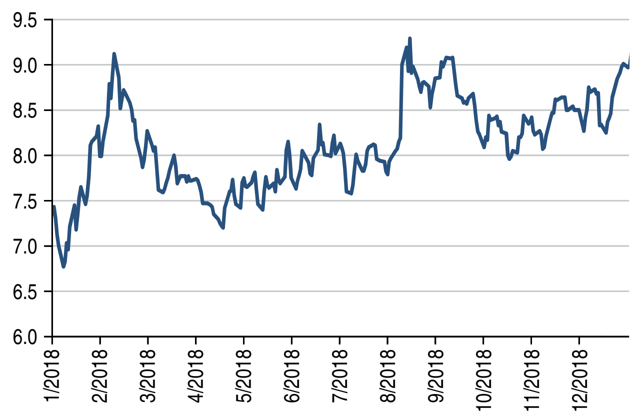
2019 Currency Outlook

FX volatility increased in 2018, impacted by influential global events that transpired throughout the year: trade wars and rhetoric, emerging market contagion, Brexit, mid-term elections and instability within the political climate in the United States and elsewhere. The J.P. Morgan Global Volatility Index rose 21.7% in 2018, with many intra-year swings along the way. (Figure 1) Across the major regions, currency movements were episodically substantial, exhibited by the increased global volatility previously mentioned. The strength of the US dollar was reflected by the 4.4% appreciation in the DXY – US Dollar Index. (Figure 2) Broad weakness across commodities, as seen in a -12.4% drop in the CRB Index, caused a corresponding weakness in commodity-based currencies such as the Australian and Canadian dollar. (Figure 3) With fluctuating risk-on / risk-off environments, the Swiss franc and Japanese yen showed episodes of strength as a safe haven currency during times of uncertainty.[1] Euro and sterling felt the weight of the Brexit negotiations, while emerging market contagion had reverberations across major markets.[2]

FIGURE 1 | **JPM FX Global Volatility Index**

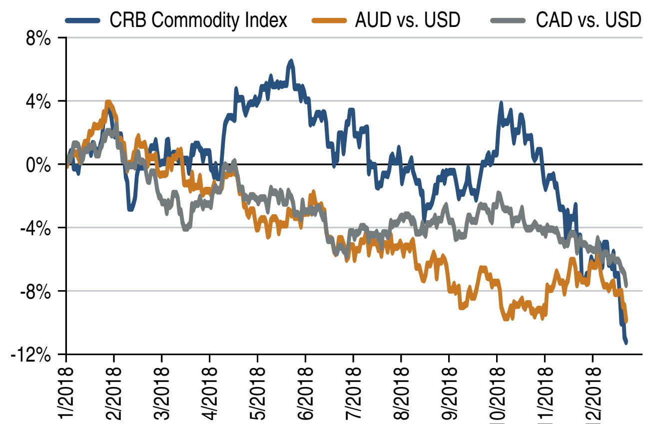


Source: Bloomberg. Chart time: 1 January 2018 to 31 December 2018. Past performance is not necessarily indicative of future results. Actual results may materially differ.

FIGURE 2 | **US Dollar Index**

Source: Bloomberg. Chart time: 1 January 2018 to 31 December 2018. Past performance is not necessarily indicative of future results. Actual results may materially differ.

FIGURE 3 | **CRB Commodities Index / AUD / CAD**



Source: Bloomberg. Chart time: 1 January 2018 to 31 December 2018. Past performance is not necessarily indicative of future results. Actual results may materially differ.

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Passive risk management reduced the currency volatility in Mesirow Financial's passive mandates by hedging against the currency swings that affected our broad base of client portfolios. While the return impact of the passive hedges was positive or negative depending upon the base currency and exposures in each mandate, efficient implementation of the hedges successfully reduced portfolio volatility in a year where significant movements impacted many portfolios.

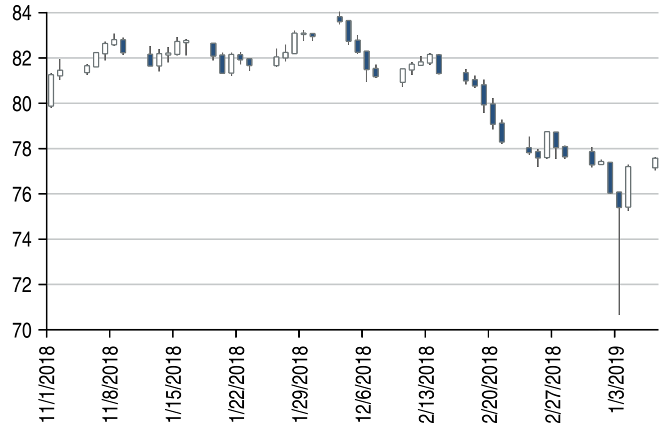
Passive plus and active risk management solutions provided opportunities for downside protection or participation in currency gains, dependent upon the client- and region-specific backdrop. The strength that the US dollar exhibited in 2018 provided downside protection opportunities for our active overlay USD-based portfolios with unhedged benchmarks through directional hedges. Across other regions with mandates employing unhedged benchmarks, the rise in the US dollar highly influenced foreign exposure appreciation, where participation in meaningful currency gains was evident in our GBP, EUR and CAD mandates, with less appreciation seen in CHF portfolios. While mandates with hedged benchmarks allow for both short and long active positions, CHF-based portfolios experienced more back-and-forth movements than their CAD-based counterparts, allowing for trading opportunities on both sides whereas CAD-based exposures were more one-directional in movement, with limited opportunity on the downside.

While 2019 promises to clarify questions heading into the new year, continued political and economic uncertainty across regions as well as their fiscal and monetary positions factor into the price movements and volatility paths we will see in the new year. The start of 2019 has already seen a spike in volatility, as a confluence of events led to the flash-crash in JPY-crosses on January 3rd.[3] Apple's warning about demand for iPhones from China amid the US-China trade war stoked fears of pushing the global economy towards recession.[4] Liquidity, already thin during the North American-Asian crossover, was even thinner as Japan was on holiday.[5] The market reaction, likely spurred on by algorithmic program trading, was to sell the JPY-crosses, with prices crashing within minutes before partially reverting to more reasonable levels.[6] The yen appreciated close to 8% against Australian dollar, breaking through the 72-resistance level that had not been seen since 2009. (Figure 4)

With a Brexit resolution due in the first quarter, uncertainty over the look of the final deal and its repercussions will likely continue to bring volatility to the FX market. The volatility potential of Brexit is reflected in the spikes in the JPM FX Global Volatility Index during the referendum in June 2016. (Figure 5)

Emerging market FX volatility peaked in mid-2018 with levels last witnessed during the Global Financial Crisis in 2008, as seen in the EM / G7 Volatility Ratio below. Though levels have reverted to more recent averages, volatility can increase very quickly when contagion is spreading. (Figure 6)

FIGURE 4 | **AUDJPY**

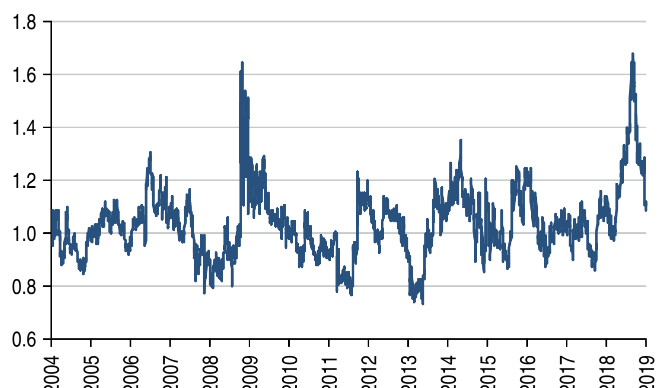


Source: Bloomberg. Chart time: 1 January 2018 to 31 December 2018. Past performance is not necessarily indicative of future results. Actual results may materially differ.

FIGURE 5 | **JPM FX Global Volatility Index**

Source: Bloomberg. Chart time: 1 January 2018 to 31 December 2018. Past performance is not necessarily indicative of future results. Actual results may materially differ.

FIGURE 6 | **EM / G7 FX Volatility Ratio Index**

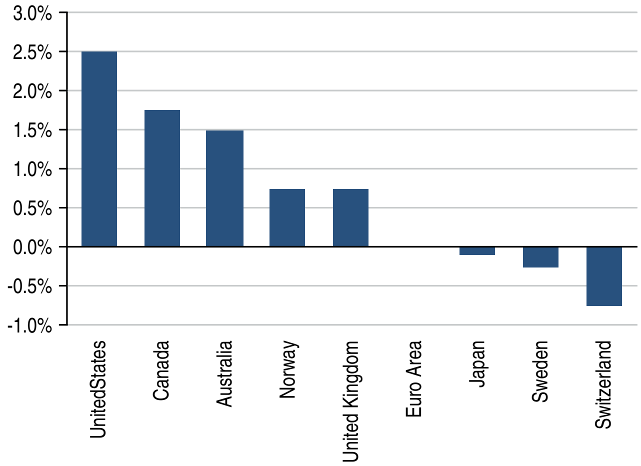


Source: Bloomberg. Chart time: 1 January 2018 to 31 December 2018. Past performance is not necessarily indicative of future results. Actual results may materially differ.

Should the coming year bring US dollar weakness due to an environment of US interest rate hike slow-downs and cooling growth, USD-based clients would look to passthrough foreign currency gains while non-US clients would likely find ample opportunity to hedge against the weakness of their largest exposure. Though passive plus and active overlay applications are benchmark dependent with respect to the hedging opportunities available, volatility reduction and downside protection are consistent focal points of these dynamic strategies. Identifying opportunities across various regimes and time horizons allows for adaptively trading in the most beneficial backdrops. While passive risk management will continue to reduce currency volatility in all regions, those outside of the US are facing a carry penalty by hedging their USD exposures. While currency volatility is the higher magnitude risk, optimizing efficiencies, trading costs and tenors are an emphasis to help alleviate some of the pain from the carry penalty. (Figure 7)

We wish everyone a happy and healthy 2019 and look forward to effectively managing the uncertainty introduced into diversified portfolios by the currency risk found in our clients' international investments.

FIGURE 7 | **Central Bank Rate**



Source: Bloomberg. Chart time: 1 January 2018 to 31 December 2018. Past performance is not necessarily indicative of future results. Actual results may materially differ.

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1 Srivastava, Vatsal., "Yen, Swiss franc up on US Political Uncertainty, Global Growth Woes." *Reuters.com*, 23 Dec. 2018, https://www.reuters.com/article/global-forex/forex-yen-swiss-franc-up-on-us-political-uncertainty-global-growth-woes-idUSL3N1YS0MA.
2 Burgess, Robert. "'Emerging Markets Contagion? Maybe. Crisis? No." *Bloomberg.com*, Bloomberg, 13 Aug. 2018, www.bloomberg.com/opinion/articles/2018-08-13/emerging-markets-contagion-maybe-crisis-no.
3 Carson, Ruth, and Michael G Wilson. "'Flash-Crash' Moves Hit Currency Markets." *Bloomberg.com*, Bloomberg, 3 Jan. 2019, www.bloomberg.com/news/articles/2019-01-02/yen-surge-algos-set-off-flash-crash-moves-in-currency-market.
4 Carson, Ruth, and Michael G Wilson. "'Flash-Crash' Moves Hit Currency Markets." *Bloomberg.com*, Bloomberg, 3 Jan. 2019, www.bloomberg.com/news/articles/2019-01-02/yen-surge-algos-set-off-flash-crash-moves-in-currency-market.
5 Carson, Ruth, and Michael G Wilson. "'Flash-Crash' Moves Hit Currency Markets." *Bloomberg.com*, Bloomberg, 3 Jan. 2019, www.bloomberg.com/news/articles/2019-01-02/yen-surge-algos-set-off-flash-crash-moves-in-currency-market.
6 Carson, Ruth, and Michael G Wilson. "'Flash-Crash' Moves Hit Currency Markets." *Bloomberg.com*, Bloomberg, 3 Jan. 2019, www.bloomberg.com/news/articles/2019-01-02/yen-surge-algos-set-off-flash-crash-moves-in-currency-market.

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JP Morgan Global FX Volatility Index is an index that tracks options on currencies of major and developing nations by following aggregate volatility in currencies based on three-month at-the-money forward options.

JP Morgan G7 FX Volatility Index is an index tracks options on currencies of major nations by following aggregate volatility in currencies based on three-month at-the-money forward options.

JP Morgan EM FX Volatility Index is an index tracks options on currencies of developing nations by following aggregate volatility in currencies based on three-month at-the-money forward options.

The indexes are designed to allow investors to measure aggregate risk premiums in currency markets, calibrate trading strategies and express views on volatility as an asset class.

Emerging Market / G7 FX Volatility Ratio is the ratio of JP Morgan G7 FX Volatility Index vs. JP Morgan EM FX Volatility Index.

The U.S. Dollar Index (USDX, DXY, DX) is an index (or measure) of the value of the United States dollar relative to a basket of foreign currencies, often referred to as a basket of U.S. trade partners' currencies.

CRB Index The Commodity Research Bureau (CRB) Index acts as a representative indicator of today's global commodity markets. It measures the aggregated price direction of various commodity sectors. The index comprises a basket of 19 commodities, with 39% allocated to energy contracts, 41% to agriculture, 7% to precious metals and 13% to industrial metals.

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