

Market Perspective



A Christmas Carol: 2020

Issue 123 | December 2020

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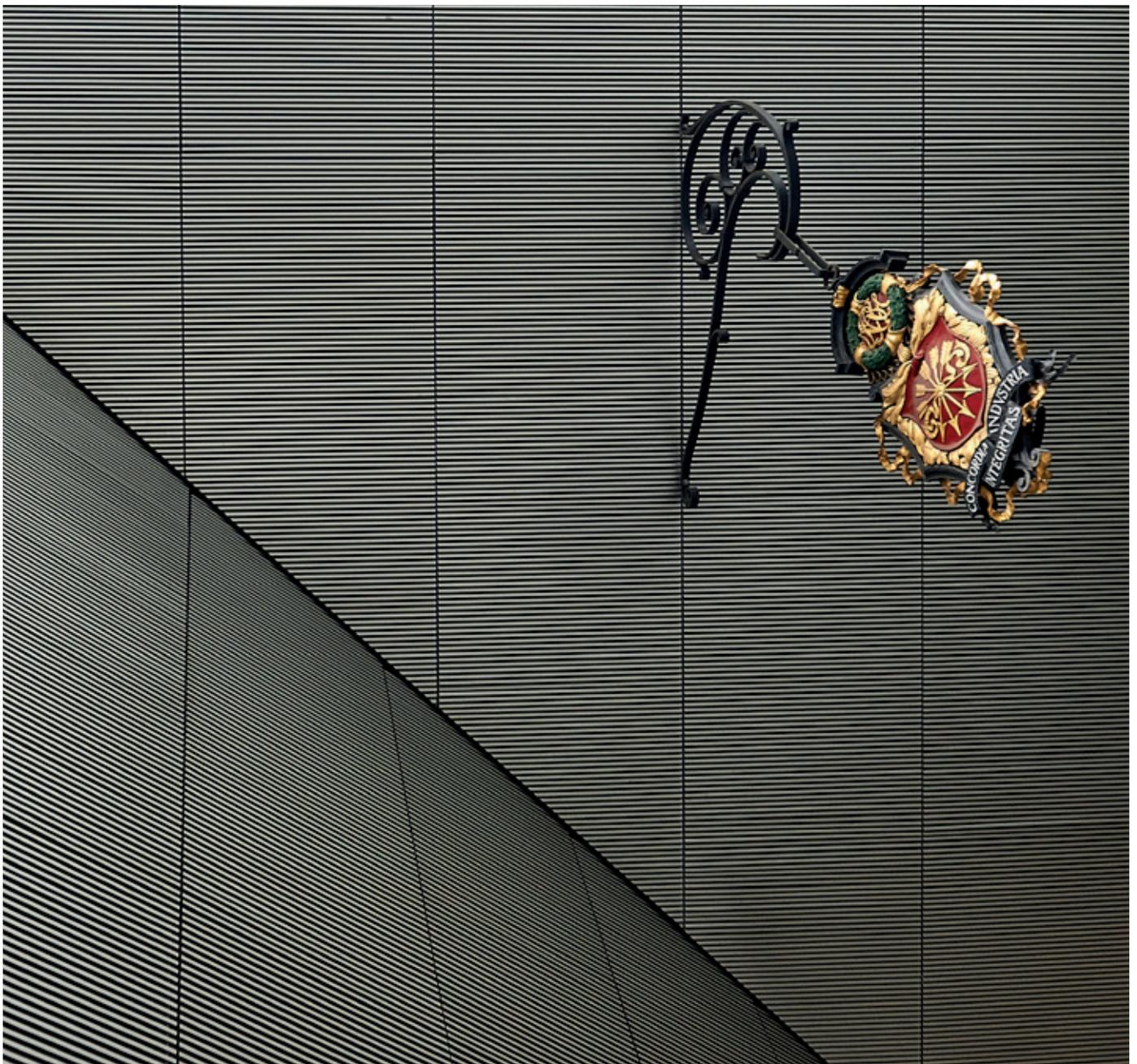
As confidence grows, the cyclical rotation is missing something

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The big currencies remain relatively stable and rangebound – for now





Foreword: A 2020 Christmas Carol

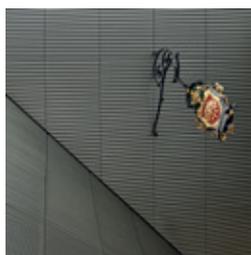
Here is the spirit of Christmas past, bringing us the gift of perspective. With a bad haircut and unusual trousers, he reminds us of a chronically bad-tempered era when the pursuit of guns and butter left Western government and money supply too big, and industrial relations dysfunctional. Floating (and fiat) currencies seemed scary, oil was scarce, and inflation – and negative real interest rates – dramatically hit savings. The economic data turned out even uglier than the fashion. Nothing has yet matched the seventies for sustained grimness.

The spirit of Christmas present reminds us that today's crisis is first and foremost a public health emergency: its economic consequences have been severe, but may not last as long as feared. Adaptation, and (with luck) distributable vaccines, suggest further economic recovery is still likely (perhaps even with some catch-up surge). Policy has helped hugely: even Scrooge is woke. There is a limit to what more it can do until we're collectively willing to mix again – but when we are, the problem may not be too little demand, but too much.

So there is something familiar about the spirit of Christmas future: six foot seven with glasses, cigar and a central banker's suit. He seems to be warning us not about a completely changed world in which business freezes over, but about the dangers of repeating past mistakes. Borrowing is tolerable, but printing might not be.

We wish readers a healthy Christmas, and a peaceful and prosperous New Year.

Kevin Gardiner and Victor Balfour
Global Investment Strategists



Cover:
A very public symbol of the heritage and values of the family business is the Rothschild shield positioned on the exterior wall of our New Court office in St Swithin's Lane, London. The five arrows combined with the family motto is the only advertisement for the business within.

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Values: all data as at 30th November 2020.
Sources of charts and tables: Rothschild & Co or Bloomberg unless otherwise stated.

Where next for stocks? Plausible returns

A year we might otherwise want to forget is drawing to a close, with global stock markets recently at all-time highs, showing double-digit gains in dollar and local terms. Talk of a second-wave economic slump looks premature; several plausible vaccines have been unveiled; the US election has made the world slightly less unpredictable; and interest rates surely can't go (much) lower. It is difficult to imagine what more can come along in terms of positive news. Meanwhile, valuations are on the expensive side. How much more headroom for stocks can there be?

Whatever happens near term – and who would be surprised if some setback were to materialise? – we think they still have enough long-term headroom to beat inflation, even allowing for that inflation being higher than today's (see below).

We have refreshed the way we compile plausible 10-year-ahead returns for cash, bonds and stocks. Our previous models had not changed in five years.

Our revised approach – still being finalised – is we hope (even) more simple, transparent and objective than before. We try to minimise the role of judgement where possible, though of course no approach to valuing securities (or anything else) can ever be purely objective.

In estimating plausible returns on cash and bonds we place more emphasis on the expectations currently embedded in markets – the yield curve, and the implied forward rates it contains – and less on our notions of long-term “fair value”. The market has also been too hawkish on rates in recent years, but by less than we have.

The result is lower projected returns on deposits, and slightly higher returns on bonds (as the probability of a big sell-off recedes further into the future). That said, with the exception of speculative grade credit, most bonds still seem unlikely to match prospective inflation (for which we continue to use IMF forecasts as an independent, objective input).

We still think some normalisation in stock valuations is likely, but towards a moving average, rather than a point fixed at the start of the 10-year window. This may capture better the way in which expectations adapt – the longer a particular valuation is sustained, the more difficult it is to say it is not normal (figure 1).

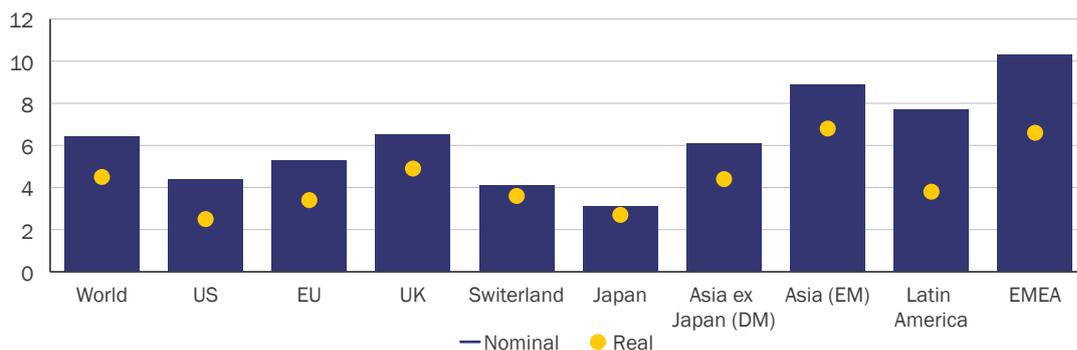
By also focusing less on (currently temporarily depressed) trailing earnings as a starting point, the trajectory for trend earnings is raised. Stocks' valuations fall back more quickly, to “normal” levels of valuation that are a little higher than they were. The result is to raise modelled global returns by 1–2 percentage points per annum. The previous approach also showed stocks beating likely inflation, but by less.

We are aware of the risk of being swept up in the current market mood. Equally, we have seen many prematurely gloomy pundits taken hostage by overly rigid and ultimately irrelevant valuation metrics these last few decades. If stocks do have a bit more absolute headroom than we'd thought, it is still likely smaller than it would have appeared at any time in recent years had we been using the revised approach throughout.

8 December – Kevin Gardiner, Victor Balfour

Figure 1: Global stocks can beat inflation long term

Plausible 10-year returns on stocks (% pa)



Sources: Rothschild & Co.

Note: These are not forecasts, but our modelled returns reflecting assumptions about dividends, growth and normalised valuations. Past performance should not be taken as a guide to future performance.

Rates or recovery?

Within the global stock market, some sectors and regions have more headroom than others, and a rotation towards them, and away from previous winners, may have begun. Specifically, as confidence in continued/resumed economic recovery grows, investors' focus seems to be gradually shifting from low long-term interest rates and long-term structural growth, and towards more cyclical sectors and regions. Echoing this, the US yield curve has been steepening as bond yields have risen relative to short-term interest rates (figure 1).

Figure 1: US yield curve

10-year Treasury yields – Fed Funds rate, %



Sources: Bloomberg, Rothschild & Co.
Past performance should not be taken as a guide to future performance.

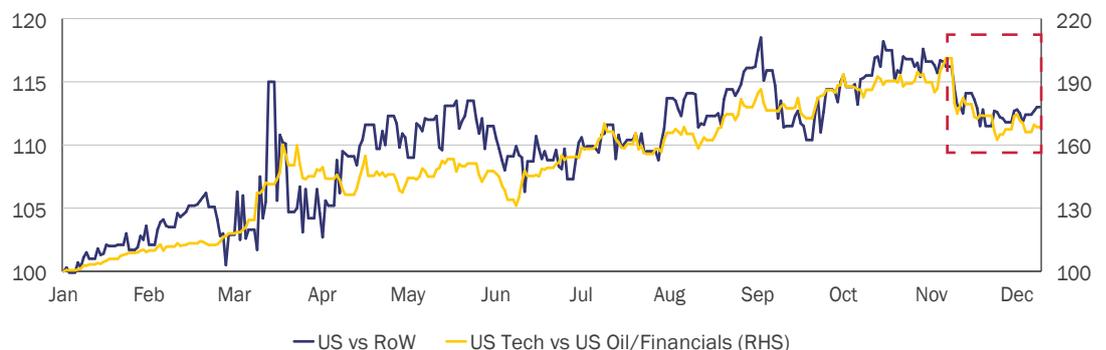
We have talked about this sort of shift often, and have been tilting our top-down advice partially in this direction. That said, we are not yet confident enough in the rotation to back all cyclical groups, or to bet strongly against those previous winners. In fixed income markets we wonder how much further the US curve can steepen while Federal Reserve (Fed) buying continues.

If the US stock market and the technology, communications and consumer discretionary sectors (for the latter, think large online retailers and electric vehicle producers), are to cede leadership on a lasting basis, we may need to see that confidence in recovery broaden further (figure 2).

And as yet it is striking still that *nobody* seems willing publicly to countenance the possibility of a catch-up surge in growth – a recovery in which GDP doesn't simply return to its previous level and glide path, but positively overshoots for a while.

Figure 2: Changing the guard?

Stock market leaders start to lag



Sources: Rothschild & Co.
Note: Technology sector includes Communication Services. Past performance should not be taken as a guide to future performance.

Such a trajectory might reflect a revival of private demand (once lockdowns are loosened, of course) alongside continuing policy stimulus – if, say, postponed spending plans are revived as part of a collective sigh of relief.

Instead, the debate, shaped by glass-half-empty groupthink, continues to talk of regaining previous GDP levels, if we're lucky, in 2022. "Upside scenarios", like that presented by the UK's Office for Budgetary Responsibility, are only slightly less grim than downbeat central views.

9 December – Kevin Gardiner, Victor Balfour

Is the dollar's smile wearing thin?

The news factories give currency markets more attention than they deserve. Exchange rates do not usually drive economic trends but are instead mostly driven by them. Their portfolio impact can be muted by “law of one price” effects (if the franc ever falls, for example, the local value of the overseas business capitalised in the Swiss Market Index rises). Most importantly, their short-term movements are unpredictable: it is extremely difficult systematically to add value by trading currencies (despite the determination with which so many “macro” funds try to do just that).

In recent years, currencies have in fact been relatively stable. Few big cross rates have broken outside long-established trading ranges – perhaps because inflation and interest rates have largely converged around very small numbers, and because most valuations are unremarkable (figure 1). Our currency convictions have been even lower than usual, and currently we have no active tactical calls.

Is this about to change – do we need a view or two?

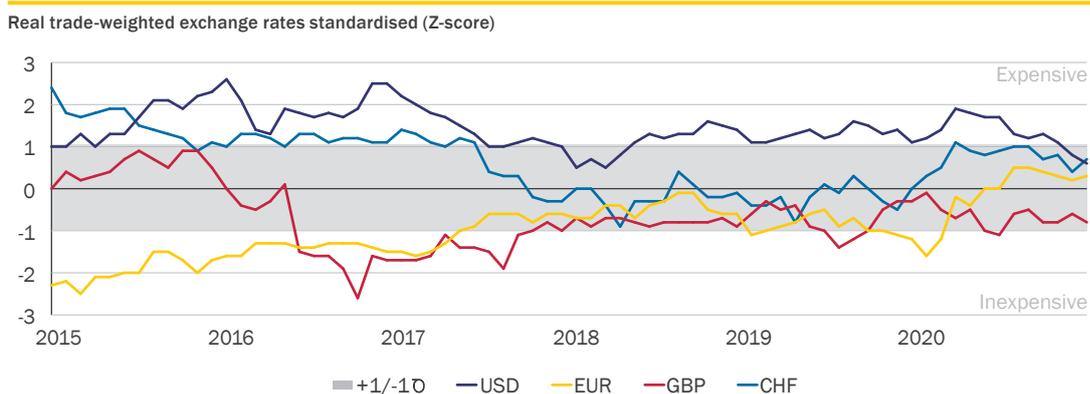
The dollar has been outperforming the other major currencies for most of the last decade, and it is relatively expensive (though as noted, not egregiously so – figure 1 again). It can be special: it is both a safe haven, but can also benefit from cyclical growth – if the US is in the van.

The result is the so-called “dollar smile”. The dollar’s attraction is high when the US economy is particularly weak, because that weakness can be a global risk to shelter from, but also when the US is especially strong, because then the Fed is likely to be leading interest rates higher. It is lowest somewhere in the middle, when global risk appetite is stable and US growth seems mediocre.

To be clear, the dollar’s status as the world’s de facto “reserve currency” is not in doubt: it cannot be replaced by the renminbi until China’s capital account controls and structural current account surplus disappear. But that status is not enough for the dollar always to be equally attractive, and the tentative rotation in investor focus described above – and in earlier notes – has unsurprisingly extended to currencies.

The dollar’s safe-haven qualities have become less attractive as global risk appetite has improved; as the euro’s credibility has risen with the EU’s “federalist” momentum; and as European economic recovery has more room to surprise positively. It has not yet however broken decisively with recent trends (figure 1), and we are not yet ready to call for it to do so.

Figure 1: Currency valuations are not outlandish



Sources: Bloomberg, Rothschild & Co.
Past performance should not be taken as a guide to future performance.

As we write, the UK and its EU partners are still seeking a last-minute Brexit deal. Whatever the outcome, the pound looks inexpensive to us, and we think the UK’s long-term economic outlook is brighter than many fear (even without a deal, though as ever we hope not to find out). This argues for some all-round sterling appreciation, eventually: near-term conviction has to remain low, as in the circumstances it could easily dip again before rallying.

9 December – Kevin Gardiner, Victor Balfour

Another bitcoin bull

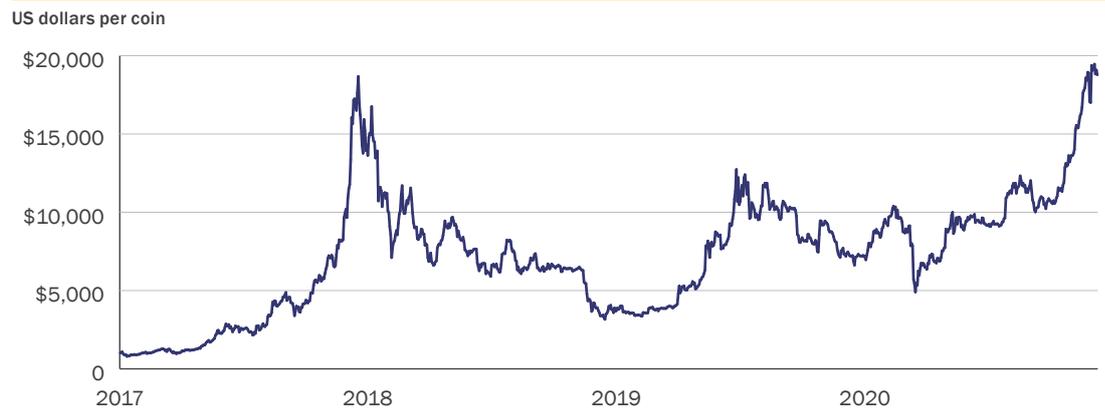
Bitcoin has surged again and has been trading close to its all-time (intraday) high of just over \$19,500 in December 2017 (figure 1). From March lows, the currency has almost tripled. Cryptocurrencies across the board have also rallied. Ethereum, the second most popular cryptocurrency has risen even faster. Ripple or “XRP” – based on a slightly different technology from the blockchain that underpins bitcoin – has also seen large increases.

Despite high levels of volatility, cryptocurrencies clearly continue to gain traction, particularly among retail investors. For more sophisticated investors, there is now a derivatives market in bitcoin. As at writing, their combined market cap stands at roughly \$600 billion; of this, bitcoin makes up three-fifths.

Relative to traditional asset markets, however, the size of the crypto market remains tiny – for reference, as of August 2020 the overall size of the global bond market in US dollar terms was approximately \$128 trillion of notional outstanding; Apple’s market cap is around \$2 trillion. For the time being, cryptocurrency remains a relatively illiquid asset.

Despite there being a finite amount of crypto coins available, there is no limit to the number of new currencies that can be created. Many jurisdictions, including the US and UK, have begun clamping down on initial coin offerings (ICOs), though activity has been continuing offshore. This, alongside new ways of coming to market such as initial exchange offering (IEOs) and token offerings (INX) make it harder to track the number of new competing currencies and highlights the market’s lack of transparency and regulation. Bitcoin’s very anonymity makes it something of a shady asset, with some dubious personalities at its fringes.

Figure 1: Bitcoin is trading close to its all-time high



Sources: Bloomberg, Rothschild & Co.
Past performance should not be taken as a guide to future performance.

Some see bitcoin as an alternative currency, a hedge against inflated government balance sheets and monetary debasement, much in the way that gold can be viewed. In August, both gold and bitcoin rose sharply – with the correlation between the two prices reaching an all-time high of 70%. However, bitcoin’s latest surge (indicative of its inherent volatility), shows it behaving far more like a risk asset than a hedge.

Perhaps, then, the most convincing argument for bitcoin’s recent run up is PayPal’s venture into the crypto space. In October, PayPal announced that from next year, US customers would be able to buy, hold and sell bitcoin within its app. This is central to blockchain’s supposed appeal – its ability to be used by mainstream payment systems. However, this aside, the technology hasn’t been getting the plaudits it used to – it’s seen as clunky, a complicated answer in search of a question perhaps, and its promise has yet to be reflected more widely in mainstream payments.

The cryptocurrency world still faces existential questions. What is it ultimately for? How can alternative stores of value be in potentially infinite supply? Given bitcoin’s inherent volatility – it behaves far more like a risk asset than a hedge – and its deliberate obscurity compared to (say) gold and conventional money, we still think it has no place in managed private client portfolios. We are not gold bugs, but when pushed for an alternative to conventional cash we’d prefer the shiny metal to bitcoin.

24 November – Charlie Hines

Inflation: revision notes

Inflation has been subdued now for a quarter of a century, yet we still cite the risk of its resurgence as one of our biggest macro concerns. Do we need to revise our worldview?

Our expectations have been adapting downwards in recent years, but while the most likely path for inflation now seems lower than it was, we think it still inclines upwards from today's levels. The range within which it might move seems wider, and the risks associated with that range seem rather one-sided. We are sceptical that inflation can be fine-tuned back up to target, and we think central banks are mistaken in their attempts to do so.

In these revision notes, we ask what sort of inflation might realistically lie ahead in the next few years; what it would do to portfolios; and how best investors might avoid – or adapt – to it.

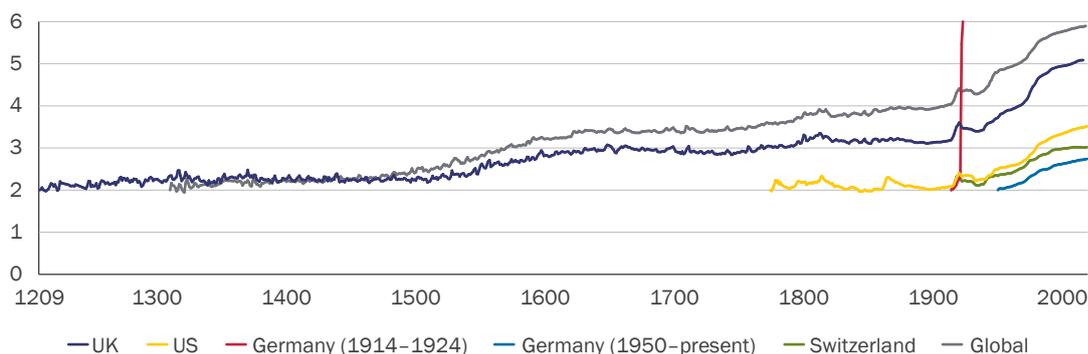
What exactly is inflation?

Sometimes it is suggested that financial asset prices are part of inflation, but we disagree. Inflation means an **ongoing** rise in the **prices of the goods and services consumed by representative households**. In practice, the price rises may percolate beyond consumer purchases, but “the cost of living” is the key idea.

Figure 1 suggests that significant inflation is a relatively modern (20th century) phenomenon. In that troubled but ultimately prosperous century, some countries saw more inflation than others. However, we can't show exactly how bad things got because the damage wrought by Weimar Germany's hyperinflation in 1921–23 meant the loss of any data that might have tried to track it.

Figure 1: Substantial inflation was largely a 20th-century affair

Consumer prices (index levels, logged)



Sources: Bank of England, *Measuring Worth*, Swiss Federal Statistics Office, Federal Reserve Bank of St Louis, Rothschild & Co. Past performance should not be taken as a guide to future performance.

Why does it happen?

In a market-led economy, prices usually rise if demand exceeds supply, though they can take on a momentum of their own, in which they are driven by self-fulfilling expectations.

The imbalance might reflect rising demand, falling supply, or a mixture of the two. In practice, disentangling them is not easy.

Perhaps the most famous statement about inflation is Milton Friedman's “Inflation is always and everywhere a monetary phenomenon” (“The Counter-Revolution in Monetary Theory”, 1970). By definition, a change in the price level affects money's value, but he believed inflation ultimately reflects excessive growth in the quantity of money.

Intuitively, it makes sense. If there is more money around, and nothing else has changed, surely it must be worth less?

However, a rigidly monetarist analysis does not work as neatly as its proponents suggest. That said, our current concerns focus mostly on the possibility of demand outpacing supply as today's supportive policies stay too loose for too long. Economies are not at full capacity, but potential spending power is huge, and the collective sigh of relief that might loom as we get back to work could be potent.

Others see inflation risk currently in populist politics and some revival in labour's bargaining power. Resource scarcity, and higher carbon prices, is another potential source of cost-push pressure.

But for us, overly-generous policy is the likely worry – particularly monetary policy. Fiscal policy can be inflationary too, but its impact feels less potentially existential.

Why we worry about it

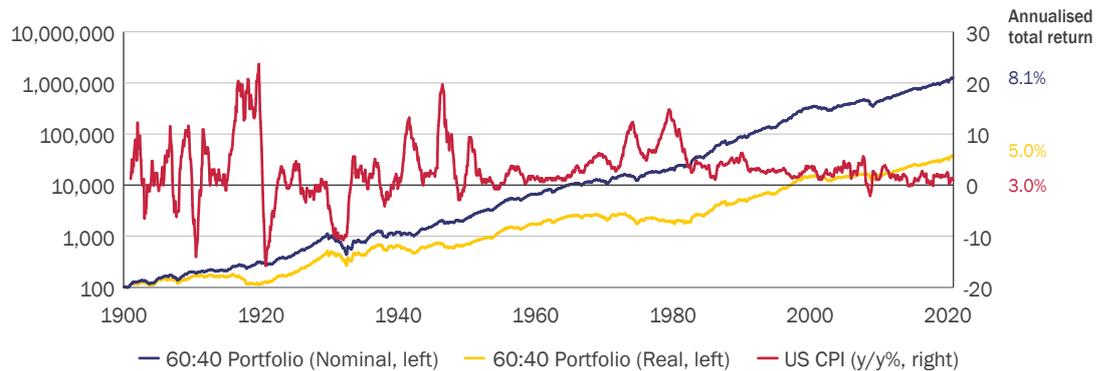
If wages and other consumer incomes always rose neatly alongside prices, consumers' "real" living standards would be stable.

In practice they don't, and consumers on fixed nominal incomes are worse off. The more vulnerable the group, the more fixed their incomes. Inflation is no Robin Hood: it steals from the poor.

When inflation has been high, investors have also done badly as financial assets have failed to keep up – particularly bonds and cash, but also stocks (figure 2).

Figure 2: Inflation and portfolios

US 60/40 equity/bond portfolio (index, logged) and CPI inflation (%)



Sources: Shiller, Bloomberg, Rothschild & Co.
Past performance should not be taken as a guide to future performance.

At the extreme, when inflation gets out of control we get periods of hyperinflation – prices accelerate exponentially. These are socially traumatic. Thankfully there have been no recent instances in developed economies, though Germany's experience in 1921–23 continues to cast a long shadow.

When purchasing power falls that fast, money loses almost all its value, loans effectively evaporate, and contracts and accounts lose their relevance. A lot of energy and ingenuity is expended in simply trying to cope, rushing to change price tickets, and to spend wages and rearrange savings before they become worthless.

Inflation can thus steal from savers as well as spenders, rich as well as poor. The redistribution of incomes it brings is arbitrary, and explosive levels of inflation can profoundly damage the fabric of the economy, leaving us collectively worse off. That said, governments generally are usually clear winners as the real value of their outstanding debt falls.

The tipping point from "high" to "hyper" inflation is not easy to spot. This is why we are nervous of current talk of nudging inflation rates back up to their targets. Collective knowledge of exactly how inflation proceeds is just not good enough to be confident in our ability to do that.

If today's sub-target inflation was responsible for poor levels of living standards and unemployment, we might understand the wish to push them back up. But it is not. Employment is at risk again today because we decided to close part of the economy to tackle the virus.

Some economists worry about low inflation because they think it might turn into outright deflation. Despite that being frequently predicted, it hasn't yet. Japan's deflation was within the bounds of measurement error. There have been no hyperdeflations.

Cause or effect?

"When sorrows come, they come not single spies, but in battalions" – Hamlet

Inflation kept bad company in the seventies and early eighties. Growth was sluggish, unemployment drifted higher, strikes were widespread, profitability collapsed – and inflation surged (which, alongside the poor growth, gave rise to the notion of "stagflation").

How do we know portfolios did badly because of the inflation, and not because of the other things? We don't. Inflation may have been more effect than cause. The things that mattered most were the things driving the unbalanced demand and supply.

For example, surging oil prices and dysfunctional industrial relations meant that for much of the time, inflation was “cost-push”, leading to squeezed profit margins. If it had been “demand pull” inflation, it might have led to bigger margins, better profitability, and stronger real stock returns.

When inflation eventually began to fall, some costs led the way, and margins were able to widen again. That they did so sustainably also told us that companies’ market position was strengthening – even as inflation was slowing.

Inflation and portfolios today

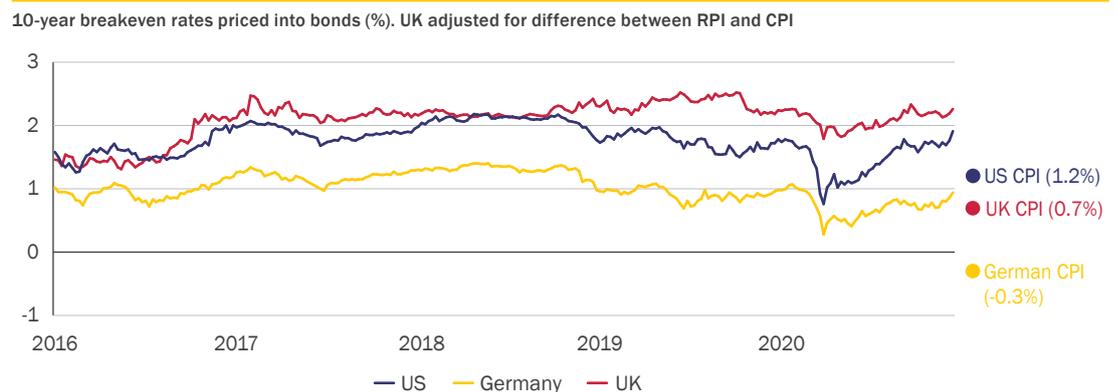
The implications for portfolios today will depend on the context. What sort of inflation do we expect: large or small, cost-push or demand-pull? What sort of policy response will there be? What is currently priced in to assets? This is already a more nuanced outlook than we often acknowledge.

A key question for investors concerns monetary policy. Will interest rates on “cash” (savings accounts and term deposits) compensate for the erosion of capital? Initially at least, we might think not. But if policymakers eventually try to restrain the inflation, they may.

Bonds are obviously exposed. The risk is greatest, however, when inflation and interest rate expectations are changing. By the time the inflation arrives, bond prices may have fallen far enough for their fixed coupons (where they still exist) to look attractive. If inflation subsequently falls short, or expected real interest rates fall, the price of the bond might rebound.

If conventional bonds are sometimes less exposed than we might think, inflation-linked bonds can be a little more exposed, again because of shifting expectations. If inflation expectations are falling back, or expected real interest rates are rising, they may lag coincident inflation. They are also more volatile generally.

Figure 3: Expected inflation



Sources: Bloomberg, Rothschild & Co.
Past performance should not be taken as a guide to future performance.

The gap between conventional and indexed yields is a measure of investors’ expected inflation. Current implied rates suggest a modest upward drift in inflation rates from today (figure 3). Most conventional bond yields are below current inflation, and even further below these implied future inflation rates.

To find such explicitly negative-yielding assets attractive requires a pretty grim view of the world, or an investment strategy geared to something other than maintaining real wealth.

Corporate bonds probably carry less inflation risk than government bonds because the yields on corporate bonds are higher, offering a bigger cushion, provided of course that the extra yields – the “spread” – are not eaten up by defaults and losses.

Government creditworthiness might deteriorate too. In practice, however, as big borrowers, governments stand to gain more than most from an unexpected surge in inflation, as noted.

Differentiated and branded products account for a growing share of economies, and give their suppliers some pricing power. This gives stocks a degree of inflation-proofing – up to a point. If inflation threatens higher interest rates or taxes, or more widespread disruption, it can become more damaging to business. The same can be true even of modest inflation, if it has its roots in cost pressures.

There is no guarantee, then, that stocks will match or beat inflation: again, it all depends. However, business assets are loosely linked to the real economy, and to economic growth. This effectively gives stocks an extra moving part that raises their chances of delivering inflation-beating returns.

How are stocks likely to fare in the sort of gradual inflation upturn we have in mind? Trend inflation could more than double and still stay in the low single digits, and we think it is more likely to be led by demand than costs. This ought not to be too traumatic for portfolios. That said, stocks' higher volatility means it would not be a surprise if they underperform other assets occasionally.

Stocks are currently more expensive than usual, and some normalisation of valuations is likely. But as noted above, our modelled future returns suggest they can still exceed currently projected inflation rates.

Gold and **real estate** are two very tangible assets that often appeal to inflation-minded investors.

However, gold's volatility means that there can be prolonged periods when it lags behind consumer prices. That said, we would strongly prefer it as a store of real value to another quasi-currency that is currently popular, bitcoin. Gold is decorative, tangible and limited in supply. Cryptocurrencies aren't.

Real estate, like gold, is tangible and attractive in its own right. Rental income is linked, like corporate dividends, to the fortunes of the wider economy. Unfortunately it is illiquid, and few investors can afford suitably diversified direct holdings.

4-9 December — Kevin Gardiner, Victor Balfour.

This is an edited version of a longer essay.

Figure 4: Inflation and portfolios

Selected assets' inflation-beating qualities

	Inflation link	Inflation-beating credentials?
Bank deposits	Variable interest rates	Depends on monetary policy and market timing
Conventional government bonds	Higher coupons – but only <i>after</i> interest rates have risen and outstanding bond prices fallen	Long-dated bonds are most exposed – but opportunities can arise
Inflation-linked bonds	Explicit link, but evolving expectations and real interest rates impart volatility	Near-complete if bought at issue and held to maturity, but a potentially volatile ride in between
Corporate bonds	As with conventional bonds, but with added volatility at times of corporate stress	Higher yields and shorter maturities offer a bigger cushion than government bonds
Stocks	Loose long-term link to inflation and real growth, but significant volatility at times of corporate stress (which can include rising interest rates)	Least vulnerable on a long-term view, but the most volatile asset in the short term
Gold	Very loose, long-term link with considerable volatility. May do best job when policy makers do worst	Correlations are unstable; significant short-term volatility
Real estate	Very loose, long-term link with occasional failures of liquidity	Long-term prospects and liquidity vary hugely by region and sector

Sources: Rothschild & Co.

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Economy and markets: background

Growth: major economies

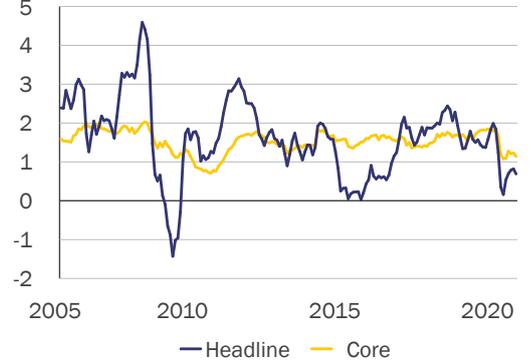
Business optimism: standard deviations from trend



Source: Bloomberg, Rothschild & Co
Composite of the forward-looking components of manufacturing surveys from China, Germany, Japan, UK and US loosely weighted by GDP

G7 inflation

%, year-on-year



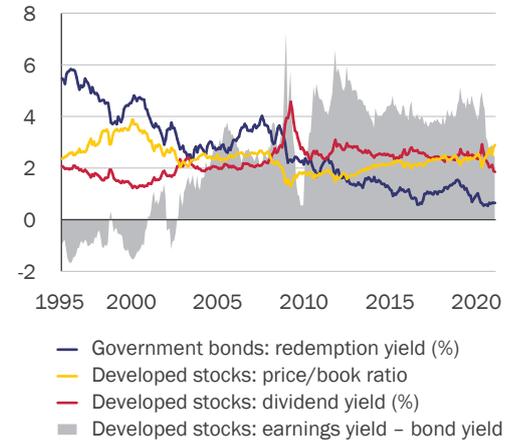
Source: OECD, Bloomberg, Rothschild & Co

Stocks/bonds – relative return index (%)



Source: MSCI, Bank of America Merrill Lynch, Bloomberg, Rothschild & Co

Stocks/bonds – relative valuations



Source: MSCI, Bank of America Merrill Lynch, Bloomberg, Rothschild & Co

Selected bonds

Current yields, recent local currency returns

	Yield (%)	1yr (%)	3yr (%)
10-yr US Treasury	0.9	9.1	19.9
10-yr UK Gilt	0.3	4.4	12.4
10-yr German bund	-0.6	2.0	7.9
10-yr Swiss Govt. bond	-0.5	-0.3	3.0
10-yr Japanese Govt. bond	0.0	0.1	1.1
Global credit: investment grade (USD)	0.9	5.2	15.8
Global credit: high yield (USD)	4.6	6.6	15.7
Emerging (USD)	3.6	6.7	16.5

Source: Bloomberg, Rothschild & Co

Selected stock markets

Dividend yields, recent local currency returns (MSCI indices)

	Yield (%)	1yr (%)	3yr (%)
World: all countries	1.9	15.0	31.8
Developed	1.9	14.1	32.3
Emerging	2.0	21.5	26.9
US	1.5	21.2	47.5
Eurozone	2.1	-0.2	5.5
UK	3.3	-8.0	-2.5
Switzerland	3.0	0.9	19.2
Japan	2.1	7.0	8.2

Source: Bloomberg, Rothschild & Co

Selected exchange rates

Trade-weighted indices, nominal (2000 = 100)

	Level	1yr (%)	3yr (%)
US Dollar (USD)	106	-3.8	0.7
Euro (EUR)	131	6.3	5.6
Yen (JPY)	94	-0.5	8.6
Pound Sterling (GBP)	78	-3.5	0.5
Swiss Franc (CHF)	169	5.4	11.5
Chinese Yuan (CNY)	134	4.1	1.4

Source: Bloomberg, Rothschild & Co

Commodities and volatility

	Level	1yr (%)	3yr (%)
CRB spot index (1994 = 100)	159	-12.3	-14.1
Brent crude oil (\$/b)	48.9	-24.0	-22.9
Gold (\$/oz.)	1,842	26.2	47.5
Industrial metals (1991 = 100)	287	21.0	13.6
Implied stock volatility: VIX (%)	22.3	40.4	132.5
Implied bond volatility: MOVE (bps)	48.5	-28.0	2.1

Source: Thomson Reuters, Bloomberg, Rothschild & Co

Data correct as of
9th December 2020.

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be taken as a guide to future
performance.

Notes

At Rothschild & Co Wealth Management we offer an objective long-term perspective on investing, structuring and safeguarding assets, to preserve and grow our clients' wealth.

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