Hedging Transactions Involving Foreign Exchange Risk – A Primer: Falling in Love with a Puerto Vallarta Condo (Part C–Epilogue)

Posted by *Farok J. Contractor* on *August 28, 2015*: http://wp.me/p4vZwE-vf

Posted in: Borrowing Rate, Certificate of Deposit (CD), FOREIGN EXCHANGE RISK, Forward Contract, Home Equity Loan, INTERNATIONAL BUSINESS, International Business Case Studies, Mexican Peso, Money Market Hedge,Real Estate Investment, Spot Market, Spot Rate, US Dollar. Tagged: Borrowing Rate, Certificate of Deposit (CD),Condo Investment, Foreign Exchange Risk, Forward Contract, Home Equity Loan, International Business Case Studies, Mexican Peso, Mexico, Money Market Hedge, Puerto Vallarta, Real Estate Investment, Spot Market, Spot Rate, US Dollar, Zona Romantica. Leave a comment

CASE STUDY (C)—EPILOGUE: The Negotiated Settlement

The two case studies presented examine foreign exchange risk from two perspectives:

(Part A) *An American couple has put a down payment on a lovely new condo in Puerto Vallarta, agreeing to pay 5,000,000 Mexican pesos on delivery of the condo in 12 months.*

(Part B) *But the next day, they have second thoughts and offer the Mexican real estate developer $307,000 instead. The Mexican firm needs to consider the foreign exchange risk from its perspective—while ensuring the sale.*

(Part C)* On the third morning, the Mexican real estate developer makes a counter offer that initially seems counter-intuitive: to accept a** lower ***amount of $305,000 provided it is paid in two installments—$5,000 wire-transferred immediately and $300,000 paid on completion of the apartment 12 months later. The apparent justification is that a significant up-front payment by the American buyers would greatly reduce the likelihood they will back out of the deal.

A Renegotiated Offer

Earlier, having fallen in love with Puerto Vallarta, an American couple had signed a deal with a Mexican real estate developer,[*] agreeing to pay 5,000,000 pesos on delivery of a condominium apartment 12 months later. But on the red-eye flight back home that night, worrying about the foreign exchange risk, they began to have second thoughts. If the dollar were to weaken over the course of the following year (or, putting it equivalently, if the peso were to strengthen), then the dollar cost to the American condo buyers could be much higher than the estimated $305,000, which was calculated using the exchange rate in effect when they signed the deal.

Consulting with David Oliva, a financial advisor at Implicit Trust Financial Services, LLP (ITFS),[*] immediately after they landed back home, the couple learned of a way to "hedge" their foreign exchange risk that would entail a known-in-advance cost of $307,361. But then, at the last minute, Oliva pointed out that there would be additional costs, such as his firm's advisory fees and real estate taxes, adding at least $1,500 to the total cost—which then would be at least ($307,361 + 1,500) = $308,861. Although the American couple had asked the advisor to prepare the documents, on later reflection they did not trust his advice and worried that the total amount they would have to pay using the "hedge" would escalate even beyond $308,861. *(End of Part A.)*

Still nervous about the alternatives they faced, the couple said to themselves, "What if we first just try to renegotiate the deal by offering the Mexican company $307,000? This would be somewhere between the $305,000 we thought the condo would cost us and the $308,861 Oliva (the financial advisor) came up with? . . . Yes, it's $2,000 more than our original estimate of $305,000 using the exchange rate of two days ago . . . but if the Mexicans agree to accept dollars, at least we can sleep in peace, having nailed down our dollar cost with no further increase."

Later that afternoon, the American couple phoned Arturo Aguilar (the Mexican real estate agent) with an offer to pay a fixed dollar amount of $307,000 on delivery of the

apartment 12 months later. "Arturo, it's even $2,000 more than we thought it would cost us," the couple added, hoping to appease him.

Inwardly irritated that this American couple was trying to renegotiate a deal signed barely 24 hours earlier, Aguilar turned to the headquarters of the real estate development company, *Construcciónes Inspiradores, S.A. de C.V.*,[*] located in the regional capital, Guadalajara, to get their thoughts. There, the reaction was initially even more negative. The general manager, Dulce Maria (D.M.) Fernandez, snapped, "These gringos are trying to shift the foreign exchange risk over to us!" and slammed the phone down. Now what was Arturo to say to the American couple when he called them back the next day?

Meanwhile, the development company's finance manager, Miguel Cardenas, hesitatingly interjected his thoughts to the general manager. He pointed out to the angry D.M. that the American couple's offer to pay in dollars could actually be to the Mexican company's advantage since it would enable *Construcciónes Inspiradores* to borrow money at a cheaper interest rate. *(For details, refer to Part B.)*

Besides, D.M., Miguel, and Arturo were all starting to worry that the American couple might back out of the whole deal.

Would Such a Settlement Be Mutually Satisfactory?

The following morning, after being convinced by Cardenas, the company's quietly competent finance manager, Dulce Maria (D.M.) Fernandez called the real estate agent, Arturo Aguilar, to see whether the American couple was still interested in a dollar-payment deal. Breathing a sigh of relief that the deal was still on the table, Arturo agreed to call the couple back immediately.

What had persuaded D.M. was Cardenas' careful analysis. He had said, "A successful negotiation addresses the concerns and aspirations of both parties. It is useful, in preparing for a negotiation, to think of not only the fears and desires of our side, but also to put ourselves in the other party's shoes." He produced the summary below for discussion (see table).

The renewed overture to the American couple resulted in a quick solution that was good for both sides. Cardenas had come up with a seemingly counter-intuitive idea: the Mexican firm would not only agree to accept dollars, but would accept a *lower* dollar amount. Instead of the couple's $307,000 offer of the previous day, they would accept $305,000—provided that the $305,000 was paid in two installments:

$5,000 wire-transferred to Mexico immediately, plus

$300,000 payable 12 months later

	American Couple	Mexican Company
Concerns and Fears	• Uncertainty about the dollar cost of having to pay 5,000,000 pesos a year later • Fear that if the peso strengthens over the course of the year, their dollar cost will be much higher than the initially estimated \$305,000 • Concern that hedging the foreign exchange risk (for a peso payable) would fix the dollar cost in advance, but cost at least \$308,861 • Mistrust of their financial advisor—fear that with additional hidden fees, their cost could be even higher than \$308,861	• Worry about assuming the risk of a dollar receivable since the peso conversion value of dollars 12 months later is unknown • Fear that the American couple could back out of the real estate deal entirely
Aspirations and Desires	• Nail down (know in advance) the cost of the condo in their own currency (US dollars) and sleep in peace over the next year • Not pay significantly more dollars than the \$305,000 they had calculated two days ago in Puerto Vallarta	• Nail down (know in advance) the revenue from the condo sale in their own currency (Mexican pesos) and sleep in peace over the next year • Make sure that the American couple does not back out of the whole deal • Reduce their company's borrowing costs

As Cardenas explained to D.M., "The main idea is that if the Americans pay \$5,000 immediately, that would mean they will not back out of the transaction." He added, "Our company benefits three ways. Even \$300,000, using the money market hedge, works out to a value greater than pesos 5,000,000 in one year. Our company needs financing, and, being able to borrow dollars against the dollar receivable, we enjoy a cheaper borrowing interest rate compared to borrowing in pesos. Also, the \$5,000 will be received from the American couple immediately, and we can use it in our business. Most importantly, it will solidify the deal, making it most unlikely that the American couple will back out."

After getting Arturo's call, the American condo buyers were equally gratified. "Wow, can you believe it? The Mexicans are willing to accept *less* than we offered!" one of them said. "Hey, I don't know what they are thinking, but in return for \$5,000 up front, which we can swing, our total purchase price for the condo comes back down to the \$305,000 that we estimated using the exchange rate from two days ago. And for us, a dollar is a dollar. We don't need to worry about the exchange rate a year from now. Hurray!" That night, the American couple fell contentedly asleep with visions of azure waters gently lapping against powdery white sand.

The General Manager Asks for a Written Calculation

Ever the cautious bureaucrat, Dulce Maria (D.M.) Fernandez, general manager of *Construcciónes Inspiradores,* who had struggled her way to a senior position from humble beginnings, wanted further reassurance. While good at running the company, and with a keen eye for assessing her subordinates' capabilities and weaknesses, she knew in her heart that her grasp of finance was weak. Luckily, she had in Miguel Cardenas a person who was not only a good finance manager, but also a person skillful at identifying key issues and negotiating tactics. Cardenas had come up with a negotiating idea that had solidified the sale of a condominium apartment to an American couple, when just the previous day they were afraid that the couple might back out of the whole deal.

Wanting to cover her back, later that afternoon D.M. said gruffly, "Miguel! Give me a detailed calculation of the deal we just concluded." Knowing he must always express a smooth, professional manner with her, Cardenas replied, "Sure. It will take me only 20 minutes." He soon produced the report below:

++++++++++++++++++++++++++++++++

To: General Manager, Sra. D.M. Fernandez

From: Miguel Cardenas, Finance Manager

ASSUMPTIONS

All the calculations below are end-of-period (12 months later), when the apartment building is finished and payment is received from the American buyers. The spot rate for the peso has changed a bit—from .0609 two days ago to .0601 currently. Interest rates have not changed.

The Advance Payment ($5,000 wire-transferred to the Mexican firm at the beginning)

The $5,000 will be converted immediately into 5000/(.0601) = 83,195 pesos. (The spot exchange rate for a peso currently is .0601.)

The pesos 83,195 will be used to reduce our company's debt balance, thereby saving over the next 12 months interest not paid, amounting to (83,195)(.068) = pesos 5,657 saved.

The Balance ($300,000 receivable 12 months later)

- **Against the receivable, our company will today borrow**
  <u>$300,000</u> = $285,987 (borrowed today)
  1,049

- **Convert $285,987 today into pesos using today's spot rate of .0601 to get**
  <u>285,987</u> = pesos 4,758,519 (today)
  .0601

- **The pesos 4,758,519 will be used to reduce our company's debt balance, thereby saving over the next 12 months interest not paid, amounting to (4,758,519)(.068) = pesos 323,579 saved.**

<u>Actions to Be Taken 12 Months Later</u>

- **Receive $300,000 from the American condo buyers. Use the $300,000 to pay off the dollar loan [(principal + interest)] = [(285,987) + {(285,987)(.049)}] = $300,000 owed to the bank.**

- **Deliver the apartment keys to the Americans.**

- **<u>TOTAL VALUE AS OF 12 MONTHS LATER</u>**

• Pesos converted from $5,000 (at the beginning)	83,195
• Savings over 12 months from reducing our debt level by 83,195 pesos	5,657
• Pesos received from spot market conversion at the beginning	4,758,519
• Savings over 12 months from reducing our debt level by 4,758,519 pesos	323,579
TOTAL VALUE AS OF 12 MONTHS LATER	5,170,950

- **Hence, we can see that the final outcome of the negotiated "compromise" turns out to be better for both parties—of course, partially because the peso has weakened slightly (over three days from .0609 to .0601).**

- **<u>American Buyers</u>: The couple will sleep in peace with a fixed, known-in-advance dollar amount. Their dollar payment of $305,000 overall is very satisfactory to them. They feel gratified that they will pay $2,000 less than what they themselves offered. (The fact that $5,000 out of the total of $305,000 is paid in advance does not matter at all to Americans, because $5,000 today in an American bank earns almost nothing in deposit interest in ordinary personal savings accounts—but to us, any advance payment helps to reduce our company's debt level.)**

***Construcciónes Inspiradores*:** **Having received $5,000 by wire transfer, we are now confident that the condo purchase deal is solid. As against pesos 5,132,357, our company would have received by "hedging" the $307,000 two days ago, we now stand to get pesos 5,170,950—mainly because the peso weakened over the past two days. Our company has an outcome—in our own currency—that we know in advance.**

++++++++++++++++++++++++++++++++

Overall Lessons from the Case

In an international transaction, there is generally no escaping foreign exchange risk borne by one or the other party in situations where money is payable in the future. The party that pays (or will be paid) in their own currency has no foreign exchange risk—although other transactional risks may remain. The party that agrees to pay (or be paid) in the future in a currency not their own carries the foreign exchange risk. The currency in which the deal or invoice is written is a matter for initial mutual negotiation. Often, as we see in Part C, a negotiation can result in both buyer and seller being happy in a win-win settlement.

In general, the party that agrees to bear the foreign exchange risk can "hedge" this risk by using either a "forward market" or a "money market" hedge. Which is better, in general? Depending on the interest rates available to the company at that time, as well as the exchange rates, sometimes the forward market hedge works out better; other times, the money market hedge may be the option of choice. There is no general rule or tendency. However, in this case, the latter option—the money market hedge—worked out better in Parts A, B, and C. All it takes is a few simple calculations to determine which type of hedge works out best.

REFERENCES

Hernández, J.R. (2014). Peso-Dollar Forward Market Analysis: Explaining Arbitrage Opportunities during the Financial Crisis. Working Paper No. 2014-09 (May), Banco de México (Documentos de Investigación). *[For academic reference]*

Shapiro, A. (2013). *Multinational Financial Management* 10th ed. Wiley. *[For interested students]*

---

[*] The companies and personnel described are fictitious.