CHAPTER 1

The Basics of Foreign Exchange Trading

Foreign exchange is the most traded instrument in the world. Roughly $3 trillion is traded on any given day. Some days, volume can reach as high as $7 trillion per day. This volume completely swamps the global stock market.

It is not hard to understand why forex is traded the most. Nobody needs to buy stocks but we must all deal directly or indirectly with the foreign exchange (forex) world. Global trade is huge. Every time a barrel of oil is bought, dollars must also be bought by everybody but Americans. Japanese must change their yen into dollars to buy oil since oil is priced in dollars. Every time an American buys a Japanese car, dollars are swapped for yen to buy the car. Every time a kid watches a Disney movie in Poland, dollars are demanded. Cross-border capital flows for investment contribute another massive quantity of foreign exchange transactions.

Perhaps the largest component of daily volume is speculation. This is mainly done by banks and other financial institutions around the world. Every day, banks trade among themselves looking for speculative profit. In addition, major banks try other strategies to make money. For example, a bank will try to find another bank that doesn't know the correct price for a currency and make a purchase. Perhaps a large order had come into a bank that was large enough to change the price of the currency. This piece of knowledge could create additional profit opportunities for the bank that knew about the order. This will be discussed later in this chapter. Let me assume that you know something about investing in general, perhaps in stocks, and focus on how the forex market is *different* from other markets.

SELL A YARD OF CABLE

I was the treasurer of the New York branch of a Swiss bank in the late 1980s. We had a client who was a cotton merchant from Turkey. He speculated in forex as a paying hobby. Late one afternoon in New York, he called one of our dealers and placed an order to sell a "yard of cable." Let me translate that into English. What he wanted to do was to sell 1 billion British Pounds. (The only currency that is capitalized is the Pound; all others are lowercase. Forex trivia!) We were shocked at the size of the order. That would be a huge order for any major financial institution, let alone for a single individual. We were the counterparty on all orders from our customers so we were expected to take the other side of his trade. No way. We weren't big enough to take on such a large position.

All foreign exchange trading, except for a small amount on the International Monetary Market, is over the counter. There is no exchange. All transactions are done over the phone, with a broker, or via some electronic means between two entities. Entities are usually financial institutions but are often corporations and sometimes individuals. That means that when a retail investor, such as myself, puts in an order through an online broker, the counterparty is practically unknown. It could very well be the broker. However, the broker could be aggregating prices from different brokers or institutions. The source of the prices are unknown, which is very different from the stock market because a stock is generally traded only at one place, such as the New York Stock Exchange (NYSE). Technically, the NASDAQ is an over-the-counter market that is centralized in one place so it is, effectively, an exchange. Forex is completely diversified.

Back to the yard of cable. The size of his order meant that we had to lay off the risk to other dealers. But there was no way that we could find a dealer to take the whole billion Pounds. Even 100 million Pounds was a large order.

It was very late in the afternoon and I only had a few forex dealers on the desk. My main trading desk was in the form of a large T with me at the top of the T. I could see and hear everything on the desk this way. I started grabbing dealers from other desks. It took a few minutes but I soon assembled a cast of ten forex, bond, and cash dealers arrayed in front of me, five on each side of the bottom of the T.

We knew that the pressure of selling 1 million cable was going to cause a sharp drop in the price of the Pound Sterling. It was a huge order. So, naturally, we sold $20 million for our own account. It didn't change the price at all. This is called *front running* and is legal in forex and bond trading but illegal in stock trading. I told each trader to call a different bank and get a price for 100 million Pounds. In the interbank world, you ask for a price from the other bank. The other bank must offer you a two-sided market.

This means that they must give you a quoted price for both buying and selling. So the other dealers might have said "43–45," which means that they are willing to buy Pounds at 43 and to sell them at 45. Notice that 43 and 45 are not complete prices. The complete price might have been 1.6543 and 1.6545. But dealers only speak about the last two figures of the price. It is assumed that we all know the "handle" or the "big fig(ure)." Dealers don't waste time. In fact, the price of 43–45 was likely barked into the phone with the implication that we better quickly tell them whether we were buyers or sellers. I would often hear dealers say something like "43 45, whaddya want?" Their quote is two-sided (both a bid and an ask) and is a push to trade.

I told my dealers to raise their hand when they had a price. I gave them the sign to sell as soon as I saw my tenth dealer raise his hand. They all simultaneously said, "Yours, 100." Saying "yours" meant that the Pounds were sold to the buyer and were theirs. We would have said "mine" if we were buyers. The "100" was the quantity that we sold them, in this case, 100 million Pounds.

We were able to sell all billion Pounds that our client wanted us to sell. We sold them all at the current market price. But then all hell broke loose.

The pressure from our order caused a vacuum to open up under the price. We may have sold a billion cable at 43 but the price was 100 pips lower in a fraction of the second. A *pip* is the smallest normal increment that a currency trades in even though some brokers quote in tenths of a pip. A general rule of thumb is to start with the far-left digit in a price and count to the right five places and that is a pip. The yen under 100.00 is an exception. In that case, only count four places. Always ignore decimal places.

Our phone board lit up like Times Square. All ten of those dealers we had just sold to were screaming into the phone some variation of how we had stuffed them and how our parentage was suspect. They were screaming about how they were now holding a big position in Pounds and had nowhere to lay off the risk since we had basically forced the market to go long. They now owned 1 billion cable and had no one to lay off the risk to since we had just swamped the market. We let the other dealers vent for a minute or two and then explained that we had no choice in how we handled the order. They all stopped venting and agreed that they would have done exactly the same thing and there were no hard feelings. Indeed, we found ourselves on the other side of such a trade over and over again. This is financial Darwin in action. Now, remember, we sold short 20 million Pounds before we stuffed the market. We had a huge profit in that position now. I remember one of my traders saying to me that we just had a good year in the last minute. Yes, we made a lot of money on that trade. It was now time to mend some bridges. We could take that 20 million cable and go into the market and buy it back, thus taking our profits on the short position. We would dole out our 20 million to the dealers that had complained the least to reward their attitude. We couldn't offer a lot of relief but we were the only bidders in the market at that point so they were very happy to hear from us. On this trade, we were not trying to get the best price. With the client's order, we really wanted to get the best price. But for ourselves, we wanted to get out at a reasonable price and, at the same time, give back a little love to the market after we had decimated it.

In this case, we called a few brokers and, after letting them rant a little more, told them that we were buyers of cable. That was a signal to them that they could move the price up a pip or two and make a little money on our order.

Did I mention that trading forex is the most cutthroat of all the major markets to trade in?

DON'T WANT TO TRADE!

I've always considered it one of my greatest trading feats that Deutsche Bank never traded with me. The Deutsche mark was still being traded when I was a dealer. The euro came later. Deutsche Bank was the premier bank trading the mark. They were the big dog in the mark and really made the market for the mark. They had all the big clients so they saw most of the flow into the market. I mentioned before that we would generally quote a market with both sides. If we quoted a price of 65–67, that meant that we would sell it to whoever called us for a price at 67 and buy it from them at 65. So, for example, another dealer would call me and say, "Price on mark." That's all. That meant that they wanted a price for me to both buy or sell the D-mark. They don't tell me in which direction they want to go. They could be buyers or sellers. This process keeps the system fair. I have to give them a fair price since I don't know what they want to do. Otherwise, consider if I knew that they wanted to be buyers. I could then shade the price a little higher so they would have to bid up to my price to buy. That way, I would make a little more money. The two-sided quote keeps the market fair and also keeps the dealers on the ball.

The same situation applies to the online forex world. Two prices are always on the screen. The lower price is the bid and is the price that we will get when we sell a contract of forex. The higher price is the ask, or offer and is the price you will pay when you buy a contract of forex. I was always very afraid when Deutsche Bank would call me looking for a price on the mark. They were the largest dealer in the currency. They knew what the price was and had a huge inventory of marks. The only reason they would call me was to try to pick me off. They wanted to see if I was quoting the price of the mark correctly. If I was on the money, they would simply say, "Nothing there," and hang up the phone. However, they would do a trade with me if I was quoting the price incorrectly. For example, let's say that the market was 63–65. But they would sell to me if I quoted them 64–66. They would sell to me at 64 knowing that they could buy at 63 from their clients, thus making a pip on the trade. I was always very proud of the fact that they would always say "nothing there" whenever they would call me. That meant that I had quoted the market correctly. I would have most certainly lost money if they had done a trade with me. They knew that market far better than I did.

There are a lot of different currencies in the world to trade but the volume is concentrated in just a few. The most popular are (with nickname and official name):

- Euro versus dollar (euro; EUR/USD)
- Dollar versus yen (yen; USD/JPY)
- British Pound versus dollar (Pound, cable, or Sterling; GBP/USD)
- Dollar versus Swiss franc (Swissy; USD/CHF)
- Dollar versus Canadian dollar (Loonie or Canuck Buck; CAD/USD)
- Dollar versus Australian dollar (Oz or Aussie; AUD/USD)
- Euro versus yen (EUR/JPY)
- Euro versus Pound (EUR/GBP)
- Euro versus Swiss franc (EUR/CHF)

You'll notice that every currency is a pair. You are always long one side of the pair versus being short the other side of the pair. You can be long or short either side. When you buy EUR/USD, you are actually buying the euro while simultaneously selling short the dollar. When you short the EUR/USD, you are actually selling short the euro while simultaneously buying the dollar. That is the convention.

Let's take a look at the Swissy or the USD/CHF as an example. First, what does *CHF* stand for? It stands for Confederation Helvetia franc. They don't call it Switzerland in Switzerland, they call the country Helvetia. The currency unit is called the Swissy even though the pair starts out with a USD. The Swissy is the USD/CHF. Foreign exchange in the interbank world is usually traded in units of a million dollars. The typical trade is for $5 million. The normal futures contract calls for delivery of 125,000 of whatever is being traded. So the Swiss franc contract calls for delivery of 125,000 Swiss francs. The retail forex world has a standard contract worth $100,000 of whatever is being traded. So trading the euro would mean that you would be trading $100,000 worth of euros. Of course, the number of euros that you would be trading would change based on the current price of the euro. There are now mini-contracts in the online forex world where each contract is worth $10,000 of the underlying instrument. In fact, there are now micro-contracts of $1,000 of the underlying instrument. The usual minimum unit that a pair can trade is called a *pip*. You can find out the value of a pip by multiplying the pip by the contract size that you are trading. For example, suppose that you are trading a standard online contract of euro. That would be $100,000 worth of euro. The euro is quoted like 1.5123. One figure to the left of the decimal place and four to the right (although there are now online brokers who quote in tenths of pips). So take the rule of thumb that the pip is the fifth figure from the left (the exception being yen when it is quoted under 100.00). The value of a pip for a standard online contract would be 0.0001 times $100,000, or $10. The value of a pip actually changes during the day as the value of the underlying instrument changes. In addition, some brokers may change the contract size less often. It is always best to double-check with each broker. In the futures world, pips are called *ticks* and are always worth $12.50. This is because the futures contracts are standardized at 125,000 francs, euros, or whatever. The only exception is the Pound, for which the contract is 62,500 Pounds and each tick is worth $6.25. The standard unit of trading in the interbank market is $5 million while in the retail forex market it is only $100,000. Does this mean that banks must come up with $5 million and we have to come up with $100,000 every time we want to do a trade? Thankfully, no. There is no margin or good-faith deposit in the interbank market. Instead, banks do deals with each other simply on credit. A bank will have its credit officers examine the credit of the other potential trading banks. The credit officer might say that the forex department can have a total exposure of up to $100 million. The forex desk could then do one big deal worth $100 million or perhaps ten different deals of $10 million each. The total, however, can't be over $100 million. The risk in the forex world is not strictly a credit risk since there is no credit being extended. There is just a delivery risk.

Consider this scenario: We have just bought 5 million euro/yen from Widget Bank, which means that we must deliver 5 million euro worth of yen to them and they must deliver 5 million euro to us. The risk in this transaction is called *delivery risk* because the other side of the trade may fail to deliver, in this case 5 million euro. Forex trades are settled within one day so the delivery risk is a one-day risk. But let's say that we are in that trade for 10 days. In the interbank world, the initial trade gets rolled over every day as if it were a new trade. The delivery risk is eliminated from the previous day but the very same delivery risk comes into play until the very last day when everything is reversed and there is no risk. It is very different in the online forex and futures worlds. Here, we must post a margin deposit every time we do a trade. Although it is termed *margin*, it is different from margin in the stock world. In stocks, margin is a form of lending

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that uses stock as collateral. Interest must be paid on the balance owed to the broker. Margin in the forex world is simply a good-faith deposit. You can even sometimes earn interest on it. The broker will freeze a certain amount of money for each contract you enter into. They will not allow you to put on a trade if there is not enough margin in the account. For example, the margin to enter a long EUR/USD trade in our online trading account is $500 for a standard contract. We have $1,000 in our account. The broker will allow us to enter no more than two contracts. However, we have to have that $1,000 margin for those two accounts at all times. If the position starts to lose money, the broker has the right to liquidate the position. They do that to make sure that you always have enough money in your account in case a position goes against you. And, yes, they will liquidate your open positions in an instant if you go below the margin position in your account. The situation is similar in futures.

TRANSACTION COSTS

The biggest transaction cost in trading forex is the bid/ask spread. The *bid/ask spread* is the difference between the bid price and the ask, or offer, price. For example, suppose that the market is 63 bid and 66 offered or asked. You will have to buy at 66 if you want to buy or sell at 63 if you want to sell. Let's assume that you buy at 66. For the interbank and futures trader, the price on the screen will show 66 and it will appear that you have a break-even trade. However, if you were to instantaneously try to sell it, you would sell it at 63 for a three-pip loss. Online brokers will immediately show that you have a three-pip loss because they will show the bid price as the last price not the last price. No matter how it is presented, you will have an instant loss of three pips when you enter a trade with a three-pip spread. Hopefully the market will move in your direction right away and eliminate that bid/ask spread loss. But, obviously, it can also go the other direction. The point is that the bid/ask is an implicit cost in every transaction. The bid/ask spread can be anywhere from one pip to tens of pips.

The more liquid the instrument, the narrower or tighter the bid/ask spread. So, generally, it is much cheaper to trade EUR/USD than GBP/AUD. The bid/ask could be ten pips on the GBP/AUD at the same time the EUR/USD may only be two pips. Everybody pays the bid/ask spread unless you are a dealer, which essentially means that you are a large bank. In the case of the large bank dealers, they are the ones who are making the bid/ask spread and that is a major profit center for the banks. They quote the bid/ask spread to the online brokers and implicitly into the futures market. They are willing to sell to us at the ask and willing to buy from us for

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the bid. They implicitly make that bid/ask spread as a profit. That compensates them for providing us with the ability to trade whenever we want to. Futures traders and sometimes interbank players must pay a commission. Futures traders must always pay a commission to their broker to execute their trade. Interbank traders will sometimes execute a trade through an interbank broker and will have to pay a pip or a half pip to the broker to execute that trade.

Transaction costs become more important the shorter the time horizon of the trader. A person who is going to hold a position for months could care less about the cost of the bid/ask spread. A three-pip spread over months is irrelevant. But three pips is highly important for a trader who is doing many trades throughout the day. Their profit objective may only be 20 pips; three pips is a significant hit on profitability. Remember, the trader has to implicitly pay the three pips when you both enter and exit a trade. Effectively, the day trader is paying six pips to make 20.

IT NEVER STOPS

Technically, forex trading begins Sunday morning in Tel Aviv and goes to Friday afternoon in New York. However, the Tel Aviv session is so small that it is usually ignored and trading starts on Monday morning in Wellington, New Zealand.

Traditionally, the trading day begins in Wellington because it is the first trading center that opens. However, Wellington is a small trading center so there is little trading. Trading really becomes more active when Sydney and Tokyo open. The London forex center is the center with the highest volume, so trading really takes off when it opens. New York opens when London is at lunch and is the center with the second-highest volume of trading. The period with the highest volume is during the afternoon in London and the morning of New York. London then closes, leaving New York as the final trading center open for the day. There is decent volume in the New York afternoon except, perhaps, on Friday afternoon. The slowest time of the day is between the time New York closes and Wellington opens.

The cycle never ends.

MY BIGGEST LOSING TRADE

There are three main orders you can place in the forex market though online brokers can be more creative. The first order is the *market order*. In this case, the order could be to “buy 5 at market” or “sell 8 at market.”

The quantity changes with each order. As mentioned earlier, the market always has a bid price and an ask, or offer, price. A market order to buy is always filled at the ask and a market order to sell is always filled at the bid. The only exception is when the quantity to buy or sell is larger than the quantity on the bid or ask. For example, you want to sell eight contracts at the market. The bid is 79 but there are only five bids at that price. There are three bids just below that at 78. So you would sell five at 79 and three at 78. A market order must be filled by the broker at the best bid or ask immediately.

A *limit order* is an order to buy when the market goes lower or to sell the market when it rallies. Let's assume that the market is 38 bid and 39 ask. A limit order would be to buy the pair when it dips to a level below the current market. So, for example, you would put in an order to buy two contracts at 33 limit. Your order will be filled when the market trades or is offered at 33. You will use the limit order whenever you want to buy a dip in the market or sell a rally.

The stop order is the order I use more than any other. A *stop order* is used when you want to buy something at a price *higher* than the current market or wish to sell a pair at a price *below* the current market price. Consider this: The market is 38 bid and 39 ask. A stop order would be used to buy the pair when it rallies up to 45. So, for example, an order to buy two contracts at 45 stop would be placed. It becomes a market order when the market trades or is bid at 45. The order will be filled at whatever the best offer is at that time.

Use a stop order when you want to buy a pair at a price higher than the current price. A stop order is often called a *stop loss order* because the most common use of a stop order is to exit a position. For example, a limit order can be used to buy EUR/USD at 135.60. To exit the trade, you should it trade down to 135.30. You would enter an order to sell at 125.30 stop. This would become a market order to sell if the market trades or is offered at 135.30. However, I use stop orders almost exclusively. A lot of people think I'm crazy because they don't understand why I would want to pay a high price for something using a stop order instead of a lower price using a limit price. Buy low, sell high, they say to me.

The first problem with limit orders is that you almost always have a losing trade immediately. For example, you have an order to buy a pair at 85 limit. You can only be filled if the market trades at 85 or is offered at 85. In the real world, the price will drop below the 85 limit price in order to get filled. The next pip after you have been filled will be 84 and, most likely, the price will move even lower before finding support. That means that you will be sitting on a losing trade right away. The more important problem with limit orders is that they break one of the basic tenets of profitable forex trading: *Don't fight the market.* Buying using a limit order is buying when the market is dropping. You don't want to buy when the market is dropping. The market is telling you that the situation is bearish because it is dropping in price. I never want to go against the market. It is bigger, faster, smarter, and better looking than I am. We will always lose the battle if we fight the market.

Entering on a stop order creates a very different dynamic. You are nearly always in a profit position immediately. After all, you can be filled on a stop order until the market is trading at or higher than your stop order. The short-term momentum of the market will nearly always push the price beyond your entry price by at least a little bit. I'll take that profit edge any day. More important, using entry stop orders ensures that we are in tune with the market. We are only buying when the market is bullish and only selling when the market is bearish. This means that we have the wind to our back, not to our face. We are in sync with the market and, therefore, have the power of the market behind us. It may not stay there long but it is always better to at least be in tune with the market for at least the beginning of any trade.

The only time to use limit orders is when there is a liquidity problem with buying on a stop. I would have to use limit orders to buy when I traded for institutions because the size of my stop order would cause the market to go sky high. I need to be buying when others are selling, or else selling when others are buying so that I wouldn't affect the market. Fortunately, we retail traders don't have to worry about this.

I was heading up a derivatives trading desk in the late 1980s. One of the derivatives we dealt and traded was options on forex. We had a book of derivatives and then used a large quantity of forex to hedge the risk. There was a big economic release coming up that day. I was using forex futures to hedge my position. In particular, I was short the Swiss franc in large quantity and other currencies in lesser quantities. I was short hundreds of contracts. Bingo! The number was released and the market skyrocketed. I ended up having my protective stop filled about 150 ticks or pips above where my stop had been placed! There was a complete vacuum of orders above the market. The brokers couldn't fill my orders until 150 pips above my stop.

The other interesting thing is that the cash market peaked about 100 pips under the futures market. In other words, there was much more liquidity in the cash market than in the futures market. I got hammered. I lost about $450,000 in less than 10 seconds. I should have lost about $150,000 because I had the wrong trade but the incredibly bad fill cost me another $300,000. It seemed like the longest walk in my life as I trudged through the trading room to report my loss to my boss, the treasurer of the bank. In this case, the price jumped over the stop order leaving me with a fill 100 pips beyond the stop order. That can happen with stop orders. That was a rare circumstance, but it can happen. It is fairly common to have a stop order filled a pip or two away from the stop level in your order. Just get used to it. I actually don't mind getting filled a little off my price because it shows that the market is moving so powerfully that there is a shortage of orders on the other side of my trade. I like that imbalance. I don't like it when I get a bad fill on a protective stop order. I want to get out at my price when I use a stop to protect an open position. On the other hand, I feel fortunate to get out, even with a bad fill, when the market gaps down beyond my stop because that means that there is so much pressure that there is no buying in the market. I definitely don't want to be long in that kind of a market!

Note that this kind of situation never occurs with a limit order. You will always be filled at your limit price. Of course, you may be in deep trouble if that happens. Let's say you want to buy at 50 when the market is at 60. A big news item comes out and the market drops precipitously. You will be filled at 50 but the next print of the price may not be until 30. Basically, you were filled at a price that was way above the market. A market order will always be filled when the market is moving dramatically. However, it may be far away from the price on the screen when you entered the order and you may be left chasing the market to get filled.

THE BOTTOM LINE

Knowing the nitty-gritty of forex trading is important when you want to make money in the market (which is always!). Learn how to enter orders correctly and enhance your profits through understanding which orders will optimize your order.