Figure 1.13. Crypto Assets: Size, Price Appreciation, Realized Volatility, and Sharpe Ratio

Crypto assets account for a small fraction of G4 central bank balance sheets.



Bitcoin's realized volatility is much higher than that of other asset classes.



Comparison with historical bubbles.



Risk-adjusted returns of crypto assets have not dramatically exceeded those of other mainstream assets.

4. Annualized Sharpe Ratio of the Selected Asset Classes



Sources: Bloomberg Finance L.P.; CoinDance; CoinMetrics; European Central Bank; Haver Analytics; national central banks; Yale International Center for Finance; and IMF staff estimates.

Note: Panel 3 is based on 90-day realized volatility. In panel 4, crypto assets is an average across Bitcoin, Ethereum, Litecoin, and Ripple. The Sharpe ratio is the average return earned in excess of the risk-free rate per unit of total risk. EM = emerging market; FANGs = equal-weighted index of highly traded stocks of technology and tech-enabled companies such as Facebook, Amazon, Netflix, and Alphabet's Google; FX = foreign exchange; G4 = Group of Four (euro area, Japan, United Kingdom, United States); TOPIX = Tokyo Stock Price Index.