

# The Frontier Line

Foreign currency management – no one size fits all

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# About us

Frontier has been at the forefront of institutional investment advice in Australia for over 25 years and provides advice on \$600 billion of assets across the superannuation, charity, public sector, insurance and university sectors.

Frontier's purpose is to empower our clients to advance prosperity for their beneficiaries through knowledge sharing, customisation, technology solutions and an alignment and focus unconstrained by product or manager conflict.



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Principal Consultant

Andrew joined Frontier in 2016 as a Senior Consultant before being promoted to Principal Consultant in 2018. He is the head of the Debt and Currency Team, leading Frontier's fixed income and currency research program. Andrew has around twenty years of experience in the asset management industry both domestically and globally, having worked in Australia, Singapore and the UK.

Prior to joining Frontier Andrew worked for a decade at Alliance Bernstein Australia as a fixed income portfolio manager, spent three years as Head of Fixed Income at DBS Asset Management in Singapore and then joined Chimera Capital as Director of Asset Management, primarily in Singapore. Andrew holds a Bachelor of Commerce (Finance) from Otago University (NZ) and a Graduate Diploma of Applied Finance and Investment from Finsia.



**Iain McMahon**  
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Iain joined Frontier in 2019 and is a Senior Consultant in Frontier's Debt and Currency Team. He is currently responsible for investment advice and manager research across debt, currency and alternatives strategies. His coverage also includes derivatives advice.

Prior to joining Frontier, Iain spent seven years at J.P. Morgan in a range of risk management functions. Four of these years were based in London providing quantitative and qualitative portfolio analysis as a Market Risk Manager. Prior to working in London, Iain worked on a Sydney trading desk in an operational capacity. He holds a Bachelor of Commerce (Finance) and a Bachelor of Science (Statistics) from the University of Melbourne. He is also a CFA charterholder and a Certified Financial Risk Manager (FRM).

# Introduction

Passive foreign currency overlays offer an easily implemented and low governance approach to currency management. To arrive at a targeted or optimal portfolio foreign currency exposure, a pro-rata apportionment of the required hedge (with each currency pair hedged in proportion to their collective exposure or the weights of an equity index) is often used. However, as management of portfolios becomes more complex (higher allocations to offshore markets, increasing number of (sometimes competing) asset owner objectives), it is important to consider the appropriate method for hedging currency risk. This paper explores the issue.

AUD investors are somewhat unique and have different requirements relative to northern hemisphere investors. The AUD has a growth focused profile meaning unhedged foreign currency exposure can provide diversification benefits (noting the AUD typically falls in risk averse environments). Therefore, we advocate for foreign currency as a separate asset class with its own strategic asset allocation (SAA), and we view strategic foreign currency primarily through a risk management lens. Managing the foreign currency SAA according to the modelled risk improvements from additional exposure can work well with shorter-term dynamic tilts (DAA) designed to profit from valuation extremes.

In this paper we outline alternatives for setting the mix of foreign currency exposure, namely, targeting foreign currency exposures implemented via individual currency pair hedge ratios rather than setting the hedge based on a basket, which is then pro-rata hedged according to either the actual exposure or the weights of an equity index. Currency pair level hedge ratios can facilitate a more targeted risk management-based SAA implementation and also incorporate a platform for shorter-term DAA tilts by currency pair, which may also be of value in certain environments.

Currency hedging has delivered greater returns in the past, but the market environment has shifted, and we must now consider approaches to ensure those returns are preserved.





# What are the alternatives?

## Foreign currency for risk management or for return?

Risk and return both seem desirable attributes of a well-functioning foreign currency program. However, in the past, active decision making (whether external or internal to the asset owner) was not always easy to attribute. Often the strategic foreign currency hedge was embedded within the currency tilting program, making it hard to clearly identify exactly who was making the calls between a) the level of hedging at a strategic level (generally undertaken for risk-management, defensive purposes), and then b) variations around these benchmark levels to generate additional returns.

Nowadays, active and passive programs are increasingly separated, which gives the investment committee or internal team the required control as to how much currency exposure is needed. The active decision maker then has a clearer purpose to tilt currency pairs for additional alpha free from the requirement to implement the overall hedge.

If investor driven DAA tilts are for return, and strategic foreign currency exposure is for portfolio risk control, can a better foreign currency mix be derived which optimises for both objectives?



## Customising the foreign currency program to achieve certain objectives

A key question asked by investors is “how can we deal with foreign currency in an operationally simple way, which aligns with objectives of the portfolio?”. For superannuation funds, there may also be objectives linked to peer risk and Your Future, Your Super (YFYS). Considering whether the overall foreign currency exposure (post hedging) can be organised differently to achieve objectives which better align to the overall portfolio seems highly relevant. For example:

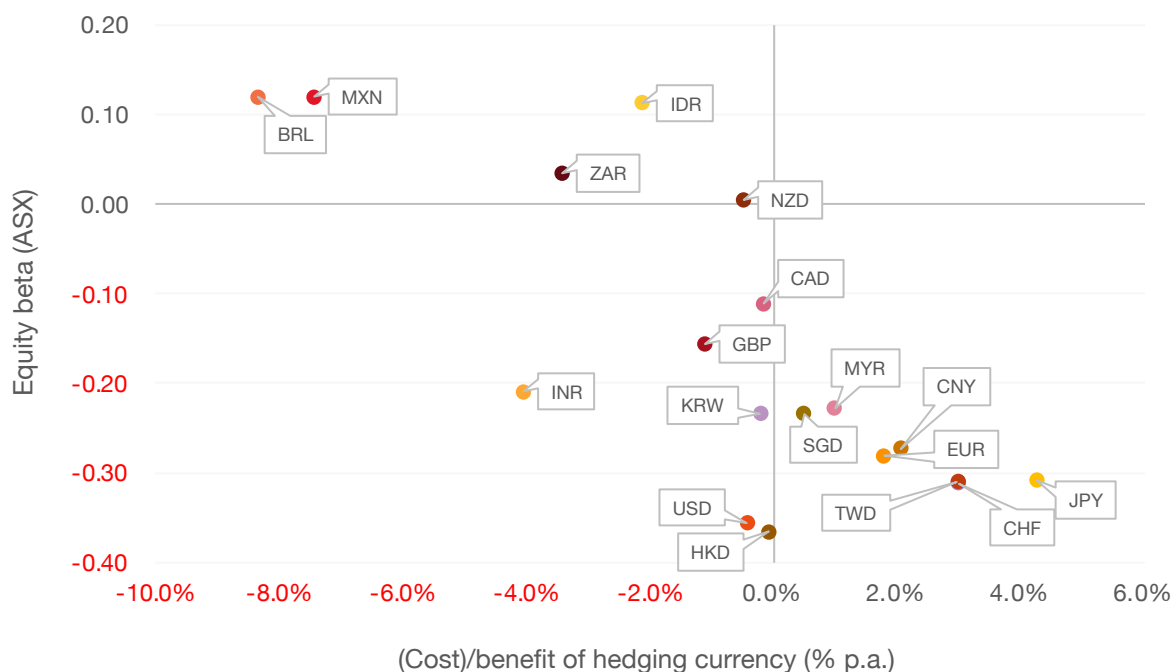
- A growth focused portfolio which needs more downside protection may opt to hedge less USD and less JPY as the downside protection characteristics of these currencies are typically greater, and well understood by Australian investors.
- Other major currencies might play different roles in the portfolio, i.e. the Euro versus the AUD offers less downside protection qualities but has offered a modest income stream over the long-term through the hedging process (noting AU interest rates have persistently been higher than European interest rates).
- Liquidity benefits, resulting from a smaller hedge in certain higher volatility currencies such as the USD, may ensue.

- For the downside aware strategy, if a currency exposure is not contributing to the downside protection but has income potential due to its interest rate differentials, hedge it and allocate the balance elsewhere.

Things change quickly in currency markets so an ongoing review and assessment of the current state of hedging costs versus likely downside protection versus other considerations is required.

In essence, pro-rata passive hedging speaks to currency baskets, whereas customised approaches consider a more targeted currency pair level exposure (with a clear ex-ante objective and stated intent against which success can be better measured). If a currency does not offer downside protection benefits and has no penalty to hedge (major costs or significant return impacts), under the customised hedging approach, investors might simply remove it and reallocate accordingly. The current estimates of downside protection versus hedge (cost)/benefit across the currency market landscape is shown in Chart 1.

**Chart 1:** Historical downside protection versus current hedging cost



Source: Frontier, Bloomberg. 3-year lookback, monthly data to 30 September 2022.

## What does the customised foreign currency basket offer in practice?

Varying the hedging proportions by currency (rather than static pro-rata hedging according to either the actual exposure or the weights of an equity index) and also changing the currencies which comprise the hedging basket, can help customise the hedging approach.

For many investors, Frontier believes targeted foreign currency exposures should be considered as an alternative to traditional passive pro-rata hedging approaches, yet the benefits of the approach need to be weighed-up against other asset owner objectives and considerations.

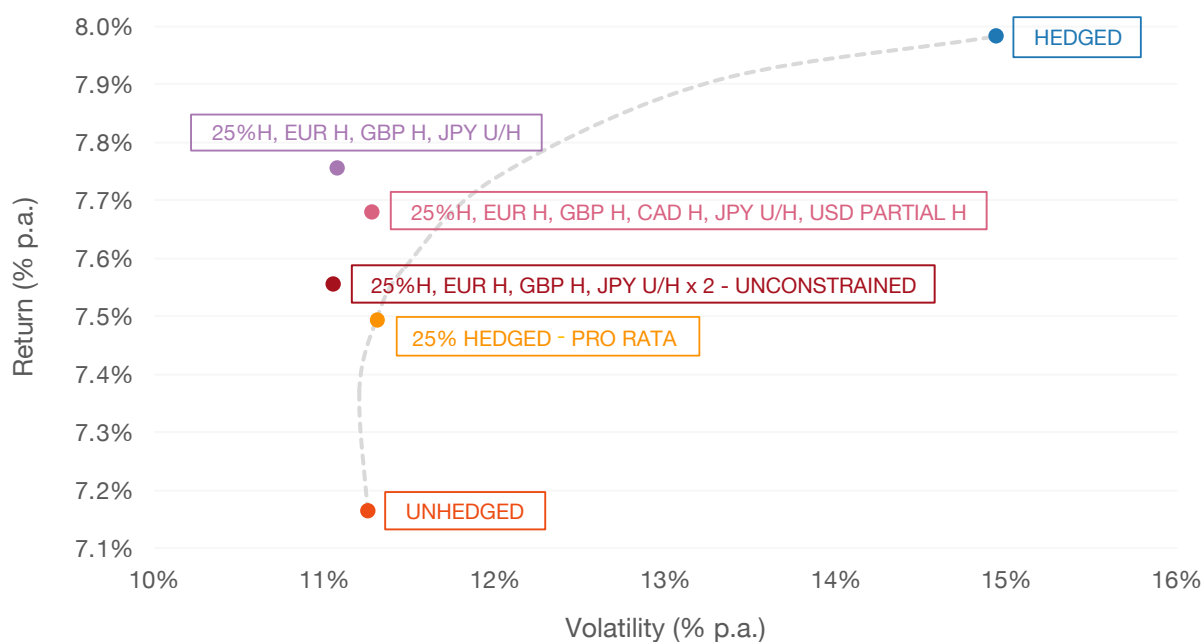
In Chart 2, we model an MSCI ACWI exposure with a 25% pro-rata hedge ratio (so every currency within the ACWI benchmark has 25% of its exposure hedged) versus various customised hedging configurations implemented with the same overall currency exposure. Albeit on a historical lookback, risk can be reduced, downside protection enhanced, and returns improved for the equity portfolio over the various cycles since 2005. In each case, a different mix of currencies is applied with a bias toward less USD and less JPY hedging (resulting in more FX exposure in these currencies and less in others). Depending on risk tolerance, an unconstrained program can also be implemented where individual exposures are added beyond the underlying asset exposure, or over-hedged to a net short position. Over the longer-term, portfolio-level risk

is lower and returns are improved, although the shorter-term window highlights that deviations can occur. In the last year for example, JPY depreciation has weighed on returns across the customised options versus the pro-rata approach, given it is less hedged by comparison.

Increasing defensiveness by targeting USD for example, may seem counterintuitive as investors consider more hedging on the basis of an elevated USD versus historical ranges. More hedging of USD may result from a well-functioning DAA program, but equally, irrespective of the level of foreign currency exposure which results from a customised process, strategic views on major currencies are importantly taken independently from other currencies in the foreign currency basket.

By targeting currency pairs, not baskets, a broad array of different configurations becomes possible. A solution that targets income (from hedging) is possible, as is one which enhances potential downside protection (the primary purpose of the strategic currency mix). Furthermore, as the foreign currency exposures change in the broader portfolio, eliminating unwanted regional or country level exposure becomes straightforward. For superannuation funds, adjusting the hedge to align with YFYS exposure weights (relative to actual exposures) is also possible, and accounting for the underlying active foreign currency tilts across international equity or bond managers can be controlled.

**Chart 2:** MSCI ACWI returns using customised foreign currency hedging approaches



Source: Frontier, Bloomberg. Monthly data: July 2005 to 30 September 2022.

## How does a customised foreign currency hedging overlay work for emerging market currencies?

A common issue within portfolios revolves around the treatment of emerging market (EM) currencies. Most strive to avoid the complexities of collateralisation, meaning developed market (DM) proxies are used, which gets complicated and potentially less optimal. Current programs also tend to target an overall level of foreign currency exposure, therefore should EM currency exposure rise (e.g. due to higher EM equity allocation) inflexible programs try to fit this into the overall foreign currency target exposure. This invariably means less DM currency exposure and therefore less of the downside protection qualities we seek from foreign currency exposure in the first place.

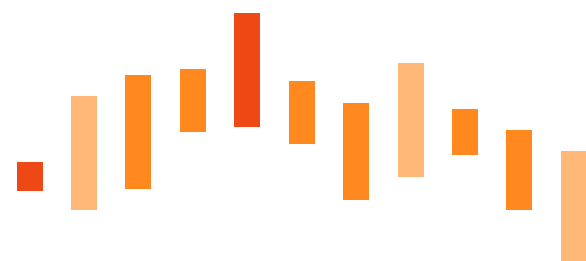
In addition to varying the hedging proportions by currency (rather than static pro-rata hedging), changing the currencies that comprise the hedging basket can help customise hedging, which assists in targeting a specific objective. For example, a simple passive implementation of this approach moves pegged or managed EM currencies such as HKD, CNY and TWD into the same basket as USD, EUR, JPY. However, the characteristics of such pegged currencies can change over time and should be monitored (e.g. CHF de-peg, 2015).

The targeted currency approach allows for flexibility should concerns rise of a particular regional exposure. For example, if concerns around China escalate, the customised hedging approach allows for direct hedging of CNY/CNH currency risk, and its quantum also can be tailored to 'look through' to the underlying currency of risk in the case of cross listed equity exposure.

## What are the risks and considerations?

Customised targeted foreign currency exposure increases tracking error, relative to equity benchmarks, asset owner peers, and for superannuation funds, also the YFYS benchmarks. This is an important consideration. Other considerations include:

- Liquidity. A customised currency hedging overlay can more easily accommodate liquidity constraints relative to passive pro-rata hedging approaches if the appropriate currencies are targeted.
- Implementation. Most of Frontier's managers note they can easily cater for a currency pair level hedge ratio as opposed to pro-rata static hedging across a basket. This type of customisation is relatively straightforward for passive currency managers, and transaction costs should be negligible versus the pro-rata approach.
- Shorter-term returns will vary against pro-rata hedging in different market environments given the risk profile is different.
- Future developments of such approaches may also conclude that different lookback windows and different market regimes can also affect modelling.
- An annual review of hedging costs/benefits and estimated levels of diversification is likely required to ensure accuracy.



## What about external active foreign currency management?

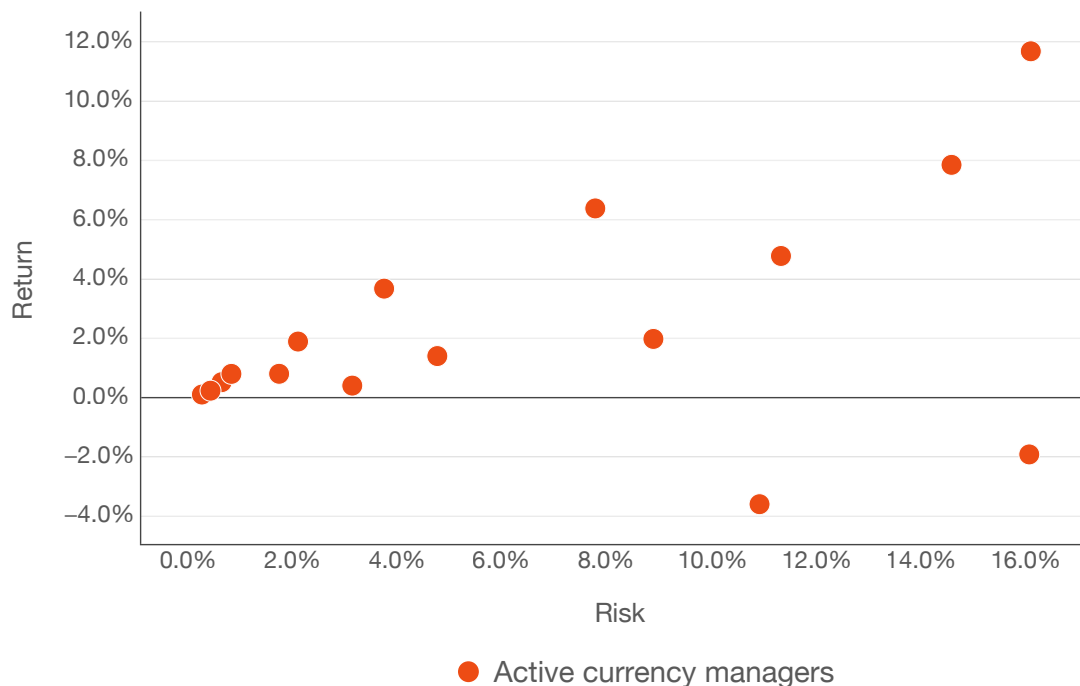
Active foreign currency programs have performed well in recent years although alpha generation can be softer during periods of low volatility or non-trending markets. Active programs where currency pair tilts are applied separately relative to the overall foreign currency exposure (SAA) have had some success, although results can be mixed depending on factors used.

In some cases, active foreign currency programs (where used) have contributed disproportionately to a portfolio's overall level of active risk. When strategic hedging and active management are combined, the size of the currency portfolio can be an issue, particularly relative to the sizing of active strategies in other asset classes.

Active currency managers do however offer highly flexible programs that can scale the risk on a linear basis. Investors can accordingly vary the allocation size to suit the risk budget and also alter the volatility budget of the active component to suit requirements. Lower risk active managers (e.g. those in the <4% volatility range) are often sighted as most appropriate for institutional portfolios, yet higher risk alpha strategies, albeit with more moderate sizing in the portfolio, can be equally as effective, and potentially broaden the manager universe as well.

Today, we think active currency managers exhibit stronger risk control. In addition, broadening of factor-based inputs has diversified returns away from the carry or momentum reliance of the past. This broadening of factors has seen results improve (Chart 3) and importantly has diversified the alpha relative to equity market performance (i.e. less correlated).

**Chart 3:** 5-year active foreign currency manager alpha



Source: eVestment, Frontier as at September 2022.



# The final word



Foreign currency's primary role remains portfolio diversification/defensiveness. We advocate for foreign currency as a separate asset class with its own SAA. Managing the foreign currency SAA according to modelled risk improvements is appropriate, with possibility of shorter-term dynamic tilts (DAA) designed to profit from valuation extremes.

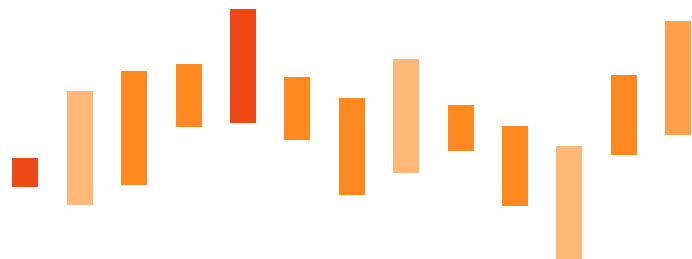
There are benefits in targeting foreign currency exposures implemented via individual currency pair hedge ratios (the 'customised approach'), rather than setting the hedge based on a basket which is then pro-rata hedged according to either the actual exposure or the weights of an equity index, for example. The benefits of the approach need to be weighed-up against other asset owner objectives and considerations. A tolerance for complexity is needed and a view on likely liquidity impacts and YFYS implications (in the case of superannuation funds) should also be considered.

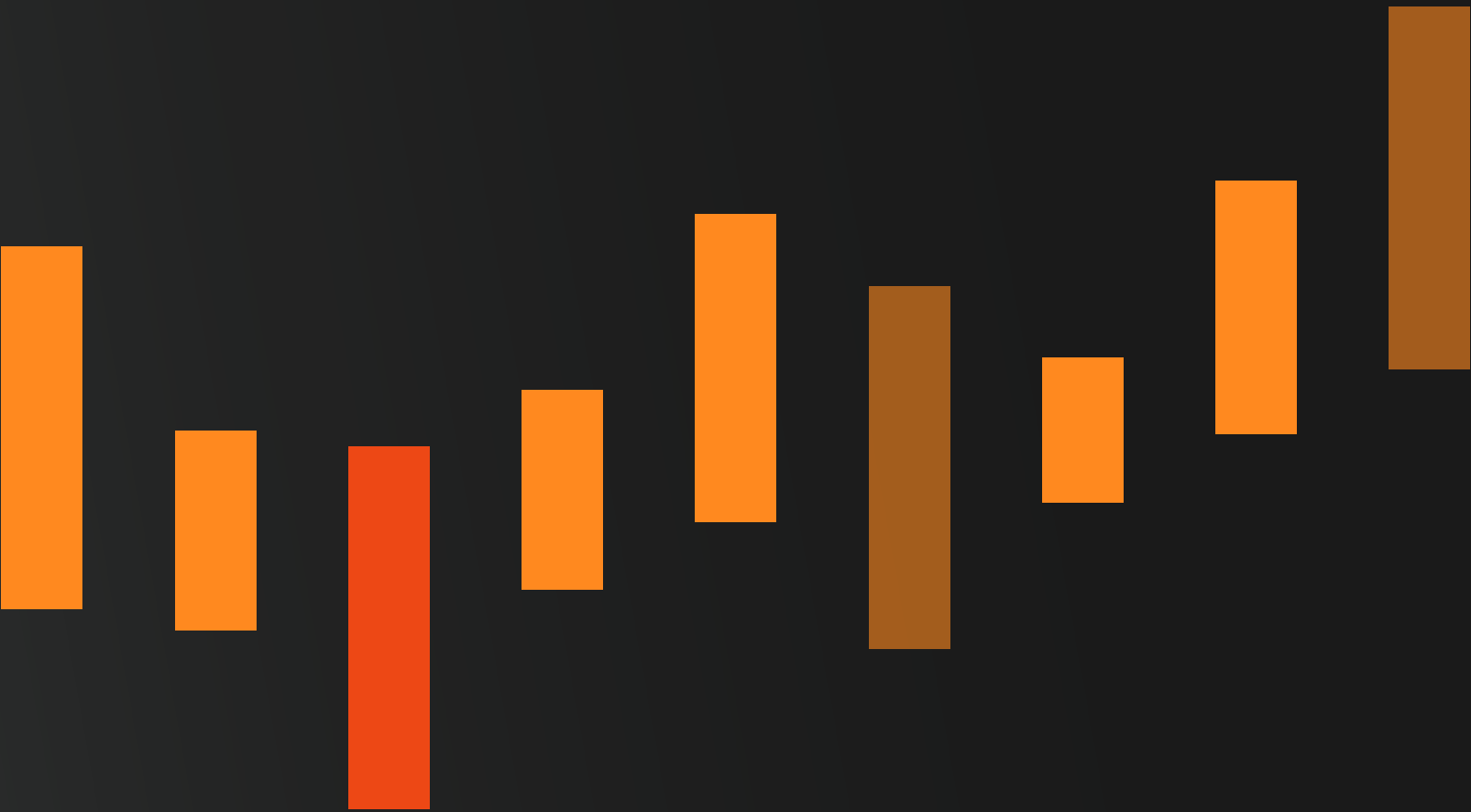
For many investors, the answer to foreign currency management in the highly uncertain market environment may be to 'do nothing'. We believe however, that setting a course to improve the flexibility of the foreign currency implementation program should start now in preparation for the future.



## Want to learn more?

Please reach out to Frontier if you have any questions or visit [frontieradvisors.com.au](https://frontieradvisors.com.au) for more information.





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