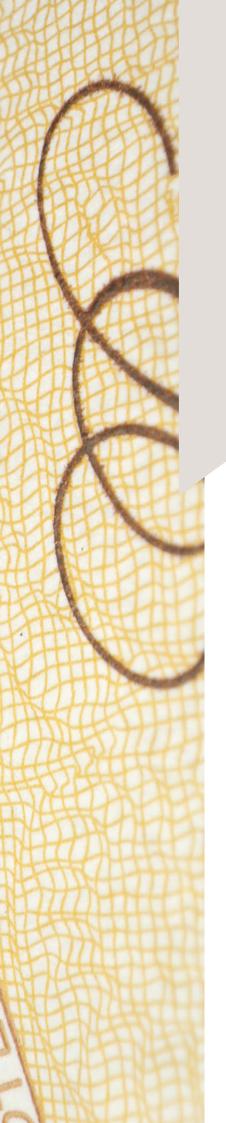




MARKET PERSPECTIVE | FEBRUARY 2022

Don't look up



Foreword

"Don't Look Up" is a 2021 film in which a comet is on a collision course with the earth.

It might be good advice for today's bondholders. It feels as if the skies are where "normal" interest rates are found these days – and they could be headed towards us.

The big western central banks are belatedly waking up to the risks posed by their now overly loose policies, and seem poised to start a process of monetary normalisation sooner than they had led markets to believe.

In the film, people ignore the approaching threat (which stands for climate change). Investors will not ignore this monetary shadow, but any panic may be short-lived: the global economy can likely live with it.

In this *Market Perspective*, we suggest that the rates headed our way may not be quite as fearsome as they appear, that there may be more momentum behind growth and corporate profits than received wisdom suggests – and that a world in which an uncertain future is visibly discounted again might eventually be less accident-prone, not more.

We are not surprised to see a more sombre mood in markets (and not just because of Ukraine), but have not given up on the prospects for inflation-beating returns in the longer term – or even in 2022.

Kevin Gardiner/Victor Balfour

Global Investment Strategists

Cover: British Pound banknotes © Gettyimages

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Wealth Management Publication date: February 2022. Values: all data as at 16 February 2022.

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Don't look up

MORE NORMAL MONETARY POLICY MAY BE HEADED OUR WAY

"My dear, here we must run as fast as we can, just to stay in place. And if you wish to go anywhere you must run twice as fast as that."

— Alice in Wonderland

The prospect of tighter monetary policy, as interest rates belatedly run in pursuit of inflation, has finally moved into focus. Is monetary rectitude set to be restored?

There will be two components to any monetary normalisation: interest rates and central bank balance sheets. The former will be by far the most important to the economy and markets.

The interest rate outlook

Many central banks have already started the process of interest rate normalisation, particularly in the developing world (figure 1). About a dozen central banks have now raised rates, pushing the average emerging market policy rate (weighted by GDP) to 4.8%, higher than it was before the pandemic struck.

FIGURE 1: OFFICIAL INTEREST RATES

Selected central bank policy rates and recent changes

COUNTRY / REGION	CURRENT RATE	PREVIOUS RATE	LATEST CHANGE	CHANGE (2022 YTD)	DATE OF CHANGE
UNITED STATES	0.25%	1.25%	-1.00%	-	Sunday, 15 March 2020
UNITED KINGDOM	0.50%	0.25%	0.25%	0.25%	Wednesday, 2 February 2022
EUROZONE	0.00%	0.05%	-0.05%	-	Tuesday, 15 March 2016
CHINA	3.70%	3.80%	-0.10%	-0.15%	Wednesday, 19 January 2022
JAPAN	-0.10%	0.10%	-0.20%		Thursday, 28 January 2016
AUSTRALIA	0.10%	0.25%	-0.15%	_	Monday, 2 November 2020
CANADA	0.25%	0.75%	-0.50%		Thursday, 26 March 2020
CHILE	5.50%	4.00%	1.50%	1.50%	Tuesday, 25 January 2022
BRAZIL	10.75%	9.25%	1.50%	1.50%	Tuesday, 1 February 2022
CZECH REPUBLIC	4.50%	3.75%	0.75%	0.75%	Wednesday, 2 February 2022
DENMARK	-0.45%	-0.35%	-0.10%	_	Thursday, 30 September 2021
HUNGARY	4.30%	4.00%	0.30%	0.30%	Wednesday, 26 January 2022
INDIA	4.00%	4.40%	-0.40%	_	Thursday, 21 May 2020
INDONESIA	3.50%	3.75%	-0.25%	_	Wednesday, 17 February 2021
ISRAEL	0.10%	0.12%	-0.02%	_	Wednesday, 27 May 2020
MALAYSIA	1.75%	2.00%	-0.25%	_	Monday, 6 July 2020
MEXICO	6.00%	5.50%	0.50%	0.50%	Wednesday, 9 February 2022
NEW ZEALAND	0.75%	0.50%	0.25%	_	Wednesday, 24 November 2021
NORWAY	0.50%	0.25%	0.25%	_	Thursday, 16 December 2021
POLAND	2.75%	2.25%	0.50%	1.00%	Tuesday, 8 February 2022
RUSSIA	9.50%	8.50%	1.00%	1.00%	Thursday, 10 February 2022
SOUTH AFRICA	4.00%	3.75%	0.25%	0.25%	Thursday, 27 January 2022
SOUTH KOREA	1.25%	1.00%	0.25%	0.25%	Thursday, 13 January 2022
SINGAPORE	5.25%	5.33%	-0.08%	-	Wednesday, 30 January 2019
SWEDEN	0.00%	-0.25%	0.25%	-	Wednesday, 18 December 2019
SWITZERLAND	-0.75%	-0.25%	-0.50%	-	Wednesday, 14 January 2015
THAILAND	0.50%	0.75%	-0.25%	-	Tuesday, 19 May 2020
TURKEY	14.00%	15.00%	-1.00%	_	Wednesday, 15 December 2021

Source: Bloomberg, Rothschild & Co. Correct to 16 February 2022.

Two prominent emerging market exceptions to the trend of recently rising rates are China and Turkey. The former is still enjoying low inflation; the latter certainly isn't (annual inflation is closing on 50%), but has a highly unorthodox monetary policy.

Among the big western central banks, the Bank of England (BOE) has also started, and delivered back-to-back rate rises at its December and January policy meetings.

The Federal Reserve, still the most important central bank by far, seems poised to raise rates next month. And even the stubborn European Central Bank (ECB) seems to be wavering, and is no longer suggesting that rates are on hold through 2022.

For the big three western central banks, the markets are assuming in each case that there will be a steady stream of rate increases through 2022 and 2023 (though the ECB is not expected to start until the second half of this year). Put bluntly, with their economies close to full employment, and inflation well ahead of target, there is no reason for them not to be raising rates, which are still at 'emergency' levels.

Investors have started to take notice. Bond yields have moved up across the curve. Most recently, shorter maturities have been rising fastest, and yield curves have flattened. In contrast to 2021, when longer-dated bond yields rose most, this time it is mostly real interest rates, not implied inflation rates, which are pushing them higher (figure 2) – perhaps because there may now be (almost) enough long-term inflation priced in, and because tighter policy settings are more imminent.

The benchmark 10 Year US treasury yield is at 2%, its highest level since 2019; the 10 Year gilt yield is at 1.6%, its highest level since 2018; and the 10 Year bund yield has turned positive once again, at 0.3%, its highest level since 2018.

If we unscramble these long-dated yields, we find that the highest levels of short-term rates priced into the maturity curves are 2.0%, 0.7% and 2.2% respectively for the US, eurozone and the UK, and are expected to arrive around 2023/4 (figure 3).

Markets are not infallible, and these rates are still on the low side: the big banks share a common inflation target of 2%, so in only one case – and barely so even there – are expected peak policy rates above targeted inflation.

There is clearly room for expectations to rise further. Of course they might also, even now, dip again if economies falter and expected inflation and real rates fall back. Our money currently is on the former: the global economy has momentum, and there is still a lot of pent-up demand from households and businesses (not least in the shape of a growing rebuilding of inventories).

FIGURE 2: COMPONENTS OF THE US 10-YR BOND YIELD

Implied inflation and real yields



Source: Bloomberg, Rothschild & Co

FIGURE 3: IMPLIED POLICY RATES

Short-term rates currently embedded in yield curves (%)



Source: Bloomberg, Rothschild & Co

The balance sheet outlook

The normalisation of central bank balance sheets after quantitative easing programmes stop is more difficult to visualise – not least because the big three have given only cursory guidance as to what they are thinking. We are in new territory where this unorthodox bit of the policy toolkit is concerned. It is less well understood and its linkages to the real economy are (even) murkier.

Since the start of 2020, the Fed has more than doubled the size of its balance sheet to \$9tn. This is equivalent to nearly a third of US GDP, and it now owns roughly one fifth of outstanding US treasuries (figure 4). The ECB balance sheet has expanded by €4tn to €8.6tn (70% of GDP, and 30% of the government bond market) and the Bank of England's by £0.5tn to nearly £1tn (40% and 30%).

Balance sheets could normalise in several ways. The Fed, ECB and BoE might simply start actively selling their bonds. Such quantitative tightening would be the most decisive and potentially disruptive approach. More likely, the process will begin with the banks simply allowing some of their bonds to mature, in a passive manner. By not reinvesting the proceeds into new issues, the overall size of the balance sheet will reduce over time, the speed depending on the maturity schedule of their holdings.

In both these approaches – active QT and passive redemption – the balance sheets will shrink in absolute terms, and (of course) more so relative to growing GDP.

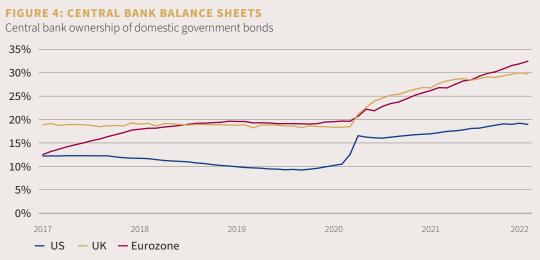
Least disruptive would be for the banks to simply maintain current holdings – neither selling nor failing to reinvest maturing proceeds – and to allow their balance sheets to normalise not in absolute terms, but relative to GDP only. This is less obviously "active" than QT, but not completely passive either.

The large-scale purchases of government (and on occasion corporate) bonds were intended first and foremost to support the banking system (which owned many of the bonds), and also to compress longer-dated interest rates, and encourage portfolio shifts into other assets. The objective was clear: bolster liquidity and lower the wider cost of capital.

At the bond market peak in 2020, nearly one third of the sovereign bond market was trading on a negative yield, and spreads across other classes and term premiums were narrow. At the same time, however, risk pricing models were upended, and investors were encouraged into more speculative assets – perhaps inappropriately.

The extent to which those trends will reverse is less clear.

For one thing, the exact timing of the run-off and any rebalancing – including outright asset sales - will be shaped by financial conditions and the state of the banking sectors at the time. The last time QT was underway, in the US in 2018, the balance sheet shrank by nearly a fifth before the Fed abandoned the policy as short-term funding markets dried up.



Source: Bloomberg, Fed, BOE, ECB, Eurostat, Rothschild & Co

A repeat of such a scenario is unlikely. The ECB has not yet signalled any willingness to scale back its balance sheet, and the Bank of England seems unwilling to adopt QT. The Fed has introduced two US standing liquidity (repo) facilities to mitigate the risk of any QT-induced trauma. Ultimately this diminishes the Fed's control over the size of its balance sheet – perhaps inevitably, given the scale of the holdings, the evolution of bank funding and the regulatory requirement for greater bank liquidity.

The Bank of England has stopped growing its balance sheet since December. The ECB has slowed its most recent pandemic related bond-buying programme, but an earlier programme remains in place: it is still buying bonds and expanding its balance sheet. So too, almost unbelievably, is the Fed, though it has "tapered" its purchases and expects to stop altogether by March.

It has been suggested that there is a natural "sequencing" to be followed, and that rates will only start to move after there has been significant normalisation of balance sheets. Clearly, with the Bank of England having moved on rates with its balance sheet having had no time to shrink even relative to GDP, and with the Fed and ECB also seemingly poised to hike as soon as their purchases stop, this need not be the case. It wasn't for the Fed in 2015.

Arguably, balance sheet and other unconventional monetary measures likely have their most pronounced impact on market sentiment and economic expectations when a liquidity crisis is at hand, and then it may be more potent even than interest rates (as we saw in 2008/9). They may be less potent at other times: a given dollop of liquidity matters more when it is in short supply, and less when it is plentiful.

That said, the size of central bank balance sheets may yet pose some practical problems for the central banks as they start to raise interest rates. Raising the cost of funds may not always be straightforward when funds are in excess supply. If the money printed by their bond purchases cannot be kept away from the short-term money markets in which they operate on rates, they may yet find it difficult to engineer the shortages they need to push money rates up.

In dealing with the likely market volatility that can accompany monetary normalisation, we should remember that alongside the benefits for monetary credibility, more normal levels of real interest rates will reduce capital market distortions and help price risk more effectively.

WHY WE CAN LIVE WITH IT

Interest rates and the economy: what we don't know

The ways in which interest rates interact with the wider economy are many and varied – and frustratingly imprecise, as noted.

There are lots of moving parts; connections between them are flexible; and those connections change over time. Cause and effect can flow in different directions – from the economy to rates, and from rates to the economy, depending on the circumstances.

The demand and supply of loanable funds is central to the determination of rates, and central banks can corner and control some parts of this market – that's why we're expecting short-term nominal rates to be heading steadily higher over the months ahead. But we don't know exactly what causes private loan demand and supply to move as they do, or just how much of the interest rate market can be controlled. Nor can we be precise in our inflation forecasts.

As a result, the long-term outlook for short-term rates; the short-term outlook for long-term rates; and the short and long-term outlook for inflation-adjusted rates and yields generally, is ultimately and inevitably a bit of a mystery.

Back to basics

That said, there are some useful building blocks for thinking about rates. First, as the saying goes, "a bird in the hand is worth two in the bush". Certainty is worth something, and we are likely to value an asset more highly if we have it now and not in the uncertain future (a 50% discount sounds steep, but we don't know how long the birds are in the bush…).

Second, the importance we attach to an asset will fall the wealthier we are when we receive it. Wealth, like everything else, is subject to diminishing marginal utility, and our collective prosperity grows over time.

These two notions suggest a tendency for future worth to be discounted relative to worth today. Whether we call the implied interest rate a reflection of 'time preference', a 'reward for waiting' or whatever, positive real interest rates seem natural from a lender's viewpoint.

Third, and from the borrower or user of capital's viewpoint, the income generated by productive assets can be seen as an interest rate. Even today, when money rates have largely disappeared and most real interest rates and bond yields are firmly negative, typical (quoted) businesses are able to take 100 units of shareholder capital today and turn it into (say) 105-110 inflation-adjusted units in a year's time. The 'production frontier', then, also naturally suggests a positive discount rate.

So when lenders and borrowers meet, it is not surprising that for most of recorded history the marketplace has delivered positive real discount rates. Interested (obsessed?) readers may want to track them back to classical times in Sidney Homer's "A History of Interest Rates" (1963).

Business cycles, institutions, secular trends

That said, interest rates have fluctuated widely – and real rates currently are mostly negative. Exactly why they move as they do is the difficult question.

Inflation expectations matter. For real interest rates, the trend rate of economic growth will likely matter too. If real rates match growth, we might expect balance sheets to remain stable, as borrowers' incomes might then grow in line with their interest payments.

Hence the rule of thumb suggesting that the 'natural' or 'neutral' interest rate is represented by the trend rate of growth in nominal GDP (that is, inflation and real growth together). This rule has worked quite well over prolonged periods, for both money rates and long-term bond yields. For example, in the 60 years to 2019, long-term interest rates in both the US and UK were, on average, within 0.3 percentage points of nominal GDP growth (below it in both cases), while short-term rates were within 1.5/1.6 percentage points of it (again, below it).

Other things equal, when growth and inflation are at above-trend levels, we might expect interest rates to be above trend too. In 2021, however, nominal US GDP growth averaged 10%, with the Fed Funds rate and 10 Year Treasury note yield averaging firmly below-trend levels of 0-0.25% and 1.4% respectively. The levels of rates and yields were unusually low even before the pandemic: in 2019, nominal US GDP growth averaged 4.1% with short rates and the 10 year yield both at 2.3%.

It would be nice to believe that today's low rates reflect a new, collective wish to revalue the welfare of future generations in line with our own, in keeping perhaps with a growing farsightedness imparted by environmental concerns. The UK government's Stern Review of The Economics of Climate Change (2006) used a real discount rate of zero in valuing future costs, which now looks prescient rather than (as it did at the time) contentious.

Nice, but we think mistaken. The reason rates have diverged so much from the nominal economy of late is probably that some important lenders – buyers of bonds – have not really cared what return they are getting but have been lending for non-economic reasons.

Such buyers are a motley group, including life assurers and pension funds, whose accounting standards oblige them to match future liabilities by owning bonds at almost any price; increasingly-prosperous emerging market savers, who view Western bonds as better stores of wealth than their own governments' bonds; and of course the big central banks, whose successive waves of quantitative easing have resulted in their owning big portions of investment grade bond markets.

The reasons for such 'liability-driven investing', for the perceived global shortage of 'safe' assets, and for central bank purchases, cannot be convincingly modelled, nor can their impacts. But



even allowing for the importance of future generations, we think those uncertainties – and production possibilities – that we face still warrant a positive discount rate.

Today's low interest rates are not a reasoned assessment of time preference and production possibilities, but more likely a distortion that may yet prove temporary.

Finally, as evidence that even the brightest and best recognise the difficulty of modelling interest rates in terms of economic variables, the Bank of England in 2020 published a carefully researched academic paper suggesting that real global rates have been on a secularly declining path for 800 years or so. On this view, economic explanation is replaced by mystical determinism.

How rates affect the economy - and vice versa

Interest rates move in mysterious ways, then. But that does not mean that they have little impact. After all, if they have no effect on the economy, today's low rates are not contributing to inflation risk, and might as well stay low forever.

The ways in which they make themselves felt are nuanced however. Higher interest rates reduce borrowers' incomes (at least those with variable rate mortgages and loans), but boost lenders'. They lift some exchange rates, but lower others.

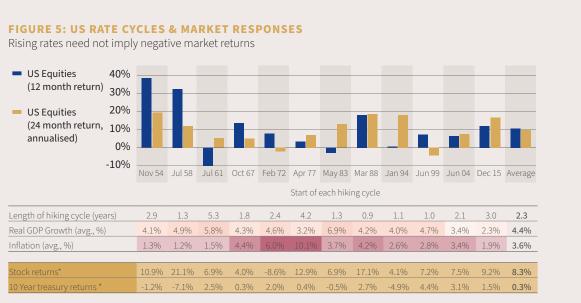
For the income and/or exchange rate 'transmission mechanisms' to work, we need to assume that lenders are more likely to be savers than spenders (which seems a safe assumption), and/or that appreciating currencies are more important than depreciating ones (most likely to be true when it is the dollar that is going up).

At today's ultra-low levels of rates, the picture is more nuanced than usual. Despite the scale of outstanding debt, interest bills are low (and fixed rate mortgages are popular). But the further rates rise, the bigger the redistribution to savers, and the greater the chances of discontinuities and accidents.

Meanwhile, the impact on stocks, bonds and asset markets generally is more straightforward – higher interest rates mean lower valuations. They can also be a clear signal of monetary intent, and may directly reduce inflation expectations.

Overall, then, we expect higher interest rates to mute aggregate demand, and thereby reduce inflation risk. But it could take some time – and several rate hikes – before they bite. And the global economy may have some momentum currently. Indeed, as hinted above, we see cause and effect currently as flowing more from the economy to rates than vice versa.

In post-war US interest rate cycles, rising rates have not prevented stock markets from delivering positive returns (on average, 10% in the 12 months after the first rise: figure 5). Few of them occurred with valuations at today's levels, of course.



^{*}Total return calculated over entire hiking cycle and annualised Source: Bloomberg, Rothschild & Co

How far up?

As noted, recent levels of nominal interest rates are unprecedented. In Europe, most money rates and many high-quality bond yields have recently been negative: borrowers have been paid, not lenders. Adjusted for inflation, interest rates are less remarkable – real rates have been negative before – but still firmly towards the low end of historical experience.

The trajectories for short-term rates now incorporated in money markets – as discussed above – are materially higher than was the case just six months or so ago. However, they are still well below historic norms in nominal terms, let alone in inflation-adjusted terms.

We doubt that rates will be thought to have normalised until real rates are firmly back in positive territory. This could happen because inflation falls back sharply to below target levels, and/or because nominal policy rates rise further than money markets currently expect.

Whether central banks are intent upon making it happen depends on how inflation and unemployment evolve. Currently, we doubt the big three western central banks have the appetite for engineering the sort of wrenching return to positive rates delivered famously by Paul Volcker at the Fed in 1981. Today's inflation threat, though real, may not be sufficiently intense to warrant such a move in any case. After a partial normalisation, we see inflation settling in the 2-4% region after 2022: above target, but not alarmingly so.

And another thing...

To return to the "Don't Look Up" analogy... If a comet or asteroid ever were on course to destroy the earth at a specified time in the near future, that in itself might lead to sharply higher interest rates – if money markets were still functioning and anybody cared, that is.

If there is no future, there are no returns: nothing can induce us to save. Our personal "time preference", the extent to which we discount future costs and benefits because they are uncertain, becomes infinite.

The late Professor Frank Hahn suggested the fact would be more important than the date. If the world is certain to end at a known time, who in the last hour will want to own worthless bits of paper, metal or digits? Anticipating that, who will be happy to hold them on the last day? Or month? Perhaps even the last year? Money might lose its value the instant the knowledge became available.

Something to ponder, perhaps, if you get to watch the film (and/or "Melancholia" (2011), more of an arthouse account, but great viewing and an appropriately earth-moving soundtrack).

Just don't buy the asteroid insurance.



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

STOCKS/BONDS — RELATIVE RETURN INDEX (%)



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	2.0	-4.8	10.1
10-yr UK Gilt	1.5	-5.9	-0.3
10-yr German bund	0.3	-4.8	-1.9
10-yr Swiss Govt. bond	0.3	-4.4	-4.7
10-yr Japanese Govt. bond	0.2	-0.8	-1.3
Global credit: investment grade (USD)	1.8	-3.3	7.6
Global credit: high yield (USD)	6.0	-1.9	12.9
Emerging (USD)	5.0	-4.6	9.9

Source: Bloomberg, Rothschild & Co

SELECTED EXCHANGE RATES

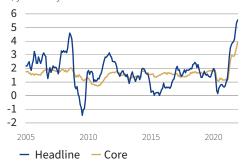
Trade-weighted indices, nominal (2000 = 100)

	LEVEL	1YR (%)	3YR (%)
US Dollar (USD)	108.2	2.7	0.0
Euro (EUR)	127.7	-1.9	3.1
Yen (JPY)	85.0	-7.6	-6.8
Pound Sterling (GBP)	83.1	3.1	7.0
Swiss Franc (CHF)	170.7	1.8	10.0
Chinese Yuan (CNY)	145.3	7.2	9.7

Source: Bloomberg, Rothschild & Co

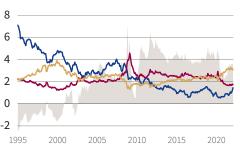
G7 INFLATION

%, year-on-year



Source: OECD, Bloomberg, Rothschild & Co

STOCKS/BONDS — RELATIVE VALUATIONS



- Government bonds: redemption yield (%)
- Developed stocks: price/book ratio
- Developed stocks: dividend yield (%)
- Developed stocks: earnings yield bond yield

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

SELECTED STOCK MARKETS

Dividend yields, recent local currency returns (MSCI indices)

	YIELD (%)	1YR (%)	3YR (%)
World: all countries	1.8	8.7	52.0
Developed	1.8	11.7	54.7
Emerging	2.5	-10.2	33.0
US	1.3	12.5	68.2
Eurozone	2.2	12.0	34.1
UK	3.5	18.8	16.1
Switzerland	2.5	13.3	38.5
Japan	2.2	0.5	34.3

Source: Bloomberg, Rothschild & Co

COMMODITIES AND VOLATILITY

	LEVEL	1YR (%)	3YR (%)
CRB spot index (1994 = 100)	265.3	41.3	46.3
Brent crude oil (\$/b)	94.8	49.7	43.1
Gold (\$/oz.)	1,869.1	4.0	41.3
Industrial metals (1991 = 100)	398.0	31.0	63.6
Implied stock volatility: VIX (%)	24.3	13.2	62.9
Implied bond volatility: MOVE (bps)	92.7	63.3	102.8

Source: Bloomberg, Rothschild & Co

Data correct as of 16 February 2022.

Past performance should not be taken as a guide to future performance.



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