Gaining Currency

IS FX AN UNTAPPED ALPHA SOURCE FOR INSTITUTIONAL INVESTORS?

By Nathan Jaye, CFA

Is currency investment part of your portfolio? If so, are you comfortable with it? In *A New Look at Currency Investing*, a recent book published by the Research Foundation of CFA Institute, an academic researcher and a foreign exchange fund manager seek to shed new light on the foreign exchange markets. The authors, Momtchil Pojarliev, CFA, senior portfolio manager for Hathersage Capital Management, and Richard Levich, professor of finance and international business at New York University's Leonard N. Stern School of Business, argue that currency investment has been overlooked as an asset class by institutional investors. In this interview, the two discuss the influence of style factors on alpha and beta in currency portfolios, the diversification benefits of adding currency to an asset mix, the workings of the CLS Bank, and measuring crowded trades in currency markets.

KEY POINTS

As a potential alpha source, currency markets have been overlooked for historical. institutional, and theoretical reasons.

Because many participants in foreign exchange markets are focused on risk management or other priorities, they may leave profit opportunities on the table for other investors.

What is the state of the foreign exchange markets?

LEVICH: The foreign exchange market is possibly the largest financial market in the world. Daily volume of trading is huge—more than US$4 trillion, concentrated primarily in the major currencies. Most of the trading is between banks that make the market, but there's a large volume of trading to facilitate international trade in goods, services, and assets—investors buying stocks and bonds denominated in other currencies. Then there's trading by investors and corporate treasurers who want to hedge their exposure. Hedging by investors is sometimes called a "currency overlay"—buying currency forwards or currency futures.

Since a large percentage of participants in the foreign exchange market use it for flow and risk management purposes, they're not really focused on the profit opportunities. Arguably, that is what leads to profit opportunities remaining on the table.

POJARLIEV: Right now, people are very interested in currency, both in currency overlay and currency alpha. This is partly because we've had some very big movements in the currency market. In October 2012, the USD/JPY exchange rate was below 80. By May 2013, it was over 100, a 25% move in six months. This is drawing attention to currency. If you have exposure to yen assets—say, investments in yen stocks or yen bonds—as a U.S. dollar–based investor, you would have lost 25% if you did not hedge your yen exposure. On the other hand, big moves also create the potential to generate alpha returns.

Is currency investing overlooked among asset classes?

LEVICH: Currency markets have been overlooked for historical and institutional reasons and, to some extent, because of theoretical foundations. Historically, currency rates in many countries were fixed or pegged for long periods of time and capital was not free to move between countries for a great part of the 20th century. If rates don't move and if it's difficult to take positions in other currencies, that can take currency investing off the table. People don't develop expertise in the area.

Institutionally, the foreign exchange market is not a place you can visit like the New York Stock Exchange or the Chicago Mercantile Exchange. It's an interbank market in lots of banks and trading rooms around the world. It doesn't have much regulatory oversight. It uses a different infrastructure for trading and a different quotation system, and it relies on different means of contacting investors using different platforms. So, you need a separate apparatus or infrastructure if you're going to deal in foreign exchange.

What are the theoretical reasons?

LEVICH: Well, look at fixed income and equity for comparison. How you determine the price of a Treasury bond is pretty well understood. If you discount the coupons at a suitable rate and assume you're going to get a final payment, you can figure out the value. For shares of Apple or IBM, you get dividends and see earnings. You can discount those back to the present and get a price.

Foreign exchange is different. Academics and market economists have argued incessantly about what determines the value of foreign exchange. There's been a lot of debate about whether currencies move randomly or are predictable. A lot of people think they're unpredictable. Governments intervene to support their currencies or depress their currencies. So, for some investors, foreign exchange has taken on the aura of a market that is largely speculative.

POJARLIEV: It explains why the market has been overlooked, especially as an absolute-return investment. For example, BarclayHedge estimates only about US$20 billion to $30 billion is invested in currency hedge funds while assets under management in all hedge funds is approximately US$3 trillion. Investing in currency funds is only about 1% of the hedge fund industry—very small, especially when you take into account the size of the foreign exchange market.

Currency is also more difficult to understand in the sense that it's always a relative value investment. If you're investing in the stock market, when the stock market goes up, you understand what's going on. But when the US dollar is going up, this means going up against another currency, which is going down.

LEVICH: So, they are all relative trades. They are all kind of long–short trades.

Momtchil Pojarliev, CFA

How did the 2008–09 financial crisis affect currency investment?

POJARLIEV: If you look at the Barclay Currency Traders Index, which is a proxy for the currency management industry, this index went up in 2008. So, currency managers managed to make money in 2008, which I think increased the interest in currency investing after the crisis. On the other hand, common currency strategies—for example, the carry trade, where you're long high-yielding currencies against low-yielding currencies—had a very big drawdown in 2008. Currency managers exposed to the carry trade did not do well. In that sense, 2008 really highlighted the difference between alpha generators and beta grazers.

How good are currency managers at generating alpha?

LEVICH: Any excess return above zero for an unfunded currency strategy has been considered alpha or a sign of currency investing expertise. For a funded strategy, any return greater than the risk-free rate has been considered alpha. That's been the standard benchmark for the industry until recently. But what we've pointed out is that if you look at a style factor model, then that shifts the benchmark.

In our 2008 paper ("Do Professional Currency Managers Beat the Benchmark?" *Financial Analysts Journal* [September/October 2008]), we used an arbitrage pricing theory model to test if returns were a function of risk factors or style factors, which has been done in the equity literature and for hedge funds in general. No one had proposed doing that in the currency asset class space. This was feasible because there's a group of hedge funds that have a currency mandate exclusively. Their universe for investing is pure currency only, so you can track their returns.

The results we got were surprising because the carry factor, the trend or momentum factor, and the value factor—those three style investment factors—explained a substantial amount of the returns that professional currency managers were earning.

These style factors don't rely on any particular expertise. They are simple, implementable trading strategies. They are formulaic, in a way. For instance, a way to implement the carry strategy is to own the three highest interest rate currencies and finance it by borrowing in the three lowest interest rate currencies.

POJARLIEV: As a currency manager, the value proposition used to be, "Any money that I make you should count as alpha." Now, because of our research, we're basically saying not all the returns that we generate should be counted as alpha. If you're just mimicking the carry trade, then you should be ready to say you're providing beta return.

Is currency investing bringing diversification benefits to already well-diversified portfolios?

POJARLIEV: Yes, it is. We tested three alternative portfolios. The first portfolio simply invested in currency exchange-traded funds (ETFs), so-called passive investment strategies where you invest equally in trend, value, or carry. The second portfolio invested in what we call the "beta grazers," which are managers whose returns could be explained by exposure to those three style factors. Then, the last portfolio was alpha generators, who have no exposure to the factors and have positive significant alpha. The result was that all three portfolios actually improve the Sharpe ratios of the well-diversified institutional portfolio. So, all three actually add value.

What is the role of the CLS Bank in currency markets?

LEVICH: The CLS bank is an intermediary that facilitates clearing and settlement in the foreign exchange market. Its history goes back to 1974, when a German bank named the Herstatt Bank failed. At the time, FX trades between banks were settled bilaterally. American counterparties had paid deutsche marks to the Herstatt Bank and were expecting to get dollars in return in New York six or eight hours later. But in that space of time, the Herstatt Bank declared bankruptcy. So, Herstatt's counterparties in the United States, which included J.P. Morgan, Chase, and many others, had a complete loss on that day's transactions with Herstatt.

Richard Levich

In 2002, a new institution called the "CLS Bank" was launched. It's a mechanism to facilitate payment settlement. So, if I've executed a trade between the dollar and the euro, instead of delivering my euros to a bank in Europe directly, I deliver euros to the CLS Bank, and then it waits for the European bank, or whoever the counterparty is, to deliver dollars. When the CLS Bank sees that both legs of the transaction are in place, the US$130 million and the €100 million, then it will release those funds to the two beneficiaries.

It had a big impact on liquidity during the crisis, correct?

LEVICH: It was absolutely essential. In the Sherlock Holmes sense, it was the dog that didn't bark. Around the time of the Lehman Brothers bankruptcy—when short-term capital markets were seizing up in all the developed countries and a bank on one side of Wall Street would not lend overnight to a bank on the other side of Wall Street for fear of not being repaid the next day or two—foreign exchange markets continued to function.

In fact, in the first three months after Lehman, the volume of trading in the foreign exchange market went up as companies and banks brought capital home and cleared a lot of transactions off their books. The banks were comfortable doing this because they knew that they had the CLS Bank as an intermediary that would prevent them from taking a mammoth loss if their counterparty happened to fail the next day. So, the CLS Bank was a critical institution that kept the foreign exchange market going. The foreign exchange market trades US$4 trillion a day, and in April 2013, the CLS Bank handled US$2 trillion of that on a daily basis. It does 600,000 tickets every day. It's like a gigantic airline that has 600,000 passengers every day and books tickets for US$2 trillion a day and without error.

There is very little public awareness about the CLS Bank because it has no storefronts and it does no advertising. It's a cooperative institution owned by the member banks, and it's regulated by the Federal Reserve Bank in the United States. But it's an essential institution, and I think it's likely to take on a larger role in the next decade.

You've developed a measure for detecting crowded trades in currency markets. How does it work?

POJARLIEV: We do regressions of managers' returns against our four-factor model, which is trend, value, carry, and volatility. Then, you measure the number of managers who have significant positive exposure to carry against all managers. As an example, if you have 100 managers and 30 of them have significant positive exposure to carry, then your gauge of "carry crowdedness" is 30%. By doing rolling regressions, it's actually possible to see how this has developed over time, how crowded certain styles become.

We had data for managers from 2005 to the middle of 2010. It was an interesting period. We were able to gauge crowdedness during the global financial crisis and also later in 2010, when we had the European debt crisis and the flash crash. We found that crowdedness fluctuated between zero and 30%, and just before the global financial crisis, carry became a crowded strategy. During the crisis, carry collapsed and crowdedness went down. Then, in 2009 and 2010, the carry strategy became crowded before the European debt crisis, and then again we had liquidation of carry trades and crowdedness went down.

LEVICH: The measure that we developed came as a byproduct of being able to examine all the manager returns on the Deutsche Bank dbSelect platform. This is something like a stock exchange, but they call it a platform. Instead of listing stocks, it includes managers who are currency managers. Deutsche Bank customers can direct their money to Manager Number 1 or 2 or 68 or 69, whichever they like. So, you can empirically track these managers.

When the returns on the strategy break, you can see that managers quickly exit. That's part of the risk of the carry trade—that managers exit quickly and impose losses on whoever is left holding this position because the returns deteriorate so quickly. So, it lets us see the dynamic that's going on between herding behavior in managers and the returns on a strategy. Tracking a crowdedness measure allows you to see the possible risks that there would be of joining the crowd.

Could this measure be applied to other asset classes?

LEVICH: We thought about that, but there's something special about currency. Again, this is a market where there's a net zero position. For example, probably 80% of institutional investors hold Apple, but that doesn't necessarily mean that Apple's a crowded trade, not in the sense that we're meaning it here. Our measure would apply to situations where we're looking at absolute-return trades where there's not a natural long position or natural open position, and we can track how many institutional managers have returns that are linked to that trade.

POJARLIEV: We wanted to check, for example, if long gold was a crowded trade.

LEVICH: Yes, so gold might be such an example. Maybe some commodity markets or maybe some derivative trades would be amenable to our crowdedness measure.

POJARLIEV: The key is to find the right database. The dbSelect platform was an ideal database for our research. If you look at hedge fund databases, they suffer from a lot of biases, [such as] survivorship bias and so on. The data we had are not self-imported data. All the returns are calculated by Deutsche Bank based on trades actually done by managers. We also had the data of the managers who had dropped out of the platform, so we were able to really clean up the database and remove all the usual biases.

What will FX investment in 2020 look like?

POJARLIEV: Investors always need alpha. They need between 7% and 8% absolute return, but it's very difficult to assume that the traditional asset classes are going to deliver 7% going forward. We are making the case that investors should consider overlooked market segments like the foreign exchange market.

LEVICH: Now that we have more countries that are becoming market oriented and thinking about opening up their economies, we're going to have more currency markets in play, which means that the institutional structure for investors to take advantage of them is finally catching up. Currency investing hasn't become commoditized, but it's becoming more and more within the realm of institutional investors to consider seriously. There are good platforms, good managers, good systems, good infrastructure like the CLS Bank, good ways of monitoring, and there's more theoretical and empirical evidence to document the risks and rewards of investing in currency.

How much do you think about alternative currencies, such as bitcoin?

LEVICH: I don't think about it at all.

POJARLIEV: No, I also don't think about it. Once at a conference, someone asked me the question, Do you trade gold as a currency? I found that question very peculiar because to me, gold is clearly not a currency. I think that the question simply reflected the fact that, at that time, gold was trading at around US$1,700.

LEVICH: I think what's more likely than bitcoin is what we see already happening in some parts of the world. Currently, Hong Kong's Octopus card can be used not only for bus and ferry transport but also in various retail establishments, kiosks, and other vendors for small purchases. In principle, New York's MetroCard, London's Oyster card, and other similar payment forms could be used for transactions in addition to transportation.

To issue money, you need a big, reliable—which usually means old—established institution behind it. The people who issue money make seigniorage off the money, meaning that I'm giving the Hong Kong subway authority a thousand Hong Kong dollars and it can earn the interest on it while I spend it and it provides the service in liquidity. To me, that's more likely than bitcoin.

What will happen to the euro?

LEVICH: I think it's going to hobble along for quite a while.

POJARLIEV: There is a very strong political will to keep it together. But it's not clear because the economics are against it.

LEVICH: Yes, how strong is the political will, and what is the populist appetite for austerity? Europe presents a mix of sovereign countries and distinct cultures. The economic constraints of a common currency area are many, so harmonized and coordinated policies may not be realistic for Europe. At some point, there'll be a flare-up and the leaders of some countries will reevaluate their options and leave the euro. But I could be wrong. Maybe the Europeans will find a way to keep the euro while maintaining much of their sovereignty.

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A New Look at Currency Investing, Research Foundation of CFA Institute [www.cfapubs.org]

"Volatility in Emerging Markets: Resources on Currency and Capital Flows," *Enterprising Investor* [blogs.cfainstitute.org]

"The Currency Question: Facts and Misconceptions," CFA Institute webcast [www.cfawebcasts.org]

"Driving Forces in Currency Markets and the Renminbi," CFA Institute Take 15 series [www.cfawebcasts.org]

Nathan Jaye, CFA, is a member of CFA Society San Francisco.