Understanding the U.S. Dollar Index

It will prove useful if you every receive a 100-trillion Zimbabwean dollar note

You've probably heard that the U.S. dollar is appreciating and getting stronger. But how much? A handy index tells you. If your business is involved in imports or exports, or if you invest in foreign securities or international mutual funds, or if you like to travel internationally, it pays to know how to work with this index.

The U.S. Dollar Index (DXY) measures the value of the U.S. dollar relative to a basket of six select currencies in an attempt to represent our major trading partners. The current mix is approximately:

- 57.6% Euro (EUR)
- 13.6% Japanese Yen (JPY)
- 11.9% British Pound (GBP)
- 9.1% Canadian Dollar (CAD)
- 4.2% Swedish Krona (SEK)
- 3.6% Swiss Franc (CHF)

Brief History

The U.S. Dollar Index began at a baseline value of 100 in March 1973, shortly after the Bretton Woods Agreement was dissolved. From your high school history class, you will recall that the Bretton Woods Agreement established a new international monetary system, the Bretton Woods System in 1944. The Bretton Woods Agreement also established the International Monetary Fund and the World Bank.

Under the Bretton Woods System, gold was the basis for the U.S. dollar and other currencies were then pegged to the U.S. dollar's value. The Bretton Woods System ended when President Nixon announced that the U.S. would no longer exchange gold for U.S. currency.

The basket was altered in 1999 when the Euro replaced several European currencies. It still includes the Swedish Krona and the Swiss Franc even though we trade more heavily with countries like China, Mexico and South Korea.

Since then, it has been as high as 164.72 (February 1985) and as low as 71.58 (April 2008).

Historical Numbers & Math

You can find the U.S. Dollar Index number from numerous online quote tools that allow you to enter a date and get a historical quote. For example, the closing value of the dollar index was 80.04 at the end of 2013 and 90.28 at the end of 2014.

With these numbers, you can say the U.S. dollar strengthened an average of 12.79% over 2014, because, to compute how much the dollar appreciated, simply subtract 80.04 from 90.28, and then divide the result by the initial value (80.04).

Note that the dollar appreciating 12.79% is not the same as foreign currencies losing 12.79%. To determine how much value foreign currencies lost requires some additional math.

Since one is the inverse of the other, the numbers are different. If the dollar appreciates 100% (doubling in value), foreign currencies lose only 50% of their value. Here is how to compute the percentage loss for foreign currencies:

If a dollar doubles, it is worth two times as much. The foreign currency is worth the inverse (1 divided by 2, which is 0.5). Since the foreign currency starts out as 1, and now is only 0.5, it loses 0.5. The loss (0.5) divided by the original value (1) equals the percentage loss (50%).

Now, apply the same math to real-world numbers. If a dollar is now worth 1.1279 times as much, then the foreign currencies are worth 0.8866 (1 divided by 1.1279). This means that they're only 88.66% of their original value. The loss is 11.34%. Hence you can also say: Over 2014, foreign currencies lost an average of 11.34%, according to the U.S. Dollar Index.

Coronavirus Impact

Most recently, COVID-19 has driven investors to the perceived safety of the U.S. dollar and it has risen markedly since March. In fact, the USD is trading at its highest level since April 2017. In other words, the strengthening U.S. dollar now buys more of the other currencies than it did before.

Even though market pundits might suggest that a strong dollar is tied to a strong economy, the reality is that's not accurate. While it's complicated, generally speaking a strong USD can be a negative for companies with a significant international business, as a strong USD makes those U.S. goods more expensive abroad.

President Trump summarized the challenge that a strong USD can bring when he said a strong dollar is "a beautiful thing in one way, but it makes it harder to compete."

By contrast, a weaker USD would allow U.S. manufacturers to sell more of their products overseas, as their goods become cheaper. But that also means that the American consumer would see prices of goods from overseas companies rise.

One more benefit of a strong USD: it makes travelling to foreign countries cheaper for Americans, but more expensive for tourists from other countries visiting the U.S.

But since global travel has come to a screeching halt, that's like having a 100-trillion Zimbabwean dollar note – worth about 40 U.S. cents.