

Snippets and stories from the world of treasury management by PwC Treasury Advisory

March 2023



Table of contents

Treasury Intelligence - making FX risk simple	3
Sustainability-Linked Loans: what's new and how to make it credible	4
The evolution of carbon hedging frameworks and instruments	7
The (hidden) materiality and volatility of FX forward points	8
Stressed sectors and the surfacing of counterparty credit concerns	11
Leveraging interest cost savings from existing portfolio value	13
PwC Treasury Advisory contacts	15

Treasury Intelligence - making FX risk simple

Over the past 20 years, the PwC Corporate Treasury Advisory team has developed strong relationships with a range of New Zealand organisations through our retained treasury advisory services. The past few years have been challenging for treasurers and finance teams as they navigate market uncertainties like COVID-19 (and working from home), supply chain disruptions, geopolitical tensions and extreme weather events, which have significantly impacted businesses in some industries. Over the same period, we've experimented with a range of tools and ways of working, as well as different ways to visualise treasury risks and effectively deliver hedging strategies.

So it's been a natural evolution that through (and as a result of) these close retained relationships over the past few years that we've developed and refined a new cloud-based treasury reporting tool.

<u>Treasury Intelligence</u> aims to make FX risk management simple. It is an easy-to-use tool for understanding a business's FX risks, testing potential hedging strategies and receiving tailored advice in real-time. In *Treasury Intelligence*, users are able to log in and independently manage their data which is securely stored and automatically integrated into the reporting outputs displayed in the Treasury Intelligence environment.

Much like our dynamic Power BI reporting tools, the outputs from *Treasury Intelligence* include a high level Compliance Summary, which at a glance shows if the business is compliant with its FX risk management policy parameters (and for how long). The more detailed Risk Position charts set out the exposure forecast (for each exposure) and the associated hedging and detailed compliance. The user is able to forward project the reporting months in order to observe the impact on the risk position in the future, and thereby enable proactive forward management to retain policy compliance.

To assist management in making effective FX hedging decisions *Treasury Intelligence* also has a Strategy Simulator. Both PwC advisors and client users are able to design, flex and save their hedging strategies to share, discuss and agree on next steps. To assist with the design of the strategy, financial market and economic reports (and weekly videos) are included in the tool, as are our tailored recommendations to individual clients.

In order to monitor and measure the effectiveness of the hedging over time, users can navigate to the Hedge Rate Analysis page. The page provides information on *when* and *how much* hedging was undertaken, historical FX rates achieved as well as the forward-looking hedged rate outstanding and the comparison to budget rates.

This makes *Treasury Intelligence* a 'one stop shop' for FX risk management needs. It is backed by a secure database which ensures data integrity and reduces the risk of errors in the data. *Treasury Intelligence* will save time as there will be less need to do onerous amounts of information handling. Treasury reporting to risk committees and Boards can also be made much simpler with visuals that are easy to read and understand. The tool provides deep insights and flexibility for risk managers making informed strategic treasury management decisions and is available 24/7 on PC and mobile devices.

Keep an eye on your inbox in the coming days for more information or alternatively, visit the <u>Treasury Intelligence</u> website and request a demo. It's a tool we're really proud of and look forward to helping New Zealand businesses make the most of their FX risk management needs.

Authored by Rajeev Verma, rajeev.c.verma@pwc.com

Sustainability-Linked Loans: What's new and how to make it credible

Sustainability-linked loans (SLLs) are any type of loan instrument and/or contingent facility for which the economic characteristics can vary depending on the achievement of predetermined sustainability performance targets (SPTs). SLLs have become the dominant format, accounting for up to 90% of sustainable loans. This contrasts with the bond market, where green bonds represent a little over half of sustainable bonds issued in 2022.

The flexibility in fund deployment, the possibility of lower interest costs if targets are met, and the opportunity to showcase sustainability progress whilst catering to the banks' interests to lend more responsibly, all encouraged SLL uptake. We expect such interest to continue from lenders, as many banks announce, or even step up, their sustainable finance ambitions: for instance, ANZ announced a new AU\$100 billion (by 2030) sustainable solutions target last November.⁴ This year, at least 50% of loans for investment-grade firms in EMEA⁵ are expected to be SLLs.⁶

However, with the greater uptake there also comes the rising concern of 'greenwashing' for performance-based instruments. Thus, strengthening relevant standards has become an important way to combat such risk. The SLL Principles (SLLP), first published in 2019, provides a voluntary framework to articulate the fundamental characteristics of SLLs and has been widely adopted by the market. On 23 February 2023, an updated SLLP, along with an updated Guidance, was released.

What's new in the latest SLLP?

Overall, the updates reflect recent market developments across global sustainable finance markets and efforts to shore up credibility of the instruments to mitigate greenwashing risk. Some of the main changes include:

- Sustainability Performance Targets (SPTs) should be beyond "regulatory required targets": this adds to the previous requirement of demonstrating a material improvement in the respective KPIs and going beyond a "business as usual" trajectory. The accompanying Guidance clarifies that "SPTs should not be set lower than... what is required (or will be during the term of the loan) by law". This sets a clear distinction between SLLs and other types of loans. Borrowers will need to go beyond compliance in order to claim the SLL label.
- The responsibility of the lender group with regards to the KPIs and SPTs: Typically, the role of assisting with negotiating the KPIs and SPTs rests on one or more "Sustainability Coordinator(s)" elected by the borrower. The new SLLP clarifies that such assistance means "...providing market colour regarding the KPIs and SPTs" and "...to facilitate dialogue between the borrower and the lender group". However, as further explained in the SLLP Guidance, the Sustainability Coordinator does not assume "fiduciary or any other duties" to the rest of the syndicate or confirm that the documentation meets the SLLP on behalf of other lenders.

¹ Loan Market Association (LMA), the Asia Pacific Loan Market Association (APLMA) and Loan Syndications and Trading Association (LSTA), <u>Sustainability-Linked Loan Principles</u>, 23 February 2023

² PRI, Sustainability-linked loans: A strong ESG commitment or a vehicle for greenwashing?, 20 July 2022

³ CBI, 2022 Market Snapshot: And 5 big directions for sustainable finance in 2023, 30 January 2023

⁴ ANZ, ANZ accelerating its support for the transition to net zero emissions by 2050, 23 November 2022

⁵ EMEA = Europe, the Middle East and Africa

⁶ Bloomberg, ESG Is Taking Over the Loan Market, 30 November 2022

- Inclusion of "neutral bracket" in loan characteristics: The new SLLP includes a reference to a
 neutral bracket without margin adjustment "in some cases, where a strong rationale is provided".
 Although no further explanation is given, this might refer to scenarios where a premium discount
 applied to margin may be directed to internal or external initiatives and projects supporting the
 sustainability strategy instead of lenders or treasury depending on an annual margin impact.
- More clear reporting and verification requirements: the new SLLP now explicitly requires the borrowers to provide the lenders a "sustainability confirmation statement with a verification report attached". The SLLP also clarifies that the independent external verification should be conducted "until after the last SPT trigger event of the loan".

Related to the second point, it is worth noting that SLLs tend to be large and more likely to be syndicated. 2022 saw the largest SLL ever in the Asia-Pacific region of US\$6.5 billion, issued by Ant Group Co. with a consortium of 20 banks.⁷ This means every bank on such a deal would need to have the ability, using internal and external expertise, to satisfy themselves with regards to the borrower's KPIs and SPTs. This speaks to the broader need of ESG upskillings across the financial industry.

Credible KPIs and SPTs are key to avoid greenwashing

Selecting relevant and material KPIs and setting ambitious SPTs are key to ensure the credibility of an SLL and mitigate the potential risk of greenwashing.

Carbon/GHG emissions reduction KPIs are the most common, representing over 50% of sustainability-linked bond (SLB) KPIs and 26% of SLL KPIs.⁸ Not surprising given the rising awareness of climate risks amongst CEOs, as shown in PwC's Global Survey.⁹ However, not many such KPIs covered scope 3 emissions, which account for the majority of companies' GHG emissions in many sectors.¹⁰ Even for SLBs, which generally face more public scrutiny, scope 3 KPIs - being it absolute or intensity based - represented 12% of carbon KPIs. Strictly speaking, to demonstrate the materiality of carbon KPIs, including the missing scope 3 would be key for many companies.

In terms of target setting, although the updated SLLP Guidance does acknowledge different stages that borrowers may be at along their sustainability/transition journeys and there is no minimum requirement in terms of ESG performance, it is no simple task to prove they are ambitious. The SLLP points to three ways of benchmarking: comparing against their own historical performance, against peers or industry standards, and/or reference to science-based scenarios or official targets. The fact that SLLP requires SPTs to be beyond both a business-as-usual trajectory and regulatory required targets also means that companies need to go beyond the baseline and prove their case of set targets.

Better sustainability strategy and disclosures would help

It is clear that, in order to have a set of credible KPIs and SPTs, companies would need to have a clear view of their sustainability and business strategy, and also have monitoring and disclosures in place to support the required benchmarking and fulfil reporting obligations post-issuance. The SLLP Guidance further suggests borrowers to undertake a materiality assessment, as a best practice, to identify the most important ESG considerations for both the borrower's business and relevant stakeholders of the business.

⁷ Bloomberg, <u>Ant Gets Asia's Biggest ESG-Linked Loan in \$6.5 Billion Deal</u>, 6 March 2023

⁸ Environmental Finance, <u>Sustainability-linked Debt - Carbon Emissions KPIs</u>, July 2022. The analysis covers SLBs and SLLs issued since their inception until 30 June 2022.

⁹ PwC, Winning today's race while running tomorrow's, 16 January 2023

¹⁰ World Resources Institute, <u>Trends Show Companies Are Ready for Scope 3 Reporting with US Climate Disclosure Rule</u>, 24 June 2022

It is thus timely that 2023 marks the first reporting period for around 200 large entities in New Zealand under the new mandatory Climate-related Disclosures rules. ¹¹ Meanwhile, the global effort of harmonising sustainability reporting frameworks, led by the International Sustainability Standards Board (ISSB), is expected to issue its inaugural standards around mid this year. ¹² The effects of the domestic rules and global standards will be felt beyond those being mandated or pressured, as banks and large corporations chase their borrowers and suppliers for more data to fulfil their obligations.

All these combined, would encourage closer collaboration amongst different functions within a company, and incentivise greater alignment from strategy, implementation and financing, to reporting. It will also help improve borrowers' capacity and ability to structure KPI-linked financing instruments whilst alleviating the risk of greenwashing. That is when an instrument like SLLs can truly contribute to real sustainability outcomes.

Authored by Feng Hu, feng.h.hu@pwc.com

¹¹ The Ministry for the Environment, <u>Mandatory climate-related disclosures</u>, 18 January 2023

¹² The International Financial Reporting Standards Foundation, <u>ISSB ramps up activities to support global implementation ahead of issuing inaugural standards end Q2 2023</u>, 17 February 2023

The evolution of carbon hedging frameworks and instruments

While media coverage has recently focused on the action (or not) of politicians around climate change policy, the quiet evolution of the carbon market has been slowly moving forward as an increasing number of market participants get involved. Separately, the market has reflected many of the volatile characteristics of equity and bond markets in 2022 after the Government opted not to follow the Climate Change Commission's price path for 2023 and beyond. NZU prices have fallen from \$88 per tonne in November to trade around \$55 currently (a drop of ~37%). Against this backdrop (and while many organisations go through the annual process to file their emission returns before 31 March) we've made a few observations on trends in the New Zealand carbon market from a practical risk management perspective.

Our recent observations

- → Awareness: over the past 6-12 months, we've observed an increase in the breadth and number of organisations taking a detailed look at their exposures and investigating whether they (i) can, (ii) need to, or (iii) want to manage carbon risks on their own accord. For many (such as transport businesses or fuel users), this has commonly been done on their behalf by others in the supply chain and when prices were at peak levels some were motivated to investigate the readiness and practicality of managing risks in-house.
- → Policy frameworks: For those already managing carbon risks, many of these hedging policies and frameworks are now three to five years old (if not older). Accordingly, there is a level of 'maturity' that has come via managing carbon price risks within these parameters and we haven't seen any overwhelming evidence that one approach (or risk tolerance threshold) is superior to another. Much like foreign exchange, interest rates or liquidity, a tailored approach is required. Importantly rather than a rolling forecast exposure, the key recognition date of 31 December will influence policy design. Most policies remain focused on providing a degree of near term certainty, with the ability to strategically acquire (or lock in) more longer-dated exposures with limits on the amount or discretion. For many also, this is the first major 'correction' in prices since adopting a formal framework and our observation would be that the level of proactive risk management decisions remains below that of foreign exchange and interest rate markets, as well as other commodity prices, such as oil.
- → **Practical challenges**: Linked to the above, there have been some practical challenges when forecasting exposures from one year to the next. As well as coordinating with other business units (or data source which commonly sits outside finance), the variability of the Unique Emissions Factor (or UEF) in particular has meant that the total amount of units required can bounce around from one year to the next. Ultimately, because units can be carried forward, this isn't a 'problem' as such, however there can be liquidity or cash flow impacts from over purchasing in one year and ultimately carrying that balance forward as required.
- → Available hedging instruments and counterparties: Finally, we've started to see more domestic banks actively step into the New Zealand ETS market providing a mix of existing instruments (such as forwards) as well as paving the way for more structured products (such as collars). It's relatively early days, but this is an exciting step as the market further matures into a liquid, well resourced industry that allows both emitters and sequesters to interact in an efficient and optimal way.

Authored by Tom Lawson, tom.f.lawson@pwc.com

The (hidden) materiality and volatility of FX forward points

Volatility and elevation have been the predominant themes of global interest rate markets across the past two years, with aggressive monetary policy tightening from global central banks driving many interest rate markets to multi-decade highs. While the most obvious implications of monetary policy tightening relates to the shape and elevation of interest rate curves, a slightly less obvious effect is the impact on foreign exchange risk management through the sharp movements in spot rates, and the often more subtle, and less easily observed, volatility in FX forward points.

There has been rapid and material swings in FX forward points across the opening months of 2023, driven by the market's digestion of changes in monetary policy settings of major central banks as they battle to balance inflation objectives with looming economic headwinds. This volatility in cross-country interest rate differentials provides a timely reminder of the risks, opportunities and potential implications that are a component of executing longer-dated forward exchange contracts (FECs).

Market overview

The forward exchange market is the most liquid and utilised market for managing foreign exchange risks, both domestically and abroad. Among others, New Zealand importers and exporters utilise this market to hedge future foreign exchange cash flows or commitments using FEC's. An FEC is a contractual agreement between two parties to exchange an agreed amount of one currency for another at both a predetermined exchange rate and date. By entering this contract, a buyer or seller of a foreign currency can protect from future fluctuations in exchange rates. While there are a plethora of factors determining the exchange rate, or in this case defined as a *forward rate*, of a FEC, the two driving components are the current spot rate of the currency, and the magnitude and sign (i.e. positive or negative impact) of FX forward points.

The basic mechanic of NZD/USD FX forward points are as follows:

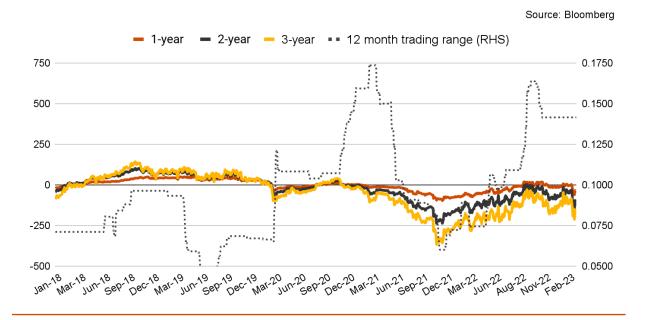
- → Positive FX forward points occur when the interest rate of the base currency (i.e. NZD) is lower than the comparative interest rate of the exposure currency (i.e. USD). Positive FX forward points favour, at the point of trade inception, importers enacting FEC's with a forward rate above spot.
- → Negative FX forward points occur when the interest rate of the base currency (NZD) is higher than the comparative interest rate of the exposure currency (USD). Negative FX forward points favour, at the point of trade inception, exporters enacting FEC's with a forward rate below spot.

In countries with traditionally elevated interest rate environments such as New Zealand, exporters have historically benefited from negative FX forward points. A comparatively weak local currency is optimal for exporters, with negative FX forward points providing a further economic advantage. With positive cross-country interest rate differentials, the longer the time horizon of hedging, the more negative FX forward points will be.

Contextualising recent volatility in forward points

With the sharp rise in interest rates over the past few years, forward points have adjusted higher (and lower) at a much faster rate than market participants have been accustomed to. However, the synchronised nature of tightening by many central banks, such as between the Reserve Bank of New Zealand (RBNZ) and the US Federal Reserve, contrasted against the slower and less aggressive interest rate increases enacted by the likes of the Reserve Bank of Australia and European Central Bank, has resulted in a disjointed level of volatility across different exchange rates. For example, the movement in NZD/USD forward points was more notable in early 2021 when the RBNZ began to signal and lead much of the global (post pandemic) tightening. Further, when comparing the movement in forward points against the rolling 12-month trading range in the spot rate, the recent absolute change in forward points (+/- 150 FX points for a 3-year term) is far exceeded by spot movements (14 cents or 1,400 FX points range over the past year). In late 2021, the market saw a -300 FX point change in the 3-year forward points, against a 600 FX point annual trading range. Effectively, forward point volatility was roughly half that of the headline spot rate.

NZD/USD forward points against 12 month rolling trading range (same scale)



Fast forward to today and a similar trend continues to play out in NZD/AUD (chart over the page). As was observed in 2021, forward points have widened aggressively with 2-year points near -250 FX points and 3-years near -325. Even the 1-year forward points are pushing above -150, which is making importer hedging decisions more challenging. As a proportion of spot rate movements, these moves in NZD/AUD forward points have maintained a relative elevation the past two years. Because NZD/AUD is naturally less volatile than NZD/USD (due to the strong positive correlation between the NZD/USD and AUD/USD), the volatility in forward point changes is proving to be consistently more material while local interest rate markets are highly sensitive to changing central bank policies.

NZD/AUD forward points against 12 month rolling trading range (same scale)



Implications for FX risk management

In most instances, movements in FX forward points should not discourage hedging, however provide a reminder of risks / considerations when executing FECs (especially those that are long-dated).

For exporters, the above volatility in forward points has generally been welcomed - it provides more favourable rates, but also a wider buffer in the event that forecasts 'get it wrong' when it ultimately comes time to settle. For NZD/AUD exporters in particular, the forward points are making it easier to achieve rates below the psychologically notable 0.9000.

For importers, it's a more complicated picture - one where more care is taken towards entry tactics (e.g. targeting recent range highs) or slightly alternative strategies can be considered (such as keeping compliance hedging slightly shorter - which reduces both the period of compliance and the cost of hedging. In addition, the use of short-dated optionality might be appropriate to buy 'time' to allow either the forward points *or* the spot rate to potentially provide a measure of relief.

Authored by Finn Wilkinson, finn.w.wilkinson@pwc.com

Stressed sectors and the surfacing of counterparty credit concerns

Organisational treasury functions have certainly endured challenges in recent years, though it has been well over a decade since challenges stemming directly from stresses in the banking sector achieved the profile and infamy seen across the past month. The collapse, or near-collapse, of a number of high-profile financial institutions during March has shone a spotlight on counterparty credit risk.

One of the principal objectives of the treasury function is the efficient and effective management of the organisation's cash flows and financial risks, ensuring funds are available to meet day-to-day requirements. Key to facilitating the attainment of that objective are the relationships maintained with bank counterparties. In a business-as-usual environment, the treasury function, supported by a Treasury Policy that defines the credit risk framework for the selection of bank counterparties and the extent of the individual relationships, should meet this objective with ease.

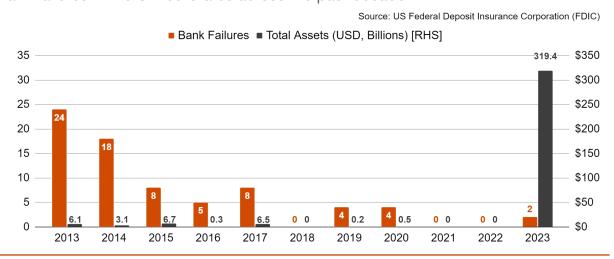
Counterparty credit risk frameworks, much like the framework of a physical structure, require regular re-assessment and maintenance to provide those relying on them the comfort and confidence that the integrity will remain intact during periods of stress, such has played out across the past month. Those stresses have the potential to significantly impede the efficient and effective management of the organisation's cash flows and financial risks.

"Success breeds complacency. Complacency breeds failure. Only the paranoid survive"

- Andrew S Grove: former CEO and Chairman of Intel Corporation

Both success and calm can breed complacency. After a sustained period of calm in the global banking sector, counterparty risk concerns have resurfaced aggressively. Counterparty credit risk parameters that had demonstrated success by default, having faced few challenges, are suddenly under scrutiny. Whether an organisation had direct, indirect, or no exposure to the banks that prompted the recent elevation of counterparty concerns, the resulting queries of C-suites and Boards of Directors are the same: is the counterparty credit risk framework appropriate for the organisation.

Bank failures in the United States across the past decade



A well structured counterparty credit risk framework should consider three primary inputs.

- → Risk alignment with the risk tolerance of the organisation.
 Risk tolerance should in turn be linked to the stated financial objectives. An organisation with a focus on generating returns on financial investments is likely to have a different risk appetite, and different financial objectives, to an organisation that is focused on protecting invested capital and deploying funds for operational and capital expenditure purposes.
- → Credit assessment of the credit risk profile of counterparty banks.
 While this information is generally provided by external credit rating agencies (principally, Standard and Poor's Global Ratings, Moody's Investor Services, and Fitch Ratings), additional consideration should be given to variation in regulatory environments across different jurisdictions. The domestic banking market is likely to be well understood, but an organisation maintaining a relationship with an off-shore bank may have additional regulatory risks to mitigate.
- → Materiality defining a link between a counterparty exposure and the invested capital of owners.

 Rather than an arbitrary figure or percentage, expressing the maximum exposure to a counterparty, or group of credit rated counterparties, in terms of the risk of lost shareholder capital in the event of default provides organisational relevance and context to the counterparty credit risk limit calculation. Both counterparty and portfolio diversification is a primary risk spreading objective.

In aggregate, the organisation must determine its overall risk appetite, its willingness to engage with counterparties at defined points along the credit rating scale, and how much invested capital it is prepared to lose in a default scenario.

Those assessments are made at the design stage of a Treasury Policy. However, the risk and materiality inputs are likely to change over time as the organisation evolves or as market conditions shift - sometimes abruptly. A counterparty credit risk framework that has performed well historically may not receive the degree of critique it deserves during scheduled Policy reviews. Complacency creep.

The issue of counterparty credit risk is just one aspect of concern raised by recent stresses in the global banking sector. A high level discussion of the broader implications and considerations for the treasury function from PwC's 'Our Take' series can be found here.

All aspects of an organisation's Treasury Policy should be reviewed on a regular basis and from an interconnectivity perspective to ensure the entirety of the framework remains fit for the evolving purposes of a changing organisation. The question of "is the counterparty credit risk framework appropriate for the organisation" is difficult to adequately answer without reference to the wider Treasury Policy.

Authored by Mike Shirley, mike.c.shirley@pwc.com

Leveraging interest cost savings from existing portfolio value

Since late 2021 the Official Cash Rate (OCR) has been rapidly increased by the Reserve Bank of New Zealand (RBNZ), advancing from a historical low of 0.25% to the current 4.75% - a level not seen since the GFC-era of the late 2000's. The RBNZ's interest rate increasing actions have been driven by high levels of inflation. The bank's mandate requires a pace of consumer price appreciation of between 1.00% and 3.00%, a pace that has not been achieved for some time. As the OCR has risen, so too has the New Zealand 90-day bank bill rate (BKBM), the reset rate associated with the majority of New Zealand's floating rate debt.

Alongside the rising interest costs, inflation is also increasing many other costs across businesses from labour to raw materials and everything in between. As a result of these rising cost pressures, many organisations are looking for any levers they can pull to achieve savings and increase interest cost certainty. One such lever is the restructuring of existing interest rate swaps.

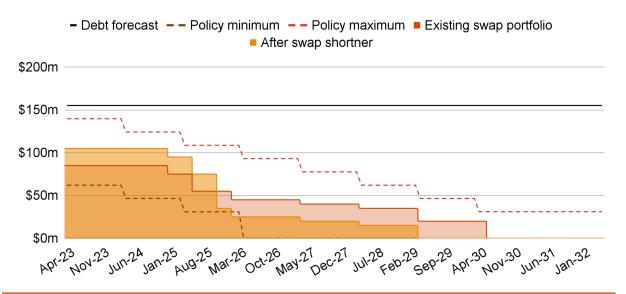
Derivatives, such as interest rate swaps, are incredibly flexible instruments that can be easily restructured to utilise their value over the desired period. Floating rate resets are often managed with pay fixed ('borrower' or 'payer') interest rate swaps, and many corporate treasurers managing debt will have active swap portfolios. Borrower swaps provide value when interest rates increase because they convert a floating interest rate into a set fixed rate and therefore their value (mark-to-market value - MtM) has a positive correlation with interest rates.

From 2008 to 2021, interest rates have broadly trended down and a strategy for swaps with negative MtMs has been to consider 'blending and extending', a process that both extends the hedging term but also blends the negative MtM over time to reduce the overall swap rate. However, in a rising or high interest rate environment (such as now, 2000 and pre-GFC) the common practice strategy is swap 'shorteners' which spreads positive MtM over a shorter period. Opposed to a blend and extend, swap shorteners reduce long term hedging, maintain the current low swap rate and increase the notional amount. The strategy smoothes the impact of the current high interest rate environment giving the business time to readjust to these new market conditions.

When shortening an interest rate swap, a simple way of visually conceptualising it is viewing a swap as a 'block' of protection that can be moved and shaped into different periods where desired. When a swap shorter is actioned, the maturity date is brought forward so the positive MtM of the swap is spread over a shorter period. Once the maturity of a swap is shorted, there is hedging from later years (part of the 'block') that needs to be embedded throughout the new shorter tenor. If the start date is held constant, the two levers that can be pulled are (1) the overall interest rate and (2) the total notional value of the swap (visualised as increasing the height of the block).

One approach is to increase the notional amount over the shorter period by grossing up the notional and keeping the existing rate unchanged to improve cost certainty from a higher short term hedged percentage (at a lower interest rate than the market rate).





The possible cost savings can vary, depending principally on the period cost savings are spread over. As a simplified example, if a swap has 8 years until maturity and \$2 million positive MtM, then this positive value is spread across the 8 years. If the swap is shortened to 4 years, the \$2 million is now only spread across 4 years thus providing a greater benefit per year, and then if shortened to 2 years the \$2 million is spread across only 2 years. The above graph illustrates a \$20 million 8-year swap shortened into a \$40 million 3-year swap. It is worth noting that the new notional size of a shortened swap is not a uniform or linear transformation, with actual achievable outcomes depending on the current market curve. When changing the maturity date, the new notional does not translate to a proportional increase in notional as the value depends on the slope, and level of inversion of the swap curve. A heavily inverted curve means that protection is being taken from later periods with projected relatively lower interest rates and embedded into relatively higher rates in the short term. However, even under this curve structure, there can still be merit in restructuring the portfolio.

An important consideration with swap shorteners is the reduction in hedging from future periods. There is no free lunch. Swap shorteners are taking value from later years to apply them over a shorter, near-term period, thus increasing exposure to floating interest rates in the longer term. This restructuring needs to be carefully managed within the parameters of the Treasury Policy, Interest Rate Risk Limits and with due consideration of the organisation's medium-term business needs.

Swap shorteners are common practice within the market at times of high interest rates and can be implemented with the intention to replace hedging with new forward starting borrower swaps at times when market conditions are more favourable.

Authored by Cameron Scott, cameron.b.scott@pwc.com

PwC Treasury Advisory contacts



Brett Johanson
Partner
+64 21 771 574
brett.a.johanson@pwc.com



Alex Wondergem
Partner
+64 21 041 2127
alex.j.wondergem@pwc.com



John Vetter
Executive Director
+64 27 421 0733
john.x.vetter@pwc.com



Tom Lawson
Executive Director
+64 27 421 0733
tom.f.lawson@pwc.com



Mike Shirley
Director
+64 27 4809 770
mike.c.shirley@pwc.com



Rob Ford
Director
+64 21 836 196
rob.j.ford@pwc.com



Natasha Reddington
Director
+64 27 337 9758
natasha.m.reddington@pwc.com



Rajeev Verma
Manager
+64 21 024 86011
rajeev.c.verma@pwc.com



Samuel White
Manager
+64 21 0236 9953
samuel.j.white@pwc.com



Cameron Scott
Senior Analyst
+64 21 831 796
cameron.b.scott@pwc.com



Ben Keen
Senior Analyst
+64 21 103 3729
ben.a.keen@pwc.com



Keegan Robbins
Senior Analyst
+64 21 823 739
keegan.g.robbins@pwc.com



Stephanie Blackwell
Analyst
+64 21 181 0008
stephanie.z.blackwell@pwc.com



Grace Lewis
Analyst
+64 21 859 614
grace.h.lewis@pwc.com



Finn Wilkinson
Analyst
+64 22 150 4871
finn.w.wilkinson@pwc.com



© 2023 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.