A COMPREHENSIVE APPROACH TO MANAGING FOREIGN EXCHANGE RISK

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Aaron Cole: Let's go ahead and begin today's event. Once again, this is a PNC Advisory Series event. It's my pleasure to turn today's call over to our moderator for today, Rob Giannone, Managing Director, Foreign Exchange. Rob, with that, I'll turn it over to you.

Robert Giannone: Great, thanks, Aaron, and good afternoon, everyone and welcome, again, to our PNC Advisory Series Webinar, "A Comprehensive Approach to Managing Foreign Exchange Risk, What you need to know to protect your business."

On behalf of the team here on the phone today, I'd like to thank all of you for joining us. This information is quite timely given the recent events in the markets, whether they be political or economic. So we hope you'll find the content here helpful as you're trying to manage your businesses.

As Aaron mentioned, I'm Rob Giannone, and I'm Managing Director here with our Foreign Exchange Group at PNC. Before we jump into the presentation, I just wanted to highlight our ongoing commitment at PNC to providing market insights, new ideas and best practices like you are about to hear today.

Our commitment is really reflected in the types of conversations that we like to have with our companies, like yours, every day. Trying to bring thought leadership, new ideas, information that's valuable to you to help you run your businesses.

We have videos, articles, economic reports, market commentary. I think we have a slide later on in the deck that we list out some of those resources you might be able to find the information. Also, I'm sure, the materials you were sent today will have links to that pnc.com/ideas site for example.

All right, well, with that, let's jump into today's event. I'm very excited to have with me today Tom Armes and Jason Sandusky, who will be taking you through today's discussion. They are going to discuss the uncertain economic environment we have today and what are some of the best practices in currency risk management to help you all ensure that you are appropriately dealing with and managing the risks of the business, at least related to international exposure and the currency market.

At the end of the presentation, I'll facilitate a question-and-answer session where we'll have a chance to answer some of your questions. So with all that said, I'm going to turn it over to Tom to start us off.

Thomas Armes: Thank you, Rob, appreciate that. And I appreciate everyone spending some time with us today to get — to, hopefully, gain some more knowledge about the foreign exchange markets, how those markets impact your business, how that impact can be felt more acutely as you grow your business internationally, and we really want to look at these factors in a top-down approach starting with the overall market, financial statements, how companies develop a hedge policy. And then finally look at some specific strategies that you can utilize to manage that risk both from a practical and tactical perspective.

So Slide 1 is an index of bank forecasts versus the actual spot, and some of you may be snickering at this because it kind of shows that banks can sometimes be wrong, but let me explain that.

Most market participants forecast currencies based on historical observation, so similar to how you would evaluate a stock price, for example, based on historical prices. And then, normally, we would put a heavier weighting on more recent periods. And this leads to a lag in adjustment to new data and a heavy bias towards what's the current trend. So the trend is your friend.

Bank forecasts that are based on that projected economic outcomes and that historical data often fail to account for event-driven or events that may occur that are variable, that are outside of our normal predicted economic forecast.

So these are two examples. Obviously, the British pound reaction to the Brexit vote, and the dollar reaction to the U.S. election. So when market participants fail to account for events or when a majority of market participants agree on the outcome of an event as they did on the Brexit or the U.S. election, that creates a potentially volatile FX market.

The makeup of the largest market in the world, which the loan average is about $5.1 trillion in turnover per day, it's primarily institutional. So same for central banks, hedge funds, et cetera. Corporations, like much of the audience today, would prefer zero volatility. However, because they represent such a small portion of the overall FX market, they have little say and little impact. In fact, the Bank of International Settlements recently stated that non-financial customers, so corporations, represent about 7% of the overall market.

And, therefore, it's important for our audience today to be acutely aware of those potential FX risks and then, more importantly, how does potential FX risk impact their business?

So this is an example of how those risks would impact your business. So for example, there's a currency mismatch, which is something that we, as FX specialists look for when we evaluate and talk to our clients. The importer in this example has agreed to source the wine in euros and to sell it in U.S. dollars.

Now, if they assume that the euro/U.S. dollar exchange rate is constant, and then they fail to manage that risk in any way, it could result in a higher cost of goods sold. Obviously, a more expensive euro, they're going to have to pay more in U.S. dollar terms.

In this example, they forecasted gross margin at 12.9%, and as we saw on a previously slide, those movements, in reaction to the U.S. election or in reaction to Brexit were about 12%. So movement of that scale in the FX market are not unheard of. And to this client, that would potentially result in a lower or negative gross profit. And that doesn't even include SG&A, freight, or other costs related to that sale.

The VAR model, which is Value-at-Risk, which is the lower portion of this slide, and that is a statistical method that is based off of historical analysis. It shows how much is at risk for this potential transaction and, coincidentally, it's almost the exact amount that they've priced in in terms of their gross profit.

So all of these exposures have an impact on your business, and the way in which we normally see that impact manifest itself is through the financial statements. And Jason is going to walk us through that. Jason?

Jason Sandusky: Thanks, Tom. Tom did a nice job of highlighting how difficult it can be to predict what a currency will do and also how you can quantify that FX risk or FX exposure. Now let's take a look at if these FX risks or exposures hit your financial statements, and if they do, how do you record them?

I think most people listening today are pretty familiar with the basics of financial statements, particularly when it comes to the balance sheet and income statement. But what you may not be as familiar with is where these FX exposures are recorded and at what exchange rates.

If we start with the balance sheet, we'll need to define a couple of terms that we'll use throughout the presentation. Those terms are monetary and non-monetary assets and liabilities. Monetary asset or liability tends to be fixed or have its stated value. Items like cash, accounts receivable, accounts payable, or a short-term note. While non-monetary assets or liabilities are typically not easily or readily able to be converted into cash. Examples could be property plant and equipment or intangible assets like goodwill.

Although the distinction may seem small, it's really important because it's going to drive how you have to record that item and also the changes in that item's value. For both assets and liabilities that are considered monetary, they're recorded at a current exchange rate, which is often referred to as the closing rate for the given accounting period.

The changes in these rates from each accounting period on represents the — or creates an FX gain or loss, which then must be typically recorded on your income statement. On this slide, you can see the arrow connecting the balance sheet to the income statement there.

Typically, assets and liabilities that are considered non-monetary are recorded at their historical rate and won't change from period to period. They'll actually stay at that historical rate until they're sold or liquidated. The same goes for equity being recorded at a historical rate.

The income statement will reflect or represent your firm's performance over a period of time. So it makes sense that you'd need to record any revenue earned at an average rate for expenses incurred at an average rate as well.

Our primary two areas of focus for today are going to be around forecasted transactions and monetary assets and liabilities. We'll start with forecasted transactions also sometimes known as cash flow hedging. These are items that aren't going to appear on your financial statement. They are simply forecasted.

If you looked to hedge this transaction with a forward contract or an option strategy, which we typically recommend doing, you must mark-to-market or record the change of value in that hedged instrument on your income statement. And it can create P&L volatility because there's no offsetting item to clear it.

Because this situation exists for many clients, the Accounting Standards Board actually allows for some special hedge accounting treatment for that type of exposure, and that's under ASC 815, formerly known as FAS 133. Under ASC 815, if certain criteria is met, you are actually allowed to have that change in value or of the hedge instrument or the mark-to-market of the instrument to flow into other comprehensive inequity. And it will remain there until either the hedge transaction matures or it's really from other comprehensive income.

It's worth noting here that we are expecting some changes to ASC 815 from the Financial Accounting Standards Board this summer. Largely, the changes should make your life easier if you are using hedge accounting treatment for cash flow hedging. They're going to relax some rules around the critical terms match and possibly removing the ineffectiveness portion. But definitely talk to your auditors for more specific information on the changes and how they may affect you.

On the other side of this slide you can see fair value or balance sheet hedging, and this is probably the more common of the two. A hedging program that we typically see when we're dealing with large companies or publicly traded companies.

This is where the distinction of monetary asset or liability becomes really important. This is when you have that monetary asset or liability on your balance sheet and each accounting period it has to re-measured or re-valued. And that change in value is going to go directly — typically directly into your P&L.

To hedge this sort of exposure, you want to choose an instrument that's going to mimic the exposure, and you want the mark-to-market or the change in value of that instrument to also go into your P&L to offset the asset or liability's gain and loss.

There's a few other types of FX exposures that we work with clients on such as translation exposure, which could refer to the translation of a foreign entity's earnings or financial statements that are in a different functional currency. Or also the hedging of a net investment in a foreign operation. But those will have to be topics for another day. In the meantime, if you do want to learn more, specifically on those two topics, Rob and Tom actually did a webinar about a year ago titled, "How to Protect Earnings from FX Swings." It's available on our PNC Ideas page that Rob referenced at the beginning of the presentation.

Or, as always, reach out to your FX representative. We're always happy to talk about a specific exposure that you'd like to address.

Now let's look at an example to help illustrate some of the concepts that we have talked about, so far. The balance sheet presented in front of us shows us a variety of assets and liabilities. And for this exercise, we added a column that distinguishes whether an item is monetary or non-monetary. And at the time that we prepared this balance sheet, the euro exchange rate was 1.20, and you can see that any of the monetary assets and liabilities were reported at that closing rate, 1.20, and the U.S. dollar equivalent calculated based on that.

At the same time, you can see that the non-monetary assets are listed at different exchange rates, which are their corresponding historical exchange rates.

If we now fast-forward one accounting period, and we assume that the euro exchange rate has gone from 1.20 to 1.0 or parity, we're going to have re-measure all the monetary assets at that new accounting close rate of 1.0. So if we take the sum of all the changes in values in monetary assets and liabilities, it's going to give us what our FX gain or loss would be. And then, in this example, since the euro is depreciating, and we have more assets than liabilities, it's going to be an FX loss. And that loss, in this given example, would be $160,000.

Now that we've talked about how to identify exposures and how they impact your financial statement, we can move into developing and maintaining your hedge policy.

Broadly speaking, it's important that your hedge policy be clear, concise, and have a well-defined purpose. It's also important to have buy-in coming from senior leadership or even the Board, depending on the size of your company. You really want everyone to be in agreement up front about how you're going to hedge, what tools are allowed, and how the program is going to be evaluated.

The first step in that process, identifying the risk and measuring its affect, Tom has covered well for us in the first section. Here is where you also want to assign which accounting treatment you're going to be giving or applying to a given exposure. If possible, it's always good to quantify the risk of that exposure, and that's something that we're happy to help you do using bar analysis like Tom showed us in Section 1 or even a simple scenario analysis — always happy to help you do that.

Once you have the exposures or the FX risk quantified, you can engage senior leadership to help set what your firm or company's risk tolerance is going to be. Once you've collectively had that conversation and made those decisions, you can look at setting and defining your internal procedures and controls around a hedging program.

And this step often leads right into designing and implementing that overall hedge policy. There are a few components of your overall strategy that you'll definitely want to consider, the first being your hedge ratio or, simply, the percentage of the exposure you're looking to hedge. Which hedging tools are available for you to use? Most of our clients use forward contracts, but we always recommend considering using a strategy that involves some optionality.

There can be times where it's more advantageous in the market to look at optionality versus a forward contract, and that's something that Tom will get into in Section 4 for us.

You also want to define the frequency or the timing of your hedges. Many of our clients have a set date each quarter that they're going to hedge on. It takes out some of the ambiguity or marketing timing of trying to pick the right time to hedge if you have a well-defined date that you're going to hedge on.

And the last piece of this strategy is the tenor or maturity of hedge contracts. So am I able to hedge out 12 months? Fifteen months? You want to have that set out ahead of time. Once you've done all that up front work, the easy part is actually implementing the hedges.

The final piece you should think about when you're putting together your hedge policy is are you going to track, manage, and account for the program's performance? And we'll get into a little more detail on how to evaluate both a cash flow, a hedging program, and a balance sheet hedging program shortly. But it's an important step that's often overlooked.

So the thing I'll mention about a hedge policy is that it really shouldn't be a static document that you've written to satisfy the auditors' request and been stuck in a folder for the last five years. The document should evolve as your business continues to grow or change.

Thomas Armes: Yes, Jason, it's Tom. I think it's important there to not only think about it as a living document but also when you're initiating or you're constructing the hedge policy, it's to build in some flexibility. Sometimes we'll see clients build this in as a target or a range of percentage of exposures hedged or a target or a range of duration of hedges so that they can take advantage — in an objective way, but taking advantage of certain market conditions.

Jason Sandusky: Thanks, Tom, I think that's a really good point, and it brings to mind a recent example that we saw a lot of our clients take advantage of, and that was following the U.S. election when the peso hit all-time lows against the U.S. dollar. Many of the companies that we work with that have forecasted expenses in Mexico and were currently cash flow hedging chose to either lengthen the tenor or maturity of their existing hedges and/or increase the hedge ratio to take advantage of those really attractive peso rates.

Moving on, we're going to talk about how to evaluate both your balance sheet hedge program and your cash flow hedging program.

I would say for evaluating your balance sheet hedge program, really get to know your FX gain and loss line. Unfortunately, the reality is it's probably never going to be zero, but you should know why it isn't zero. And also be able to effectively communicate to management why it isn't zero. Most likely, if you have a hedge program in place and one quarter you have a large FX loss, you're going to have that question, you might as well be prepared to address it.

Some of the common causes for FX gains and losses, even if you're hedging, it could be unhedged exposures, which probably sounds like common sense but oftentimes, we work with companies that fail to properly identify an exposure, and that's going to drive a gain or a loss.

There could also be a time where you choose not to hedge a particular exposure. There could be a variety of reasons why you might do that. Being over or under hedged could also cause it. One of the cardinal rules of hedging that you've probably heard from us or other colleagues is to never be over-hedged. But, unfortunately, it does happen from time to time, usually, a result of poor forecasts.

There are a couple of ways that we would recommend that you approach this if you do have a situation where you're over-hedged. You can actually adjust your hedges during a new accounting period. Or if there's a pattern where you're seeing a particular group struggling with their forecast, maybe it's time to spend a little more time with them looking at the forecast or making this decision if it's worth hedging that exposure.

Timing, of course, can play a big role. You know, Tom showed us a couple of big events we've seen in the market recently, where a day or two can make a considerable difference. You want to line up your trade date as close to the accounting period end date as possible to avoid a market event causing a big difference in what the rates would look like.

Forward points is one of the — probably the few pieces — that you don't have control over. When you use a forward contract, the forward rate of that contract has two components — a file component or it's basically just a current market rate component and then a forward point adjustment.

Now, typically, the forward point adjustment tends to be a small component of the overall forward rate, and it's based on the interest rate differential between the two currencies. That forward point adjustment can either work in your favor or against you, depending on the exposure and the currency.

Typically, when we see clients hedging currencies in high interest rate environments or countries, this is where it can be expensive to hedge. Brazil is a pretty common example of a country where many of our clients that look to hedge an asset debate whether it's worth hedging due to the high cost of hedging.

Conversely, when we're dealing with clients that are looking at hedging in the Eurozone or other European countries with lower negative interest rates, we find that the forward points can either actually be in your favor or much less costly when you're hedging.

The final point I'll make for evaluating the balance sheet hedge would be called kind of a mismatch in exchange rates, and this you may also hear referred to as slippage. And slippage can occur when you have a hedge that matures, and it fixes against the central bank fixing rate. Oftentimes there's a difference between what the central bank would fix at versus the rate that would be in your ERP system. So it can definitely cause a little bit of mismatch on the rate side there.

Evaluating the balance sheet hedging program is sometimes easier than a cash flow hedging program because you do have that FX gain and loss line that can act as a guide for you. What we would say to someone looking to evaluate their cash flow hedging program, first and foremost is don't fall into the trap of purely comparing your realized hedge rates against what the spot market would have been if you didn't hedge.

The reason that you're hedging in the beginning should be risk mitigation, not to try and beat the market. On this slide, the chart on the lower half is an example of what we call a Look Back analysis, which is a tool that we use to help evaluate the success of a cash flow hedging program. In this particular example, it's for a company that uses, we'll call a "layered hedge approach" on forecasted euro sales.

The basic idea behind a layered hedge program is that you always want to have a percentage of your forecasted exposures hedged. And, typically, it's a higher percentage in the near term or the immediate quarter and the declining or lower percentage each quarter out.

As time passes or each quarter goes by, you put on another round or layer of hedges. The net result is that you always have a percentage of your overall exposure hedged. And it's kind of similar to how a lot of our clients think about hedging their interest rate risk where they always want to maintain at least some overall percentage of exposure hedged.

In this particular example, you can see the layered hedge effective rate in green, and the spot — if they had sold at spot, in gray. And the net result that you have is a reduction in volatility in the program.

As you can imagine, managing one or even both of these types of hedge programs could be really time-consuming. In response to this, we've seen a lot of companies adopt technology to address many of the challenges and reduce the work set for them.

Typically, we see clients incorporate technology in two areas — exposure aggregation and trade setup and then also hedge management and the accounting. We have one particular client that we've worked with for a long time that continually struggled to collect data from their various subsidiaries across the globe. Over the years, they had grown through acquisitions and all the subs were operating on different ERP systems. Because of this, they were never able to get a clear picture of what their true exposures were. Recently, they decided to adopt technology to actually pool the data out of these various ERP systems and also give them a central place to manage all the risk. Once they did this, it was really easy for us to help them identify where their exposures aligned, identified natural offsets, and particularly when they were consolidating financial statements of the subs that had different functional currencies.

The same went for cash flow exposure for them as well. Historically, cash flow forecasts are held outside of any ERP system and can be challenging to collect and store. We're seeing firms now move to centralize this as well and then manage it so that they can track their current exposures against the hedges that they have to make sure that they are in compliance with their hedge policy.

The second slide, the ongoing hedge management and accounting for the hedges — obviously, once you have the good data collected, the ongoing management of that hedge program is going to be much easier. You should be able to reconcile your FX gains and losses without a lot of manual spreadsheet work and guessing and checking.

We also, with that same client, realized once they had all the exposure centralized that they had a high volume of intercompany invoice payments. The various subsidiaries were making and receiving multiple currency payments a month amongst each other. We actually were able to work with them and onboard them onto our PINACLE FX Millennium (ph) platform, which really simplified the process. Instead of those subs making multiple payments in multiple currencies every month, they were able to make or receive one currency payment, and it was always in their functional currency.

It saved the company time, money and effort. They reduced their overall FX exposures, and the number of wires that they sent, dropped. And also another benefit they didn't realize up front was a lot less time spent reconciling all the intercompany invoices.

The accounting piece can be a big perceived barrier to cash flow hedging, and now you can adopt technology that can help you with this process. There are systems that will automate not just the hedge documentation when you initiate a transaction, also do effectiveness testing for you, prepare journal entries and even SEC disclosures if needed.

And in our response to a growing number of our clients seeking these sorts of technology tools, we're really excited to announce that we're actually in the process of developing our own solution for the full lifecycle of an exposure and a hedge, which will be called PINACLE FX Manager.

PINACLE FX Manager is going to be a Web-based platform with single sign-on through our online PINACLE platform, which I'm sure you're all very familiar with. It's going to help you with the full lifecycle current risk management, and it should cover a lot of the key stages that we've talked about today — exposure aggregation, trade set-up, trade execution, the accounting for hedges, and even SEC reporting.

We're hoping to have this system live in early 2018, and we'll keep you updated as we get closer to that date.

I'm going to pass it back to Tom. He's going to talk a little bit more about some of the different strategies you can use.

Thomas Armes: Thanks, Jason. We've talked a lot about the FX environment, how that environment impacts your business, primarily looking at the financial statements, how you can leverage technology to gain a better grasp on your exposures and how to implement a policy. What we haven't talked about is some of the specific strategies that companies utilize to mitigate the risk.

So let's talk about that a little bit, both from a practical and tactical perspective. And when I say "practical" I mean taking into account your risk management approach, taking into account how those will be accounted for. And when I say "tactical" I'm talking about how different strategies and structures might work in specific market environments.

So in order to kind of pivot onto a little bit more complicated hedging discussion, we typically start with a forward contract, and a forward contract is really the bread and butter of hedging. According to this survey, which came to us from Deloitte, forwards are used 92% of the time to mitigate currency risk. And these items are mutually exclusive. As you can see, they don't add up to 100%, so many of our clients will utilize multiple strategies, depending on the type of exposure or the duration of the exposure.

And to quickly define what a forward contract is, it is an obligation for you to buy yourself a currency in exchange for another currency at a specific point in the future at a specific rate. So, effectively, you're locking in that cost or that asset or that liability at some point in the future, which is a very powerful tool, and that's why it's so popular amongst our clients and amongst the market as a whole.

So using that forward as a baseline, we can then define some other solutions based upon their risk/reward parameters. As you can see here, from the spectrum above, the forward has the least upside potential and, conversely, it has the least downside potential. All these structures are further defined in the appendix, which you'll see later. But I think it's important to briefly define them here.

A forward is, effectively, a put in a call at the same strike price. In our example of needing to sell euros forward, the company would buy the put and sell the call. If you separate these two legs, you can create a collar of varying widths. If you buy the put but only sell 50% of the call, you create a participating forward. An enhanced collar, or a forward extra consists of buying the put, then selling a call with a trigger.

In this example that we've illustrated here, these triggers knocked that effective rate back to a lower level. So you can see that all of them have very different risk/reward parameters.

So that's a lot. I recognize that we just ran through some very complicated hedging strategies very quickly, so let's take a look at that from a picture perspective, because I think a picture is definitely worth 1,000 words specifically in this case.

The distribution, the bell-shaped curve that you see here, is the anticipated euro rates derived from option pricing. As you can see, the point, which the forward, the collar, and the enhanced collar converge is the highest probability for the euro rate, and this indicates a very efficient market. But as we discussed previously, it failed to account for unknown variables or events.

The participating forward, as you can also see, is below that point because it has — although it starts lower, it ultimately has the highest potential effective rate. And as I mentioned, companies will use different types of hedging, depending on their risk policy and the type of exposure. One client that I have worked with, in particular, they'll hedge balance sheet exposure, they'll hedge that because it's more known, it's more immediate. They'll hedge that utilizing forwards, but their forecasted cash flows, or their forecasted transactions, they'll typically hedge with collars to allow some of the market volatility potentially work in their favor but still maintain the protection against negative market movements. And, for them, that delineation is typically 18 months and under, forward to 18 months and beyond collars.

So clients will choose that strategy based upon their risk policy and the type of exposure, but what about based on market conditions or, as we were talking about earlier, tactical. As we've discussed, market events can sometimes present opportunities to more effectively mitigate risk. Since January of last year, there have been three such occurrences.

When we look at these through a variety of market indicators, so not just the spot rate, we can see a more holistic picture of currency valuation. The top graph is euro/U.S. dollar, the spot rate. The middle graph is skew, and our vol skew, and skew shows if there is a market preference for puts or calls. Negative skew, in this example, means participants are buying euro puts and expect the euro to weaken. You can see that in the run for the Brexit and French quotes, the skew was increasingly negative.

If you needed to buy a euro during that period, a collar would be very attractive, because the sole put would be valuable and finance a lower collar. Obviously, the inverse is true. So in current market conditions, calls are favored, so our example of someone selling euros would benefit selling a call at a higher price and, conversely, a higher overall effective rate.

So moving on to another way in which we look at skew, this graphic shows probabilities for euros over different time horizons. The one we look at previously, that distribution was just one month. This one illustrates over varying time horizons. The collar in this example, where you see the two lines — the two vertical lines, is a three-month collar because the forward contract intersects that distribution at the highest level of probability.

So simplifying this down, assume that the forward rate is 1.13, which is in the middle of those three lines, the call strike is 1.15, and the put strike is 1.10. So 3 points between the forward and the put and 2 points between the forward and the call. This indicates a negative skew is driving forwards down and presents an opportunity to hedge using collars if you needed to buy yours in the future, and this especially works well for longer dated exposures.

So on the previous slide that had three sections with the upper section being the euro/U.S. dollar spot rate, the middle section being skew, and the lower section was implied volatility. And, again, another way in which we look at the market, and that can give you maybe a broader picture than just the spot rate.

Implied volatility is also derived from option pricing and indicates if the market is expecting higher levels of price action. It's indifferent to the direction. So if you think of implied volatility as 2% for the next three months, that means that the market is expecting 2% positive or negative movement in the euro/U.S. dollar, for example.

Many of our clients hedged some aspect of their balance sheet with forwards, in fact, that's the most common use of the forward, as we saw, which was 92% of hedging, and the majority of that hedging is done to mitigate the re-measurement of balance sheet items to the P&L. So a lot of our clients are utilizing forwards to hedge that risk.

But in periods of relatively high implied volatility, you have forward extra, which, as we discussed, a forward extra is selling of a call with a trigger, might be a better solution. Because that trigger is more likely to occur in a higher volatility environment, it makes the overall structure that much more attractive. And so we've done a lot of this analysis for our clients where we've looked back and said, "Okay, well, if you did forwards on a rolling balance sheet hedging program, every month or every three months for one year, what would that look like if you did forward extras instead?"

And as you can see here, over this period of time, the forward extra actually resulted in a better overall effective rate for this client. Again, taking advantage of the market conditions while still being in line with their overall risk appetite and foreign exchange policy.

So at this point we've discussed market conditions. We've discussed how those market conditions impact your financial statements. We've discussed how you can leverage technology and policy to manage that impact. And, lastly, we've discussed the hedging strategies, based not only on the policy that you've developed in response to those market conditions, but also potentially leaving yourself enough room in that policy to take advantage of certain dynamics within the market.

So at this point we've concluded the presentation aspect of this webinar, and I'd like to turn it back over to Rob to open it up for questions. Rob?

Robert Giannone: Yes, thanks, Tom. Wow, you guys covered a ton of FX information in about 45 minutes, from intro to, I think we went beyond master's level, so great stuff. I'll now direct folks on the call to put some questions into the panel. You can do that by looking for the Q&A window on your screen. If you don't see it, click on the Q&A widget found in the lower center portion of your screen, and you'll be able to type in a question.

Some have actually come in while you guys were talking, so I'm going to jump right into the first one.

The first one is actually a two-parter. "Can you provide an example of a currency where forward points are working in your favor? And in that same vein, where it's not working in your favor, and it's expensive to hedge, are there strategies that could help reduce the cash outlay or cost of hedging for those sorts of exposures?"

Thomas Armes: Rob, thanks, it's Tom. I'll take that one. I think Jason alluded to this earlier, but basically the way forward points work is that if you're buying a currency with a higher interest rate than the one you're selling, then you receive a discount. And, conversely, if you're selling a currency with a higher interest rate than the one you're buying then that incurs a premium.

So what Jason was saying — the example that Jason laid out where some of our clients were struggling with the cost of hedging in Brazil, that's because they were selling the Brazilian real. They had sales or other assets over there that they were trying to hedge, and it became very expensive for them to do that.

Again, on the other hand, we have clients that have sales in Europe, and European interest rates are very low. It's, in fact, negative. And that creates a very positive premium or forward point premium so that they can sell euros at a higher rate, going through time.

So the second part of the question, which is how do I — if I'm in a position where I need — I would like to hedge, but it's expensive because I'm hedging something that has a higher interest rate than my functional currency. An example of Brazil, what we'll see companies do is utilize a collar to give them a little bit more of a range. Or they'll just dial down their hedge ratio. So rather than targeting, say, 100% or 80% in the near quarter, maybe they'll just hedge 50% or 60% and thereby not absorb so much of that up-front interest rate cost.

Robert Giannone: Okay, thanks, Tom. Next question is, "Can you talk a little more about when a forecasted cash flow item becomes a receivable after we recognize the revenue? What happens to the cash flow hedge?"

Thomas Armes: It's Tom again, I'll take that one, also. So forecasted transactions are — they're kind of known unknowns. They're expected to curve, but they're not necessarily firm commitments. And so when companies hedge those, they're designated as a hedge of a forecasted cash flow. It goes through OCI, as Jason mentioned.

Once that is a firm commitment, and it becomes an item on the balance sheet, it is measured using period end rates or closing rates, and the difference over an accounting period then moves toward to the income statement as an FX gain or loss. And what the hedge does, normally, what our clients will do is they'll either de-designate that hedge as a cash flow hedge and let it be a fair value hedge — so the hedge effectively follows the exposure from forecasted transaction to the balance sheet and then is restated, and then they offset each other through the income statement. Or, sometimes our clients will do a cash flow hedge and then re-designate it for a different cash flow hedge, if they're not that necessarily interested in measuring or offsetting the measurement of the balance sheet.

So it really depends on the goal of our client and where their Board or their executive team or the investors are most keen on mitigating risk. But, for the most part, what happens is the hedge follows the exposure from forecast transaction to balance sheet item. And then is restated, and they offset one another through the income statement.

Robert Giannone: Great, thanks, Tom. Let's see, the next question is — okay, this is a pretty good open-ended question. "If I'm not hedging today, how do I get started? What do I do first?"

Jason Sandusky: All right. Tom, I'll hop in and take this one. So if you're not hedging today, the good news is you've probably already taken a good step one, and that's joining the webinar today.

But aside from that, what I would say is start to try and get an idea or understanding of what your exposures are. And then, really, you start moving into the formation of the hedge policy like we discussed today. And those are all things that we're happy to help you walk through from the early stage of identifying it to setting up that policy.

So feel free to reach out to your rep or if you don't know who your foreign exchange contact would be, reach out to your banker or your RM, and they'll get you in contact with them.

Robert Giannone: All right, thanks, Jason. The next question — "If I'm already under water," like, the market is worse than the budget rate is — what the question, I think, is getting at, "should I do a forward or should I look at something else?" We get this question a lot, so this is an example of where a company has a budgeted rate they'd like to have to be able to exchange their currency, and the market already has them at a disadvantage, the rate is already way worse than their budget rate. So what do you do? So, Jason or Tom, who wants to take that one?

Jason Sandusky: I'll take that one as well. Yes, as Rob mentioned, it is a common question that we've seen, particularly for some of our clients that sell into Canada, and the exchange rate has been moving against them for a while.

Probably a couple of things that we would say is, one, we probably want to have a conversation around how you're setting your budget rate. But if that's already set, using some optionality is a way to give yourself the opportunity to get back to what that budget rate may be.

I would say you probably also need to have that conversation with leadership, as well, to make sure they're on the same page that you could live with a little bit worse of a hedge rate by using an option if the currency continues to move against you as compared to a forward. But optionality is certainly a way to give yourself additional upside potential and the opportunity to get back to that budget rate.

Robert Giannone: Okay, thanks, Jason. Okay, here's a good market — a question about the markets. "How does a potential rescinding of Brexit impact the British pound or the euro?" Oh, that's an open-ended one there.

Jason Sandusky: I'll leave that to you, Tom.

Thomas Armes: Well, okay. The — I think the reaction that we saw initially to Brexit has caused a lot by the surprise outcome of the vote. So I think that if the UK rejoins — they're already a member of it, but stays in the EU, which they've been invited to do by the German Finance Minister and, obviously, the new president of France, I think you would see a strengthening of the pound just in general. But I also think it depends a lot on how those reentry negotiations proceed. I also think it depends greatly on if Prime Minister Mays is able to cull together a coalition government, or if someone else comes to fore in terms of running the UK.

So that question is very difficult to answer because there are so many variables, but I would say on the surface that that would be positive for the British pound and positive for the euro as they go through a period where they may be looking to unwind some of their quantitative easing and potentially even raise interest rates at some point later this year.

So I think, all in all, the answer to that question is it should be positive for both, but there's too many variables to say definitively.

Robert Giannone: I couldn't have said it better myself, Tom, thanks. Another question relates to China, actually. "How are companies hedging their exposure in China? And what's driving, maybe, the cost of their forward markets in China?"

Jason Sandusky: Sure, I'll take this one as well. So maybe before I get into specifically hedging exposures in China, one thing I'll mention is that we've seen the adoption of the RMB to settle global trading, increasing every year over the last several years at a pretty rapid pace. So we're starting to see more and more clients settle their trade with China in the RMB instead of in U.S. dollars, which historically has been done.

Most of our clients that have exposures in China have forecasted expenses. There may be manufacturing abroad there, and we see a lot of deliverable forwards used that hedge that forecasted exposure in China. I guess what's driving the — or impacting the forward points as Tom mentioned in the earlier question when you're buying something in a currency that has a higher interest rate environment, you're going to be buying that at a discount. So interest rates both in the U.S. and in China would certainly impact that. But one of the nice things about hedging any expenses in China right now is it's a pretty sizable discount when you're buying Renminbi forward. That's what we see a lot of clients doing these days.

Robert Giannone: Okay, thanks, Jason. Well, as I'm looking at the time here, we're just about at the top of the hour, and I want to be respectful of everyone's time here today.

So I'll go ahead and thank Tom and Jason for a really solid presentation with a tremendous amount of good information, lots of good insights and perspectives here. I'll just echo what Jason said earlier, I mean, please reach out to one of your relationship managers or your FX specialist directly to discuss any of these concepts in more detail. We'd be happy to do that.

And we'd like to thank all of you for giving us an hour of your time today in joining us. A PDF of the presentation and a CTP certification credit for those of you who need those is now available for you to download from a green resource list. If you can't see that, look in the middle of your screen. In the bottom, you'll see a green icon that says "Resource List." From there you can download the presentation and the CTP certificate.

Before you run, we always like to try and get feedback on these events to make sure that we're delivering relevant information that's impactful to all of you and helpful for you to run your business. So please take a few minutes to complete our quick survey online.

Once again, I'd like to thank you all for joining us and have a great rest of the day.

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