Fred??

Dollar Value Trends from 2002 to July 2019

From 2002 to 2011, the dollar declined.

1. Investors were concerned about the growth of the U.S. debt. Federal Reserve would allow the dollar’s value to decline so that U.S. debt repayment would be worth less in their own currency.
2. The debt put pressure on the president and Congress to either raise taxes or slow down spending. This concern led to sequestration and stifled economic growth.
3. Foreign investors prefer to diversify their portfolios with non-dollar denominated assets.

Dollar strength in 2014

Fred – St. Louis – Feb 2, 2016

Rate Hike Affect the Dollar’s Exchange Rate

Starting in the middle of 2014, the U.S. dollar experienced a rapid appreciation. The dollar’s value increased by more than 20& with three months and its appreciation corresponds with the lead-up to the FOMC’s first interest rate hike in nearly a decade.

Does a higher interest rate boast the value of the dollar because global investors are chasing the higher interest rate yield and need to buy dollars to invest?

Random walk theory disputes the above assertion.

International Journal of Central Banking 2(4), 157 -183

Exchange Rates : For daily changes, Federal Reserve Board’s H.10 release, which contains exchange rates as of noon NY time.

OIS = Overnight Interest Swaps – Federal Reserve funds rate effective rate for USD OIS swaps.

The overnight change in the USD Overnight Index Swap(OIS) rate at the two-year horizon. This measure is appealing because it contains information about changes in both the current level of the U.S. short rate as well as the expected path of future short rates.

IFDP Noes September 22, 2017 Stephanie E. Curcuru

The Sensitivity of the U.S. Dollar Exchange Rate to Chagnes in Monetary Policy Expectations

Federal Reserve Board Governor Brainard stated that “changes in expectations regarding the path of policy in the United States relative

Because, theory suggests it is changes in interest rate differentials which drive exchange rate movements, rather than changes in domestic rates alone, we also use a differential based measure of surprise.

Report requirement:

RMarkdown report (.html and .Rmd output) to GitHub repository.

Clean report

Section header for an introduction, and section headers for each of the research questions

An introduction section which explains the datasets working on ( what they are, where they came from)

Context behind the research questions ( what are the research questions, and why would one care about specific questions?)

The datasets read into the report + data analysis and data visualization to help guide research questions

Explanations behind any data analysis or visualization created which can be understood by a non-technical audience;

Some commentary regarding research questions, and if applicable, whether or not your findings match with your hypotheses that you made in the proposal you submitted

Answer research questions and use data analysis to guide them.

Explain research questions, the methods used to address them , any analyses and visualizations created

Write in complete sentences.

3 research questions:

Why I am interested and other investors interested in this?

1. I am starting to trade in the foreign exchanges and I would like to know which economic indicators will signal a change in the direction of the eight major currencies I am interested in trading.
2. Knowing the trend of a currency movement is very important to any business that trades globally
3. Government to monitor its country economic health. Government policy will affect the overall economy and which will impact the stock market where I invested.

Learning what factors affecting the trend and movement of foreign exchange is necessary for forex traders, business, and the government.

Goal:

1. To determine what economic factors affect the US currency - explanatory variables 6 or 7 and response variables – $GXY
2. To determine what degree the impact will be
3. To determine how early the warning of change begins

This analysis will not include the unexpected events such as terrorist attacks, presidential elections, or global economic crisis. These factors are once in a lifetime events and unpredictable. My analyses focus on the pattern of the change of both explanatory variables and the response variable. For the third question, I will exam the impact of the percentage change from one period to another of the explanatory variable against the percentage of the change of the response variable. I choose five-years end of the month time line between 2014 – 2019 because it is most relevant to our time and readily available. Going further back in time will not reflect the breakneck speed our economy evolves. I will apply the beginning data of the monthly for the duration of the month if daily data is not available.

The linear regression analysis is

Expected $GXY = Bo + B1\*Fed\_Rate + B2\*Debt + B3\*Inflation +B4\*BalofTrade +B5 \*GDP +e

It will show which predictors are statistically significant on the outcome of $GXY.

The economic factors that are expected to impact the valuation of the US dollar are as follows:

1. Federal Fund rate: the interest rate depository institutes use when lending and borrowing among themselves - may be the OIS Overnight interest swap. OIS = Overnight Interest Swaps – Federal Reserve funds rate effective rate for USD OIS swaps.

The overnight change in the USD Overnight Index Swap(OIS) rate at the two-year horizon. This measure is appealing because it contains information about changes in both the current level of the U.S. short rate as well as the expected path of future short rates.

1. US Government Debt

Investors are concerned about the growth of the U.S. debt. Federal Reserve allows the dollar’s value to decline so that U.S. debt repayment becomes less in foreign currency.

The debt put pressure on the government to either raise taxes or slow down spending. This concern will lead to sequestration and economic growth stagnation.

1. Inflation Rate

Inflation rate and value of the domestic currency move in opposition direction. Increase in inflation rate means the domestic dollar worth less than before because the public need more unit dollar to pay for the same goods and services.

1. Balance of Trade Payment

The higher the balance of trade payment deficit is, the more the US dollar needs to pay for foreign goods in their currency. The higher the demand of foreign currency, the lower the US dollar is worth because there is the supply and demand at work. More US dollars are needed to pay for the same foreign goods

1. GDP

A blooming economy means it is an attractive and secure place to invest. An influx of foreign investment leads to an increase in demand in US dollar since investment in the US is in the US currency. The opposite leads to a decrease in the value of the US currency since less foreign investors coming to the US and most likely US investors will invest overseas instead.

Exchange Rates : For daily changes, Federal Reserve Board’s H.10 release, which contains exchange rates as of noon NY time.

The Foreign Exchange(FOREX) Market is where global exchange rates are derived for everyone including market speculators and end users of currency. People and companies buy and sell currency much like you would buy and sell anything else.

The currencies of major industrialized nations are free floating resulting in Exchange Rates that fluctuate every day.

Market Participants

Banks – provide a market for Forex transactions, Banks provide liquidity and credit to corporations, governments, funds, other banks, and speculators.

Government – through their Central Banks, they attempt to control the money supply to balance economic cycles.

Corporations – typically looking to hedge against currency fluctuations of the countries in which they do business

Investment Funds – looking to both hedge and speculate on investments.

Traders/Speculators – short-term players attempting to make a profit.

Broker/Dealers – looking to profit by providing a market for speculators.

Analysis Techniques:

Mathematical calculations that use past price action and/or prior volume activity

Use the past data to look at their past characteristics when it comes to

Liquidity and volatility

Understanding Analysis Techniques will imply an edge when trading.

Liquidity and volatility are both characteristics that tend to remain

If a Forex Market was liquid yesterday, chances are that it will remain liquid tomorrow

If a Forex Market moves an average of 200 pips per day, chances are that tomorrow it will be similar.

Lagging effect

Since they are based on past data, Analysis Techniques always lag

Never use them to try to forecast the next direction for Price Movement since you would be guaranteed to be late Timing the Markets

This lagging effect is actually not harmful when screening for Currency Markets to be traded while in the process of building a Watchlist

The US Dollar

The most heavily traded single currency in the world

It is the currency used most in international transactions and is widely held as a reserve currency

The US Dollar is involved in approximately 80% of transactions worldwide

The US Dollar’s value is commonly tracked by comparing its performance against a basket of other currencies

The US Dollar Index can be seen in multiple forms:

US Dollar Index $DXY – “Dixie”

US Dollar Index Future @DX

Understanding Supply and Demand for the Dollar Index can help the Forex trader

US Dollar Index ($DXY)

The $DXY is made of 6 currencies against the US Dollar

Currency Weight

Euro 58.6%

Japanese Yen 12.6%

Canadian Dollar 9.1%

Swiss Franc 3.6%

Swedish Krona 4.2%

British Pound 11.9%

For me personally, I would gauge the $DXY and determining my trade positions whether long or short a certain currency.

The more I understand how things impact affect the US currency relative to other countries, the less risk I will have in my investment positions.

It is fitting to study the $DXY since the US dollar is the number currency for foreign countries to be held as reserve. It is a key indicator of our economies performance relative to others.