Market Perspective



Better for people, worse for bonds

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Foreword: Better for people, worse for bonds

A year after Western lockdowns began, global stock markets have long since delivered the speediest ever rebound from a major fall. The economic mists are also clearing relatively quickly, as we'd thought they might. Data are painting a picture of a global economy poised to rebound strongly in 2021 – perhaps more so than most official forecasts have suggested.

In the US in particular, the stage seems set for some sort of economic fireworks from the spring, as an economy in which output has already more or less retraced the ground lost a year ago receives a further substantial fiscal stimulus. Even these days, \$2 trillion is a lot of money.

In Europe, where the virus is still being more actively suppressed, economic activity has been less fragile than feared. Meanwhile, China's data are difficult to read at this time of year even in normal circumstances, but there are few signs of growth faltering significantly.

Against this backdrop, it is no surprise that bond markets, led by the US, have been registering growing demand for capital relative to its supply. As investors expect excess capacity to be used up faster, they are expecting some upturn in inflation and higher real borrowing costs too.

Central banks are not ready to sanction tighter policy, and in some cases are actively trying to stop bond yields from registering the economic improvement. They may well change their minds as the data evolve.

As a result, investment risks have moved on again.

If the first half of 2020 was driven by worries about profitability, 2021's risks may focus on the eventual consequences of a healthier business climate and full valuations. Put bluntly, last year was bad for people, but good for bonds. This year will likely be better for people, but worse for bonds. Stocks are friendly with both, and their heartstrings face something of a tug of war as a result.

We think they can cope.

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. © 2021 Rothschild & Co Wealth Management Publication date: March / April 2021. Values: all data as at 23 March 2021. Sources of charts and tables: Rothschild & Co or Bloomberg unless otherwise stated.



Rapid reversal

We are exactly one year on from the global stock market's COVID-related setback. The swift decline was not the deepest of the significant stock market drawdowns that there have been, but its brevity was striking: global equities fully pared all losses in less than five months, delivering the second strongest 12-month recovery on record.

Victor Balfour — 23 March

A relatively short US stock market reversal

Significant setbacks in the S&P 500 index (nominal terms)



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



A primer on SPACs

SPAC: A special-purpose acquisition company (SPAC; /spæk/)

SPACs are 'shell companies', formed for the purpose of raising cash through an IPO in order to fund an acquisition with the proceeds within two years of its listing.

The SPAC structure for raising capital has garnered a lot of investor attention of late, with 2020 being touted the 'year of the SPAC' – 219 SPACs raised \$73 billion in 2020, outpacing traditional IPOs (\$67 billion). Within the first two months of this year already, 128 SPACs have raised over \$38 billion – January alone surpassed the total raised in 2019.

The price seems to reflect this. A SPAC index – a benchmark that follows the aftermarket performance of a broad universe of SPACs – has risen more than three times as fast as the S&P since July 2020. Inevitably, this index has a limited track record (inception date July 2020), a smallish market cap (\$27 billion), and only represents a portion of the growing number of SPACs on the market.

Despite its in-vogue appeal – some celebrity investors have jumped on the bandwagon – there can also be genuine benefits to this type of structure. Firstly, given the shell companies' lack of underlying operations (their 'clean balance sheets') the listing process is much less onerous than a traditional IPO – an entire SPAC IPO can be completed in as little as 15 weeks, reducing market risk and direct and indirect costs. Owners of target companies should face few nasty surprises – unexpected liabilities on the acquirer's balance sheet – once the deal closes.

The SPAC model has appealed to private market sponsors too; partly because it provides a more liquid capital solution, but also because the sponsor retains a larger economic stake (20%) in the post-IPO SPAC, with lower upfront costs. This type of structure also allows them to go after larger targets in industries that traditional private equity documentation would normally prohibit. Structurally, as an equity-funded vehicle, they require less leverage as well; SPACs provide equity capital without the debt servicing costs and covenants inherent in debt financing.

The structure does not come without its drawbacks, however. If a target is not found within two years of the SPAC's listing, the cash is returned to the investor – the risk here being the opportunity cost of an investment forgone. More than 370 US SPACs have over \$118 billion in dry powder ready to be deployed. This risk in turn leads to others – too much capital chasing too few deals, inflated prices, or the acquisition of less desirable targets (to the detriment of the SPAC shareholder). In February of this year, a SPAC that initially targeted leisure companies announced a \$200 million deal with a biopharmaceutical company – no deal being worse, seemingly, than a bad deal.

Equally, SPAC investors have the right to exercise a redemption right once a transaction is announced, allowing them to exit if the acquisition turns out to be less desirable. Recent research has found that for a large majority of SPACs, post-merger share prices dropped, largely driven by share dilution – the need to raise additional funds through private placement, as well as cash redemptions. Either way, the SPAC investor bears these costs.

For now, the SPAC bandwagon is largely US-based, but there is increasing popularity for the structure in the European market.

For now, the SPAC bandwagon is largely US-based, but there is increasing popularity for the structure in the European market as well. SPACs have actually been around for a long time in one form or another – 'blank check' companies date back to at least the 1980s, while the first SPAC was created in 1993, when blank check companies were prohibited in the US – which suggests that they aren't going away anytime soon. There are obvious benefits when used in the right way; they can sit nicely beside traditional IPOs, but should not replace them entirely. Thorough due diligence and an understanding of what – and when – you're buying is important, but then that is true of most investments.

The fact that the underlying investment is initially unknown seems troubling: we are all aware of the South Sea Bubble-era prospectus that offered 'an undertaking of great advantage, but nobody to know what it is'. But other funds can be similarly open-ended: we have noted elsewhere how hedge fund marketing literature can be remarkably unspecific, and private equity funds routinely open for subscriptions without knowing their prospective targets. The issue is a more subtle one, that of 'good faith': many SPACs may have it, whereas the South Sea venture likely didn't.

That said, some investors need more transparency than others, and SPACs would not appeal to us as wealth managers until we knew what was in them.

We suspect the fashion for SPACs will cool in due course, and we doubt that it has materially affected the trajectory of the wider stock market. Nor do the amounts involved seem big enough to pose a systemic financial risk – even if SPAC investors themselves should turn out to be using borrowed money to buy them. For perspective, the market capitalisation of the S&P 500 is \$34 trillion. Charlie Hines – 10 March

200 180 160 140 120 100 100 = 30 July 2020 80 Aug 2020 Sep 2020 Oct 2020 Nov 2020 Dec 2020 Jan 2021 Feb 2021 Mar 2021 -SPAC index - S&P 500 index

SPACs outperform

Total returns: SPAC index and S&P 500 index (indexed, 100 = 30 July 2020)

Source: IPOX, Bloomberg, Datastream, Rothschild & Co.

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



Is the dollar about to smile?

The dollar's downtrend has been a consensus trade for the past year and for good reason: interest rates converged; inflation was subdued; and the dollar was expensive. It was effectively in the middle of the so-called 'dollar smile', which traces its attractiveness as growth moves from being low to high. The US currency can do well in times of crisis, or when US growth is especially strong, but often seems to languish in the middle, its relative appeal diminished by attractions elsewhere.

Our exchange rate conviction has been low for much of the past year. We had earlier cancelled a preference for the US dollar but had then stayed broadly neutral. We had felt that sterling was undervalued against it, but with the pound recently (late February) hitting its highest level against the dollar (\$1.42) since 2018 and the renminbi also at equally strong levels (RMB 6.45), we wonder if it's time to question the continuation of the dollar's downtrend.

As Keynes once quipped, 'when the facts change, I change my mind'.

Our quantitative approach to monitoring currencies is centred around three factors: i) carry; ii) momentum and iii) valuations. This loosely matches our approach towards appraising bond and stock markets, with 'carry' replacing 'growth'.

We do not make exchange rate forecasts – trading currencies is not a sustainable source of investment return.

We do not make exchange rate forecasts – trading currencies is not a sustainable source of investment return and we see little value in offering spurious and misleading precision. However, we do apply our quantitative and subjective approach in identifying risks and opportunities across major currency markets.

Looking back at 2020 – the year of the 'great convergence' – those interest rate differentials narrowed, and valuations moved back to trend. In particular, the dollar no longer looks especially expensive.

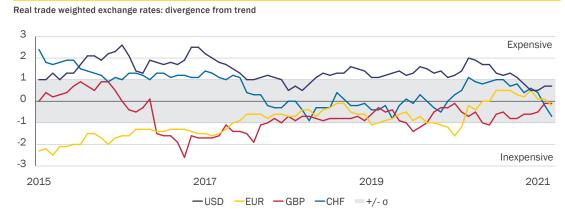
Valuations (as with equity and bond markets) are, however, only one piece of the puzzle. Those spot prices can diverge from 'fair value' for all sorts of reasons – expectations about inflation, policy, growth, and sentiment more broadly – all the things that influence carry and momentum, the other two components of our scorecard.

Looking ahead, interest rate carry may not re-emerge as a significant driver anytime soon – central banks will be reluctant prematurely to withdraw the 'punchbowl'. But when they do, recent data suggests that the relative strength of the US economy – even before additional fiscal impetus makes itself felt – suggests a rethink on interest rates may happen soonest in the US, and rather sooner than the Fed is guiding. Bond and money markets are certainly signalling as much.

As we see it, the dollar may be poised to move up the other side of that 'dollar smile': that bearish dollar consensus may be premature.

Victor Balfour – 25 February

Exchange rate valuations have converged



Source: JPM, Bloomberg, Datastream, Rothschild & Co.

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



Coping with covid?

Joseph Schumpeter, the Austrian economist, described a process of ongoing 'creative destruction'. Shifting economic trends and new habits elevate innovators and leave laggards in terminal decline – a process perpetually in motion. Economic crises and market dislocations can accelerate the process.

Today is no exception: the crisis has amplified questions of viability for many companies and of whole sectors – from energy to traditional retail.

Yet, so far, relatively few businesses seem to have gone under. Last year, European businesses reported fewer bankruptcies than in any year since 2015 – even the US was below 2019's rate of bankruptcy filings. Fiscal and monetary policy has helped hugely of course: generous labour market support and abundant liquidity have prevented a more serious reckoning. Vulnerable families had to be protected.

Is this an interruption of the cycle of corporate decay and rebirth, perhaps to the detriment of longterm growth and efficiency? Or are we perhaps entering a new era of 'big state' and enhanced corporate responsibility?

Divergent approaches

Milton Friedman said, 'the social responsibility of business is to increase profits'. He was not making a moral comment. Rather, his point was that businesses exist to do one thing and governments another, and that blurring the lines can be inefficient, making us collectively worse off.

The US has always embraced a more undiluted form of capitalism than its European peers. A mix of flexible labour markets, accommodating bankruptcy law and a more conventionally laissez-faire form of capitalism all contribute to the US's global investment appeal. Last year, the US ranked sixth globally on the 'Ease of Doing Business' index. None of Europe's large economies featured in the top 20.

Coincidentally or by design, the US has also had faster growth and lower unemployment in recent decades – an experience echoed in the past year. Today, US unemployment stands at 6.2% – having more than halved since last spring – and is now far below European levels, which have been edging higher, not lower.

The irony is that despite its more diluted capitalism, Europe has fared worse than the US, economically, in the last year: output contracted more sharply, and its road to recovery may take twice as long. This most recent divergence is largely a function of Europe's tougher COVID restrictions – but it is the US whose budget deficit has risen furthest in response to the crisis.

We have seen Europe's traditional interventionism. While the US sought to directly compensate workers laid off during the crisis with higher unemployment pay and household cheques, the 'German way' – retaining workers and compensating employers through job retention schemes – aimed to protect jobs and productive capacity. In theory, this should enable businesses to restart operations without disruption.

The jury is out on which has been more successful – the labour market remains in a COVID-induced stasis, and employment in both regions remains way below pre-crisis levels. US *un*employment may be lower, but this partly reflects people leaving the workforce: employment has been more stable in Europe (see chart 'Divergent trends in employment'). But the bloc's decision to try to directly protect jobs rather than people may yet have lasting consequences for productivity. Meanwhile, as we note elsewhere, there are signs that US productivity is currently enjoying a remarkable surge.

Once the dust has settled, European unemployment may continue to grind higher as furlough schemes are eventually retired, though we think there will be enough economic momentum to avoid this – but perhaps at the expense of productivity.

Social capitalism

At a big picture level, US and European forms of capitalism may be about to converge. Whereas in recent decades the commonly held view was that European capitalism would align more closely with that of the US, this may no longer be the case.

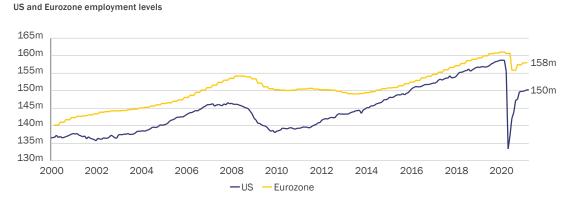
Increasingly, a social (and environmental) agenda is permeating political, and even corporate, discourse. Governments are emphasising the need for a more ethical form of capitalism, and not just in Europe. Ahead of the election, President Biden suggested that shareholder capitalism is a "farce", and many of his new policy proposals – though less dramatic than those of Bernie Sanders – hint at such a shift. Corporate executives – from Jamie Dimon (JP Morgan) to Marc Benioff (Salesforce) are also refocusing beyond the bottom line – more inclusive and holistic measures of success are now being incorporated.

As noted, in reality it is the US, not Europe, which has spent more through this crisis – and it has failed to run a balanced budget since the Clinton administration. President Biden's ambitious policies suggest the fiscal taps are unlikely to be turned off anytime soon.

More broadly, and back to our original question: will more widespread business failures be avoided altogether? Reopening lies ahead, and with it, a return to growth. Markets are certainly upbeat about the prospects for the global economy – in terms of stock prices, even those troubled sectors are now moving back towards pre-crisis levels. Perhaps the avoidance of crisis – particularly one like this, as opposed to a conventional economic downturn – can breed innovation too, and the ongoing adoption of new digital technologies may turn out to have a more profound impact on business models and productivity.

Victor Balfour — 18 March

Divergent trends in employment



Source: BLS, Eurostat, Bloomberg, Datastream, Rothschild & Co. Past performance should not be taken as a guide to future performance.



America's surging productivity

The US economy seems more or less to have returned to its pre-crisis level in the current quarter. If so, the most dramatic output reversal in modern times has been relatively short (recovery after the global financial crisis took more than twice as long).

This will not be a big surprise to our readers. What is a bit more remarkable is the fact that total civilian US employment is still some 5% below its previous peak.

Total employment peaked in the same calendar quarter as GDP (the fourth quarter of 2019), but it would usually be more of a lagging indicator: it will probably accelerate now in the months ahead. But a likely 5–6% year-on-year surge in output per head in the current quarter is unlikely to fade quickly even as employment regains momentum, not least because output also seems set to grow strongly again in the second quarter as the pending fiscal stimulus is disbursed.

As a result, either employment is going to surge dramatically in the second half of the year – hardly bad news – or 2021 may see one of the fastest year-on-year gains in per capita productivity in recent times.

This would not be simply a rebound from a big decline in 2020. In fact, employment eventually fell more sharply than output last year, and output per person actually rose by 3%, which is very unusual (productivity is usually strongly pro-cyclical: it falls when output does and vice versa).

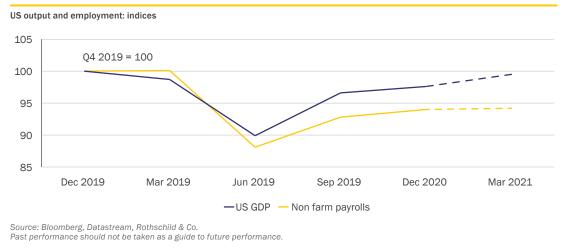
Even allowing for employment to catch up more later in the year, some far-from-outlandish arithmetic suggests that output per person in 2021 might turn out some 6% higher than in 2019 – which would make it the strongest two-year period since the late 1990s, a remarkable outcome given that (as noted) it includes a recessionary year.

Hard cases make bad law, of course, and the last 12 months' dramatically special circumstances, and fluctuating labour market incentives, suggest it would be premature to make much of this just yet. But nobody seems to be even mentioning it – which is odd since economists have spent the last decade fretting about a perceived *slowing* in productivity growth.

This is another reason for thinking that corporate profitability might rebound more strongly than expected. It is also perhaps a reminder that we shouldn't be *too* alarmist about inflation: it would be supply-side flexibility writ large.

Kevin Gardiner — 11 March

A US productivity surge?



8 minute read

The economic uncertainty principle

Our essay on US productivity triggered a question we don't get asked nearly as often as we should, viz: do many perceived economic troubles simply reflect bad measurement?

A careful answer requires more space (and expertise), but here is a highly subjective shortlist of 'issues' that may at least be partly shaped by definitional or measurement problems:

- 1. The UK's spectacularly bad GDP performance in the second quarter of 2020
- 2. The perceived output/productivity slowdown
- 3. A reported stagnation of 'typical' household income in recent decades
- 4. A likely overstatement of inflation in recent decades
- 5. Our alleged collective debt burden
- 6. A reported 'global savings glut'
- 7. Understated equity valuations from the 1930s

In what follows I'll offer an overview, then explain my shortlist!

People rarely ask what exactly economic data is supposed to measure, or whether it is doing a good job of measuring it.

Especially economists. Two prominent Harvard professors a few years back equated Ireland's international debt burden with Iceland's (they were off by a factor of 10). Another well-known economist famously quipped, 'we see computers everywhere, except in the productivity data' – perhaps forgetting that digital output is particularly hard to measure.

Official statisticians have a tough job. Even defining aggregate income (or output, or spending) is not as easy as it sounds. Quantifying it, and then dividing it into component prices and quantities, are tasks best suited to Hercules and Sisyphus. Yet we routinely take the concept and measurement of GDP, both in nominal and 'real' terms, for granted.

Definitions and coverage

First, we have to draw a 'production boundary' somewhere, usually by excluding (for example) unpaid activities. Hence the oft-cited example: if a person marries their housekeeper, GDP falls.

Second, we have to avoid double-counting: intermediate transactions, where one company's output is another's input, have to be largely netted off.

As the notion of a 'production boundary' suggests, many useful things do not make their way into GDP; equally, some things in GDP are not useful. We derive enjoyment ('utility' in the jargon) from families, good health, clean air, nature, friendships, recreations, peace, equality and fairness – but we don't try to measure these. Equally, activities that pollute, emit carbon, endanger health and security, or generally make us miserable, are included.

This means that even in principle, GDP is flawed as a comprehensive gauge of economic well-being, and a growing research effort is investigating alternative, more holistic gauges, though the things omitted are mostly difficult to measure (as they say, not everything that counts is countable). But despite its conceptual imperfections, changes in GDP are likely correlated with all-round prosperity.

Can we possibly hope to capture all the relevant items in a large, decentralised market economy where businesses are starting and failing, products and processes are evolving, and more and more of what we use and create is intangible and digital in nature?

A good example of the latter point is the difference between email and physical post: we can count physical letters at the sorting offices, but email can be tracked only indirectly, via the incomes generated by it – hoping that we know about those incomes to begin with.

The statisticians have a good go. In the UK they tackle GDP from three directions: income, spending and output. They use a mixture of household and business surveys, tax returns, customs data, public sector records, and so forth.

Errors and omissions are inevitable. Even before the digital revolution, we described many international flows as 'invisible' trade, with good reason; and on top of all the other issues, there is the underground economy to think of. Explicit balancing items often feature in national accounts tables.

None of this stops markets reacting to 'surprises' of a fraction of a percentage point – spuriously precise news about a variable that is partly imaginary to begin with.

Across countries, statistical processes still vary hugely, despite international conventions' best efforts. Across longer-term history, comparisons are also difficult: GDP as a concept dates from the 1930s, and only became widely reported in the post-war period.

For example, when the UK's GDP fell by a fifth last spring, a much bigger slump than elsewhere, it may have been partly because the UK statisticians measured education output differently to their peers – by (for example) counting pupils taught rather than teachers' pay.

And can we really compare recent trauma with the Great Depression, or today's corporate earnings with less strict accounting? If companies in the early 20th century didn't depreciate fixed assets, should we take their declared profits seriously?

The price/quantity split

Distinguishing between changes in prices (inflation) and quantities (output), to gauge the extent to which our money incomes translate into higher 'real' living standards is even harder. It is much more difficult to identify or define a 'real' economy, because that involves adding together quantities of very different items – apples, tractors, software licences. We can't just add raw numbers, or weigh them.

The only way we can add them meaningfully is to use their monetary values, as we do in compiling GDP. Unfortunately, monetary values reflect prices as well as quantities. Which means there is no such thing as a 'real' economy that is independent of prices – nor an economy-wide 'price level' that is independent of quantities.

Statisticians use 'base-weighted' and 'current-weighted' indices to try to measure changes in aggregate quantities and prices. The former correspond to our conventional idea of change, showing how the quantities or prices of a specified starting basket of items has evolved. A current weighted index, by contrast, takes today's relative importances, and shows how quantities or prices evolved to get here.

But a pair of indices – one for quantities, the other for prices – will only fit evolving nominal GDP if one of them is base weighted and the other current weighted. Like the speed and location of Heisenberg's particles, for any given series of nominal GDP, base-weighted volume and price changes cannot both be known.

I did say it was a good question.

We assume that individual prices and quantities are easily measurable. But supposedly similar products often vary in detail, while list prices can be discounted. Over time, it becomes more difficult to compare like with like. A Ford Escort Mark III was much more reliable and comfortable than the Mark I: its price was also higher, but how much was inflation, and how much 'real' change?

More generally, how do we account for the fact that today's GDP and shopping baskets contain items we couldn't imagine a few decades ago, and which have surely made us better off? The uses to which they will be put are not always expected, even by their makers. Can such qualitative shifts be fully captured by numbers?

Statisticians make ingenious 'hedonic' adjustments in an attempt to quality-adjust products, to avoid confusing higher prices with real progress. But ambiguity inevitably remains.

Memories are subjective, but the choice and quality facing today's consumers has surely expanded massively since the 1970s, for example. Nominal GDP may not have captured this fully; within it, some of what has been measured as higher prices may have been real growth.

Other economic variables are also difficult to define and measure. Much of the recent debate about debt, for example, is based on some very lazy thinking. And let's not get started on 'money'.

This is just one of the reasons why economics is not science: our concepts are woollier, and our measurements less precise. We should be much more sceptical of precision – and of long-term historical comparison, enjoyable though it can be – than we are.

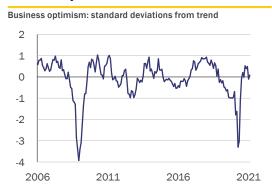
To return to the list:

- 1. The sheer scale of the decline in UK GDP in the second quarter of 2020 and the subsequent rebound suggests varying measurement techniques, and we know that education output in particular can be measured differently.
- The detailed UK statistical review by Professor Sir Charles Bean (and other studies elsewhere) suggests an under-recording of digital output. Alternative explanations – such as Robert Gordon's opinion that we are just running out of new ideas – seem implausible (and unmeasurable). Corporate operating margins have shown few signs of a marked slowing in productivity.
- 3. It is hard to believe US median household living standards can have stagnated over a period in which real, on-the-ground gains in technology and choice have been so striking (and in which, until 2020, unemployment was falling). Closer inspection, and recent data revisions, suggest the picture was not as stagnant as it seemed.
- 4. Inflation experienced by better-off families may be higher than headline rates reflecting, for example, steadily-rising private school fees but those recorded headline rates may themselves be too high, because of the likely quality changes noted above. This is not an under-recording issue, but a misallocation of real growth to inflation.
- 5. Noting that gross financial liabilities add up to a large number (even before COVID), is not very useful. The distribution, and interest costs, of debt are what matter: collectively there can be no net debt, nor can we borrow from future generations. Financial crises are crises of collective liquidity, not solvency. This is a definitional or interpretative issue, rather than a measurement problem.
- 6. There are certainly many errors and omissions in global trade data total balances do not sum to zero but the 'savings glut' is another largely conceptual issue. Ex post, global savings always match global investment; ex ante, if savings were higher than investment, the economy would have been shrinking. Current account surpluses do not always reflect the behaviour we impute to them.
- 7. Today's PE ratios are certainly higher than those in the 1930s, but today's accountants would redline much of 1930s earnings. Meanwhile, the modern quoted corporate sector is more diverse, and less dependent on tangible assets, than yesterday's. Stock prices are still volatile though.

Kevin Gardiner — 17 March

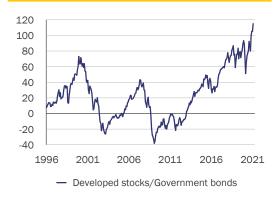
Economy and markets: background

Growth: major economies



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 | 1.7 | -3.2 | 17.0 | |
| 10-yr UK Gilt | 0.8 | -2.0 | 8.5 | |
| 10-yr German bund | -0.3 | -0.0 | 7.3 | |
| 10-yr Swiss Govt. bond | -0.3 | -0.2 | 2.5 | |
| 10-yr Japanese Govt. bond | 0.1 | 0.4 | 0.5 | |
| Global credit: investment grade (USD) | 1.1 | 3.1 | 14.0 | |
| Global credit: high yield (USD) | 4.7 | 29.7 | 17.2 | |
| Emerging (USD) | 3.9 | 17.7 | 16.0 | |
| | | | | |

Source: Bloomberg, Rothschild & Co

Selected exchange rates

| Trade-weighted indices, nominal (2000 = 100) | | | | | |
|--|--|--|--|--|--|
| Level | 1yr (%) | 3yr (%) | | | |
| 107 | -9.1 | 5.0 | | | |
| 130 | 3.4 | 3.7 | | | |
| 91 | -5.1 | -0.0 | | | |
| 81 | 8.7 | 3.2 | | | |
| 164 | -2.0 | 7.4 | | | |
| 136 | 2.1 | 1.5 | | | |
| | Level 107 130 91 81 164 | Level 1yr (%) 107 -9.1 130 3.4 91 -5.1 81 8.7 164 -2.0 | | | |

Data correct as of 23 March 2021.

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

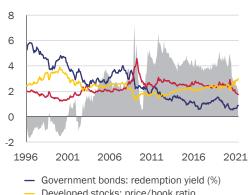
Source: Bloomberg, Rothschild & Co

G7 inflation



Source: OECD, Bloomberg, Rothschild & Co

Stocks/bonds - relative valuations



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 | 66.2 | 42.6 | |
| Developed | 1.7 | 66.6 | 44.4 | |
| Emerging | 1.9 | 63.2 | 28.9 | |
| US | 1.4 | 76.9 | 58.0 | |
| Eurozone | 2.0 | 53.8 | 19.6 | |
| UK | 3.6 | 31.0 | 6.1 | |
| Switzerland | 2.8 | 28.8 | 36.5 | |
| Japan | 1.9 | 59.4 | 25.6 | |

Source: Bloomberg, Rothschild & Co

Commodities and volatility

| | Level | 1yr (%) | 3yr (%) |
|-------------------------------------|-------|---------|---------|
| CRB spot index (1994 = 100) | 189 | 52.6 | -3.2 |
| Brent crude oil (\$/b) | 64.6 | 139.5 | -6.2 |
| Gold (\$/oz.) | 1,741 | 16.1 | 31.2 |
| Industrial metals (1991 = 100) | 313 | 59.1 | 17.9 |
| Implied stock volatility: VIX (%) | 18.9 | -71.4 | -19.1 |
| Implied bond volatility: MOVE (bps) | 67.6 | -49.3 | 20.9 |

Source: Thomson Reuters, Bloomberg, Rothschild & Co

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.

We provide a comprehensive range of services to some of the world's wealthiest and most successful families, entrepreneurs, foundations and charities.

In an environment where short-term thinking often dominates, our longterm perspective sets us apart. We believe preservation first is the right approach to managing wealth.

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