The FX Quarterly Q4 2022

Update and outlook on currencies impacting the innovation economy

svb

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For our concluding report for the year, we revisit the drivers behind the strength in the US dollar (USD) and determine that a reversal over the next couple quarters is unlikely unless there is a material change to the global inflation picture. In our macro section, we look to currency options markets to find more USD supportive data points.

USD strength is causing significant headwinds for the global companies, venture, and private equity funds we bank who generate cash flows and returns overseas. On the other hand, many earlier stage companies that fund global expansion with USDs as opposed to foreign revenues are seeing a material lift from a stronger USD. Hedging activity is up across the board, both from those looking to protect against further losses and those seeking to lock in currency windfalls.

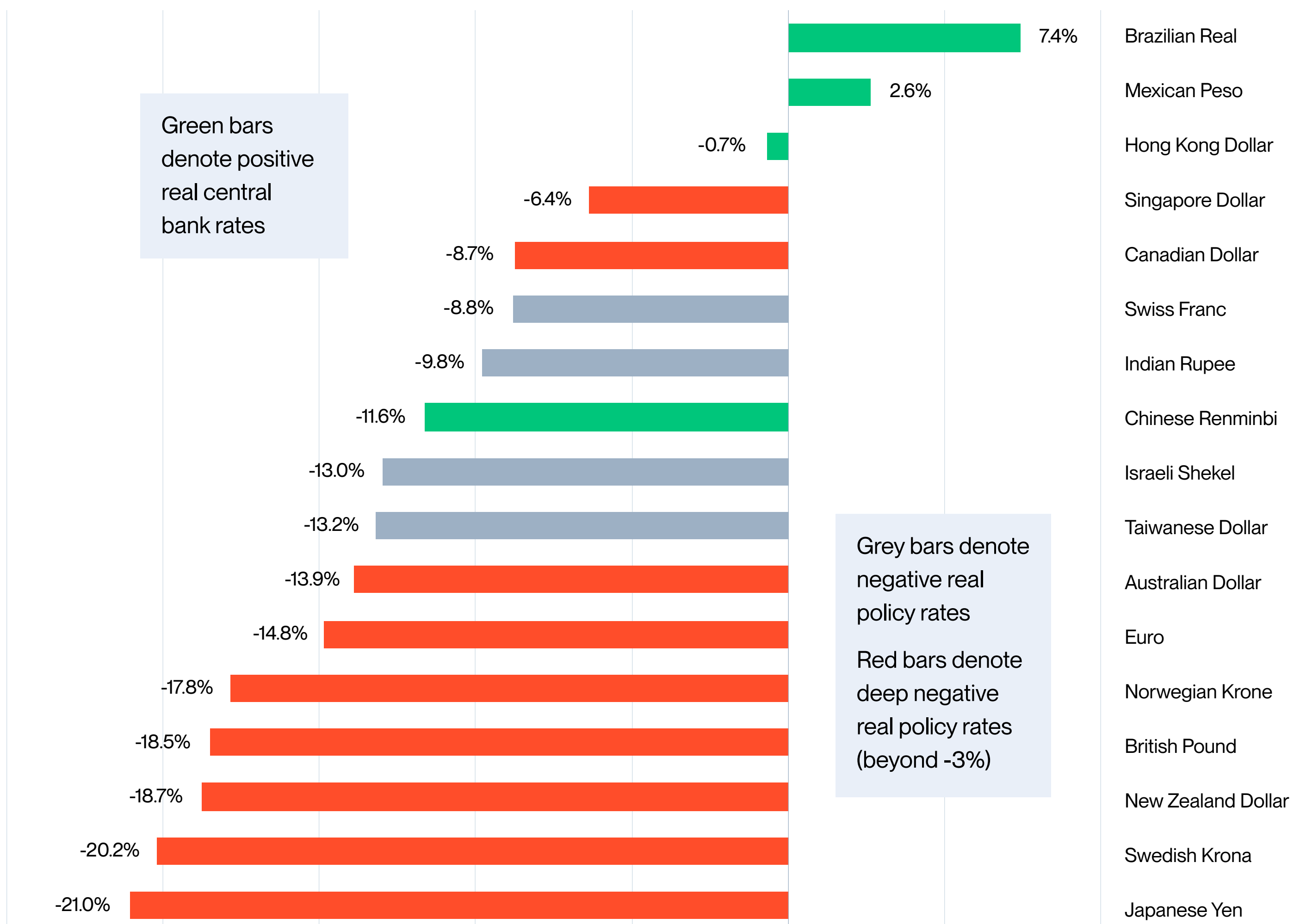
In our currency spotlight section, we introduce the SVB currency scorecard, an objective approach to measure relative currency strength/weakness and potential future realignments. Our quant insights pieces check in on hedging costs, which today look very different due to the monetary policy induced interest rate movements of the last 12 months. Finally, our trending topics section highlights an emerging trend that may derail the USD bull run – central bank intervention in currency markets.

Macro

USD strength, broad-based but imbalanced, poised to continue

- A combination of spiraling inflation, deteriorating trade and current account balances, and lower interest rates versus the US have contributed to sizeable depreciation in currencies versus the US dollar.
- Looking ahead, currencies overseen by central banks considered to be laggards on fighting inflation because they are not hiking rates fast enough to keep up with rising prices will continue to experience the greatest downward pressure. Along these lines, currencies whose central banks are not raising interest rates (i.e. Japan) or actually cutting rates (China) may face similar headwinds.
- An important metric to gauge the proactiveness of a central bank is the 'real' central bank policy rate (policy rate minus running annual inflation). Deep negative real policy rates will be a key driver of currency weakness in the months ahead as the base effects from supply-side and geopolitical inflation pressures wear off and inflation reaches the next plateau lower.

Currency depreciation versus the USD in 2022 YTD



Source: Bloomberg as of October 2022

Options pricing indicates there may be more upside to the USD

- Prices for currency options to protect against a further rise in the USD are greater than those of currency options to protect against a fall in the USD, for the same level of protection.
- Higher prices reflect greater hedging and speculative demand for options that benefit from further appreciation in the USD.
- This metric is generally considered a proxy for collective market positioning and view bias.

Currency market indices show excess demand for protection against a rising USD

Euro — Canadian dollar — UK pound — Chinese renminbi

Chart tracks 3-month 25-delta implied volatility risk reversals for currency pairs versus the US dollar

A positive (negative) reading implies calls on the USD are more (less) expensive than USD puts

implied volatility (%)

4.50, 4.00, 3.50, 3.00, 2.50, 2.00, 1.50, 1.00, 0.50, 0.00, -0.50, -1.00

1/1/2021, 4/1/2021, 7/1/2021, 10/1/2021, 1/1/2022, 4/1/2022, 7/1/2022, 10/1/2022

Source: Bloomberg as of October 2022

Currency spotlight

SVB currency scorecard highlights which currencies are most vulnerable to continued USD strength

Our 9-point scorecard assigns a score on each of 9 potential factors that help explain currency movements. A grade of +1 is assigned if the factor is expected to contribute to currency strength (tailwind), a grade of -1 is assigned if the factor is expected to contribute to currency weakness (headwind), and 0 is assigned if the factor is expected to have a neutral impact. The sum across factors is the currency score. The higher (lower) the score, the greater the relative strength (weakness) expected.

		I. Inflation (Y/Y)	II. Policy interest rate (%)	III. Gap between policy rates and inflation (%)	IV. GDP growth (Q/Q)	V. Unemployment (%)	VI. Current account (% GDP)	VII. Budget deficit (% GDP)	VIII. Commodity price pressures	IX Correlation to risk assets	Currency score
Developed Markets											
Euro area	EUR	9.90%	1.25%	-8.65%	0.80%	6.60%	0.90%	-3.90%	Importer	Positive	-7
UK	GBP	10.10%	2.25%	-7.85%	-0.10%	3.60%	-4.33%	-4.87%	Importer	Positive	-6
Japan	JPY	3.00%	-0.10%	-3.10%	0.50%	2.50%	1.75%	-6.36%	Importer	Positive	-3
Canada	CAD	6.90%	3.25%	-3.65%	1.10%	5.40%	0.24%	-12.60%	Exporter	Positive	1
Australia	AUD	6.10%	2.60%	-3.50%	0.90%	3.50%	2.25%	2.50%	Exporter	Positive	3
Switzerland	CHF	3.30%	0.50%	-2.80%	0.30%	2.10%	7.94%	-2.27%	Importer	Low	1
Emerging Markets											
China	CNY	2.80%	4.35%	1.55%	-2.60%	4.00%	2.06%	-3.83%	Exporter	Positive	3
Brazil	BRL	8.70%	13.75%	5.05%	1.20%	8.20%	-1.98%	-4.20%	Exporter	Positive	-1
India	INR	5.90%	5.90%	0.05%	-1.40%	6.50%	-1.90%	-6.65%	Importer	Positive	-5
Mexico	MXN	8.50%	9.25%	0.72%	1.00%	4.60%	0.25%	-0.64%	Exporter	Positive	4
Base currency											
United States	USD	8.20%	3.25%	-4.95%	-0.10%	3.70%	-3.90%	-3.50%	Exporter	Negative	0

Tailwind +1
Neutral 0
Headwind -1

Bottom line:
In relation to one another,
Currencies projected to do better: AUD, CAD, CHF, CNY, MXN
Currencies projected to do worse: EUR, GBP, JPY, BRL, INR

Source: SVB FX Risk Advisory, Bloomberg as of October 2022

SVB currency scorecard factors

I. Inflation: Higher persistent inflation hurts the relative purchasing power of one currency versus another, leading to currency weakness.

II. Policy interest rate: Currencies with relatively higher interest rates or with expectations of having relatively higher rates benefit from yield seeking international investors buying the currency over the short-run.

III. Gap between policy interest rates and inflation: A negative gap indicates monetary policy is too accommodative given high levels of inflation and begets currency weakness. A positive gap indicates the central bank is restrictive and interest rates outpace inflation, this is positive for a currency. When inflation and policy interest rates are aligned, this signals a neutral policy stance for a currency.

IV. GDP growth: When a country's economy is experiencing strong growth, the central bank will tighten monetary policy as a lever to keep growth in check. Tighter monetary policy, often via higher interest rates is a tailwind for a currency over the short-run. Low to negative GDP growth gives central banks rationale for accommodative monetary policy, which puts downward pressure on currencies as a result of lower yields offered.

V. Unemployment: Central bank charters support policies that bring stability to labor markets. Low unemployment rates give central banks more room to tighten policy to reign in inflation, providing support to currencies through higher interest rates.

VI. Current account balance: A current account balance represents the value of a country's net exports of goods and services (exports - imports). A negative current account balance implies a country is a net importer of goods and services, which essentially means it is exporting capital to pay for those goods and services and increasing the supply of its currency in global markets. More currency supply translates to a lower currency price.

VII. Budget deficit: High budget deficits may be perceived by global bond investors as a sign that a country may run into trouble servicing and repaying its debts, potentially leading to bond sales, capital flowing out of the country, and a weaker currency (as occurred recently in the UK in September 2022).

VIII. Commodity price pressures: Commodity price increases, especially those that come quickly as a result of market distress or geopolitics, will put downward pressure on the currencies of economies that are net energy importers.

IX. Correlation to risk assets: The US dollar reigns supreme as the only standing safe-haven asset that investors flock to during times of financial distress. Alternative safe-havens such as the Japanese yen, Swiss franc, gold, or even crypto have not provided much relief in the 2022 bout of risk aversion.

Quant insights

The FX forward carry[1] picture has changed, benefiting USD buyers

- Global companies, venture, and private equity funds that generate cash flows and returns overseas typically use FX forwards to hedge foreign currency proceeds back to USD.
- The 2022 Fed rate hikes have outpaced those of most developed economies, widening the interest rate differential in favor of the US. This interest rate benefit in favor of the US has improved the carry earned for US-based firms and funds locking prices for future USD purchases via FX forwards.
- The average carry pick-up for buying USD against the major currencies traded by SVB clients is now 0.92% per annum versus -1.17% 1-year ago. The carry to buy USD has improved for all but one currency pair listed.

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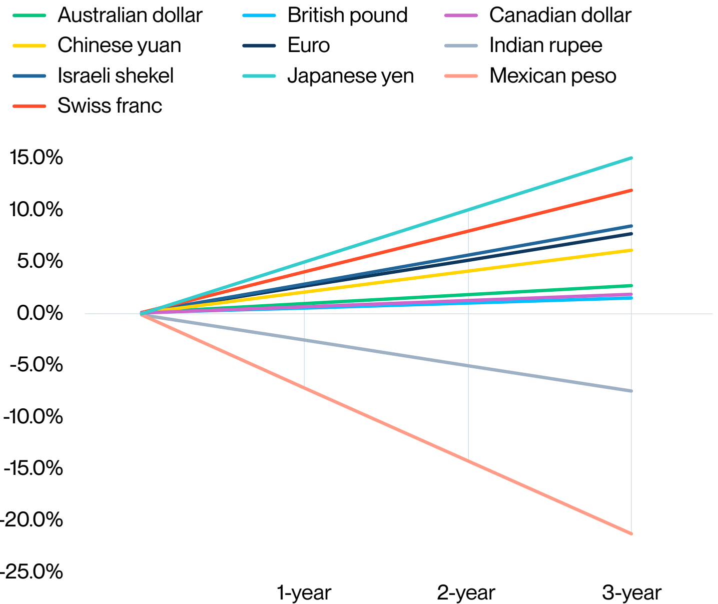
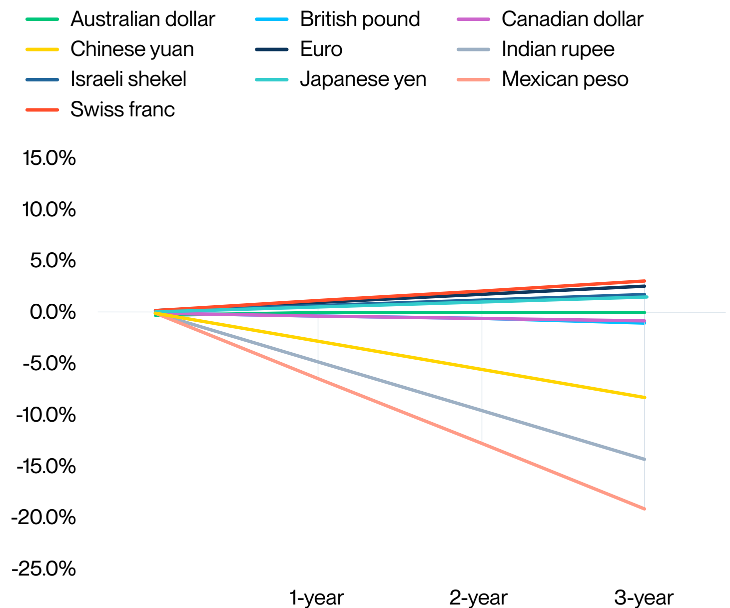
Cumulative carry earned/paid as of Oct 2022[2]



Cumulative carry earned/paid as of Oct 2021[2]



A positive (negative) reading implies carry is earned (paid). In other words, forward rate is more (less) favorable than spot at inception

Source: SVB FX Risk Advisory, Bloomberg as of October 2022

1 Carry reflects the cost of hedging with FX forwards. It is the difference between the forward contract rate and the prevailing spot rate at the time the hedge is executed, which can be favorable or unfavorable for the hedger depending on currency pair and direction. Carry is earned (paid) when buying (selling) the higher yielding currency versus the lower yielding currency.

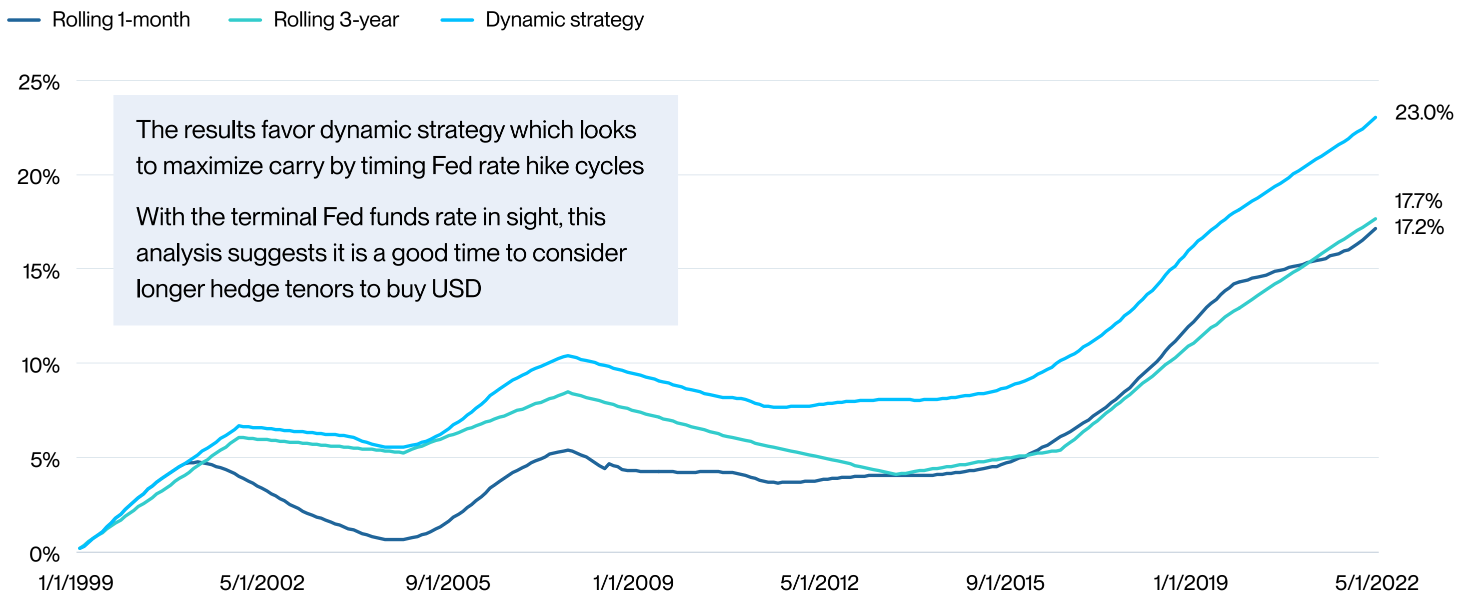
2 Charts reflect carry for 1-year forwards interpolated under 1-year and extrapolated to 2 and 3-year tenors.

Following the Fed may optimize carry earned from FX hedges

Global fund investors with good visibility about both the timing and amount of a cross-border exit may hedge their currency risk using shorter or longer-maturity forwards. The choice depends on a number of factors including credit utilization, size and frequency of cash outlays, desired flexibility to adjust amounts, and carry profile. With regard to the latter, US dollar funds invested in Europe have been able to earn carry from FX forward hedges for most of the last two decades, as interest rates in the US have been higher than interest rates in Europe. **If the goal is to maximize the carry earned from the hedges, is it better to roll short-term forwards or opt for long tenors?**

The analysis below **tracks the carry earned from hedging the current risk of back-to-back 3-year investments into Europe by a US dollar fund over the last two decades**. Three different strategies are evaluated: 1) roll 1-month forwards, 2) roll 3-year forwards, or 3) dynamic strategy where the baseline hedge is 1-month, but then switches to 3-year at the end of a Fed rate hike cycle. The rationale for the switch is that the longer hedge locks the higher US interest rate, that is earned synthetically via the forward hedge, for longer.

Simulated cumulative FX forward carry pick-up from three strategies (%)



Source: SVB FX Risk Advisory, Bloomberg as of October 2022

Past experience is not a guarantee of future outcomes

Trending topics

Despite intervention in currency markets, the USD remains stubbornly strong – but for how long?

Intervention in currency markets is back in vogue as governments around the world have looked to stabilize their currencies against the rising US dollar, which has received a strong lift from aggressive Fed rate hikes and general risk aversion inflows. Intervention can take many forms, but at its basic level, it involves a country utilizing its holdings in foreign-denominated bonds and assets, aka currency reserves, to buy its own currency to absorb excess selling pressure. While data on intervention is difficult to come by, we can look to changes in the notional amount of currency reserves portfolio as a proxy. A decrease implies reserves are used to defend currencies.

Country	2022 decrease in currency reserves	2022 depreciation versus the low of the year	2022 depreciation through October
China	-6.8%	-12.7%	-12.4%
India	-17%	-10.7%	-9.9%
Japan	-12%	-24.2%	-22.1%
Korea	-10%	-17.7%	-16.4%
Malaysia	-7.7%	-12.0%	-11.8%
Philippines	-47%	-13.6%	-12.1%
Taiwan	-1.3%	-14.3%	-13.9%
UK	-13%	-23.1%	-14.5%
Vietnam	-14%	-8.2%	-8.1%

All currency movements are versus the USD
Source: Bloomberg as of October 2022

Featured in the table are countries that have been reported to have intervened in currency markets in 2022.

Two important observations

1. Currencies have weakened in spite of intervention activity
2. Currencies are trading in October near the lows of the year, suggesting selling pressure persists

Intervention rarely draws a line in the sand, and its success is mixed. However, depreciation may have been greater without it.

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