March 2018

Issue 15

MANCHESTER
CAPITAL MANAGEMENT, LLC

Insight

The Big Mac Index

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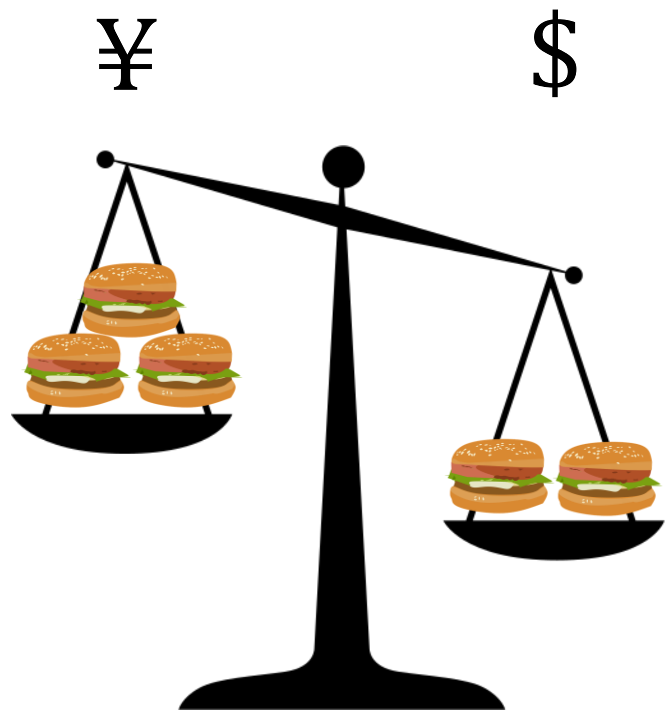
The Big Mac index was created by The Economist magazine in 1986 as a lighthearted take on whether currencies are at their "correct" level. It is based on the theory of purchasing-power parity (PPP), which says that exchange rates should eventually adjust to make the price of identical baskets of goods the same in each country. In January 2018, a Big Mac cost $5.28 in the U.S., $4.81 in Europe and $3.17 in China. This suggests that for a Big Mac to cost the same across these regions, the euro and yuan are undervalued by 8% and 40% respectively versus the dollar. While the index does accomplish its mission of being a quick price comparison, it has flaws. Prices are set by McDonald's, not market supply and demand. The size and ingredients of a Big Mac can also vary among countries. Also, burger prices tend to be cheaper in poor countries than in rich ones because labor costs are lower.

Looking at PPP through a more complete basket of goods can give better signals about where exchange rates should be heading in the long run. According to this concept, two currencies are in equilibrium when a basket of goods (taking into account the exchange rate) is priced the same in both countries. Even this method is an imperfect predictor of exchange rates.



Investors often hear about how the dollar is "strong" or "weak" against another currency, but the mechanics of how the value of the U.S. dollar is determined are pretty complicated. The way the value of the dollar used to be determined is markedly different from today. Prior to 1971, the U.S. government set the official value of the U.S. dollar by tying it to a fixed amount of gold.[1] In 1971, President Nixon took us off the gold standard, saying that we would no longer convert dollars to gold at a fixed rate. That move allowed the dollar's value from gold to float freely.

Why do we care about exchange rates, anyway? When the dollar strengthens, it makes American-made goods more expensive and less competitive compared to foreign-produced goods. This decreases exports, and slows economic growth. It also leads to lower oil prices, as oil is transacted in dollars, which can lead to lower inflation. When it weakens, our exports are more competitive, but imports become more expensive and inflation becomes a concern.

The dollar is currently trading near its lowest level since 2014, following a 10% decline in 2017.[2] The drop is a bit of a mystery because the Federal Reserve has been raising interest rates for the past year. Rate hikes usually boost the dollar's value because they cause more foreign investors to buy American assets. This expectation is based on the theory of interest rate parity, which connects current and forward interest rates to current exchange rates. Interest rate parity theorizes that there is no arbitrage in the foreign exchange markets. Investors cannot lock in the current exchange rate in one currency for a lower price and then purchase another currency from a country offering a higher interest rate. All else being equal, the dollar should have strengthened as Treasury yields increased.

If we look at what is happening around the world, it may not be a surprise that the dollar is weak. Europe is on the mend, and emerging markets continue to grow at a brisk pace, reminding us that exchange rates are a relative game. In addition, political actions like higher fiscal spending and the threat of a trade war may also be depressing the dollar.

Recent history shows that the dollar moves in cycles. From 2002 to 2011, the dollar declined, as investors were concerned about the growth of the U.S. debt.[3] The debt put pressure on the president and Congress to either raise taxes or slow down spending. Between 2011 and 2016 the dollar strengthened. Investors worried about the Greek debt crisis, which weakened demand for the euro. Meanwhile, the European Union struggled to boost economic growth through quantitative easing. Finally, economic reforms slowed China's growth and caused investors to buy dollars.

Since 2016, the dollar has weakened.[4] It briefly recovered after Brexit, but continued its descent after the election of President Trump. Is this by design? President Trump has made it clear he wishes to promote domestic manufacturing and reduce our trade deficit. Treasury Secretary Mnuchin has said that a weaker dollar would be good for trade. Recent measures to cut taxes and increase spending could serve to increase government debt levels, historically an event which results in a weaker dollar.

While difficult to predict, exchange rates are important to monitor, as they can have significant implications for asset class returns. Unless one has a strong sense of where currencies are moving, a good practice is to maintain a "balanced" allocation among assets that would be assisted, or hurt, by moves in the dollar.

ENDNOTES

[1] Domitrovic, Brian. "August 15, 1971: A Date Which Has Lived in Infamy." *Forbes Magzine* Web. 14 Aug. 2011.

[2] Source: Factset

[3] Source: Factset

[4] Source: Factset