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CIO Viewpoint

Making sense of currencies

Investment Solutions

3 January 2022

Foreign exchange fluctuations can have a material impact on investment portfolio returns measured in terms of a base currency. At Lombard Odier we dedicate significant resources into understanding currencies through a range of models, backed by observations from our local teams. Here, we share insights on our currency valuation models and outline our expectations for 2022.

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Key takeaways

- Currencies represent the world's largest financial market worth trillions of dollars in daily transactions
- The US dollar has a special status as it represents a global safe haven in periods of higher volatility
- In 2022, we see a stronger US dollar as growth decelerates and the Federal Reserve pivots towards more hawkish policies. We also anticipate a stronger Swiss franc and a weaker euro
- For emerging currencies, we expect the dollar-renminbi to trade within its current range through the first half of 2022 while we stay cautious on the Brazilian real and South African rand.

From a single base currency to a basket of reference

We believe that models based on a single base currency have become obsolete, as an increasing portion of families have a footprint spanning several geographies. Some have cross-border business operations, while others split their personal life between multiple jurisdictions. Our customised approach aims to determine our clients' specific needs, and to align their strategic asset allocation with their liabilities in all the currencies to which they are exposed. For this reason, we prefer to think in terms of a reference basket of several currencies, rather than in a single base currency. This framework also applies at a national level, as globalised economies rely on several currencies beyond their own. While Switzerland has a strong currency, for example, it depends on the US dollar for its energy sourcing and on the euro for large pharmaceutical imports from Germany.

The strategic allocation defined above is complemented with tactical adjustments based on theoretical and practical models, which we strive to continuously fine-tune.

Theoretical and practical considerations

The foreign exchange market is the largest financial market in the world, worth trillions of dollars in daily transactions. Enormous resources go into modelling currencies' valuations in an attempt to anticipate foreign exchange movements through diverse and often contradictory factors. Where theoretical models assess the value of currencies in a perfectly open and frictionless world, empirical models attempt to identify the most prominent variables driving exchange rates, and then extrapolate them into a prediction.

The first theoretical framework to find a fundamental value between two currencies is the purchasing power parity (PPP) model, which compares the price of similar goods in different jurisdictions to determine whether a currency is over- or under-valued. The typical illustration of this model compares the prices of burgers in different countries, as per the Economist's Big Mac index.

However, while the PPP model is helpful in understanding currencies' broad movements, it is limited by assumptions that often don't correspond to reality. If a particular good or service happens to be cheaper in a certain country, real-world constraints such delivery costs and VAT frictions, for example, mean that the switch does not necessarily happen.

Such limitations to theoretical approaches have prompted a more practical behavioural equilibrium exchange rate, or BEER, model. This is an empirical approach that analyses the historical movements of a currency to identify the most important macro-economic explanation for fluctuations. These typically revolve around inflation, terms of trade, interest rate differentials, foreign direct investment flows, a central bank's balance sheet as well as total government debt. For example, the BEER model may find that the currency of a raw-materials-rich emerging economy is largely dependent on China's growth. By forming a view on the strength of the Chinese economy, the model can anticipate the currency's path.

We combine theoretical and empirical models using the most appropriate for each currency pair. Considering the limitations of such models, we complement the output of our models with observations from investment professionals in our local offices.

The dollar's privilege

Our currency analyses take into account the exceptional status of the US dollar in the global economy. While the US accounts for 10% of global trade, some 40% of commerce is settled in dollars, along with a large share of financial asset prices. US Treasuries also effectively offer a global benchmark as the world's most liquid bond market and a safe haven. The dollar tends therefore to be closely linked to the global economic cycle. This was clear in 2021 when the dollar bottomed as global manufacturing peaked, before gaining in value through September, despite a then-unchanged outlook for US monetary policy.

Some of the higher frequency models show that these global drivers influence the US dollar (chart 1). Over the past decade, when global growth expectations decline, or the US economy outperforms the rest of the world, the dollar strengthens.

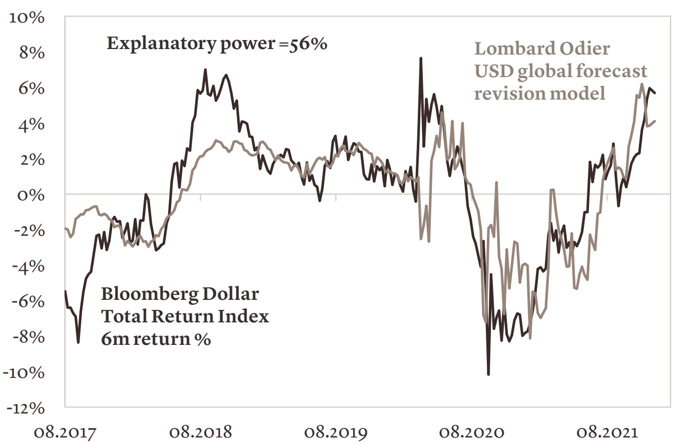
FX performance in 2021

The US dollar strengthened against most developed as well as emerging market currencies over 2021, with a few notable exceptions: the Chinese yuan, Taiwanese dollar, Israeli shekel and Russian rouble. Among developed market currencies, the US dollar appreciated about 8% against the euro, but close to 10% against the Japanese yen and Swedish krona (chart 2).

Beyond the dollar, currency performance was particularly fragmented in 2021. A number of currencies in developed and emerging markets, including the Canadian and New Zealand dollars, Norwegian krone, Mexican peso, Indonesian rupiah and Malaysian ringgit, benefitted from surging global commodity prices. Others, like sterling and the New Zealand dollar, were supported by more hawkish central banks while both the Swiss franc and Israeli shekel were allowed to appreciate by their respective central banks. On the other hand, currencies including the Brazilian real, Colombian and Chilean pesos, performed poorly due to a decline in terms of trade. Still others, such as the Thai baht, suffered from falling tourism, or, in the case of the Polish zloty and Turkish lira, a dovish central bank response to higher inflation risks.

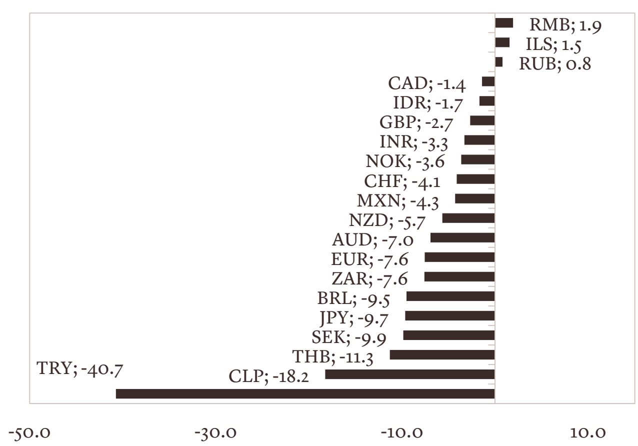
Our currency positioning contributed to portfolio performance in 2021, driven in particular by our overweight position in the Chinese renminbi, as well constructive views on the Russian rouble, which gained as energy prices rose, and the Israeli shekel, which benefitted from strong technology sector exports.

1. USD rallies when global growth estimates are being revised lower and/or US is seen outperforming the rest of the world



Sources: Bloomberg, Lombard Odier

2. Spot return vs USD in 2021 (in %)



Sources: Bloomberg, Lombard Odier

An outlook for 2022

We anticipate a stronger US dollar and Swiss franc in 2022, and a weaker euro. In line with the negative correlation between global growth and dollar performance discussed earlier, we expect the dollar to appreciate as global growth decelerates towards its long-term trend. We expect the Federal Reserve to begin raising rates around mid-2022. Over the last four Fed tightening cycles (1994, 1999, 2004 and 2015), the dollar averaged a 3.8% gain in the six months before the first rate hike. This was true even where markets had already priced-in hikes, as is the case today.

Switzerland's strong balance of payments indicates that the franc will further appreciate. These pressures may wane if Swiss domestic investors invest more abroad, or the Swiss National Bank intervenes in currency markets. The central bank's balance sheet has already risen to 143% of Switzerland's gross domestic product, the highest in the developed world (chart 3). Now, the SNB is moving in line with other central banks moving to taper the asset purchases that built high balance sheets. We therefore see the euro-franc tracking euro-dollar performance, and reaching parity by the end of 2022.

For the euro, our BEER model incorporates the relative size of central bank balance sheets as well as bond yields and inflation projections. This sees the euro-dollar equilibrium value declining in the quarters ahead from 1.15 to 1.10. However, undershoots are possible, and more likely when currency volatility increases, as expected through 2022.

Beyond these central convictions, we favour currencies whose economies have experienced a robust growth recovery, with sound external and fiscal balances and more hawkish central banks. In addition, we prefer those that are not highly dependent on commodity prices, or China's expansion.

Within developed currencies, we like the Canadian dollar and Swedish krona. The Canadian currency should benefit from the US's growth, and is not too dependent on volatile commodity prices. We also favour the Swedish krona: Sweden's economy has recovered well and inflation pressures should make the central bank more hawkish. On the other hand, we are cautious on the Australian dollar, where the labour market has slack, with few wage pressures (chart 4).

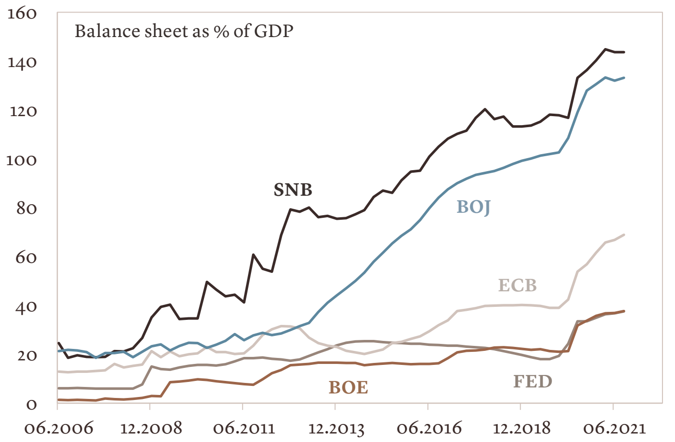
Emerging currencies, diverging expectations

Turning to emerging markets, continued limits on outbound Chinese tourism and still strong demand for China's debt will keep the country's balance of payments strong over the first half of 2022, leaving the dollar-renminbi rate to trade within its current range. However, as the economy normalises, we may see some weakness in the second half of the year. We favour the Mexican peso as it will probably continue with its relatively conservative monetary and fiscal policies as long as trade with the US remains strong.

We also like the Israeli shekel. The country's exports are highly linked to the information technology revolution and it enjoys a solid foreign direct investment pipeline and strong external balances. With a solid economy and sound Covid management, the central bank can turn more hawkish and reduce its currency interventions.

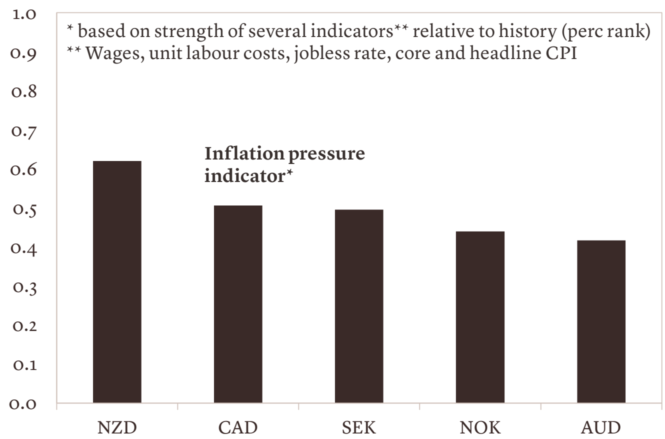
On the other hand, we remain cautious on both the Brazilian real and South African rand. These countries are likely to see government debt continue to build. In addition to the burden of Covid spending, both countries are expected to grow more slowly than the real interest cost of servicing their debt. This should see debt-to-GDP ratios continue to rise. Our BEER models, which find government debt an important explanation for historical trends in these currencies, signal further depreciation for both currencies.

3. SNB may begin to taper FX purchases to stabilise the large SNB balance sheet



Sources: Bloomberg, Lombard Odier

4. Ranking commodity-dependent currencies



Sources: Bloomberg, Lombard Odier

Perspective on cryptocurrencies

We could not conclude this paper without a reference to cryptocurrencies, which benefitted from abundant liquidity, low rates and strong risk appetite in recent years. Going forward, the Fed's policy normalisation process with zero asset purchases and rising rates will test cryptocurrencies' resilience.

We believe that cryptocurrencies are too volatile to represent a credible payment disruptor. As a consequence, we do not treat them as a currency. This is supported by the expectation that governments would take regulatory measures to prevent cryptocurrencies from competing with national currencies.

Cryptocurrencies should be subject to the same risk and return considerations as any other asset class. Taking Bitcoin as an example, and assuming a 0.5 Sharpe ratio threshold with its annualised long-term volatility of around 80%, a single Bitcoin would have to return 40% per annum to be attractive. This would mean that one Bitcoin would have to be worth more than USD1.1 million by 2031 to make it a worthwhile investment.

While developments in this space are very fluid, we believe that investors in cryptocurrencies are simply not rewarded enough for the considerable risks they run at this stage.

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