# 03 The WHAT of Hedging

Simon Bishop,
Director and Head of
Corpay Singapore

Simon Bishop, Director and Head of Corpay Singapore, has more than twenty-five years' experience in foreign exchange trading and risk management, and seven years as a business owner. His experience spans the buying and selling sides of the market, and in his career, he has seen the good, the bad and the ugly.

In this three-part series, Simon seeks to shatter the myths surrounding currency hedging. He explains:

1. The **WHY of Hedging**: to hedge or not to hedge currency risk is your decision—and if you choose not to hedge, that is also a decision;
2. The **HOW of Hedging**: building your a strong strategy, executing and monitoring it; and
3. The **WHAT of Hedging**: selecting a hedging product or structure that aligns to your strategy and your hedging policy.

**Simon explains the WHAT of hedging here.**

# The WHAT of Hedging

I've been involved in foreign exchange for about 25 years. I came to Singapore to head up Corpay in 2022, and it's been an exciting time. We've built a big team and we have terrific clients.

One big part of our work is supporting our clients as they hedge their currency risk.

That is really where this idea for this series came from, to help our clients understand the WHY, HOW, and WHAT of foreign exchange hedging. It is a journey.

The foundation is WHY: why you might decide to hedge your currency risk, and why you might not.

Next comes the HOW: how to evaluate your business needs and goals, and develop a risk profile and hedging strategy that suits your business—not a competitor's, not a neighbour's, and how to implement it and review it.

This particular journey ends at the WHAT: an introduction to four different hedging products and their function and potential outcomes & trade-offs. We offer a wide range of different structures that includes more than these four, but the ones I have selected for this post will give you a bit of a flavour and understanding of how they work.[1]

## Hedging products

The primary reasons why most businesses with foreign exchange needs hedge currency risk are to protect gross margin and create cashflow certainty. And your product selection, aligned to your hedging profile and risk appetite, can help you achieve those goals.

We'll start with the **Forward Exchange Contract (FEC)** and what it does, and then look at a number of different FX options structures that will show key differences between the types of products.

The **Forward Exchange Contract** is the most basic hedging structure. It is effectively an agreement between the customer and Corpay to exchange a specific amount at a future date at a predetermined rate. That rate's divergence from the spot market rate is determined by the interest rate differential between the two currencies.

Effectively the rate is locked in, no matter where the market is on the expiry date. This product is really good in creating certainty, and is probably the most commonly used hedging structure.[2]

The next are **FX options**, also called **FX structured products**. There are three basic types of FX options: A Protection option; a Participation option, and an Enhancement option. Each has different advantages and disadvantages, but the one you choose will depend on your business and on your risk profile. If you're a very conservative client or your business cannot afford the risk if the market moves against you, you may be more in the protection-focused bucket, perhaps with some 'participation'.

But if you're in a business that is quite complex, and you understand the products along with having the ability to 'roll with the punches' if something goes wrong, you might look at enhancement products.

The last is the elusive **natural hedge**, where you have no apparent exchange rate risk on your transactions, where you might have inflows of a currency that you also need to pay out. You might be selling in USD and buying USD at the same time.

I call it 'elusive' because it is not particularly common for a business trading internationally to be fully hedged naturally. Even when it does exist, timing can sometimes be an issue.

For instance, we have commodity clients in Singapore who buy and sell in US dollars, so there is no apparent FX risk. Many of these companies, though, do have a small FX risk because there might be a requirement to use SGD to send profit back to Singapore or to fund operating expenses or dividends. And we do look at that with a lot of our clients in the commodities sector to make sure they have certainty around capital expenditure and operating expenditure during the year.

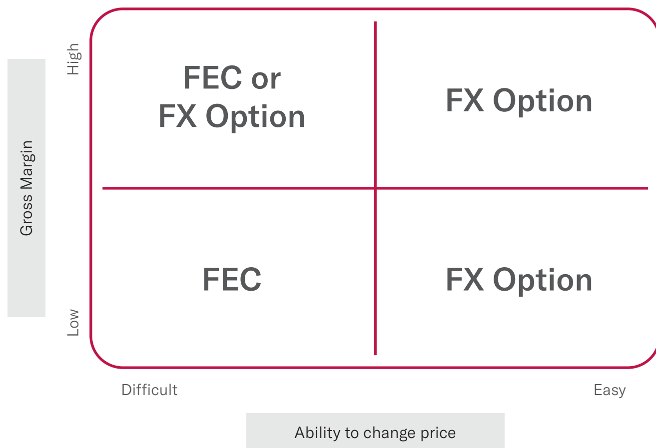
In this post, we'll focus on forwards and structured FX options because that's the crux of what we look after for our clients.

Let's first look at what goes into the decision-making around which products might suit you.

---

[1] All examples presented in this article are **hypothetical and for illustration only**.
[2] **Please note:** A small deposit ('**initial margin**') may be required when booking a forward contract or certain type of option. Should the market value of the open transaction fall below a specified amount (the '**margin threshold**') when marked-to-market, you may be required to post additional funds to 'top up' the deposit ('**variation margin**'). Corpay will inform you of additional margin due by a specified date ('**margin call**'). Additional margin paid will be applied to the original commitment.

The diagram below effectively removes emotion from the process:




The vertical axis is your gross margin. You're either a high or a low gross margin business, low being defined as a gross margin of less than 10%, high being above 30%, and if you're in the middle, that's where you sit. Most of our clients sit between 10% and 30% gross margin.

The horizontal axis is your ability to change price. Is it difficult or is it easy?

Everybody's business will be different, but these two factors are considerations in nearly every business when it comes to currency risk management and hedging.

If you are a low gross margin business and it is very difficult to change your price, you would likely predominantly use the forward exchange contract. That helps give you certainty, and because you can't change your pricing easily, the impact of foreign exchange movement could be material.

If you are at the other extreme, with a high gross margin and prices you can easily change, FX options could represent a good alternative.

To me, forwards work in almost all circumstances. When you're looking at your hedging plan, I suggest you first contemplate what the forward looks like because it gives you total FX certainty. But if you do have high margin and you can easily change your price, it could be worthwhile also considering FX options.

In the last two quadrants, the choices are the same. If you've got high margin and you can't change your pricing, or you've got low margin and you can change your pricing, you might consider either forwards or options. These quadrants give you the ability and the flexibility to look at different types of products.

The quadrant that fits your business situation can potentially guide you towards what product(s) you might consider.

## Use case: a hypothetical wine importer

Our wine importer has a commitment to sell one container of wine every month for the next six months at a fixed price. This is a **hypothetical**, so let's just suppose the USD/SGD spot rate is 1.3850. The importer prices the wine off 1.4000, so he has a little bit of a buffer on the spot rate (this is quite a common practice). And then he adds his 20% gross margin.

The budgeted rate of 1.4000 is the worst-case scenario rate. Sale proceeds are SGD168,000, which means he is effectively making SGD28,000 per container.

### No hedging

Let's say he doesn't hedge. What could happen?

If the spot rate goes to 1.4500 (SGD to USD), the container cost is still going to be USD100,000 and the sale proceeds will still be SGD168,000. But the Singapore dollar cost is now SGD145,000, effectively reducing the profit margin down to SGD 23,000, a reduction of SGD5,000. Last year we had that rate push up to 1.45, so this possibility is a realistic one.

| Risk – USD/SGD at 1.45 | |
|---|---|
| Container cost | USD100,000 |
| Container cost | SGD145,000 |
| Sale Proceeds | SGD168,000 |
| Gross Margin | SGD23,000 |
| GM reduction | **SGD5,000** |

In this next example, the exchange rate goes down to 1.3500. The container cost is still at USD100,000. The landed cost in Singapore, though, is a lot cheaper, SGD135,000. Sale proceeds are still SGD168,000. But the gross margin is now SGD33,000 a container rather than SGD28,000, so our importer has made more money than budgeted.

**Risk – USD/SGD at 1.35**

| | |
|---|---|
| Container cost | USD100,000 |
| Container cost | SGD135,000 |
| Sale Proceeds | SGD168,000 |
| Gross Margin | SGD33,000 |
| GM reduction | **SGD5,000** |

But let's go back to what the importer was trying to achieve at the outset: gross margin certainty, which in this scenario means locking in SGD28,000 margin per container. While it would be wonderful to get an extra SGD5,000, it's likely more important to avoid having SGD5,000 less than budgeted.

When you're looking to hedge, the worst case is your target: 1.4000 locks in your gross margin and you can move forward with certainty.

## An example of forward points

A forward, as I said before, is an agreement between Corpay and the client to lock in a future exchange rate.

Let's look at the pricing for the wine importer. Basing it on a spot rate of 1.3850, you'll see the forward points. The forward points show a considerable interest rate differential because interest rates in the US are higher than in Singapore at the moment. The further out we go, the better the rate becomes. On average, it gives us a rate that's better than the current spot rate—a 'discount.' If we deal the forward—and let's use the par forward to make it easy—up or down, we're locked in at 1.3833. No matter what, we are covered.

| Expiry | Amount | Spot Rate | Forward Points | Forward Rate | Par Rate |
|---|---|---|---|---|---|
| 1 month | USD1,000,000 | 1.3850 | 0.0000 | 1.3850 | |
| 2 months | USD1,000,000 | 1.3850 | -0.0003 | 1.3847 | |
| 3 months | USD1,000,000 | 1.3850 | -0.0010 | 1.3840 | 1.3833 |
| 4 months | USD1,000,000 | 1.3850 | -0.0020 | 1.3830 | |
| 5 months | USD1,000,000 | 1.3850 | -0.0030 | 1.3820 | |
| 6 months | USD1,000,000 | 1.3850 | -0.0040 | 1.3810 | |

The key advantage is that we have locked in our gross margin for the next six months. The key disadvantage is if USD/SGD spot rate moves in our favour, for example, down to 1.3500, we are still locked in at 1.3833.

Let's come back to the reason why we're looking to hedge. It would be great to get 1.3500, but in this case, our goal of hedging is to **protect our** gross margin. The key piece in the equation is ending up 167 points better than the 1.4000 budgeted rate: a great result.

Don't get caught in the trap of worrying about getting better rates as the market falls. Better for our hypothetical wine importer to sell more wine, rather than worrying about the SGD strengthening against USD in the spot market. Lock in the 1.3833, move on and sell more containers of wine in order to make more profit. That's where this importer is more likely to make real money: in his core business.

[3] Forward points are based on the interest rate differential at this writing, and are used for illustration only.

## Collar option

A Collar is a 'participation' option structure. You set a best-case rate ('participation' rate) and a worst-case rate (a 'protection' rate: typically, the budgeted rate), and in between our wine importer deals at the spot rate. If the market moves in our importer's favour (SGD gets stronger in spot market), our rate moves with it, but only to the best-case rate.

In this example, the protection rate is 1.4000 and the best-case rate is 1.37.

If the spot rate is above 1.4000, we're fully protected. If the rate is between 1.3700 and 1.4000, we deal at the spot rate. However, we do not have all of the ability to move with it if the rate goes below 1.3700.

| Expiry | Amount | Protection Rate | Participation Rate |
|---|---|---|---|
| 1 month | USD1,000,000 | 1.4000 | 1.3700 |
| 2 months | USD1,000,000 | 1.4000 | 1.3700 |
| 3 months | USD1,000,000 | 1.4000 | 1.3700 |
| 4 months | USD1,000,000 | 1.4000 | 1.3700 |
| 5 months | USD1,000,000 | 1.4000 | 1.3700 |
| 6 months | USD1,000,000 | 1.4000 | 1.3700 |

Outcomes at Expiry

| | |
|---|---|
| Spot > 1.4000 | Buy USD1,000,000 @ 1.4000 |
| Spot > 1.4000 | Buy USD1,000,000 @ spot |
| Spot > 1.4000 | Buy USD1,000,000 @ 1.3700 |

### Key advantages:

1) This product, the collar option, allows our importer to lock in the worst-case rate: the budgeted rate, which has the advantage of full protection. No matter what happens, the wine importer is fully protected.
2) This structure also provides the advantage of participating in favourable moves, albeit only down to the level of the participation rate.

### Key disadvantages:

1) The protection rate is worse than the forward. If the market were to rally (i.e., SGD strengthens against USD in the spot market), the forward would have been a better scenario.
2) The other disadvantage is in the case of a material move lower. We can only participate to 1.3700. But that's still 300 points better than our budgeted rate.

## Knock-in FX option

The Knock-in Option is also a 'participation' product, but a little different from the collar.

You decide on your worst-case rate at the outset, so you will be fully protected. But you will also be able to participate at spot until a certain occurrence happens in the market, which is called a **trigger** (that knocks in the option).

So, again, the wine importer's protection rate is 1.4000, but the trigger rate in this case is 1.3600. If the market is above 1.4000, we're fully protected. But, in between 1.3601 and 1.4000, we deal at spot. This is a little bit better in terms of favourable moves, with a little more participation than in the collar.

But, if the market is at or below 1.3600 at expiry, the importer gets 'knocked back' to deal at 1.4000, the protection rate.

The question is, then, is that a bad outcome?

Not really, because again, we are trying to achieve 1.4000. But with a move lower, we might have done a little better with this structure than with the collar.

With structured products, there is a fundamental trade-off: if you get something, you give something up. You might get better participation, but if you do get knocked in, you go back to the worst case and you deal at a worse rate than you would have done under the collar.

### The key advantages:

1) full protection and
2) the ability to participate down to 1.3601.

The key disadvantage is that the protection rate for the collar and the knock-in is worse than what the forward is. Participation is capped at the trigger rate, and if the trigger occurs, the wine importer gets knocked back to the protection rate. Not the desired outcome, but still not bad considering we priced a 20% gross margin off a budgeted rate of 1.4000.

You can see that the complexity of the products we're discussing is starting to increase. We've gone from a basic forward with one outcome. The collar and knock-in each have roughly three possible outcomes, but fairly simple ones: full protection, deal at spot, or deal at best-case rate. I'm taking you on the journey of looking at products that are a lot more complex, though still protected at the budgeted rate of 1.4000 SGD per 1.00 USD.

### Target Accrual Redemption Forward (TARF)

This next product, the Target Accrual Redemption Forward (TARF), is an example of an enhancement product and is arguably the most complex product discussed in this 'WHAT' discussion. Nonetheless, despite the complexity, this product can be a good selection in certain circumstances.

In simplest terms, a TARF locks in a protection rate which is significantly enhanced to what the spot rate is…with limits (and disadvantages).

You get a certain number of points to use at different expiry dates, over the life of the contract. However, once those points are utilized, ***if*** they're utilized, the actual structure disappears.

Here's a hypothetical use-case example. The wine importer uses a TARF to get a protection rate to buy USD/SGD out over the next six months at 1.3550 with 1000 points worth of target, so the protection rate is significantly better than the spot rate. At each expiry (or fixing), we calculate the number of points used to achieve that rate.

Let's just take the first example, with 1.3550 as the protection rate. If at the first expiry, we have finished at 1.3850, we would get 1.3550 on our USD purchases and utilize 300 points from the 'bucket'. There are now only 700 points remaining.

Imagine the same situation on the second month (1.3850 vs 1.3550). We would use another 300 points, leaving 400 points for the rest of the contract. If the market went up a little bit in the third month, let's say to 1.3950, that would use up all the remaining 400 points and we would buy USD at 1.3550.

Due to utilizing all of the 1000 points in the first 3 expiries (fixings), months four, five and six are knocked out. The structure disappears and our importer then deals at spot.

The potential upsides of the TARF structure:

1) An enhanced protection rate relative to spot and most of the other hedging structures.
2) Some guaranteed protection at the outset.

The potential downsides of a TARF:

1) Uncertainty in terms of how long you will get that protection rate.
2) Once the points are used up, you get no protection.

So you see that the target accrual redemption forward (TARF) is quite complex. While the outcomes are quite simple, an enhanced rate, you have the added scenario of, "How many points do I have left in my bucket?" And you don't know how long the structure will be in place. The enhanced rate structure may well be in place for two or three months as in the example, but it may well not be in place for the other months.

Often when clients deal a TARF, they are looking at a short-term scenario, rather than a longer period.

## In summary

The decision over which strategy to choose often comes down to your personal preference and your business's risk appetite.

The most important item, though, is to make sure you understand the full range of potential outcomes of any strategy that you do choose.

The key piece here, in the **WHAT**, is that you have to be comfortable with the risk, number one, and number two, understand what you've got.

One of the biggest challenges that clients face is looking only at the best-case outcome and saying "I want that. It's x points better than spot." But they don't actually understand what they're getting themselves into in terms of the trade-offs: the actual outcome might not be that best-case.

That's why, at Corpay, we spend the time with you to go through the structures in a consultation to help you really understand your possible outcomes.

And this goes back to the **WHY** and the **HOW** in this series, and specifically your risk profile. If you don't want any FX risk, the forward, the collar, and even potentially the knock-in can look pretty good because they give you certainty.

We also have clients who are comfortable with risk. If the rate goes up and they exhaust all the points in the TARF, they're okay.

Again, it's your personal choice. Have a think about where you're at and what you want to achieve.

Let's summarise the **WHY**, the **HOW**, and the **WHAT**.

**WHY**. Always start with **WHY**. The two main reasons for FX hedging for most businesses are gross margin protection and creating certainty within your cashflows.

**HOW**: **HOW** to plan, execute, and review your strategy.

**WHAT**. The **WHAT** comes at the end. It's generally a bad idea to let the specific product itself be the determining factor from a hedging perspective. The **WHAT** is the tactic that helps you achieve your goal as you implement your strategy. Is a forward, is it an option? It can be a mixture of both. We have clients who deal forwards and also options.

Hedging does not have to be an all or nothing game. We can support you as you create and implement your strategy: Lean on us by making the most of hedging discussions with Corpay.

## Q & A

**Q.** *Are there any restrictions on what products we can deal at Corpay?*

**A.** The simple answer is yes, there are restrictions. Corpay has some duties to its clients.

We do a stringent suitability assessment prior to a client dealing any hedging product other than a forward, and we share this with the client.

We discuss your experience, your knowledge and what your business is about, and then we share that suitability assessment with you and we agree on the assessment.

That helps protect somebody who has never had any hedging experience from dealing in products they don't understand, and that may not be suitable for them. They may look at a TARF, for example, and say, "Wow, that looks fabulous," but we might not allow that client to book a TARF because we want to make sure that we're dealing a product that would be appropriate for that client and that client's experience.

**Q.** *If you have a view on the market, does that come into consideration when choosing a product?*

**A.** Absolutely. Let's be clear, though: the view on the market should not be the deciding factor on whether you hedge your currency risk or not. That's a mutually exclusive discussion. If the trade-offs of hedging make sense for your business, then hedging is probably the next step no matter what your view on the market is. However, you might use your market view to help choose a product.

Let's use the example we looked at earlier. If you think the spot rate is going to fall, why deal a forward? You might choose to deal a collar at 1.4000 with a 1.3700 best rate, which allows you to participate to that level if the market moves in your favour.

In another scenario, if you think the market's going to just sit for the moment, no major moves either way, you might decide to deal a TARF to help you get an enhanced rate. If the market stays calm, then you may not utilize your full bucket over the period, and you will likely get a rate significantly better for that period than the other structures could deliver.

But—and there is a but — your view/forecast about the FX spot market could prove completely wrong. And if the market does rally, you could get knocked out and then the product disappears.

**Q.** *How many different types of FX options can Corpay offer?*

**A.** The simple answer is that we've got an unlimited number of options. Effectively, we build a structure bespoke to the client's needs.

We can build anything based on the outcome.

If a client wants a structure that does **A** if the market goes up, and **B** if it goes down, we can build it.

Again, it goes back to suitability. We want to make sure that we're offering each client a structure within the range of trade-offs that client might determine is appropriate for the business. We'll sit down with you, run through the different views, the different needs of your business, and we can consult with you toward structuring anything that matches those needs. The key is that we have a full & frank discussion about the structure and its set of trade-offs; its key pros and cons.

A big part of our job is to help you manage your risk. If we can gain an understanding of what your needs are, what your risk profile is, we can support you as you develop and execute your hedging strategy, help aligned with your business goals.

Again, hedging is very much a bespoke solution. Your business will give you the reasons why you are hedging and what you should be dealing. Please lean on us: we're here to help you.

---

If you would like to learn more about hedging and the WHY of hedging, please reach out to your dealer or request a call-back here.

To watch Simon's webinar on the WHAT of hedging, please click here.

# To learn more, visit Corpay.com

Investment products carry a high degree of risk and are not suitable for everyone. You should be sure that you fully understand the risks to determine if it is right for your company.

If you are unclear, you should seek third party advice.

This communication should not be viewed as an influence to trade in investment products. Corpay does not offer advice in every jurisdiction in which it is licensed. Please refer to our Licensing and Regulatory Information document for detailed licensing information.

"Cambridge Global Payments" and "AFEX" are trading names that may be used for the international payment solutions and risk management solutions provided by certain affiliated entities using the brand "Corpay". International payment solutions are provided in Australia through Cambridge Mercantile (Australia) Pty. Ltd.; in Canada through Cambridge Mercantile Corp.; in the United Kingdom through Cambridge Mercantile Corp. (UK) Ltd.; in Ireland and the European Economic Area through Associated Foreign Exchange Ireland Limited; in Jersey through AFEX Offshore Limited; in Singapore through Associated Foreign Exchange (Singapore) Pte. Ltd. and in the United States through Cambridge Mercantile Corp. (U.S.A.). Risk management solutions are provided in in Australia through Cambridge Mercantile (Australia) Pty. Ltd.; in Canada through Cambridge Mercantile Corp.; in the United Kingdom through Cambridge Mercantile Risk Management (UK) Ltd.; in Ireland and the European Economic Area through AFEX Markets Europe Limited; in Jersey through AFEX Offshore Limited; in Singapore through Associated Foreign Exchange (Singapore) Pte. Ltd. and in the United States through Cambridge Mercantile Corp. (U.S.A.).

Corpay provides this document as general market information subject to: Corpay's copyright, and all contract terms in place, if any, between you and the Corpay entity you have contracted with. This document is based on sources Corpay considers reliable, but without independent verification. Therefore, Corpay makes no accuracy or completeness guarantee. Corpay is not responsible for any errors in or related to the document, or for damages arising out of any person's reliance upon this information. All charts or graphs are from publicly available sources or proprietary data. The information in this document is subject to sudden change without notice.

Corpay may sell to you and/or buy from you foreign exchange instruments (including spot and/or derivative transactions; both kinds are here called "FXI"s) covered by Corpay on a principal basis.

This document is NOT: 1) Advice of any kind, or 2) Approved or reviewed by any regulatory authority, or 3) An offer to sell or a solicitation of an offer to buy any FXIs, or to participate in any trading strategy.

Before acting on this document, you must consider the appropriateness of the information, based on your objectives, needs and finances. For advice, you must contact someone independent of Corpay.

Certain FXIs mentioned in this document may be ineligible for sale in some locations, and/or unsuitable for you. Contact your Cambridge representative for further information regarding product availability/suitability before you enter into any FXI contract.

FXIs are volatile and may cause you to incur losses. Past performance of an FXI product cannot be relied on to determine future performance.

Fees may be earned by Corpay (and its agents) in respect of any business transacted with Corpay.

The document is intended to be distributed in its entirety. Unless governing law permits otherwise, you must contact the applicable Corpay entity if you wish to use Corpay services to enter a transaction involving any instrument mentioned in this document.

© Copyright 2023, Cambridge Mercantile Corp., ALL RIGHTS RESERVED. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, on any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Cambridge Mercantile Corp.

Please refer to http://cross-border.corpay.com/disclaimers for important terms and information regarding this brochure.

Please visit www.corpay.com for more details and more information on Corpay's regulatory and privacy statements and terms of use, and for contact details.