time to diversify away from the US. The US equity market has been outperforming since the global financial crisis. Since its relative performance bottomed in February 2008 through June 2016, the US market's cumulative return is 89%, compared with 36% for global equities, 3% for Europe, Australasia, and the Far East, and -10% for emerging markets.

The many reasons for the US's outperformance include the relative strength of the domestic economy, led by innovation in the technology and health care industries, and the volatile political environments outside the US (a recent example being the Brexit referendum). These trends have shown no sign of turning, thus making many investors more confident that the US is the place to invest. However, these reasons for favoring the US appear to be largely priced in, and we question investors' confidence, given the historical tendency toward mean reversion. Figure 8 shows the valuation of US equities relative to non-US markets. On a variety of metrics, US valuations look stretched.

 $\label{eq:Figure 8} Figure \ 8$ The US looks overvalued in absolute terms and relative to history Valuation of US vs world ex US

	Shiller P/E	Trailing P/E	Price/ book	Price/ dividend	Forward P/E
Current US premium (%)	76	23	89	62	21
Premium vs historical median (%)	94	30	45	49	9
Historical percentile (%)	100	92	99	96	99
Start date	Dec 1979	Jan 1970	Dec 1974	Jan 1970	June 2003

Sources: MSCI, Datastream | As of 30 June 2016. Only includes developed markets, for data availability. Current US premium refers to the percentage difference in the current valuation measures. Premium vs historical median refers to the percentage difference in the current valuation measures compared with where they have been on average historically. A historical percentile of 100% corresponds to current valuations for the US being the most expensive they have been in the full data set relative to non-US equities, while 90% would mean US markets have only been more expensive 10% of the time.

Another way of assessing value is to consider how large a share of the global market capitalization a particular segment reaches. This number will tend to peak when the cycle supporting that asset peaks and valuations are most stretched. As Figure 9 shows, the US is now near a 40-year-plus peak in market cap as a percentage of the MSCI World, surpassing its high during the technology bubble. While the US share of global market cap could go on to much higher levels than it has in the past, this measure has historically been a useful contrarian indicator of forward relative returns for the US.

 $\label{eq:Figure 9} \mbox{US share of developed-market cap is at its highest level in over 40 years}$



Sources: MSCI, Datastream | Only shows developed markets, because of data availability. The US is currently 53% of global markets, including emerging markets.

This appears to be the best of times for the US, with margins near record highs, revenue growth trending well ahead of the rest of the world, and share buybacks providing a further boost to earnings. Meanwhile, valuations are quite rich. Experience suggests that some or all of these conditions are likely to normalize in the years ahead. So, while the near-term environment may look challenging for global equity markets and none of these valuation metrics will enable investors to pick the bottom for non-US equities with any certainty, valuations would suggest that the bulk of the US market's outperformance is behind us and that it would be reasonable to expect non-US equities to outperform over the coming five to 10 years. In our view, this makes the present a particularly attractive time to shift to a more globally diversified equity portfolio.

Conclusion

Our research suggests that, in the very long term, the optimal portfolio is geographically well diversified, with an allocation of 40% – 60% to non-US equities. This is consistent with both the US's fundamental share of the global markets and historical optimal performance. Additionally, we find non-US markets to offer more compelling opportunities for alpha, which could be an important source of returns for investors, in the current context of low expected returns for broad markets. While a US-biased portfolio has outperformed in recent years and may still appear to have fundamental tailwinds, valuations have reached such extremes that we believe this is an especially attractive long-term opportunity for global portfolios. \blacksquare

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