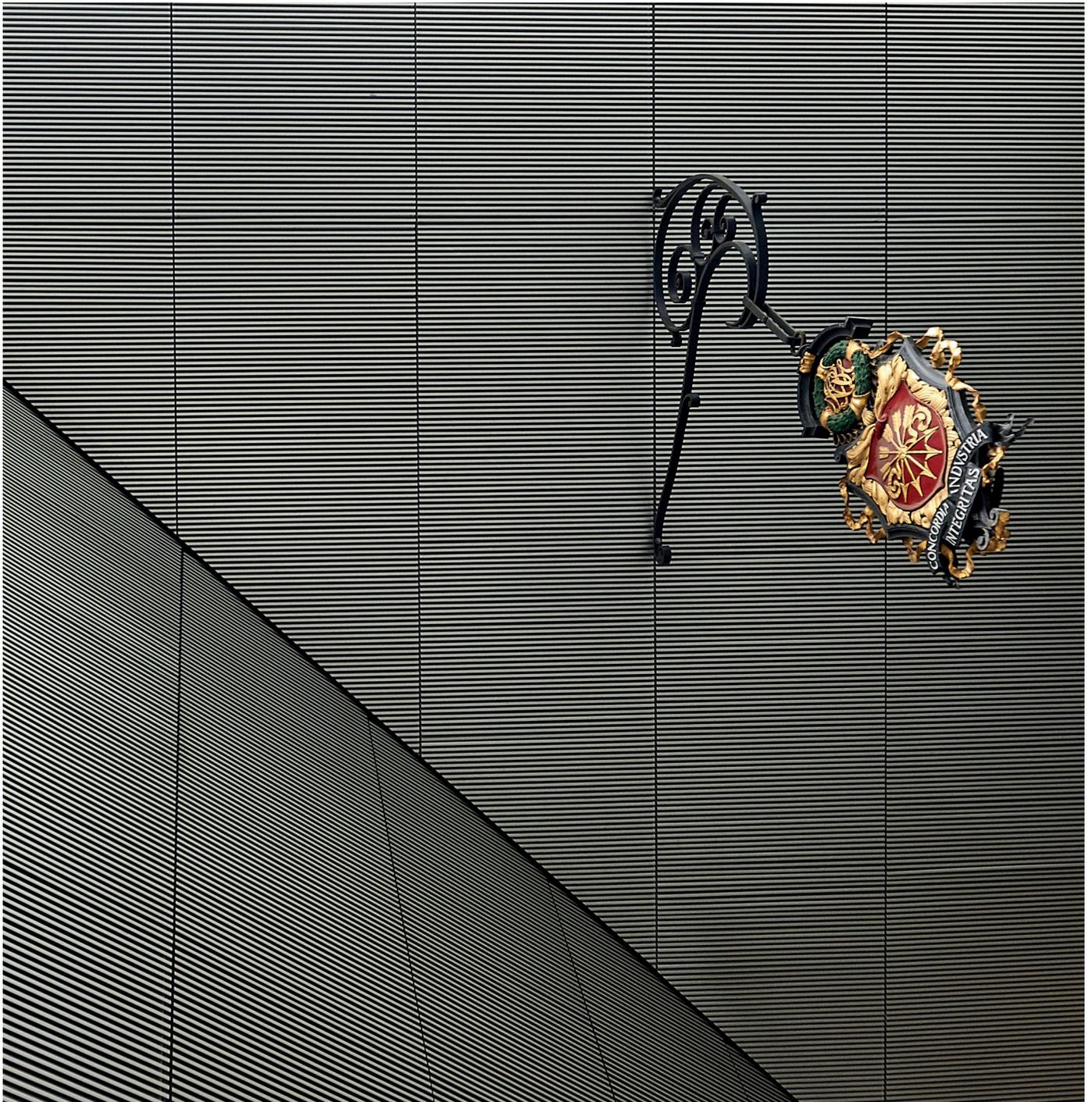


Market Perspective



Bubble trouble? | Bitcoin: fad or future?

Issue 97 | November 2017



Foreword

Since 2009 we have argued that received economic and financial wisdom has been too pessimistic.

In place of widely diagnosed global debt deflations, secular stagnations, US double dips, euro implosions and Chinese banking crises, we've seen instead a profitable "muddle through" scenario.

Markets have now risen a long way, and even some traditional pessimists have noticed that the global economy has not been doing too badly (it is in fact one-third bigger than at its pre-crisis peak). Is the potential now fully priced-in? Is it time to turn more cautious?

Not yet, we think.

Many are still deeply sceptical. They see bubbles everywhere, and view the low cost of portfolio insurance not as a reflection of unbalanced option supply and demand but as a sign of investor complacency.

Central banks continue to treat economies with kid gloves, and fret about falling short of their inflation targets (targets which were originally introduced to pull inflation down, not to push it up).

In this *Market Perspective* we go on a bubble hunt, and find them elusive. We meet few complacent clients. If the consensus is less gloomy than it was, that is no guarantee of imminent disaster.

We can't see markets remaining this well-behaved. We are braced, however, not for bursting bubbles, but for a less dramatic setback or correction. We do not advise significantly restructuring long-term portfolios in anticipation.

There is some froth out there. Parts of the credit markets, and some prominent US stocks, seem priced for perfection. We worry about the dysfunctionality at the top of some key administrations.

And as we discuss in the second essay, we are ourselves deeply sceptical of the claims being made for today's cryptocurrencies.

But so far, trouble itself has been perhaps the most obvious bubble.



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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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Bubble trouble?

We think valuations are flashing amber, not red

“The stock market is roaring, and that makes perfect sense”

Editorial, *Financial Times*, 6th October

“The world economy is enjoying its most widespread and fastest growth spurt since a temporary bounce back from the global recession in 2010, the International Monetary Fund said ... as it released a series of upward revisions to its economic biannual forecasts”

Financial Times, 10th October

Looking for bubbles

Staff writers at the *Financial Times* and economists at the IMF are not noted for their optimism, so when they think things are looking good it must be pretty much in the price.

Other commentators are talking of bubbles. Some, sensitised by the Global Financial Crisis, know that cycles are a fact of financial life. For others it's sour grapes: they've missed one of the best investment periods in modern times.

And we have seen some remarkable things of late. Nominal interest rates have hit record lows, and in some places turned negative.

So with global stocks and government bonds up some 220% and 34% in local currencies since February 2009, it seems sensible to take a closer look at valuations.

We should remember that valuations are no guide to short-term returns, and an imperfect one even in the long term. Other things matter

too. And markets can always pick a quarrel in an empty room.

What are bubbles, and why do they matter?

There is no formal definition, but we'd suggest several key characteristics:

- Momentum and hype: prices rise sharply, and a long way – typically, five- or 10-fold.
- Outlandish valuations: the ascent is not backed by profitability or cashflow.
- Risk of drastic, lasting loss: most, or even all, of investors' capital is at stake.

Figure 1 shows typical profiles. Sometimes there can be second acts, however. Selling the NASDAQ at its 2002 bottom was arguably (and eventually) a costlier mistake than buying it at the 2000 top. Its recent ascent to new highs looks much less bubbly.

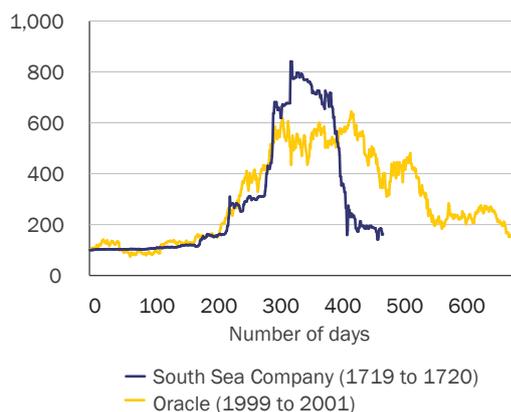
A long and colourful history

Bubbles have been around for as long as markets. Examples include the Dutch tulip bulb and South Sea Company episodes of the 17th and 18th centuries.

It would be nice to think that nobody these days could be taken in by a South Sea era prospectus offering “...a company for carrying out an undertaking of great advantage, but nobody to know what it is...”. But we quickly found similarly opaque language on a hedge fund website.

Figure 1: Typical bubble profiles

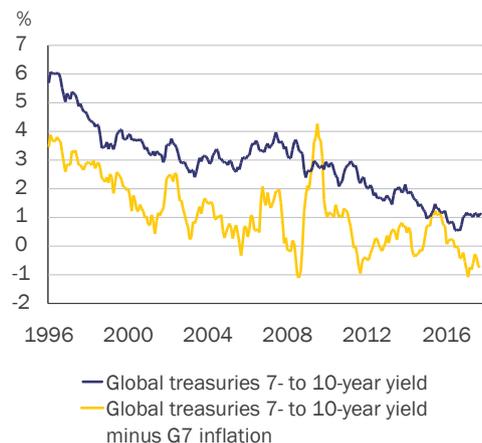
The South Sea Company and Oracle stock prices



Source: Bloomberg, Yale International Center for Finance, Rothschild & Co

Figure 2: Nominal and real G7 bond yields

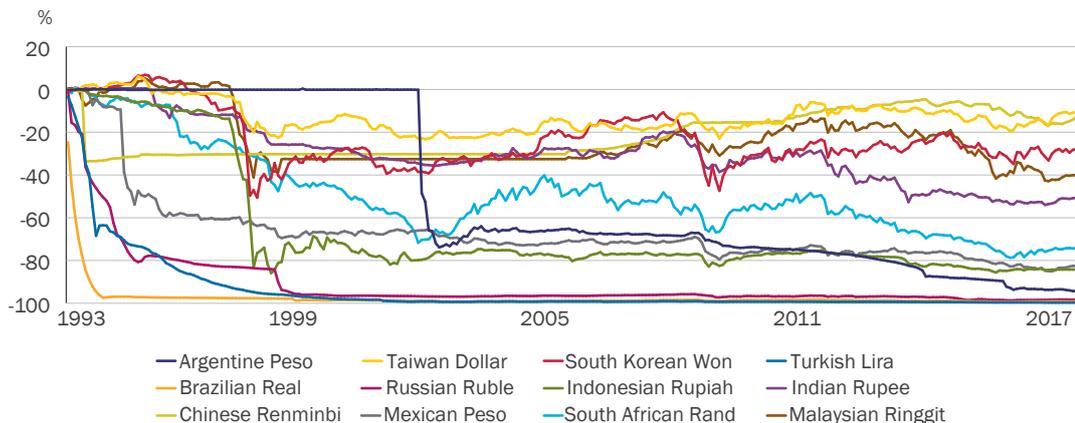
Real yields have often been negative: today's levels are not unprecedented



Source: Bloomberg, Rothschild & Co

Figure 3: Emerging currencies are capable of imploding

Selected currencies against the dollar, indices



Source: Bloomberg, Rothschild & Co

No market is immune. Alongside tulip bulbs and stocks we have seen bubbles in property, commodities and art, for example.

Cash, rates and bond markets

When allowance is made for inflation, today’s record lows in nominal interest rates and yields look a little less unusual (figure 2).

That still doesn’t mean they will last. Mark-to-market risk as yields rise can be significant – high duration bond prices could easily fall by double-digits – and most yields to maturity seem unlikely to match inflation. Credit markets, particularly lower-grade segments, look frothy.

But almost all investment grade bonds will be redeemed at par, and the ongoing impact of default and loss on a basket of speculative bonds might be of the order of 2–3% per annum – not the stuff of which bubbles are made.

Perhaps central bank balance sheets are the bubble here: has quantitative easing (QE) boosted the economy unsustainably, or fostered a potential tidal wave of inflation?

Figure 4: Stocks are expensive, but not sensationally so

Cyclically adjusted PE ratio, developed markets



Source: Bloomberg, Rothschild & Co

We think not. We see QE not as a motor linked via a transmission mechanism to the economy’s wheels, but as a crash barrier at the side of the road. It averted disaster after 2008, but is not directly responsible for the growth since, and need not lead to hyperinflation. If the latter were to materialise, then cash itself is a bubble.

If mainstream money markets are not wildly inflated, the hype and valuation attached to bitcoin (see second essay) is another matter. But at \$117bn the market is tiny by comparison.

And while bubbles in major currencies are rare, emerging markets can be different. Bubbles suddenly become visible when reserves run out, and exchange rates precipitously catch up with an inflation surge and/or loss of policy credibility (figure 3). We see few big over-valuations now, but are not willing to share even “routine” volatility in (for example) the rand, real or ruble.

Stock markets

Stocks dominate most long-term investment portfolios. On four occasions since 1929 the S&P 500 has roughly halved or worse.

There is no “best” valuation measure, and we look at as many as we can, an exception being “Tobin’s Q” (which is mistaken, mismeasured and misread – apart from that, it’s fine).

The cyclically adjusted price–earnings (PE) ratio (figure 4) is elevated, but its recent profile bears little relation to figure 1. Price-to-book ratios, dividend yields and conventional PE ratios tell a similar story.

Discounted cashflow models suggest stocks are positively cheap, but they are based on those unsustainably low interest rates and bond yields.

Meanwhile, back on the ranch

As the IMF agrees, the global economy is growing steadily, in an unusually synchronised fashion, with little inflation. Profits and profitability are rising alongside only the most gradual rebound in interest rates.

Politics remains a worry. But we've argued that President Trump's protectionist instinct may

be less damaging than feared – it could even encourage China to compromise and/or assist in North Korea – while any tax cuts are a wild card. We do not see Catalonia or Italy leading to euro break-up, nor do we think Brexit means disaster (though we'd have preferred not to be finding out). Wider UK risk is more daunting, but not yet urgent, and we always advocate a big holding of international stocks in UK-based portfolios.

Investment conclusions

Stocks remain our preferred asset. That setback is still overdue, and they are not cheap. But profits are growing, interest rate risk is modest, and geopolitical risk is manageable.

- Stocks are still not troublingly expensive, and remain the most likely source of inflation-beating returns. Restructuring long-term portfolios in an attempt to avoid a setback could leave us stranded if markets rally.
- Most government bonds do look expensive: yields remain below likely inflation rates. We still prefer high-quality corporate bonds (credit), but they are also unlikely to deliver positive real returns. We view bonds and cash currently as portfolio insurance.
- We continue to favour relatively low duration bonds, but are more neutral in US dollar portfolios, where we also see some attraction in inflation-indexed bonds. We think speculative grade (high yield) credit has now

run out of valuation headroom in Europe, and cyclical upside in the US.

- We prefer stocks to bonds in most places, even the UK (where the big indices are in any case driven by global trends). We still favour a mix of cyclical and secular growth over more defensive bond-like sectors.
- Trading currencies does not systematically add value, and our exchange rate conviction remains even lower than usual. The dollar has most cyclical support, but is expensive. The most positive surprises continue to come from the euro area. The Swiss franc remains dear, and with a more stable euro this may matter again. The pound's sell-off after the Bank of England's rate rise may be temporary: we see more rate hikes ahead and think it is pricing in too much bad news. China's growth and slowed liberalisation is underpinning a yuan that is expensive relative to its trend. On a one-year view we still rank sterling highest and the yuan lowest.

Bitcoin: fad or future?

Focus on the technology, not the currency

An underwhelming investment case...

We are increasingly asked for a view on bitcoin. Its value is up 640% this year, and the market value is \$117bn (but still tiny in relation to stock and bond markets). With almost 200 "initial coin offerings" this year, cryptocurrencies generally are a hot topic.

We still do not recommend any cryptocurrency as an investment. Prices could rise a lot further, in which case we'll look too cautious. But they might collapse: bitcoin's profile (figure 5) resembles those discussed above. This could be today's bubble.

The number of potential bitcoins is limited, but the number of cryptocurrencies clearly isn't. They carry no interest – not that bank deposits do at the moment, but they will again at some stage

– and unlike gold, they are not attractively shiny or immune to social collapse and/or nuclear holocaust. The only attraction that we can see is that prices have been going up – a classic bubble-like reason for getting involved.

... but a potentially transformative technology

But whatever happens next to prices, the technology may transform finance – and here the investment case is stronger, if more difficult to act upon.

Bitcoin, the first cryptocurrency, was born in 2009, partly in response to the Global Financial Crisis. A currency, remember, is supposed to be a store of value, a unit of account, and a means of transacting – and it is in the latter respect that bitcoin is truly exciting (it is clearly not yet a stable store of value). The blockchain distributed ledger

technology that fostered it was conceived as an alternative to the centralised governments, banks and other intermediaries that dominate modern payments systems. It facilitates anonymous payments across the internet, and establishes a secure, decentralised system of record that requires no official support or policing.

Clearing banks and other financial institutions currently keep a digital record of transactions – the key ledgers. Blockchain does away with the need for these intermediaries: a small number of potentially insecure ledgers is replaced with an unfathomably large number of decentralised records that are unfeasibly difficult to tally fraudulently (analogies with tally sticks feature prominently in cryptocurrency promotional literature).

Bitcoin is a “permissionless” blockchain, which means anyone can view past transactions, but also add new transactions. The decentralised ledger is maintained by a community of users who bundle transaction into “blocks” of data – a process known as a “mining”. Each block makes reference to the previous block and in so doing forms a chronological “chain”. With no central authority to verify transactions, it is the number of participants that makes the system secure. Members of the network must reach a consensus before a new block is added to the ledger. There are safeguards in place to ensure that existing blocks cannot be tampered with retrospectively. The system is said to be immutable.

The process of mining is computationally intensive, and members who add new blocks to the chain are rewarded with bitcoins. Just as the search for ever-faster security trading has spawned direct fibre links that burrow through US mountains, so enterprises have now sprung into being to mine bitcoins, up to the eventual maximum of 21 million, and in some

How to purchase bitcoins?

Coins can be bought on online exchanges or “mined”, and can be stored digitally in application based “wallets” or in dedicated computer hardware.

Bitcoin as an investment?

Bitcoins have no interest payments or use value, making “fair value” elusive. Its fixed supply is an attractive characteristic only while demand exists, and recent performance may be a speculative bandwagon. Bitcoin’s digital intangibility limits its safe-haven appeal in comparison to gold.

unusual places. In Mongolia, for example, cheap coal-generated electricity lends itself well to bitcoin mining. Whether the environmental and computing costs are sustainable is a moot point: one estimate suggests that creating a single bitcoin uses as much energy as a US household in a week.

But these obvious excesses, and the hype surrounding bitcoin itself, should not obscure the possible sea change in payment registration and processing.

The number of bitcoins is limited, but the number of cryptocurrencies clearly isn't.

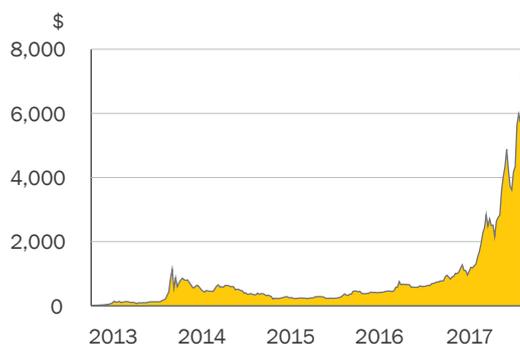
The technology may sideline the large financial institutions, reduce costs and raise the speed of transactions. Verification of payment and transfer of asset is simultaneous – the payment and ledger are one and the same. Custodial businesses will be transformed or even eliminated.

A number of large banks are trying to hedge their business models by forming a “permissioned” blockchain consortium. Members of this network maintain the ledger without the need for a cryptocurrency as it is not publically available.

Otherwise, investing in the technology is not as easy as it sounds. No one knows who the winning suppliers of this new financial technology (“fintech”) will be. As with other waves of innovation – from printing, through transportation, to the internet – the safest way to invest may be to back the business users whose costs will be cut, not the would-be producers.

Figure 5: Caveat emptor: bitcoin price

Dollars per unit

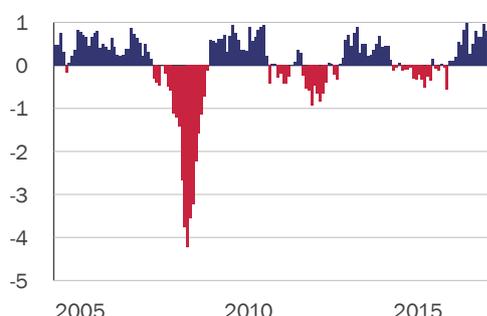


Source: Bloomberg, Rothschild & Co

Economy and markets: background

Growth: major economies

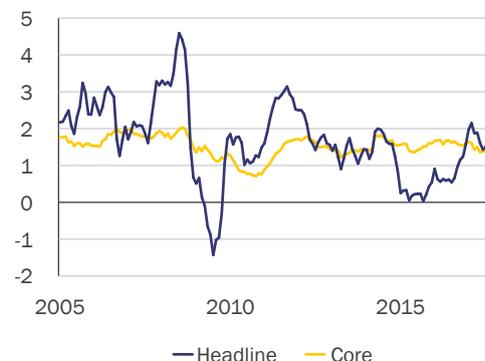
Business optimism: standard deviations from trend



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



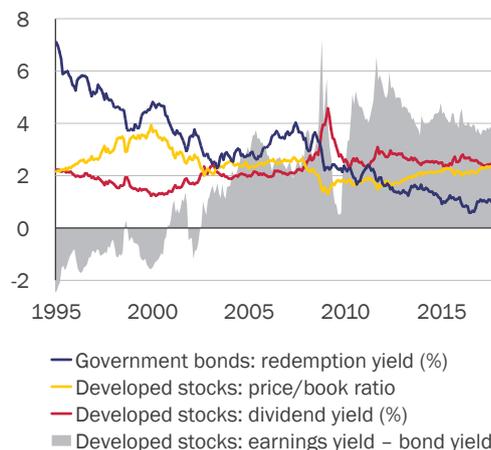
Source: OECD, Bloomberg, Rothschild & Co

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	2.4	-1.8	6.8
10-yr UK Gilt	1.3	1.1	13.3
10-yr German bund	0.4	-0.3	7.4
10-yr Swiss Govt. bond	-0.1	-1.9	6.0
10-yr Japanese Govt. bond	0.1	-0.8	4.3
Global credit: investment grade (USD)	1.6	1.2	9.4
Global credit: high yield (USD)	5.0	9.2	21.4
Emerging (USD)	4.5	5.8	16.6

Source: Bloomberg, Rothschild & Co

Selected stock markets

Dividend yields, recent local currency returns (MSCI indices)

	Yield (%)	1yr (%)	3yr (%)
World: all countries	2.3	22.2	31.1
Developed	2.4	21.7	31.0
Emerging	2.3	25.7	30.8
US	1.9	22.8	32.9
Eurozone	2.8	23.6	36.0
UK	3.9	11.8	27.0
Switzerland	3.1	21.3	15.3
Japan	1.9	27.4	34.4

Source: DataStream, Bloomberg, Rothschild & Co

Selected exchange rates

Trade-weighted indices, nominal (2000 = 100)

	Level	1yr (%)	3yr (%)
US dollar (USD)	105	-1.7	13.2
Euro (EUR)	123	4.3	3.2
Yen (JPY)	87	-9.3	6.8
Pound sterling (GBP)	78	5.2	-10.1
Swiss franc (CHF)	152	-4.3	4.8
Chinese yuan (CNY)	132	1.0	-1.0

Source: J.P. Morgan, Rothschild & Co

Commodities and volatility

	Level	1yr (%)	3yr (%)
CRB spot index (1994 = 100)	188	0.7	-31.0
Brent crude oil (\$/b)	61.4	27.1	-28.5
Gold (\$/oz.)	1,271	-0.5	8.3
Industrial metals (1991 = 100)	270	29.5	0.2
Implied stock volatility (VIX, %)	10.2	-40.3	-27.4
Implied bond volatility (MOVE, bp)	51	-21.9	-25.5

Source: Thomson Reuters, Bloomberg, Rothschild & Co

Notes

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