
Asian Investors Could Benefit From a Reduction in Home Bias

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Executive Summary

Home bias refers to the phenomenon of investors worldwide tending to disproportionately allocate their equity portfolios with domestic assets despite potential benefits from international diversification. While recently we have been seeing a downward trend in domestic equity holdings across Asia, there still remains a significant home bias in equity allocations in Asian markets. This exposes pension plans in Asia to higher risks as Asian equity markets often display higher volatilities and concentration risks relative to global equities.

Home biases can exist for a variety of reasons including investment barriers, transaction costs, corporate preferences and regulatory constraints. There are also currency risks to consider. However, there is no denying that there are significant benefits to expanding investments into global markets, including volatility reduction, return diversification and the ability to reduce concentration risk.

Over the long term, global equities tend to generate comparable or better risk-adjusted returns relative to those of Hong Kong, Japan, Korea, Singapore and Taiwan — the markets that we are considering for analysis in this paper — suggesting global investments could improve long-term risk-return profiles in these markets. This would imply that the trend toward global investments should (and likely will) continue across Asia.¹

Key Points

- **Asian Equity Home Bias** Although it is trending down, Asian pension funds continue to hold domestic equities larger than their respective market capitalisation levels in their portfolios.
- **Global Investments Improve Risk-Adjusted Returns** Adding global equities could improve investors' long-term risk-return profiles in the five Asian markets that we examine — Hong Kong, Japan, Korea, Singapore and Taiwan.
- **Reasons for Home Bias** There are many reasons for home bias including investment barriers, transaction costs, corporate preferences and regulatory constraints. There are also currency risks to consider.

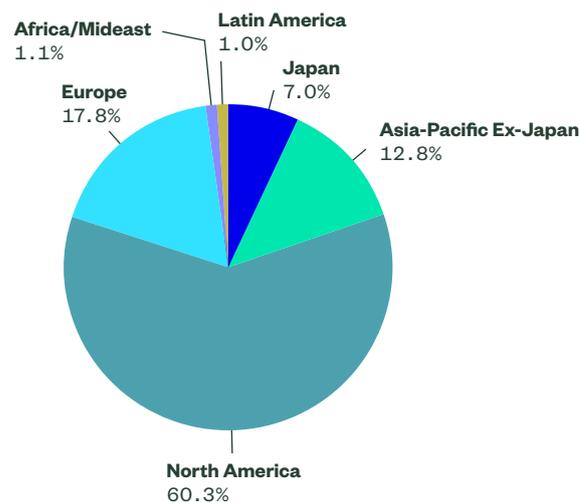
Portfolio Benefits

- **Risk Reduction** Over the long term, global equities tend to show less volatility compared with their Asian peers.
- **Lower Concentration Risk** Many Asian stock markets are highly concentrated in a few companies making them more subject to stock-specific risks compared with global equities. The same argument holds true for sectors as well.
- **Return Diversification** International diversification reduces risk much more than domestic diversification because domestic securities tend to be more highly correlated with each other given their exposure to country-specific shocks.

1 Asian Pension Plans Demonstrate Significant Home Bias

Standard financial theory suggests that a world market portfolio is the optimal portfolio in a fully efficient and integrated capital market, which means investors should construct their equity portfolios in line with global market capitalisations. This approach should lead Asian investors to have a relatively smaller allocation to their home equity markets in their global equity portfolios (Figure 1).

Figure 1
**Market Cap
Breakdown of MSCI
ACWI in USD**



Note 1: Market cap weights of select Asian markets on the MSCI ACWI: Hong Kong = 0.9%, Singapore = 0.3%, Korea=1.4%, Taiwan= 1.5%.

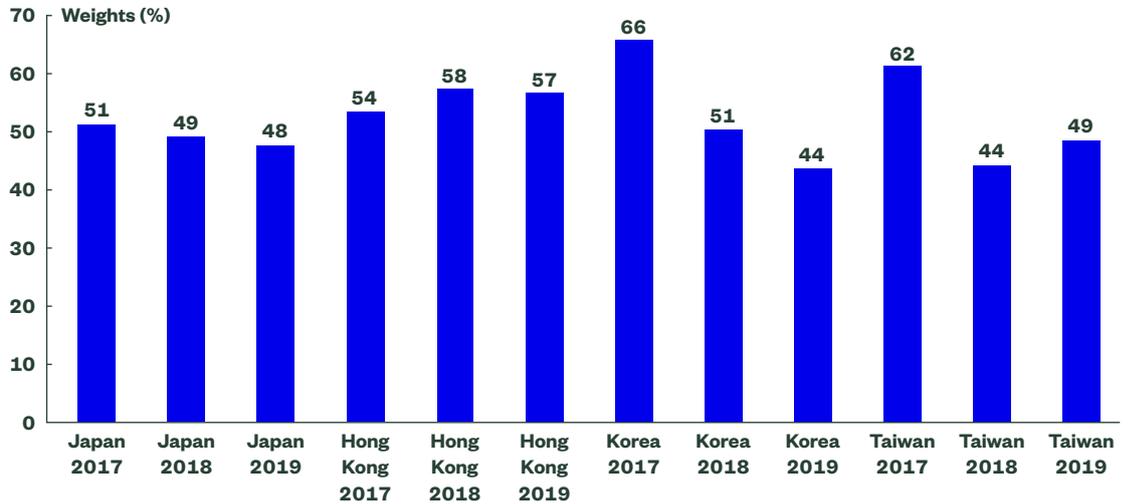
Source: FactSet, State Street Global Advisors, as at 30 June 2020.

However, in reality, we find that Asian pension funds hold a much higher percentage of domestic stocks in their equity portfolios, resulting in significant home bias. Pension funds surveyed in the four major Asian markets by Mercer allocated between 44% (Korea) and 57% (Hong Kong) in domestic equities as of 2019 (Figure 2).^{2,3}

When we compared these funds' domestic exposure versus their market cap weights on the MSCI All Country World Index (ACWI), Hong Kong pension funds were found to have the biggest home bias at 63x their market cap weighting, while Japan showed the smallest bias at 7x. Although the bias toward domestic assets tends to be larger in developing countries compared with developed economies,⁴ this does not seem to be the case with Hong Kong. Home bias tends to be lower for countries with higher weights in global markets (mainly developed markets) although this need not always be the case.

Trend-wise, pension funds across Asia have decreased their equity allocations in home markets from over 65% to around 52% on average. Korea and Taiwan reduced their home bias from more than 60% in 2017 to below 50% in 2019, while domestic allocations for Japanese and Hong Kong pension funds remained relatively stable over the three-year period. The fall in domestic equity holdings in Korea was predominantly due to the National Pension Service (NPS), which accounts for the bulk of the pension fund assets. NPS' local equity holdings fell to 44% of the total in 2019 compared with 55% for the Teachers' Pension Fund and 65% for the Government Employee Pension Fund.

Figure 2
**Equity Home Bias of
 Asian Pension Funds**



Note 1: For complete citations for the figure, please refer to endnotes.

Note 2: While we include Singapore in our analysis, details around home bias have not been included in the Mercer reports.

Source: Mercer.

Reasons for Equity Home Bias Among Investors

For many investors, home bias may have historically stemmed from a perception that investing in foreign securities is challenging. Reasons for this perception include unavailability of custody accounts or limitations on the repatriation of investment income. However, over the past couple of decades, many countries have liberalised their financial markets, resulting in improved market accessibility. Indeed, global indices such as MSCI ACWI are designed to reflect the investment experience of international institutional investors and tend to allocate higher weights to those countries and stocks that provide international institutional investors with good liquidity and accessibility.

Another explanation put forward for home bias is transaction costs, which could include withholding tax, commissions, variable fees as well as FX costs. Due to this, actual realised returns could differ depending on the investor's domicile, affecting both expected returns and risk. While some tax and fee friction may continue to exist, there are relatively low-cost ways to hedge out currency risk (although this could vary from currency to currency).

Higher return expectations from domestic equities (based on stronger economic growth prospects) may be another factor, particularly for less-developed markets. While diversification indeed helps to reduce risk, investing in stocks that are expected to provide lower returns compared with that of the home market is likely to inhibit the desire to expand into more-developed markets.

Investors also show a domestic bias due to information asymmetries that may exist between domestic versus foreign equities. While barriers to the flow of information have come down substantially, if there is differential information, risk-averse investors tend to prefer stocks on which they have better information, which typically happen to be domestic securities.

Another popular explanation for home bias is behavioural quirks. Investors may think of foreign stocks as riskier regardless of their actual financial characteristics. Some markets may face higher risks related to corporate governance and politics, but as developed markets (DM) account for a major part of the global markets, we wonder whether market familiarity is a bigger driver of home bias, particularly for emerging market (EM) economies.

While less cited as a rationale for home bias, there may be a desire on the part of investors to provide support for local economies/companies and government pension funds may be encouraged to invest in local stocks (for strategic or political reasons).

Lastly, some investors may face regulatory constraints in regard to global investments. For example, domestic investors in China are subject to strict capital controls and cannot invest freely in global assets. Similarly, in Hong Kong, Mandatory Provident Funds are required to hold at least 30% of their assets in Hong Kong dollars.

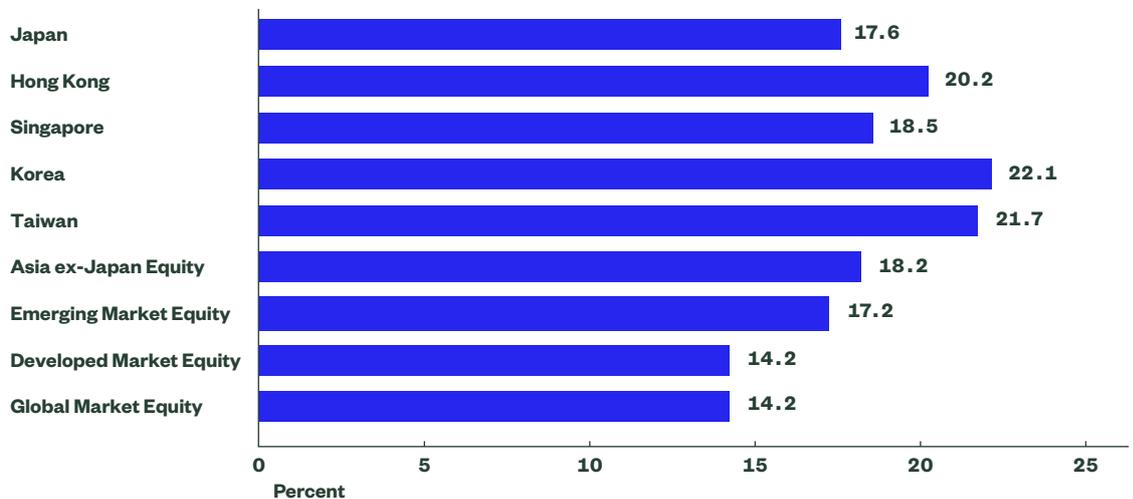
3 Benefits of Investing in a Global Equity Portfolio

Asian equity markets often tend to display higher volatilities and concentration risks relative to global equities, which means adding global equities to Asian equity portfolios would be beneficial for Asian investors looking to diversify their portfolios.

Risk Reduction

As mentioned above, from the perspective of risk, global equities are less volatile compared with their Asian counterparts, which is one of the key benefits of global diversification (Figure 3). Note that some Asian investors invest in Asia ex-Japan equities as they start to invest in global equities. Although Asia ex-Japan equities are usually less volatile compared with most other individual Asian equity markets, they tend to be more volatile than the broader EM and DM equities. As such, investors would enjoy better diversification benefits if they were to invest in a broader universe of global equity portfolios.

Figure 3
20-Year Annualised Volatility of Asian and Global Equity Markets



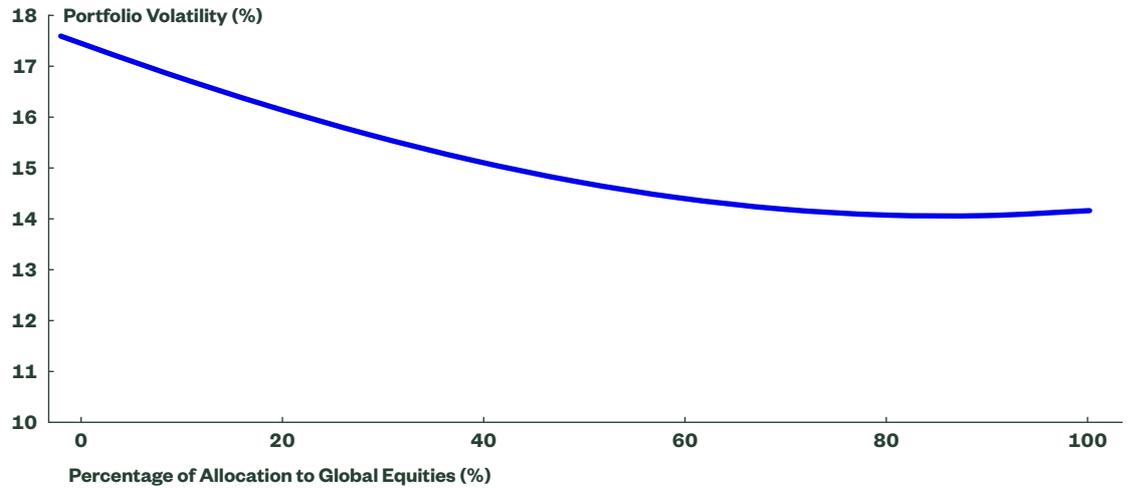
Note 1: Time period from July 2000 to June 2020. Monthly local currency returns of the indices were used to calculate equity volatility. Local currency returns were used as proxies for hedged returns of MSCI ACWI, World and EM equities.

Note 2: Japan = MSCI Japan Gross Total Return Index; Hong Kong = MSCI Hong Kong Gross Total Return Index; Singapore = MSCI Singapore Gross Total Return Index; Korea = MSCI Korea Gross Total Return Index; Taiwan = MSCI Taiwan Gross Total Return Index; Asia ex-Japan Equity = MSCI AC Asia ex Japan Gross Total Return Index; Emerging Market Equity = MSCI Emerging Markets Gross Total Return Index; Developed Market Equity = MSCI World Gross Total Return Index, Global Market Equity = MSCI All Country World Gross Total Return Index.

Source: FactSet, State Street Global Advisors, as at 30 June 2020.

If we consider Japanese stocks, the long-term risks of which have been the lowest among the five Asian markets considered here, we would find that by adding global stocks up to 90% of the total portfolio, we can reduce the risk of the total equity portfolio (Figure 4). This means local investors will likely realise diversification benefits from incremental allocations to global equities.

Figure 4
**Historical
 Portfolio Volatility
 With Different
 Combinations
 of Japanese and
 Global Equities**



Note 1: Time period from July 2000 to June 2020. Monthly local currency returns of the indices were used to calculate equity volatility. Local currency returns were used as proxies for hedged returns of MSCI ACWI.
 Note 2: Japan = MSCI Japan Gross Total Return Index; Global Market Equity = MSCI All Country World Gross Total Return Index.
 Source: FactSet, State Street Global Advisors, as at 30 June 2020.

Lower Concentration Risk: Company and Sector

Compared with global equity markets, many Asian stock markets are very concentrated, making them highly susceptible to stock-specific risks. Figure 5 shows the number of securities in each of the five markets that we have considered along with the percentage of each index's market cap represented by the top five stocks and the weights of the top-three securities on each index.

Among the five Asian markets, Singapore is the most concentrated, comprising 22 securities, with the top-5 stocks accounting for 59% of the index market cap. The Hong Kong, Korean and Taiwanese markets are also similarly dominated by the largest companies in their respective indices. Although Japan is less concentrated comparatively, the MSCI ACWI with close to 3,000 stocks would still provide better diversification benefits than the local Japan equity market. This means Asian investors could reduce concentration risks by increasing their global equity allocations.

Figure 5

Concentration of Stocks in Asian and Global Equity Indices

	MSCI Japan		MSCI Hong Kong		MSCI Singapore		MSCI Korea		MSCI Taiwan		MSCI ACWI	
Number of Securities	321		40		22		107		88		2,988	
Percentage in Top-5 Securities	13%		48%		59%		49%		50%		11%	
Top-3 Securities	Toyota Motor Corp.	4.0%	AIA Group Ltd.	25.2%	DBS Group Holdings Ltd.	18.3%	Samsung Electronics Co., Ltd.	31.2%	Taiwan Semiconductor Manufacturing Co., Ltd.	36.8%	Apple Inc.	3.4%
	Sony Corp.	2.6%	Hong Kong Exchanges and Clearing Ltd.	11.4%	Oversea-Chinese Banking Corp. Ltd.	14.6%	SK Hynix Inc.	5.8%	Hon Hai Precision Industry Co., Ltd.	5.1%	Microsoft Corp.	3.1%
	SoftBank Group Corp.	2.4%	CK Hutchison Holdings Ltd.	3.9%	United Overseas Bank Ltd. (Singapore)	11.7%	Samsung Electronics Co. Ltd. Pfd. Non-Voting	4.7%	MediaTek Inc.	4.2%	Amazon.com, Inc.	2.5%

Source: FactSet, as at 30 June 2020.

The same argument holds true for sectors. A domestic bias will lead to significant sector tilts compared with having exposure to the MSCI ACWI (Figure 6). For example, Korea and Taiwan are overweight in information technology companies, while Hong Kong and Singapore are overweight in financials and real estate. Japan is more diversified but does have an overweight in industrials and is less exposed to information technology compared with the MSCI ACWI. These differences in sector exposures could lead to unintended risks for investors.

Figure 6

Sector Comparisons Between Asian Equity Markets and MSCI ACWI

Sectors	MSCI Japan	MSCI Hong Kong	MSCI Singapore	MSCI Korea	MSCI Taiwan	MSCI ACWI
Communication Services	9.58	1.78	9.86	9.16	3.51	9.39
Consumer Discretionary	17.74	7.26	3.23	8.38	3.10	11.52
Consumer Staples	8.42	3.30	3.86	5.13	2.57	8.08
Energy	0.64	0.00	0.00	1.48	0.48	3.56
Financials	9.02	42.71	47.89	7.81	15.81	13.47
Health Care	11.80	1.62	0.00	6.99	0.00	12.94
Industrials	20.18	12.06	10.43	7.36	1.73	9.45
Information Technology	12.63	0.72	2.19	46.83	65.49	20.80
Materials	4.81	0.00	0.00	6.16	7.02	4.65
Real Estate	3.56	20.21	22.54	0.00	0.28	2.92
Utilities	1.60	10.34	0.00	0.71	0.00	3.20

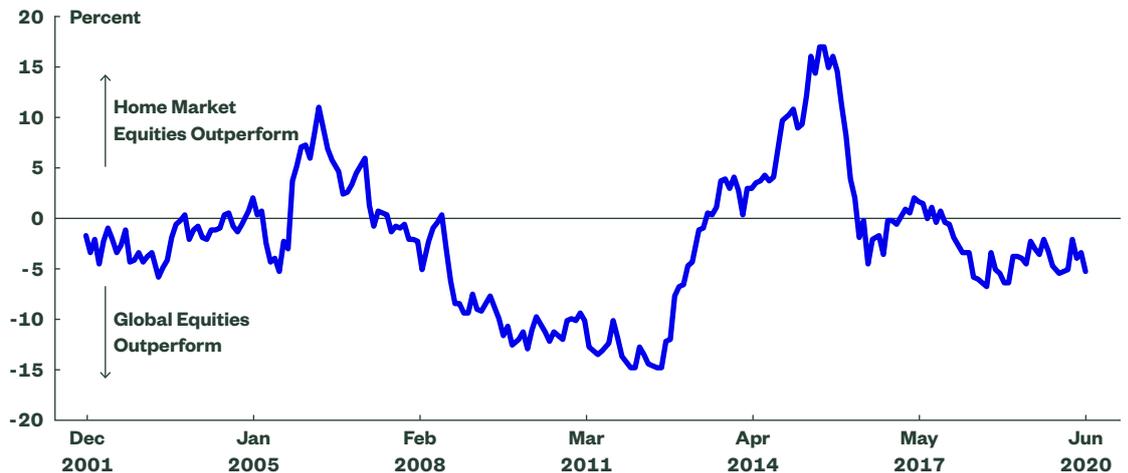
Source: FactSet, State Street Global Advisors, as at 30 June 2020.

Return Diversification

International diversification tends to reduce risk faster compared with domestic diversification as domestic securities are highly correlated with each other given their exposure to country-specific shocks. While companies with higher levels of overseas sales may be less affected by a growth slowdown in their respective economies, they are still susceptible to market-specific risks. This is not surprising, given that a country's stock market returns are typically correlated with its GDP growth.

While specific Asian stock markets have outperformed global equities over certain periods, such as Japan during most of 2012–2015 and Korea during most of 2001–2010, there have been periods when global stocks have outperformed, too (Figures 7a and 7b). Similarly, there have been return differentials between Hong Kong, Singaporean, Taiwanese and global equities.

Figure 7a
**Rolling 3-Year
 Annualised
 Return Differential
 Between Asian and
 Global Equity**
 Japan vs. Global
 Equities



Note 1: Time period from July 2000 to June 2020. Monthly local currency returns of the indices were used to calculate equity volatility. Local currency returns were used as proxies for hedged returns of MSCI ACWI.
 Note 2: Japan = MSCI Japan Gross Total Return Index; Global Market Equity = MSCI All Country World Gross Total Return Index.
 Source: FactSet, State Street Global Advisors, as at 30 June 2020.

Figure 7b
**Rolling 3-Year
 Annualised
 Return Differential
 Between Asian and
 Global Equities**
 Korea vs. Global
 Equities



Note 1: Time period from July 2000 to June 2020. Monthly local currency returns of the indices were used to calculate equity volatility. Local currency returns were used as proxies for hedged returns of MSCI ACWI.
 Note 2: Korea = MSCI Korea Gross Total Return Index; Global Market Equity = MSCI All Country World Gross Total Return Index.
 Source: FactSet, State Street Global Advisors, as at 30 June 2020.

Clearly, the performance of an equity portfolio with a strong home bias is overly dependent on the performance of the domestic economy and market, while diversification benefits could be gained by investing in foreign markets since foreign markets are less correlated with domestic markets. This means the expected return for a given level of risk would rise and returns would be smoother over time.

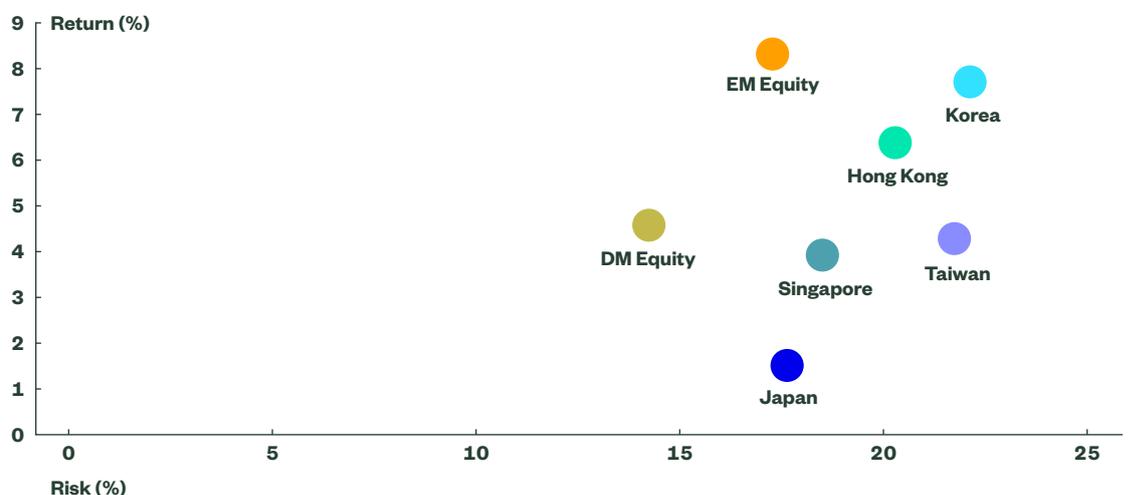
4

How Risk-Adjusted Returns Look Across Asia Compared With Global Equities

Figures 8a and 8b illustrate the historical long-term returns and risks of various Asian and global equity markets. For global equities, we separate the broad DM equities (represented by the MSCI World Index) and EM equities (represented by the MSCI EM Index) as these two markets have different return and risk characteristics. This is important as some Asian markets have return characteristics in line with that of EM while for others those are more in line with that of DM.

As many Asian investors tend to hedge their foreign investments back to local currencies, we used local currency returns to proxy currency-hedged returns for the MSCI World Index and the MSCI EM Index. On a long-term basis, this proxy provides broadly similar returns to locally unhedged returns (+/- 2% versus DM), but on a short-term basis the variation in returns can be quite sharp due to volatility in currency movements. This makes currency hedging an important consideration for investors looking to invest in overseas markets.

Figure 8a
Historical Returns and Risks of Asian and Global Equity Markets



Note 1: Time period from July 2000 to June 2020. Monthly local currency returns of the indices were used to calculate equity volatility. Local currency returns were used as proxies for hedged returns of MSCI ACWI, World and EM equities.
 Note 2: Japan = MSCI Japan Gross Total Return Index; Hong Kong = MSCI Hong Kong Gross Total Return Index; Singapore = MSCI Singapore Gross Total Return Index; Korea = MSCI Korea Gross Total Return Index; Taiwan = MSCI Taiwan Gross Total Return Index; Emerging Market Equity = MSCI Emerging Markets Gross Total Return Index; Developed Market Equity = MSCI World Gross Total Return Index; Global Market Equity = MSCI All Country World Gross Total Return Index.
 Source: FactSet, State Street Global Advisors, as at 30 June 2020.

Figure 8b
**Annualised Risks
and Returns**

	MSCI Japan	MSCI Hong Kong	MSCI Singapore	MSCI Korea	MSCI Taiwan	MSCI World	MSCI EM
10-Year Return (%)	8.5	7.4	2.6	5.1	9.6	11.0	6.4
10-Year Risk (%)	16.7	18.1	14.6	14.6	14.0	12.4	12.9
10-Year Return/Risk	0.51	0.41	0.18	0.35	0.68	0.89	0.49
20-Year Return (%)	1.5	6.4	4.0	7.7	4.3	4.6	8.3
20-Year Risk (%)	17.6	20.2	18.5	22.1	21.7	14.2	17.2
20-Year Return/Risk	0.09	0.32	0.21	0.35	0.20	0.32	0.48

Source: FactSet, State Street Global Advisors, as at 30 June 2020.

Over the past 20 years, the MSCI EM Index has generated higher returns as well as higher risks versus the MSCI World Index. This is in line with what one would normally expect from EM equities, which have higher risk premia to reflect their higher growth potential as well as higher embedded risks. However, the past 10 years have been abnormally favourable for DM equities, which generated much higher returns compared with EM equities with similar risks.

If we look at the risk and return characteristics of the five Asian markets over the past 20 years, we can see that Japan generated much lower returns compared with both DM and EM equities as well as other Asian markets, while its risk was similar to that of EM equities, giving it the lowest risk/return ratio. Japan's disappointing equity market returns reflect its slow economic growth, aging workforce, high levels of public debt and lack of inflation.

By comparison, the Hong Kong and Korean markets made returns somewhere between that of DM and EM equities with higher accompanying risk compared with EM equities. Their return/risk ratios were also the highest among the five Asian markets and similar to that of DM equities but lower than that of EM equities. Hong Kong's diverse financial sector (including real estate, banks and insurance) made up over half of its equity market, which benefited from the booming housing market and expanding financial service businesses over the past 20 years. In Korea, the Samsung conglomerate was a big part and the main driver of the Korean equity market.

The Singapore and Taiwanese markets produced returns that were slightly lower than that of DM equities with higher risks compared with EM equities giving them return/risk ratios that were lower versus both DM and EM equities. Three big banks accounted for a large percentage of Singapore's equity market cap and their steady but lower growth profiles partly explain the lagging equity performance of Singapore. Taiwan's equity market is dominated and driven by its semiconductor industry, which is very cyclical. Overall, DM and EM equities generated comparable or better risk-adjusted returns relative to Asian markets.

Over the past decade, Taiwanese and Japanese equity markets performed relatively strongly — the former due to a stronger semiconductor cycle and the latter due to better growth and strong performances of communication services and health care stocks. Singapore's performance was the weakest among the five Asian markets, again due to its higher exposure to banks. Despite a very different market environment (particularly for EM equities), global equities were able to provide comparable or better risk-adjusted returns relative to Asian stocks. Ultimately, what this highlights is that investors with higher home biases are likely to be more exposed to sector cyclicality given the concentrated nature of many Asian markets.

While equity market performances in general have been quite strong over the past 10 years driven by the liquidity created by global monetary policies such as quantitative easing, we prefer to use a 20-year time horizon for our analysis as long-term data reduces the cyclicality of shorter timeframes. We do recognise that investors may not consider such long horizons for asset allocation decisions, so some consideration should be given to shorter-term cyclical effects from sector concentrations and the potential impact on returns. That said, we would still suggest that diversification created by mitigating these sector concentrations will likely create a better risk-adjusted return for investors.

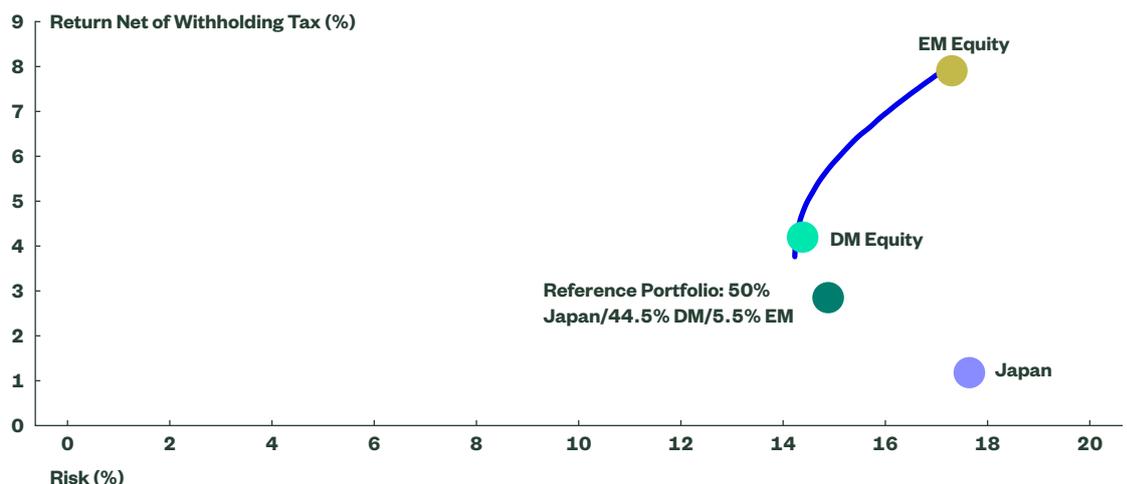
Benefits of Increased Global Allocations on Asian Investors' Equity Portfolio

To illustrate the potential benefits of further diversifying into global stocks, we plotted efficient frontiers for two representative Asian markets, namely Japan and Korea (Figures 9a and 9b). The efficient frontier represents the optimal asset mix of the Asian home stock market, DM as well as EM equities, which generated the highest historical return given a certain risk level over the past 20 years (excluding withholding tax).

The Reference Portfolio stands as a proxy of the current asset mix of an average pension fund in these two countries, which comprises 50% domestic stocks and 50% global equities split into DM and EM equities by market cap. For Japan and Korea, the Reference Portfolio does not lie on the efficient frontier, which means there is still room to improve the portfolio's risk-adjusted returns. Same is the case for Hong Kong, Singapore and Taiwan, although we do not show the respective analysis for these markets here.

As explained above, global equities tend to have comparable or better risk-adjusted returns than Asian local markets. However, the impact of this on a portfolio could be different depending on the home market's return profile relative to global equities. While increasing foreign exposure can improve both the return and risk metrics in the case of Japan, risk is reduced at the expense of returns if home equities are replaced by broad global equities in the case of Korea.

Figure 9a
**Efficient Frontier
Combining
Japanese, DM
and EM Equities**

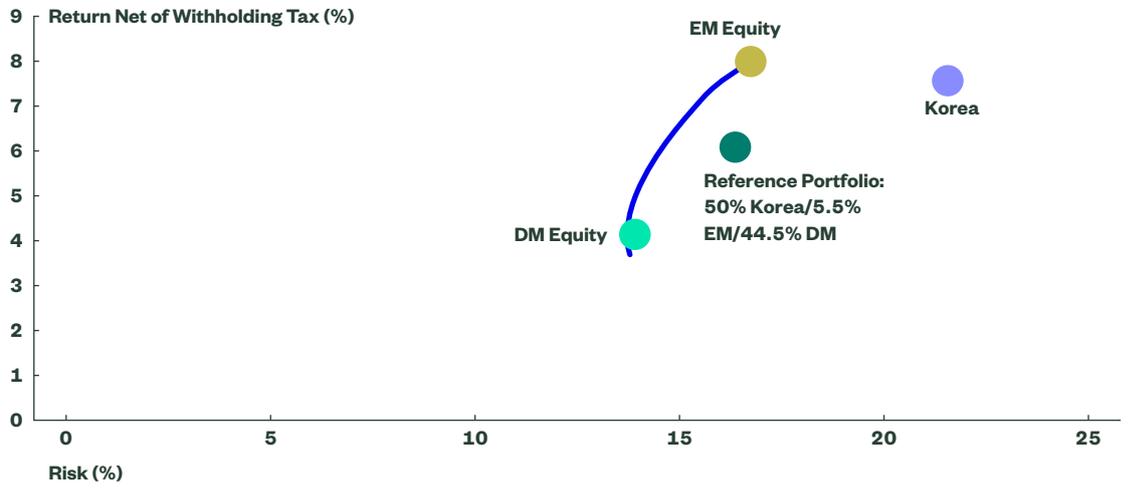


Note 1: Time period from July 2000 to June 2020. Monthly local currency returns of the indices were used to calculate equity volatility. Local currency returns were used as proxies for hedged returns of MSCI ACWI, World and EM equities. We assumed a withholding tax of 0.3% for Japanese equities, 0.5% for DM equities and 0.3% for EM equities.

Note 2: Japan = MSCI Japan Gross Total Return Index; Developed Market Equity = MSCI World Gross Local Currency Total Return Index; Emerging Market Equity = MSCI Emerging Markets Gross Local Currency Total Return Index.

Source: Morningstar Direct, FactSet, State Street Global Advisors, as at 30 June 2020.

Figure 9b
Efficient Frontier
Combining Korean,
DM and EM Equities



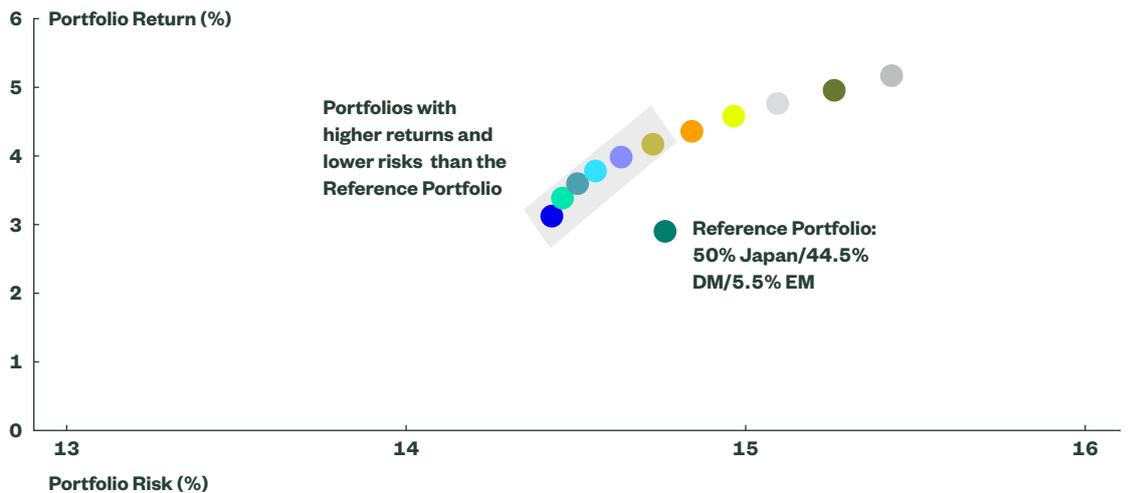
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 Source: Morningstar Direct, FactSet, State Street Global Advisors, as at 30 June 2020.

To take the analysis a step further, we assessed the effects of an increased global investment/reduced domestic investment on the Reference Portfolio's risk-return profile for our two representative Asian markets, Japan and Korea (Figures 10a and 10b). Using historical 20-year return and risk metrics, we compared the Reference Portfolio (50% domestic, 44.5% DM, 5.5% EM) with various asset mixes such as 40% domestic and 60% global with different DM/EM splits.

For Japan, all of the 40% domestic and 60% global asset mixes generated a higher portfolio return than the Reference Portfolio, as both DM and EM equities made higher returns compared with Japanese domestic stocks over the past 20 years. A higher EM allocation within global equities led to a higher portfolio return with higher risk as would be expected. The highlighted portfolios with an EM allocation of between 5% and 30% had lower risks and higher returns relative to the Reference Portfolio. Given the poor return/risk ratios of Japanese stocks relative to global equities, Japanese investors have much more flexibility in terms of improving their portfolio's long-term risk-return profile by increasing global investments.

Figure 10a
Historical Portfolio
Returns and Risks
With Different
Combinations of
Japanese, DM
and EM Equities

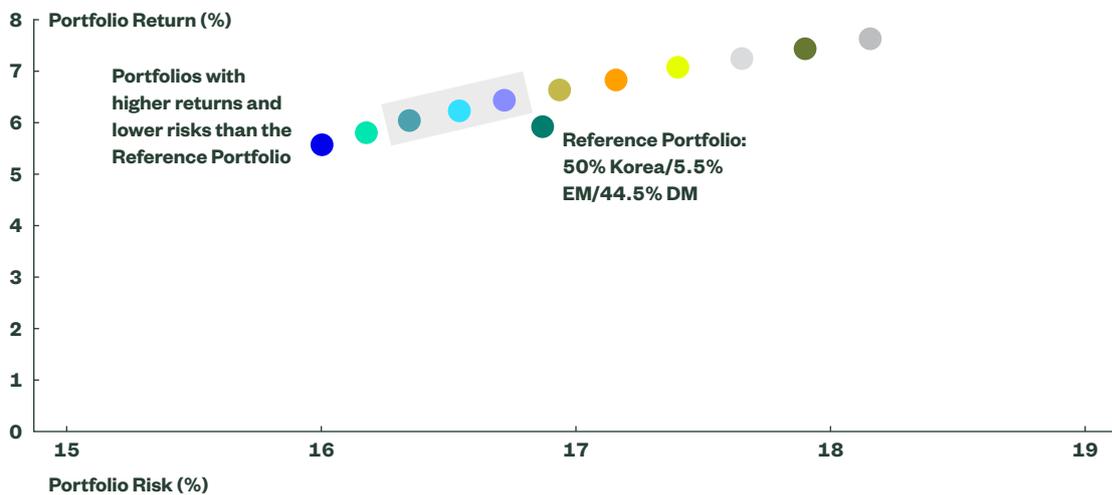
- 40% Japan/55% DM/5% EM
- 40%/50%/10%
- 40%/45%/15%
- 40%/40%/20%
- 40%/35%/25%
- 40%/30%/30%
- 40%/25%/35%
- 40%/20%/40%
- 40%/15%/45%
- 40%/10%/50%
- 40%/5%/55%



Note 1: Time period from July 2000 to June 2020. Monthly local currency returns of the indices were used to calculate equity volatility. Local currency returns were used as proxies for hedged returns of MSCI ACWI, World and EM equities. We assumed a withholding tax of 0.3% for Japanese equities, 0.5% for DM equities and 0.3% for EM equities.
 Note 2: Japan = MSCI Japan Gross Total Return Index; Developed Market Equity = MSCI World Gross Local Currency Total Return Index; Emerging Market Equity = MSCI Emerging Markets Gross Local Currency Total Return Index.
 Source: Morningstar Direct, FactSet, State Street Global Advisors, as at 30 June 2020.

Figure 10b
Historical Portfolio Returns and Risks With Different Combinations of Korean, DM and EM Equities

- 40% Korea/ 5% EM/ 55%DM
- 40%/10%/50%
- 40%/15%/45%
- 40%/20%/40%
- 40%/25%/35%
- 40%/30%/30%
- 40%/35%/25%
- 40%/40%/20%
- 40%/45%/15%
- 40%/50%/10%
- 40%/55%/5%



Note 1: Time period from July 2000 to June 2020. Monthly local currency returns of the indices were used to calculate equity volatility. Local currency returns were used as proxies for hedged returns of MSCI ACWI, World and EM equities. We assumed a withholding tax of 0.3% for Korean equities, 0.5% for DM equities and 0.3% for EM equities.
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 Source: Morningstar Direct, FactSet, State Street Global Advisors, as at 30 June 2020.

For Korea, the highlighted 40% domestic and 60% global portfolio with EM allocations of between 15% and 25% provided higher returns with lower risks relative to the Reference Portfolio. As Korean equities made returns between that of DM and EM equities, a minimum EM allocation of 15% would be needed for the portfolio to generate a higher return compared with that of the Reference Portfolio. However, an EM allocation higher than 25% led to a higher risk relative to the Reference Portfolio. The fewer number of highlighted portfolios reflects the fact that Korea had a more comparable long-term return/risk ratio with that of global equities.

Similarly, for the other three Asian markets, namely Hong Kong, Singapore and Taiwan, there were 40% domestic and 60% global asset mixes with higher returns and lower risks relative to the Reference Portfolio over the long term. Much like Korea, Hong Kong had fewer number of highlighted portfolios as its risk-return ratio was more comparable to that of global equities, while Singapore and Taiwan were more in line (albeit slightly better) with Japan.

Of course, this outcome is purely based on historical risk and return metrics and would change if we were to consider a different historical time horizon. In addition, currency-hedged returns for global equities could differ from the local currency return proxies depending on the actual hedging costs in the prevailing market environment. However, what this analysis shows is that Asian investors could benefit from further reducing their domestic equity investments in favour of greater global exposure. This can result in a more diversified return opportunity with reduced and less-concentrated risk exposures, which can lead to an improvement in risk-adjusted returns over the long term.

Conclusion

While there is significant downward trend in domestic equity holdings across Asia, similar to many other markets, there remains significant home bias in equities. This exposes pension plans to higher risks as Asian equity markets often feature higher volatilities and concentration risks relative to global equities.

Home biases can exist for many reasons including investment barriers, transaction costs, corporate preferences and regulatory constraints. There are currency risks to consider as well. However, there is no denying the fact that expanding investments into global markets provides significant benefits, including an increase in diversification of returns as well as a reduction in volatility and concentration risk (stock, sector and country specific).

Our analysis shows that global equities tend to generate comparable or better risk-adjusted returns relative to the Asian markets that we examined (Hong Kong, Japan, Korea, Singapore and Taiwan) over the long term, suggesting more global investment allocations could improve investors' long-term risk-return profiles in these markets.

For markets with higher returns, such as Hong Kong and Korea, risk may be reduced at the expense of returns if local equities are replaced with broad global equities. However, we are still able to structure a mix of lower domestic equity exposure and higher DM and EM equity exposure, which generates higher returns and lower risks. This implies that given the more diversified return opportunities and potential for reduced portfolio risks, the trend toward global investment should continue in Asia.

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Endnotes

- 1 Given the tighter restrictions on overseas investments currently in place for many mainland Chinese asset owners, we have excluded mainland China from this study.
- 2 Asset Allocation Insights: Pension allocation trends in Latin America, the Middle East, Africa and Asia. Mercer, 2020.
- 3 Growth Markets Asset Allocation Trends: Evolving Landscape 2019. Mercer, 2019.
- 4 Hnatkovska, V. (2019, April). Home bias in International Macroeconomics. Oxford Research Encyclopedia of Economics and Finance.

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