DECODING THE DOLLAR CYCLE VS. THE BUSINESS CYCLE

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It wasn't that long ago that we were experiencing a spectacular degree of dollar strength in 2014 and 2015-more than 23% appreciation in these two years, as measured by the ICE U.S. Dollar Index (DXY).

We have been focused on helping investors better understand the <u>drivers behind different</u> <u>currency movements</u>, and this post examines both <u>valuation</u> and economic <u>growth</u> indicators.²

The Dollar Became Extended vs. Purchasing Power Parity

U.S. Dollar Index Spot Level vs. U.S. Dollar Index Purchasing Power Parity Level

(1/31/1997-3/31/2018)



Sources: Bloomberg, Record Currency Management. Based on weighting euro area 19 (57.6%), Japan (13.6%), United Kingdom (11.9%), Canada (9.1%), Sweden (4.2%) and Switzerland (3.6%). Past performance is not indicative of future results. You cannot invest directly in an index.



- Purchasing power parity (PPP) might be most popularized by its relation to what's called the Big Mac Index. The gist of the Big Mac Index is that a ubiquitous product—the McDonald's Big Mac—should cost just about the same, adjusting for exchange rates, in different countries. A tradable basket of goods should have the same cost, no matter the currency. The orange line represents an estimate of the appropriate PPP level for the U.S. dollar, using a basket of global currencies that approximate DXY's exposures.
- <u>Currency spot rates</u>, however, do not take PPP and move in alignment as an exact science. Over the last 20 years, the DXY <u>spot rate</u> has been both considerably above and below PPP, punctuated by strong appreciation and strong depreciation.
- 2014's upward spike in performance of the U.S. dollar was extreme, and it took DXY from a discount relative to PPP to a premium relative to PPP. While this premium still persists, it is more modest and brings into context some of the moves of 2016 and 2017—even in the face of divergent central bank policy.

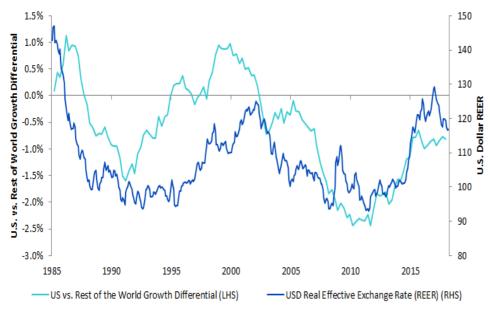
Connecting Currency Movements with Relative Growth Cycles

While PPP is important, it is rare to see it take center stage. In today's world, governments are searching for ways to grow faster. Developed markets have lots of debt, and faster growth allows for either the raising of greater revenues or more <u>inflation</u>, which allows for the paying down of debt with currency that is worth less over time.

There is a fairly strong explanatory relationship between the trajectory of U.S. growth versus the rest of the world along with the U.S. dollar's real effective exchange rate against a basket of currencies.

Stronger Relative Growth Leads to Stronger Currency

Relative Growth Cycles and FX (1/31/1985-4/30/2018)



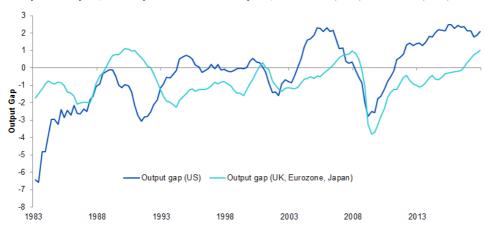
Sources: Bank of International Settlements (BIS), Macrobond, Record Currency Management. Past performance is not indicative of future results.



- Neither U.S. growth nor the dollar tend to stay at a constant level versus the rest of the world. As the world's largest economy, the United States is nowhere near the fastest growing, and it is frequently growing at a slower rate than the rest of the world, as shown in the chart, which notably has a 40% to 50% exposure to much faster-growing emerging market countries.
- Notably, during periods of appreciation in the real effective exchange rate, the U.S. tends to increase its growth relative to the rest of the world. At the end of 2015, U.S. growth relative to the rest of the world peaked and stopped what had been a trend of U.S. growth acceleration relative to other countries. The real effective exchange rate responded in kind.

The Connection of Central Bank Activity & the Growth Cycle

Output Gap (% of potential output) from 3/31/1983-12/31/2017



Source: Macrobond, Holston-Laubach-Williams, Bank of Japan, Record Currency Management. Past performance is not indicative of future results.

- The output gap is a way to think about the effectiveness of a given economy at achieving a level closer to its potential output.
- The U.S. tends to accelerate first out of a recessionary period. Connecting to the prior chart and understanding that developed markets today are more interconnected than ever before, it is during this acceleration that the bulk of dollar strength is seen. Then, other economies begin to catch up with the U.S., thereby seeing their growth accelerate on a relative basis. The U.S. therefore tends to reach the point where its central bank is thinking about inflation first—and experiencing inflation first—before other central banks are taking action.
- The combination of the U.K., <u>eurozone</u> and Japan started displaying acceleration relative to the U.S., and this explains the dollar's relative weakness in 2017.

Looking Forward-Outcomes for U.K., Eurozone and Japan Are by No Means Assured

In 2017, the U.K., eurozone and Japan had many positive economic surprises—in some cases, genuinely positive, while in others less decidedly negative. 2018's outcomes are by no means assured, and recent growth momentum signs may be reversing yet again. While the dollar is not "cheap" on a PPP basis, it also not overly expensive, and there are a number of forces that can push it higher.



What Is the Investment Takeaway?

In many ways, the complexity of currency markets suggests one should not feel overconfident in their ability to forecast currency movements. This leaves many investors stuck in their status quo bias with legacy positions. We point out that the status quo of being <u>unhedged</u> relies on a weak dollar bet persisting, *forever*. Being unhedged implies a directional currency bet—whereas strategically <u>hedging</u> involves mitigating any directional bets.

WisdomTree suggests having a <u>currency-hedging</u> program to neutralize the risks that come with currency exposure. Hedging can be done either strategically to lower risk, 50% hedged to minimize regret or with a dynamic overlay strategy to add alpha. All are reasonable currency programs—what we question the most is being 100% unhedged all the time and the assumption of unrewarded risk that comes with it

¹Source: Bloomberg, with data measured for the period 12/31/13-12/31/15.

²We'd like to thank Record Currency Management, a global thought leader on currencies, for analytical support in this blog series.

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DEFINITIONS

<u>ICE U.S. Dollar Index (DXY)</u>: a geometrically- averaged calculation of six currencies weighted against the U.S. dollar. Current exposures include the euro, Japanese yen, British pound, Canadian dollar, Swedish krona and, & Swiss franc.

<u>Valuation</u>: Refers to metrics that relate financial statistics for equities to their price levels to determine if certain attributes, such as earnings or dividends, are cheap or expensive.

Growth: Characterized by higher price levels relative to fundamentals, such as dividends or earnings. Price levels are higher because investors are willing to pay more due to their expectations of future improvements in these fundamentals.

<u>Purchasing power parity</u>: Academic concept stating that exchange rates should adjust so that equivalent goods and services cost the same across countries, after accounting for exchange-rate differences.

Spot currency: The foreign exchange rate of a currency available for immediate delivery.

Spot return : return generated from changes in spot price.

Inflation : Characterized by rising price levels.

Eurozone (EZ): Consists of the following 18 countries that have adopted the euro as their currency: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain (source: European Central Bank, 2014).

<u>Unhedged</u>: Strategy that includes the performance of both the underlying asset as well as the currency in which it is denominated. The performance of the currency can either help or hurt the total return experienced.

<u>Hedge</u>: Making an investment to reduce the risk of adverse price movements in an asset. Normally, a hedge consists of taking an offsetting position in a related security, such as a futures contract.

<u>Currency hedging</u>: Strategies designed to mitigate the impact of currency performance on investment returns.

