



Global Investment Research

Is crypto the next asset class?

June 2021

Allison Nathan
Goldman Sachs & Co.

Managing Director
+1 212 357-7504

Senior Strategist and Editor-in-Chief, Top of Mind
allison.nathan@gs.com

Jeffrey Currie
Goldman Sachs International

Managing Director
+44 20 7552-7412

Global Head of Commodity Research
jeffrey.currie@gs.com

Zach Pandl
Goldman Sachs & Co.

Managing Director
+1 212 902-5699

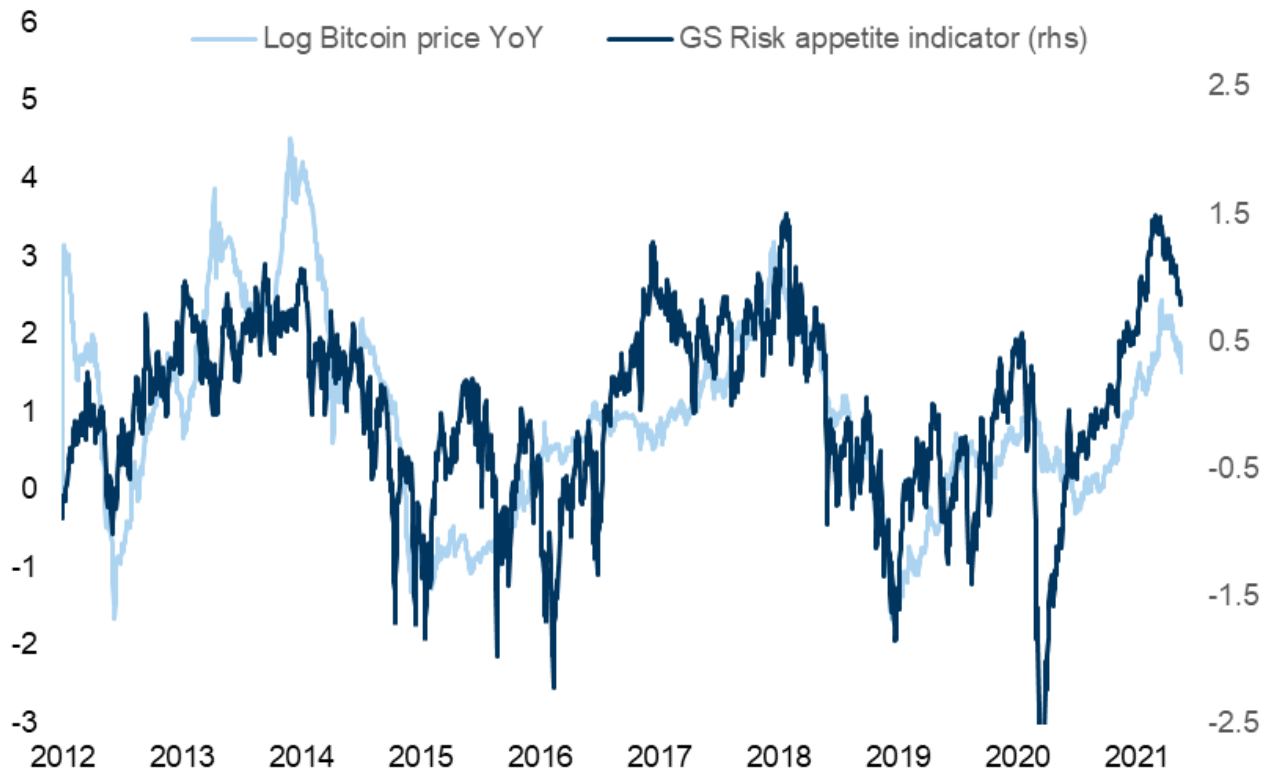
Co-Head of Global FX, Rates, and EM Strategy
zach.pandl@gs.com

Christian Mueller-Glissmann
Goldman Sachs International

Managing Director
+44 20 7774-1714

Senior Multi-Asset Strategist
christian.mueller-glissmann@gs.com

Cryptocurrencies are risk-on assets



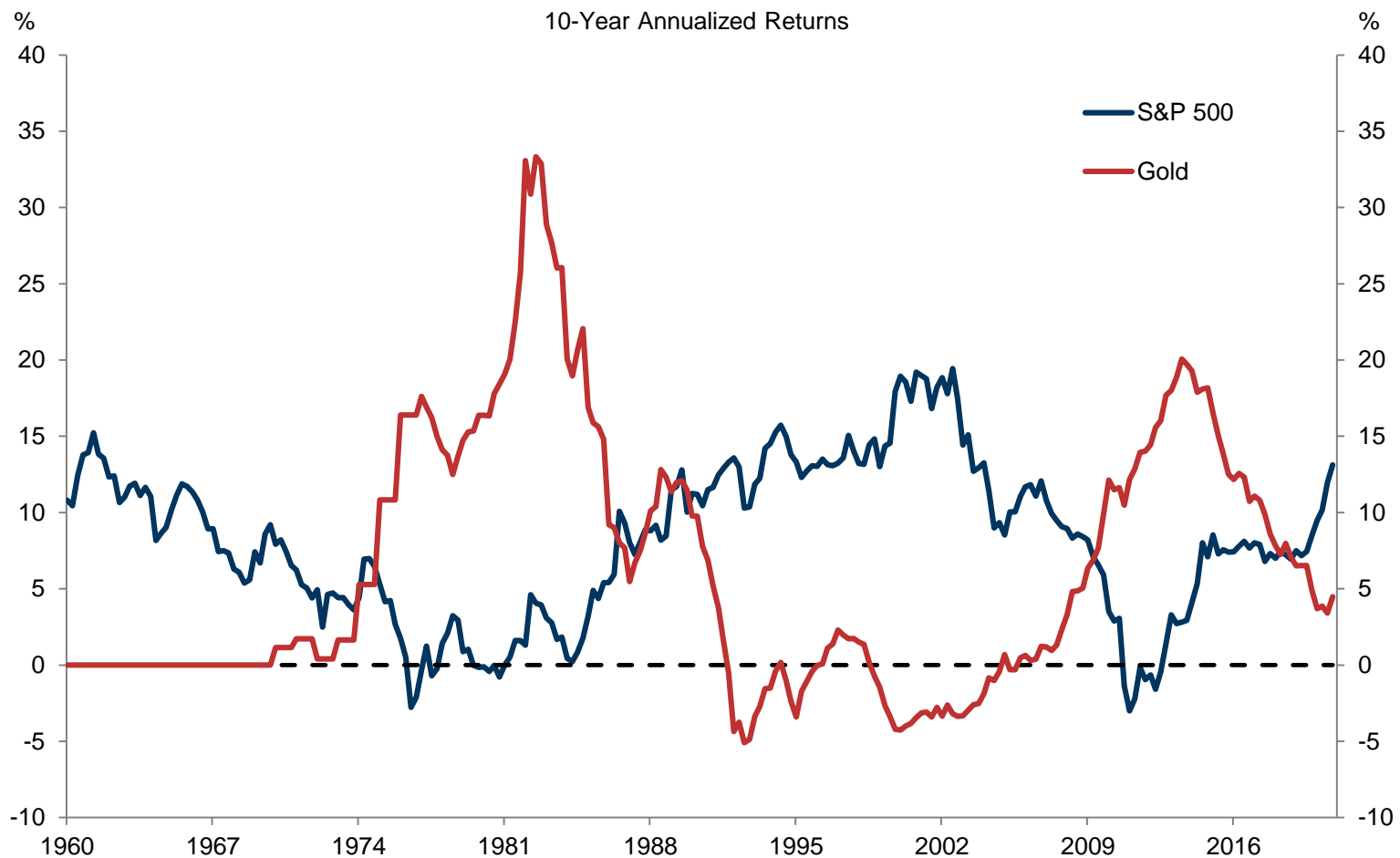
Source: Bloomberg, Goldman Sachs Global Investment Research.

Bitcoin and gold trade in opposite directions which suggests very little cannibalization of gold



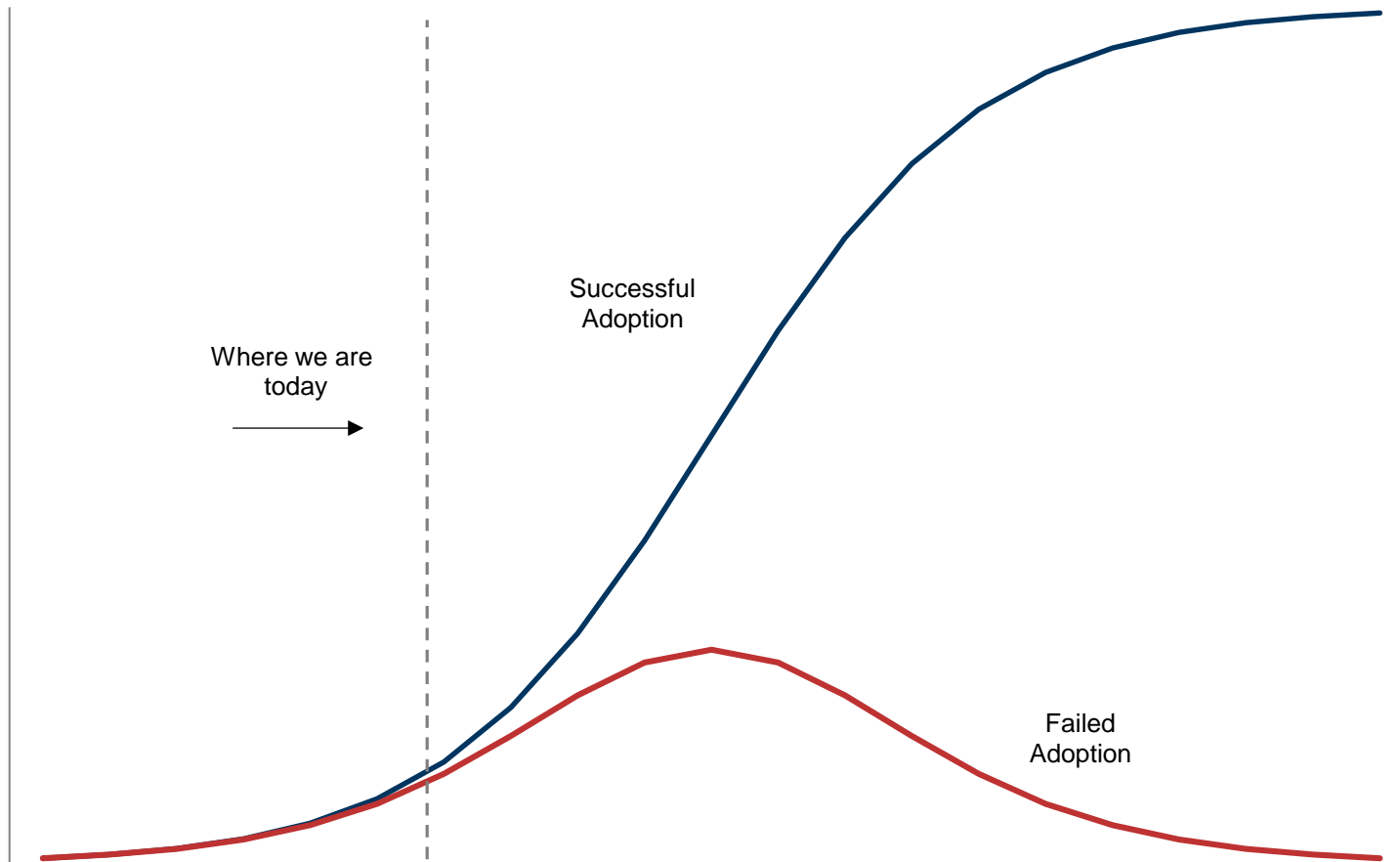
Source: Bloomberg, Goldman Sachs Global Investment Research.

Gold plays an important diversification role in portfolios



Source: Bloomberg, MeasuringWorth, Goldman Sachs Global Investment Research.

Today's bitcoin prices reflect some probability that cryptos could achieve greater adoption in the future

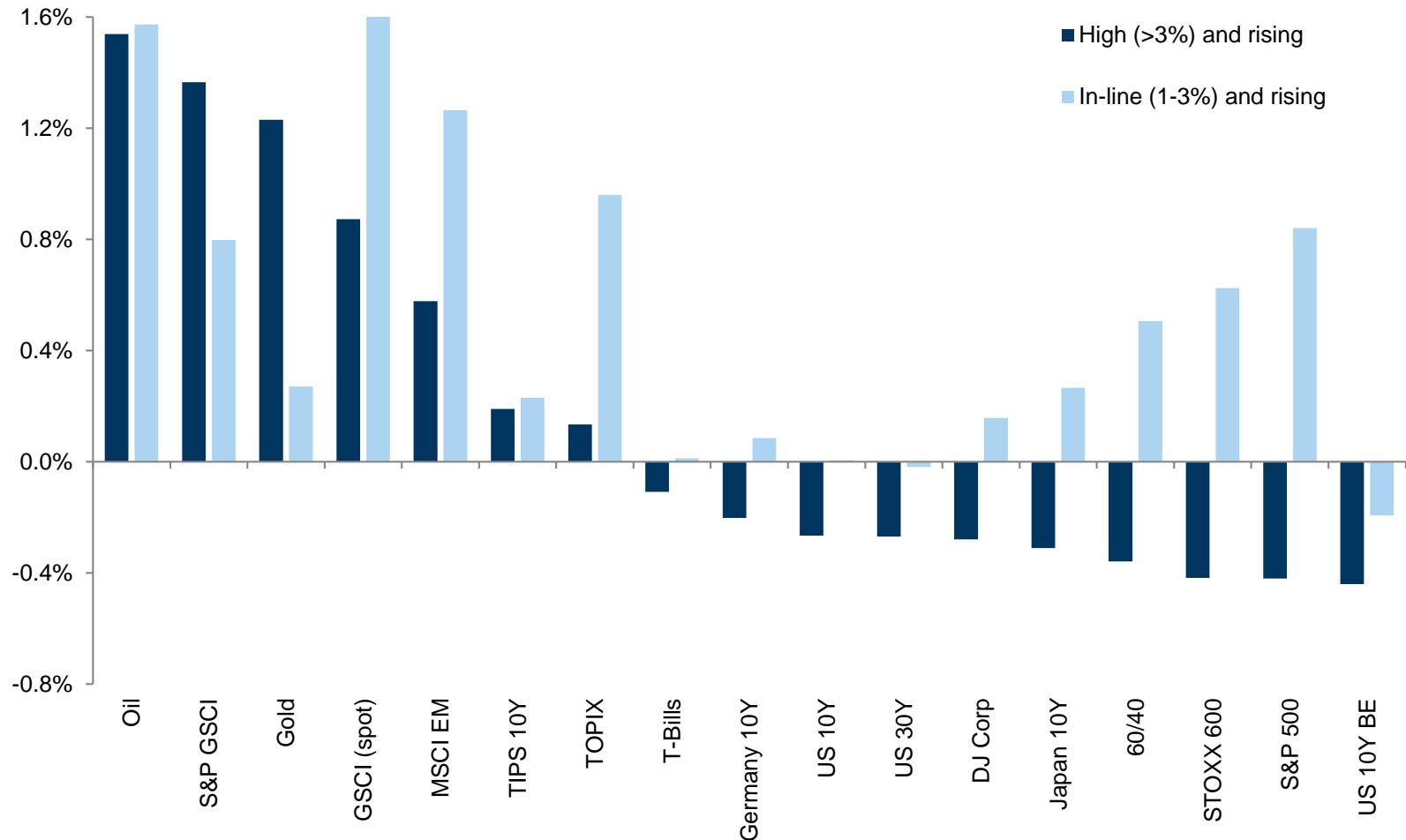


Source: Goldman Sachs Global Investment Research.

Real assets might offer an inflation hedge when balanced portfolios fail

Gold and commodities tends to do well when realised inflation is elevated and rising

Average monthly, real total returns (since 1950) based on US CPI regimes



Source: Bloomberg, Datastream, Haver Analytics, Goldman Sachs Global Investment Research.

Benefits from adding bitcoin to a 60/40 portfolio – difficult to assess based on short history

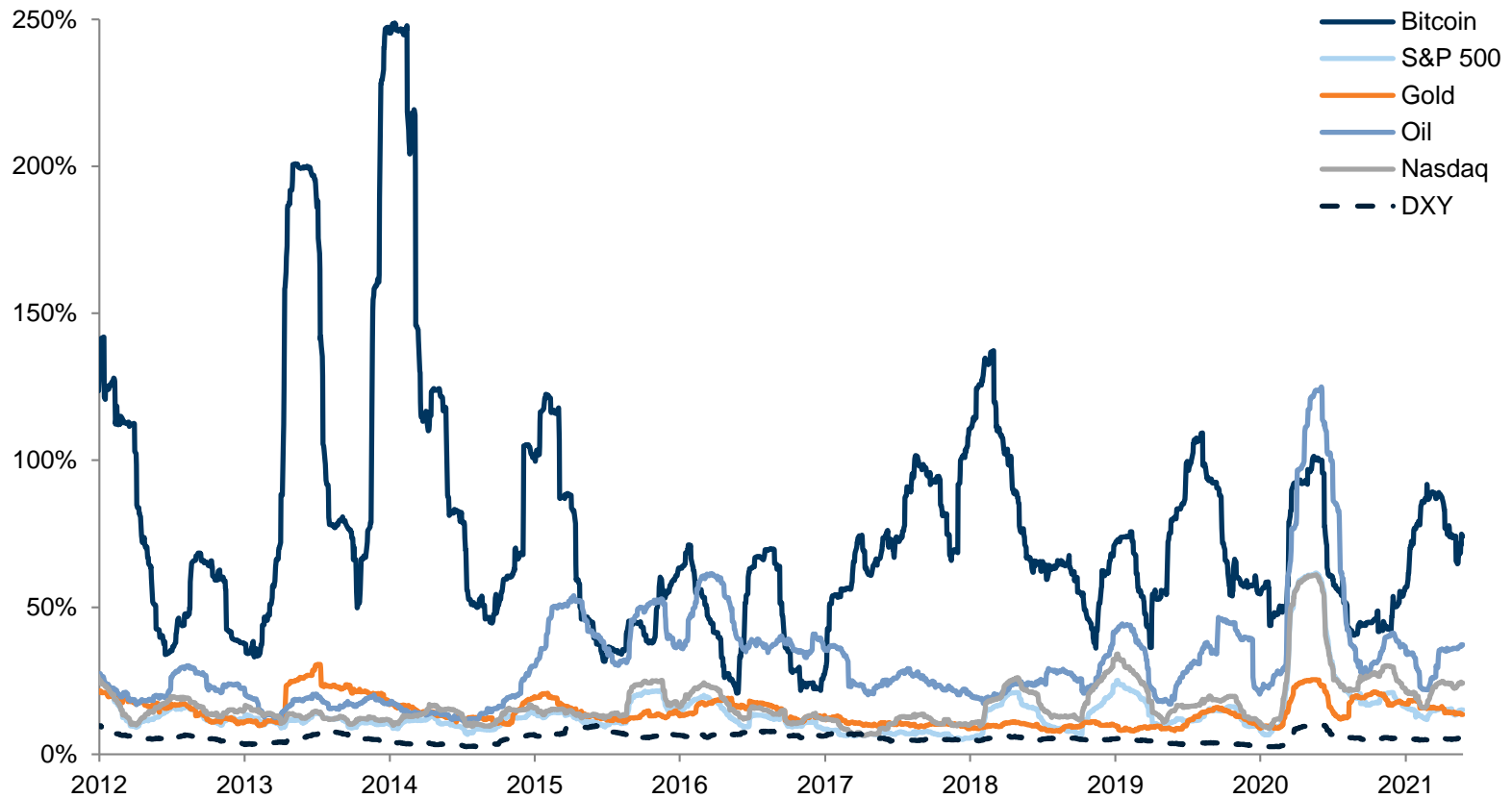
A small allocation to bitcoin has enhanced a 60/40 portfolio in recent years

	S&P 500	US 10yr bond	Bitcoin	60/40 portfolio	Allocation to Bitcoin			
					+2.5%	+5%	+10%	+20%
Since 2014								
Return p.a.	14%	4%	79%	10%	12%	14%	19%	27%
Volatility (daily)	18%	6%	73%	10%	10%	10%	12%	18%
Volatility (monthly)	15%	6%	87%	8%	9%	10%	13%	20%
Return/ volatility	0.77	0.60	1.08	1.03	1.24	1.39	1.53	1.53
5% CVaR	-10%	-3%	-35%	-5%	-6%	-6%	-7%	-10%
Max drawdown	-34%	-11%	-83%	-18%	-19%	-19%	-20%	-29%
2014-2019								
Return p.a.	12%	4%	46%	9%	11%	12%	15%	21%
Volatility (daily)	13%	6%	74%	7%	7%	8%	10%	16%
Volatility (monthly)	11%	6%	87%	6%	7%	8%	11%	19%
Return/ volatility	0.92	0.66	0.62	1.26	1.46	1.56	1.53	1.31
5% CVaR	-7%	-3%	-35%	-4%	-4%	-4%	-5%	-8%
Max drawdown	-19%	-11%	-83%	-11%	-11%	-12%	-18%	-29%

Source: Bloomberg, Goldman Sachs Global Investment Research.

High volatility can reduce portfolio construction benefits

Bitcoin: not quite a safe haven
 One-year rolling volatility, daily returns

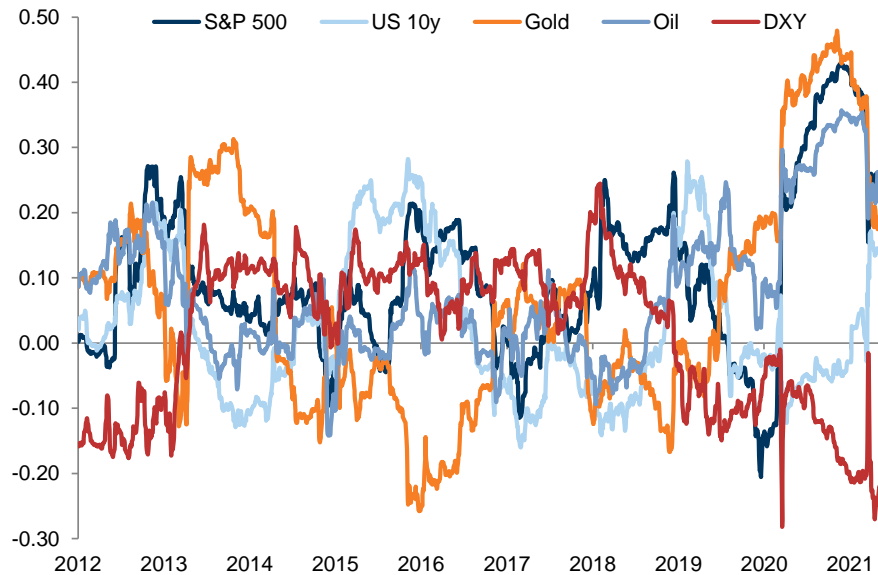


Source: Bloomberg, Goldman Sachs Global Investment Research.

High idiosyncratic risk for bitcoin can overshadow macro relationships

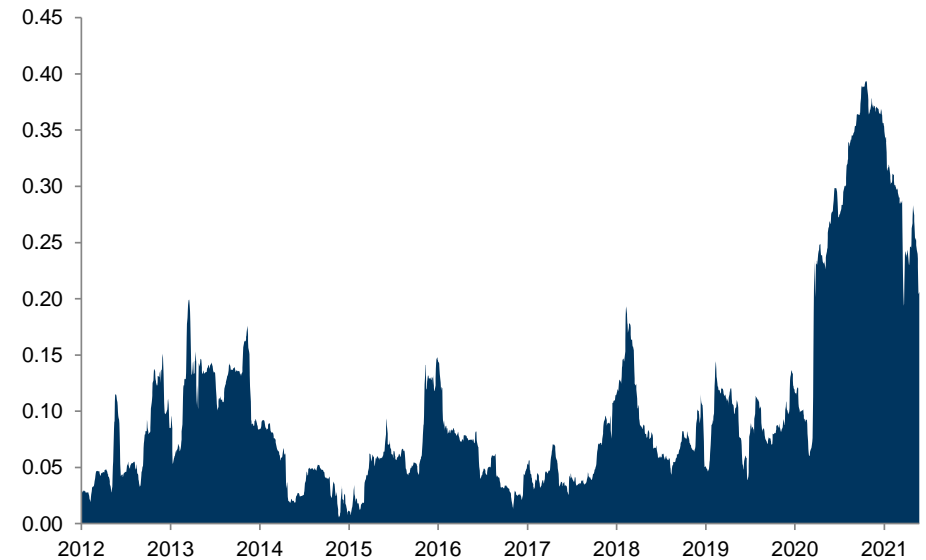
After high correlation with risky assets last year, recently bitcoin has acted as Dollar debasement hedge

12-month rolling correlation with bitcoin (weekly change)



Bitcoin has had high idiosyncratic risk since its inception

One-year rolling R-squared of a regression of bitcoin on S&P 500, US 10y bond, oil, gold, and DXY, weekly changes



Source: Bloomberg, Goldman Sachs Global Investment Research.

Non-currency crypto assets are starting to dominate use



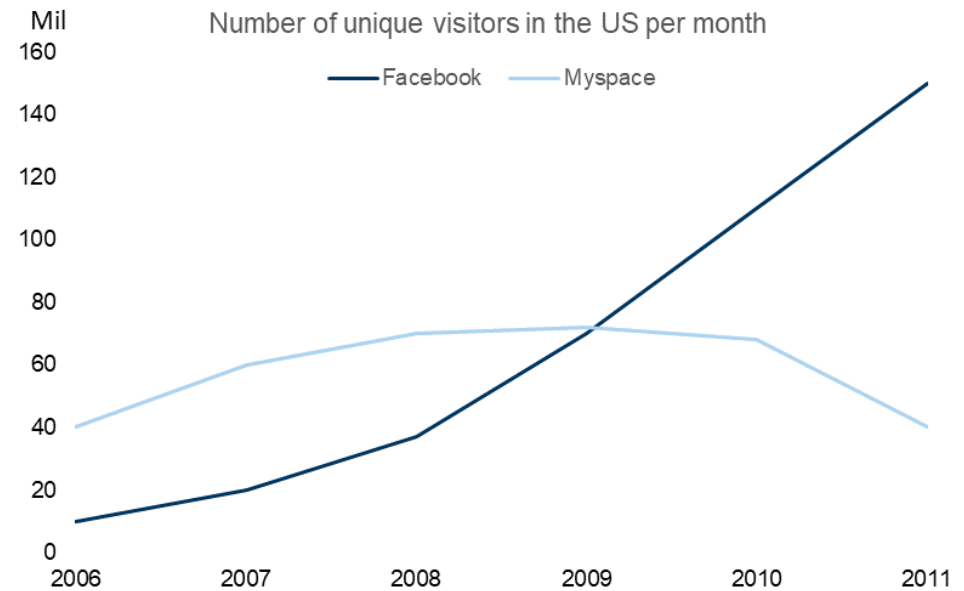
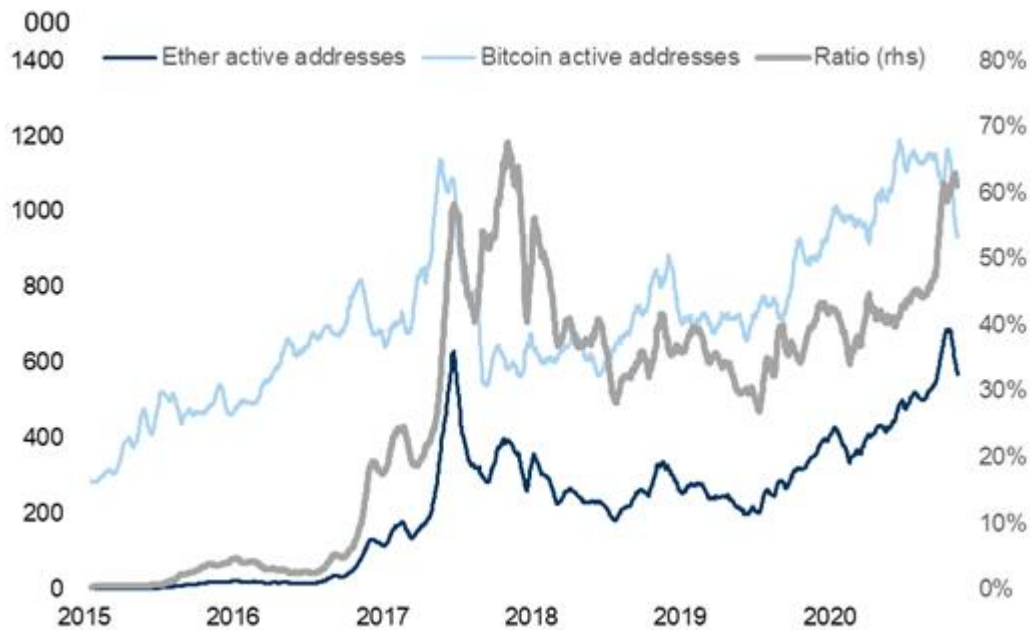
Source: Glassnode, Goldman Sachs Global Investment Research.

Real demand for gold is a powerful price stabilization tool



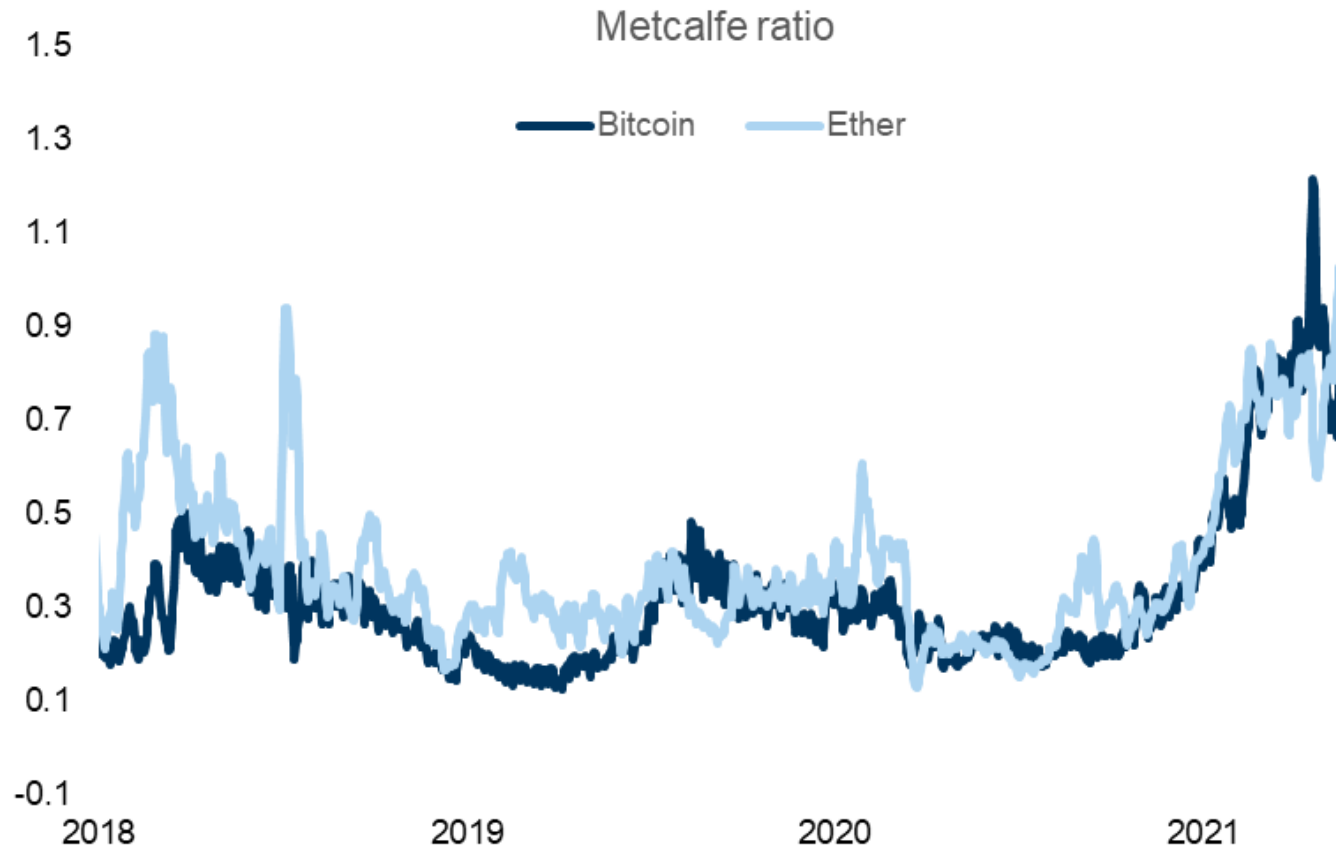
Source: World Gold Council, Goldman Sachs Global Investment Research.

As a new industry crypto user base numbers remain highly volatile, meaning that leadership can change quickly



Source: Comcore, Goldman Sachs Global Investment Research.

Both Bitcoin and Ether currently still look expensive given their current user base



The metcalfe ratio is calculated as market cap of the network divided by square number of active users.

Source: Glassnode, Goldman Sachs Global Investment Research.