The case for currency management in managed account portfolios

IMAP | February 2019

Jonathan Shead, Head of Retirement Solutions, Australia

Introducing Currency Risk

All the information contained in this presentation is as of date Indicated unless otherwise noted

Why invest globally?

Diversification 1:	→	**Economies**
Diversification 2:	→	**Industries**
Diversification 3:	→	**Companies**

Source: SSGA. For illustration purposes only
Diversification does not ensure a profit or guarantee against loss.

Remember these drawdowns?

-62%
Australian Shares
Dec 1969 – Sep 1974

-66%
UK Shares
Aug 1972 – Sep 1974

-68%
Japanese Shares
Dec 1989 – Apr 2003

-68%
US Shares
Oct 07 – Feb 2009

-63%
Italian Shares
May 2007 – May 2012

-64%
JPY instead of AUD
Jun 1995 – Oct 2007

-60%
USD instead of AUD
Jun 1995 – Jun 2011

Source SSGA, MSCI. Past performance is not a reliable guide to future performance. Sharemarket returns are calculated from MSCI Australia Gross, MSCI UK Net, MSCI USA Net, MSCI Japan Net, MSCI Italy Net. Hedge returns are estimated by SSGA using spot rates and short term interest rates.

A Practical Example

A hypothetical holding: Pfizer Inc. (American Healthcare Company)

1 29 December 2017

- Share price US$ 36.22
- Buy 10,000 shares
- Cost US$ 362,200
- Exchange Rate 78.21c
- Sell AU$463,112 and buy US$362,200 to pay for shares

2 31 December 2018

- Share price US$ 43.65
- Sell 10,000 shares
- Proceeds US$ 436,500
- Exchange Rate 70.40c
- Sell US$436,500 and receive AU$620,028

3 Your return (ignoring dividends)

- Share Price: +20.5%

  US$36.22 to 43.65
- Exchange Rate: +11.1%

  78.21c to 70.40c
- Total Return: +33.9%

  AU$463,112 to 620,028

Source: SSGA
The information contained above is for illustrative purposes only.

Recent market history

Period	Global Sharemarket Performance (% Total return)	Impact of Foreign Currency (% Total Return)	Combined Return for Australian Investors (% Total Return)
28 February 2009 to 30 April 2013	123.3	**-92.2**	31.2
30 April 2013 to 31 October 2015	37.4	**+41.7**	79.1
31 October 2015 to 31 December 2018	32.1	**-8.4**	23.7

Source: MSCI, S&P, SSGA. Indices used: MSCI World ex Australia for Global Equities. AUD Hedged return has been estimated by SSGA. Foreign currency is the "in AUD" return less the "100% AUD Hedged" return. Past performance is not a reliable guide to future performance. Index returns reflect capital gains and losses, income, and the reinvestment of dividends. Index returns are unmanaged and do not reflect the deduction of any fees or expenses.

Currency Risk

Movements in exchange rates can change a profitable share investment into a loss making one (or a loss making investment into a profitable one)

Total return on global equity investment =

Share price movement +

Dividends +

Movements in exchange rate

Source: SSGA

Managing Currency Risk

- When the AUD **weakens**, exposure to foreign currencies **adds** to your returns
- When the AUD **strengthens**, exposure to foreign currencies **detracts** from your returns
- "**Currency Hedge**": A strategy to remove the impact of exchange rates from returns

Source: SSGA

A Balanced Portfolio View on Currency Risk

"I have some foreign currency exposure. Should I hedge it or not?"

Source: SSGA. For illustration purposes only

“Do I want any foreign currency exposure in my portfolio? If so, which ones and how much?”

Source: SSGA. For illustration purposes only

Foreign Currency as an Asset Class

✓Risks

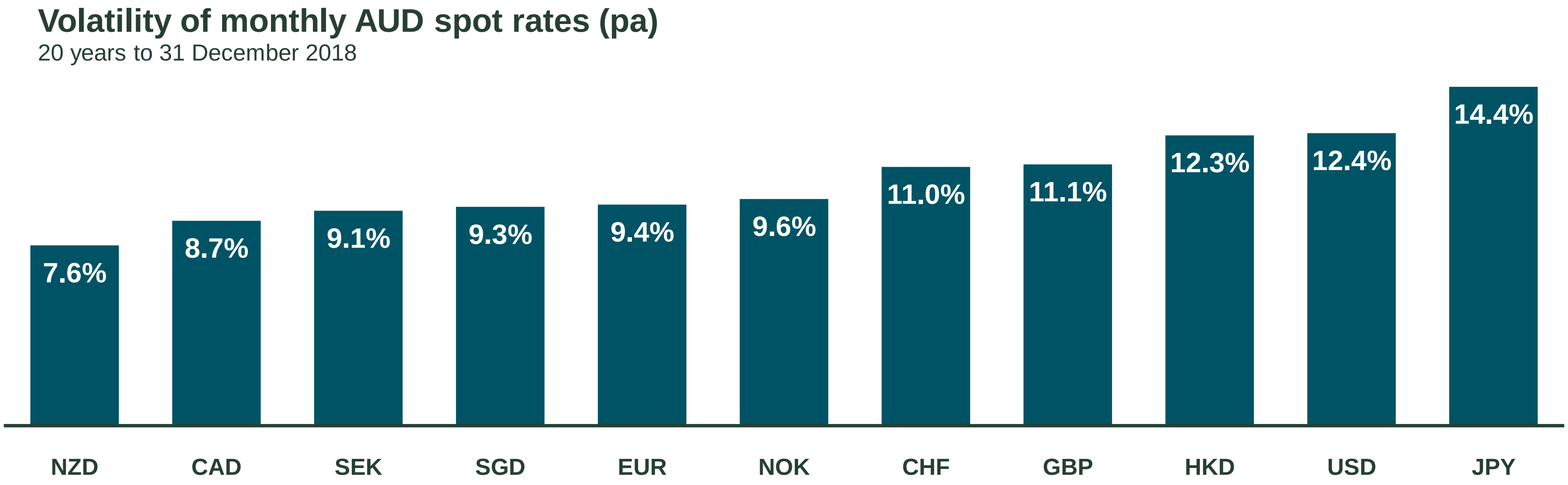
✓Correlation / Diversification

✓Returns

= Allocation

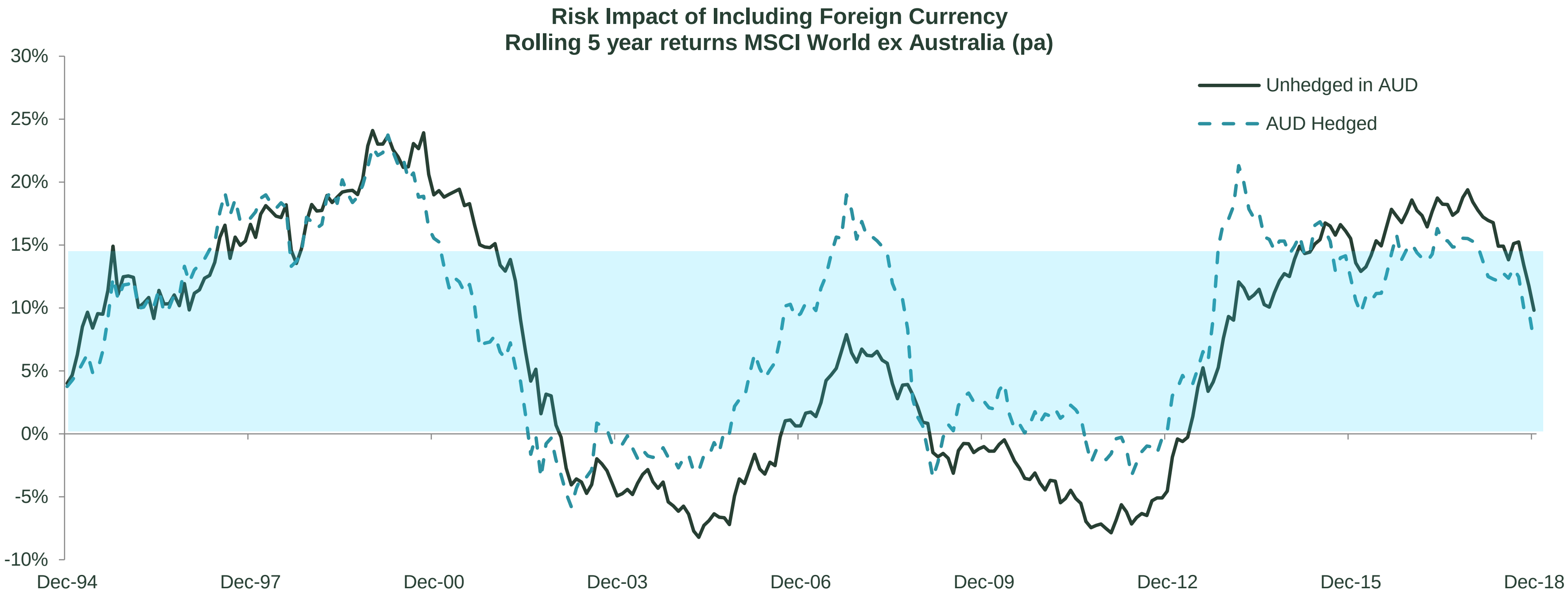
Source: SSGA. For illustration purposes only. Diversification does not ensure a profit or guarantee against loss.

Different Risks by Currency



Source: SSGA. Past performance is not a reliable guide to future performance.

Long Term Risk for Equities & Currency



Source: SSGA, MSCI. Past performance is not a reliable guide to future performance. Index returns reflect capital gains and losses, income, and the reinvestment of dividends. Hedged returns have been estimated by SSGA to 31 December 2018.

Different Diversification

Best Diversification for Australian Investor (low correlation)

Worst Diversification (high correlation)

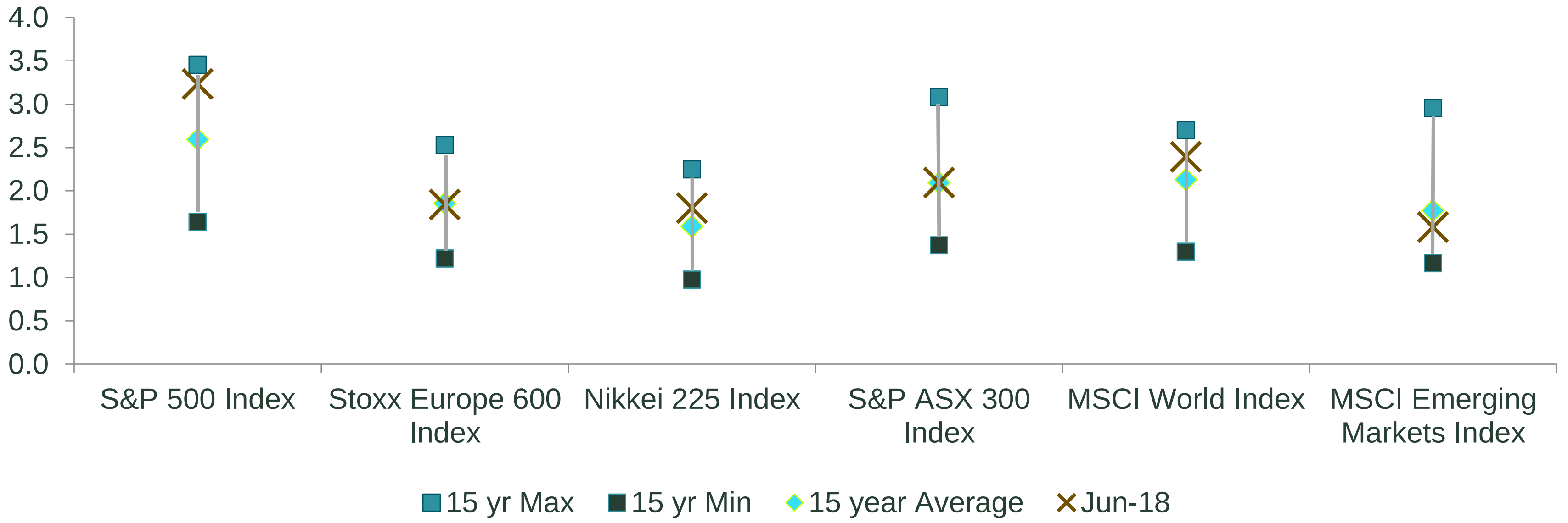
Australian Equities	Global Equities	Global REITs	Aust. Infl. Linked Bonds	Global Treasuries	Global Credit
JPY	JPY	EUR	CAD	GBP	USD
USD	USD	JPY	GBP	CAD	GBP
CHF	CHF	USD	EUR	EUR	EUR
EUR	EUR	CHF	CHF	USD	JPY
GBP	GBP	GBP	USD	CHF	CHF
CAD	CAD	CAD	JPY	JPY	CAD

Source: MSCI, S&P, SSGA. Indices used: S&P ASX 200 for Australian Equities, MSCI World ex Australia Hedged to AUD for Global Equities where hedged returns have been estimated by SSGA, FTSE EPRA/NAREIT Developed Liquid Index in Local Currency for Global REITs, FTSE Non-AUD World Government Bond Index Hedged to AUD for Global Treasuries. Past performance is not a reliable guide to future performance. Index returns reflect capital gains and losses, income, and the reinvestment of dividends

Do you assess equity return potential?

Global Equity Market Price to Book Ratios (P/B)

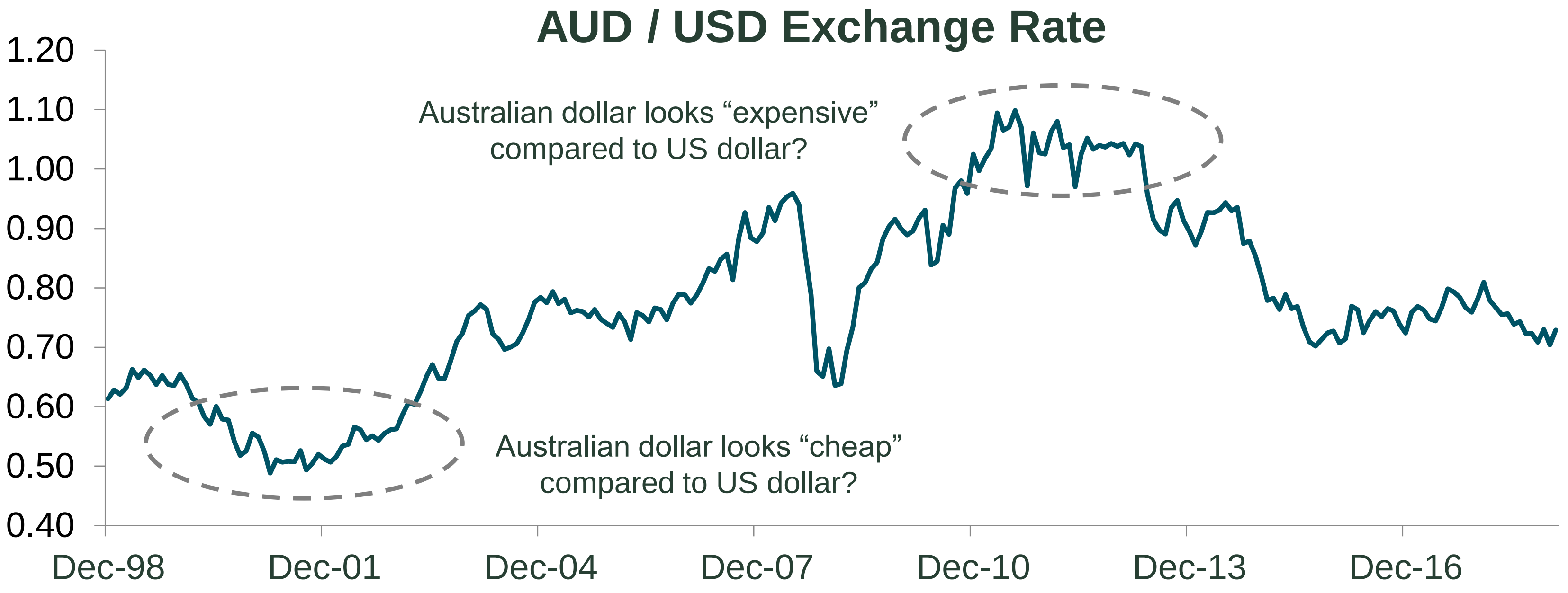
15 years to 30 June 2018



Source: SSGA, Factset

Currency Valuations

Currencies can also move from “cheap” to “expensive”



Source: SSGA, Factset As at 31 Jan 2019

Currency Valuations

Very long term economic value considerations include:

- Inflation (How much does a hamburger cost?)
- Terms of Trade (Prices of exports vs prices of imports)
- Productivity

Other considerations include

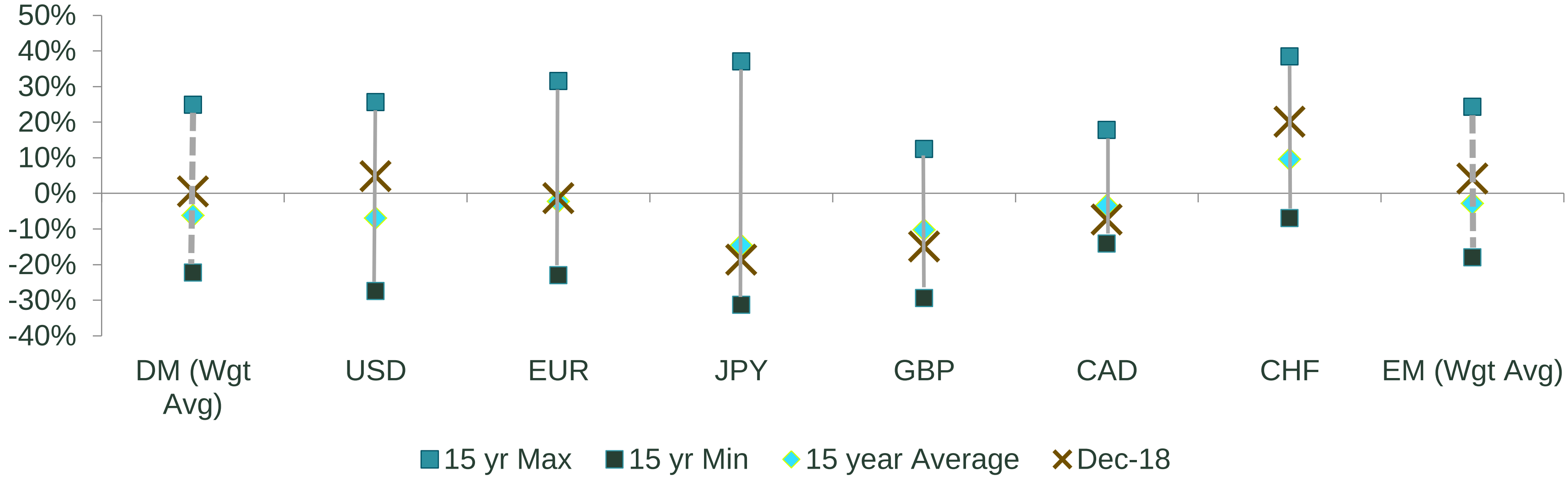
- Interest Rate
- Every currency is different
    - US dollar might be “expensive” while Japanese yen is “cheap” compared to Australian dollar
- Avoiding large transaction costs

Source: SSGA

Assessing currency return potential

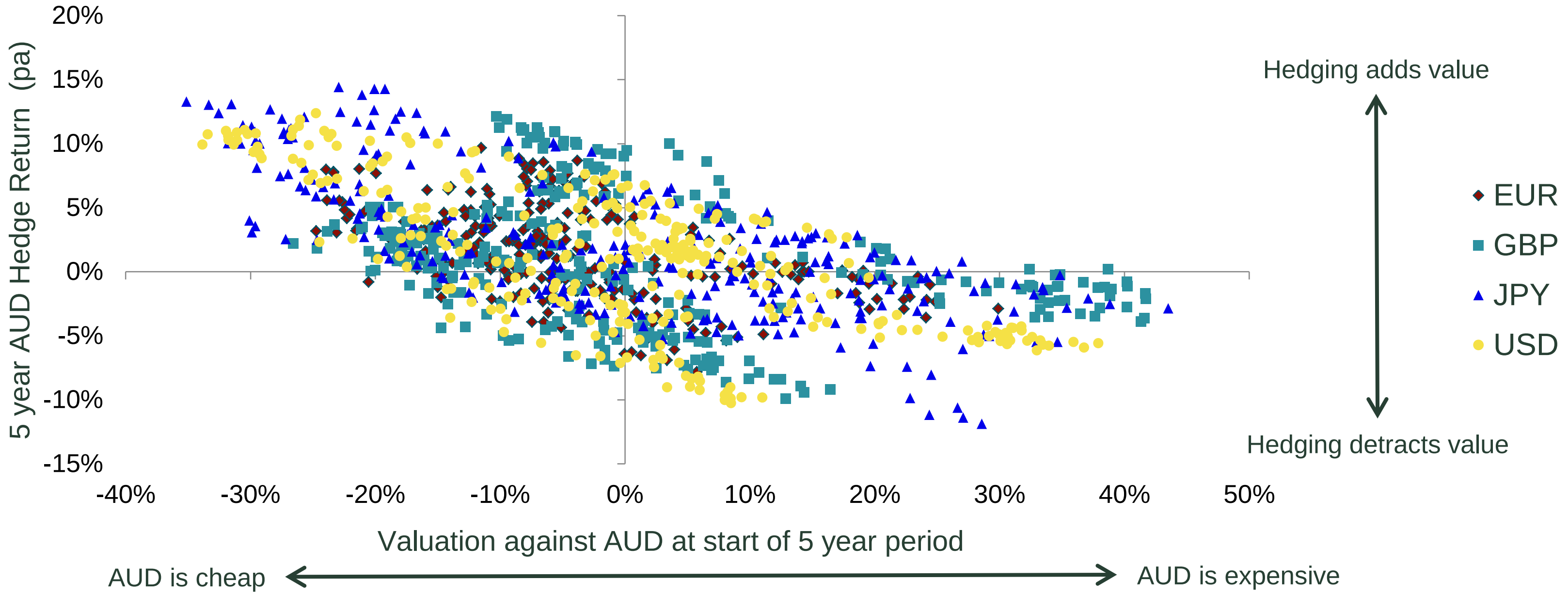
Currency Valuations relative to Long Term PPP

15 years to 31 December 2018



Source: SSGA from December 1989 to December 2018. The results shown represent current results generated by our SSGA Purchasing Power Parity equilibrium model. The results do not reflect actual trading and do not reflect the impact that material economic and market factors may have had on SSGA's decision-making. The results shown were achieved by means of a mathematical formula, and are not indicative of actual future results which could differ substantially.

Long Term Value in Currencies



Source: SSGA, from December 1989 to December 2018. Past performance is not a reliable guide to future performance. The results shown represent current results generated by our SSGA Purchasing Power Parity equilibrium model. The results do not reflect actual trading and do not reflect the impact that material economic and market factors may have had on SSGA's decision-making. The results shown were achieved by means of a mathematical formula, and are not indicative of actual future results which could differ substantially.

How to Implement in Managed Accounts

Hedging Currency Risk

Total return on global equity investment =

Share price movement +

Dividends +

Movements in exchange rate +

Return of "Currency Hedge"

These two parts offset each other

Source: SSGA

Active Currency Hedging

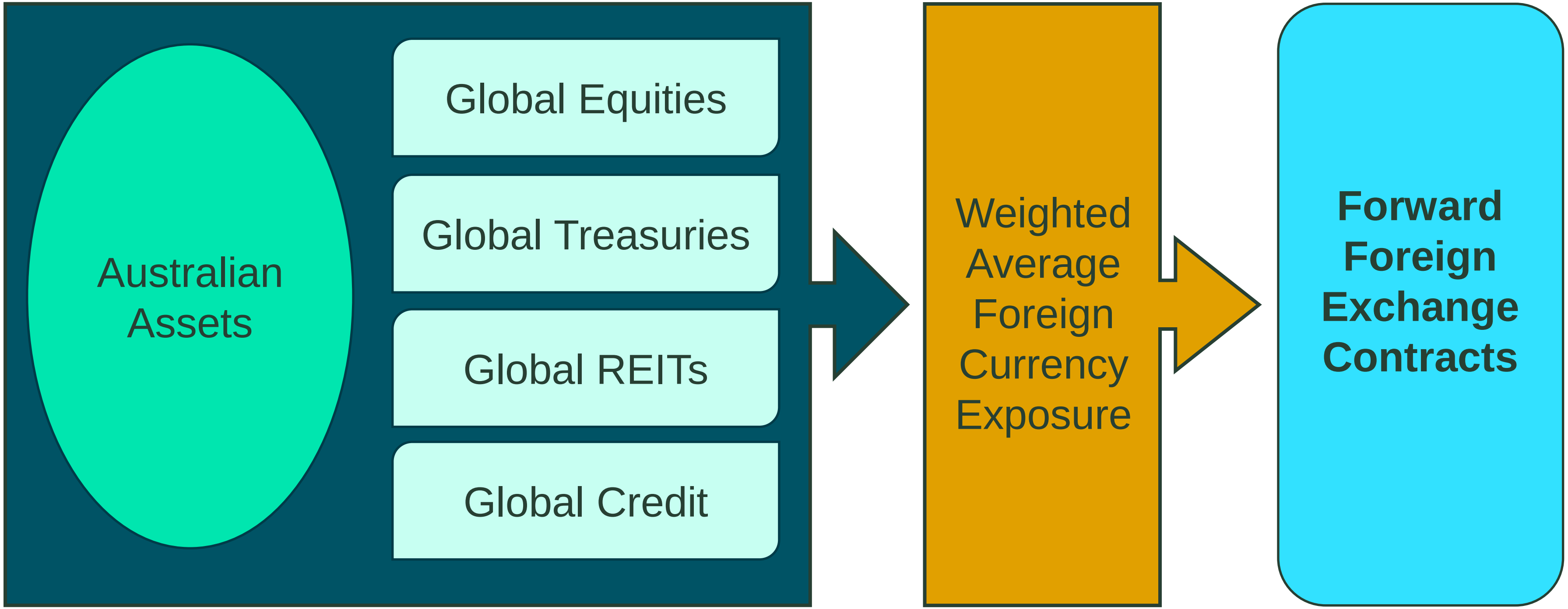
Passive currency hedging

- Protects returns when exchange rates move "the wrong way"
- Removes the chance to profit when exchange rates move "the right way"

Active currency hedging seeks to protect the portfolio against adverse currency movements while still profiting from positive movements

Source: SSGA

In Theory, using FFX



Source: SSGA. For illustration purposes only

In Practice, using managed funds only

Portfolio Weights (%)	"Conservative"	"Balanced"	"Growth"
Target Growth Exposure	**30**	**50**	**70**
Target FX Exposure	**0-5**	**15-20**	**30-40**
Growth Assets			
Australian Equities	12	20	28
International Equities: **Unhedged**	0	5	16
International Equities: **0-100% Hedged**	0	5	10
International Equities: **Hedged**	12	10	2
Global REITs: **Unhedged**	6	10	14
Defensive Assets			
Australian Fixed Income	28	20	12
Global Fixed Income: **Hedged**	28	20	12
Cash	14	10	6
Actual Growth Exposure	**30**	**50**	**70**
Actual FX Exposure	**6**	**15-20**	**30-40**

Source SSGA. The information contained above is for illustration purposes only , using an Australian investor portfolio as an example.

A Global Equity Portfolio View on Currency Risk

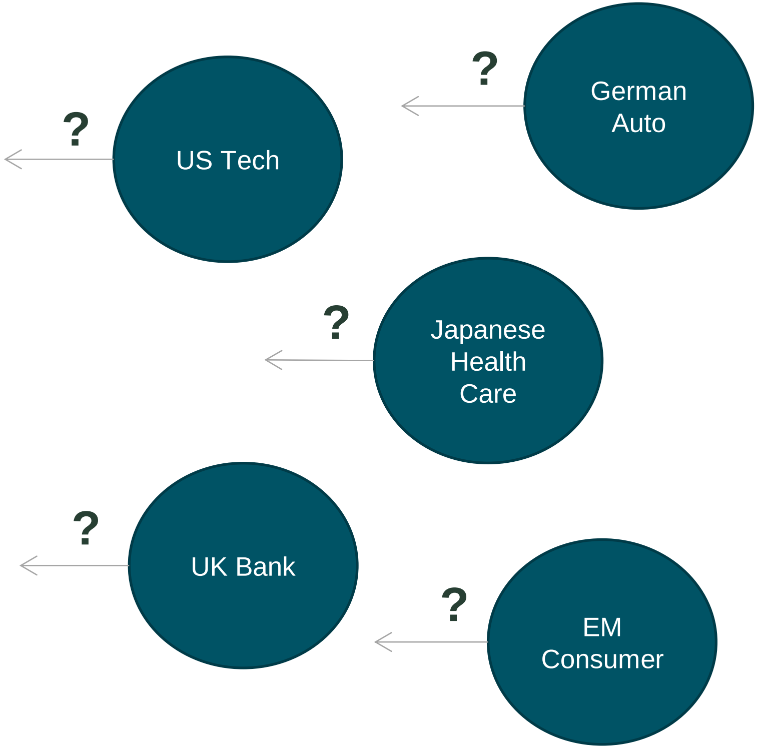
Digging deeper – at stock level

Objective:

<u>Australian</u>
CPI + 5%

Australian:
- Economic growth
- RBA rate decisions
- Housing Market
- Bank funding costs
- **AUD strength**
- Demographic changes
- Corporate profitability
- Productivity growth
- Wage growth
- Inflation expectations
- …

Global:
- Economic growth
- Resource demand
- …



Source: SSGA. For illustration purposes only

Digging deeper – a naive example

The Assumptions

Optimised Portfolio

30 June 2018

Universe is MSCI World

Stock scores based on P/B

GICs sectors 25%

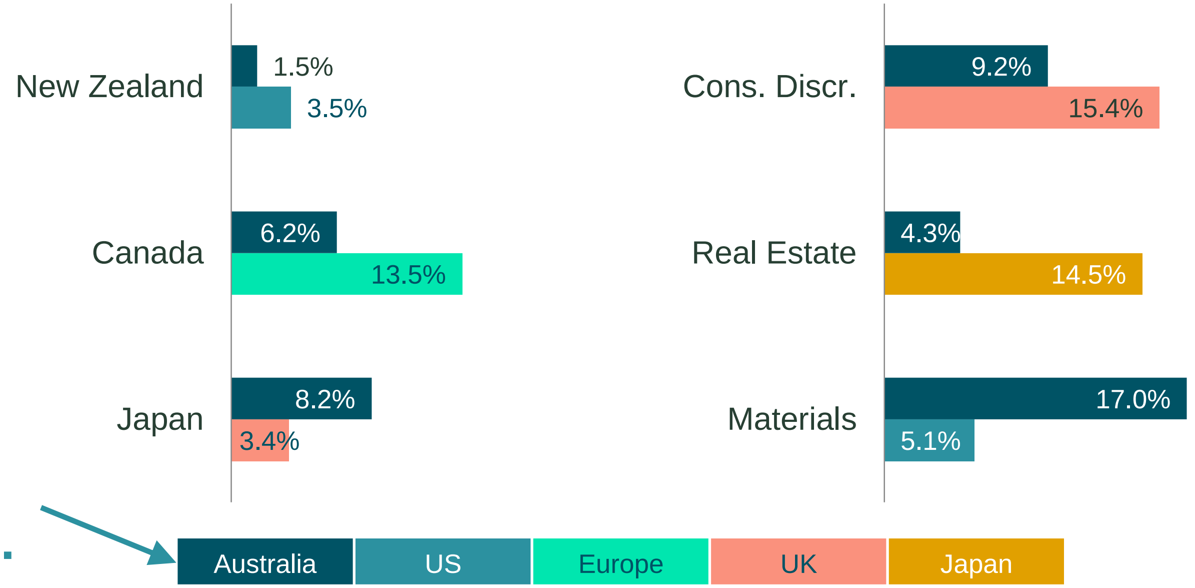
Active country +/-10%

Stock limit 1.5%

Change where the investor is based …

Sample Country Weights

Sample Sector Weights



Source: SSGA. For illustration purposes only

Conclusions

- Currency risks are not stable and should be managed.
- Short term and long term risk of currency exposures are not the same.
- Valuation matters. Currency is no different.
- Global equity portfolios should be tailored for the base currency of the investor.

Questions?

Your Managed Funds Team

Syvanna Croyden

Head of Managed Funds Sales

P: 0466 501 590

syvanna_croyden@ssga.com

Amanda Conner

National Sales Manager

P: 0466 501 605

amanda_conner@ssga.com

Ivor Kay

Business Development Manager, QLD

P: 0435 960 129

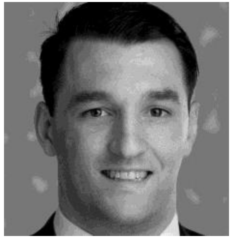
ivor_kay@ssga.com

Wendy Meehan

National Sales Associate

P: 0466 414 166

wendy_meehan@ssga.com



Andrew Turner

Business Development Analyst

P: 0466 026 328

andrew_turner@ssga.com

Tom Scrivener

National Sales Coordinator

P: 0466 015 604

thomas_scrivener@ssga.com

Important Disclosures

For institutional and wholesale investors only. Not for use with retail investors.
Issued by State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services Licence (AFSL Number 238276). Registered office: Level 17, 420 George Street, Sydney, NSW 2000, Australia Telephone: +612 9240-7600 Facsimile: +612 9240-7611.

The information provided herein does not constitute investment advice and is not a solicitation. It does not take into account any investor's particular investment objectives, risk tolerance, or financial and tax status. You should consult your tax and financial advisor. There is no representation or warranty as to the current accuracy of, nor liability for, decisions based on such information.

References to the State Street Global Equity Fund ("the Funds") in this communication are references to the managed investment schemes domiciled in Australia, promoted by SSGA Australia, in respect of which SSGA, ASL is the Responsible Entity.

The views expressed in this material are the views of Currency Management Team and Active Quantitative Equities Team through the period ended 12 February 2019, and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.
Investing involves risk including the risk of loss of principal. Past performance is not a reliable indicator of future performance.

Diversification does not ensure a profit or guarantee against loss.

Risk associated with equity investing include stock values which may fluctuate in response to the activities of individual companies and general market and economic conditions.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates rise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Investments in issuers in different countries are often denominated in different currencies. Changes in the values of those currencies relative to the Portfolio's base currency may have a positive or negative effect on the values of the Portfolio's investments denominated in those currencies. The Portfolio may, but will not necessarily, invest in currency exchange contracts or other currency-related transactions (including derivatives transactions) to reduce exposure to different currencies. These contracts may reduce, take or eliminate some or all of the benefit that the Portfolio may experience from favorable currency fluctuations.

This document may contain certain statements deemed to be forward-looking statements. All statements, other than historical facts, contained within this document that address activities, events or developments that SSGA expects, believes or anticipates will or may occur in the future are forward-looking statements. These statements are based on certain assumptions and analyses made by SSGA in light of its experience and perception of historical trends, current conditions, expected future developments and other factors it believes are appropriate in the circumstances, many of which are detailed herein. Such statements are subject to a number of assumptions, risks, uncertainties, many of which are beyond SSGA's control. Please note that any such statements are not guarantees of any future performance and that actual results or developments may differ materially from those projected in the forward-looking statements.

Investing involves risk including the risk of loss of principal. Risk associated with equity investing includes stock values which may fluctuate in response to the activities of individual companies and general market and economic conditions. Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations.

Currency Hedging involves taking offsetting positions intended to substantially offset currency losses on the hedged instrument. If the hedging position behaves differently than expected, the volatility of the strategy as a whole may increase and even exceed the volatility of the asset being hedged. There can be no assurance that the Fund's hedging strategies will be effective.

Currency Risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

Hedge ratio is defined as the amount of local currency sold against the base currency underlying foreign exposures in the portfolio.

Hedging involves taking offsetting positions intended to reduce the volatility of an asset. If the hedging position behaves differently than expected, the volatility of the strategy as a whole may increase and even exceed the volatility of the asset being hedged. There can be no assurance that the a hedging strategy will be effective.

Standard deviation is a historical measure of the degree to which a fund's returns varied over a certain period of time. It is normally shown over a time period of 36 months, but the illustrations noted in this material reflect a shorter time frame. This may not depict a true historical measure, and shouldn't be relied upon as an accurate assessment of volatility. The higher the standard deviation, the greater the likelihood (and risk) that a fund's performance will fluctuate and have greater potential for volatility; a lower standard deviation indicates past returns have been less volatile.

The use of leverage, as part of the investment process, can multiply market movements into greater changes in an investment’s value, thus resulting in increased volatility of returns.

Derivative investments may involve risks such as potential illiquidity of the markets and additional risk of loss of principal.

Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations. Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

Standard & Poor's and S&P are registered trademarks of Standard & Poor's Financial Services LLC ("S&P") and Dow Jones is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones") and have been licensed for use by S&P Dow Jones Indices LLC and sublicensed by SSGA. The S&P indices are a product of S&P Dow Jones Indices LLC, and have been licensed by SSGA. State Street Australian Equity Fund is not sponsored, endorsed, sold or promoted by S&P Dow Jones Indices LLC, Dow Jones, S&P, their respective affiliates, and none of S&P Dow Jones Indices LLC, Dow Jones, S&P, nor their respective affiliates make any representation regarding the advisability of investing in such product(s).

MSCI indices are the exclusive property of MSCI Inc. ("MSCI"). MSCI and the MSCI index names are service mark(s) of MSCI or its affiliates and have been licensed for use for certain purposes by State Street Global Advisors ("SSGA"). The financial securities referred to herein are not sponsored, endorsed, or promoted by MSCI, and MSCI bears no liability with respect to any such financial securities. No purchaser, seller or holder of this product, or any other person or entity, should use or refer to any MSCI trade name, trademark or service mark to sponsor, endorse, market or promote this product without first contacting MSCI to determine whether MSCI's permission is required. Under no circumstances may any person or entity claim any affiliation with MSCI without the prior written permission of MSCI.

This material should not be considered a solicitation to apply for interests in the Funds and investors should obtain independent financial and other professional advice before making investment decisions. There is no representation or warranty as to the currency or accuracy of, nor liability for, decisions based on such information.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA Australia's express written consent.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA Australia’s express written consent.

Tracking Code: 2420339.1.1.ANZ.INST

Expiry Date: 31 May 2019