LV Longview Economics

Investments. Trades. Macro.

Quarterly Global Asset Allocation No. 48, 17th December 2021

(i.e. 6 months – 2 years global asset allocation views)

Written by: Harry Colvin, CFA, Director & Senior Market Strategist, Longview Economics

2022 Key Asset Allocation Driver: Policy Normalisation

a.k.a. Stay OW Risk in Strategic Portfolios

Summary Extract:

"…The bulls argue that policy normalisation is appropriate. That is, emergency monetary policy is no longer fitting for the US economy, given rapid real economic growth (+7% annualised forecast this quarter) and high inflation…

…If the bulls are correct, and the US and global economy can absorb/withstand that policy normalisation, then it will drive a number of key themes in markets next year (and beyond)…"

Table of Contents – Key Sections:

Published as Separate Individual Extracts

Important disclosures are included at the end of this report

2022 Key Asset Allocation Driver: Policy Normalisation

a.k.a. Stay OW Risk in Strategic Portfolios

Harry Colvin, CFA, Director & Senior Market Strategist, Longview Economics
Email: harry@longvieweconomics.com;

Summary & Conclusion

"There have been moments when the Fed acted mildly and pre-emptively, 1995 for example, to create what we might call a pause that refreshes with respect to an expansion, but that was when it was acting with a doctrine of looking ahead, not the current doctrine of no action until inflation is absolutely established."

"the difficulty of engineering a soft landing in which inflation comes down but we don't see a real problem is, I think, very challenging."

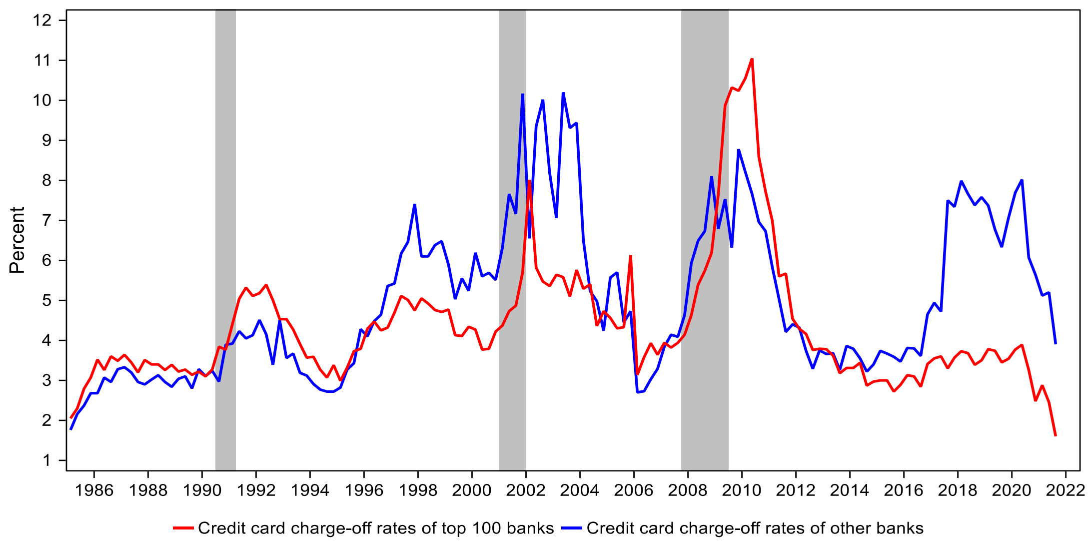
Source: Larry Summers, December 2021

Bearishness towards the global economy and risk assets is elevated. In particular, market participants are concerned about:

- **(i)** high inflation (and an associated real income squeeze);
- **(ii)** high wage inflation impacting corporate profit margins;
- **(iii)** the potential for a sharp tightening of Fed policy;
- **(iv)** fears about a potential slowdown in US & global economy (especially with the Fed in tightening mode); and
- **(v)** the rapid spread of the new Omicron variant.

....amongst many other factors (including the recent technical breakdown in various parts of the long duration growth parts of the equity market).

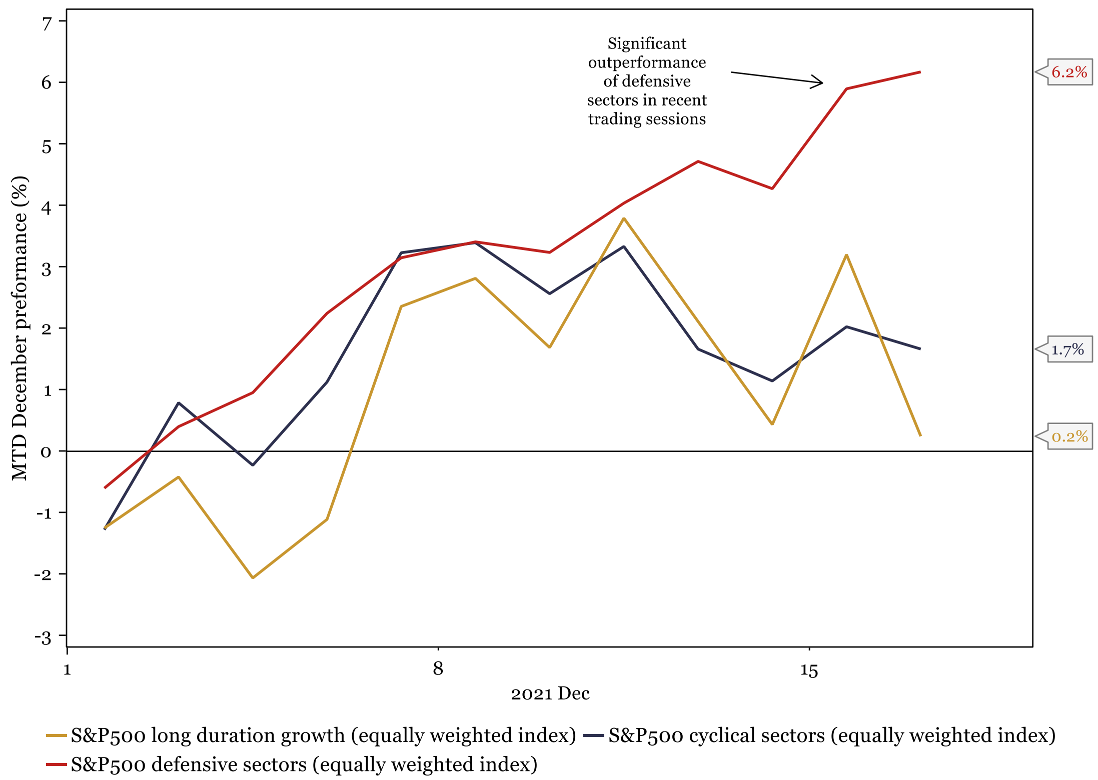
Fig 1: US credit card charge off rates (%)



Source: Longview Economics, Macrobond

The bears are therefore 'banging the drum' about rotating into cash, US Treasuries, and the safer/defensive sectors of the global equity market (i.e. healthcare, utilities and other bond proxies). Interestingly, in that respect, LONG/OW positioning in all those assets increased this month, according to the December BAML Fund Manager Survey, fig 4a. Indeed, from a sector perspective, the defensive areas of the market have dramatically outperformed month to date so far in December (fig 1a). In other words, therefore, caution & bearishness are currently key themes in investor portfolios[1].

Fig 1a: Month to date performance defensives, cyclicals and long duration growth sectors (%)



Source: Longview Economics, Macrobond

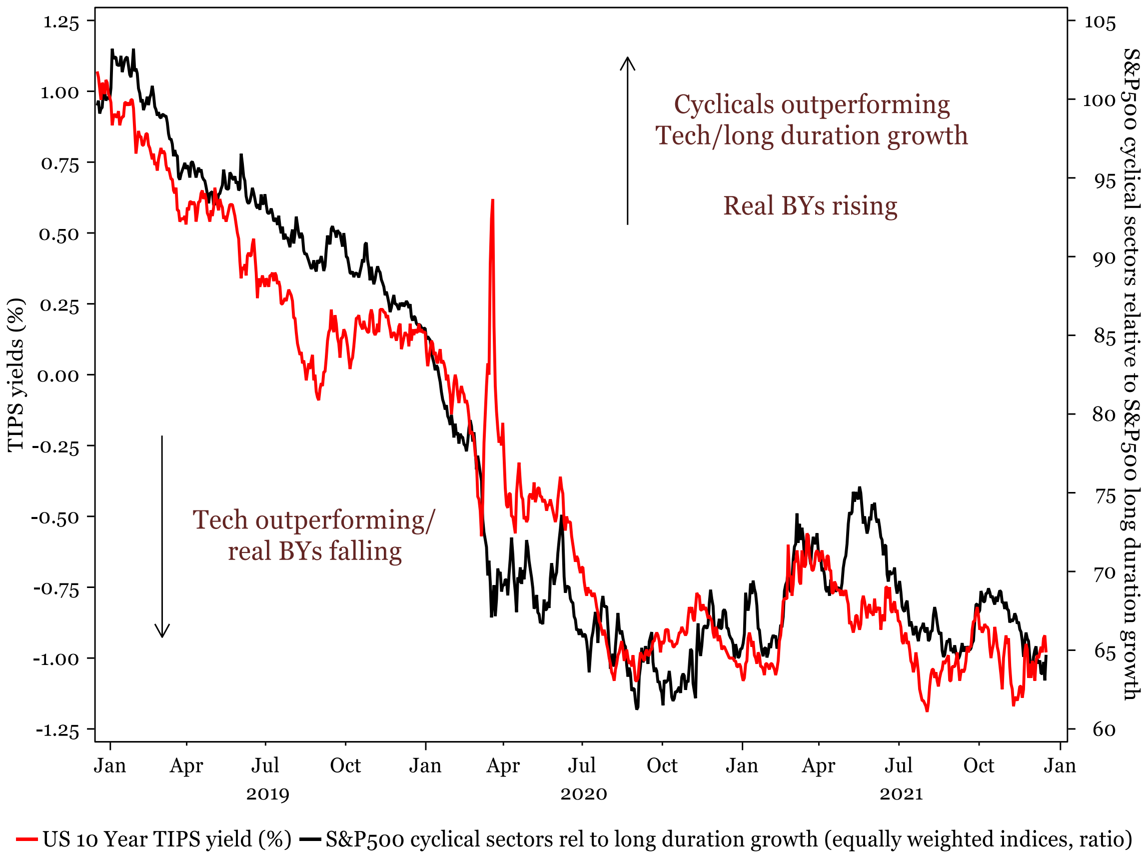
Are, though, the bears correct? Will the Fed hike three times next year into a slowing economy? Or, put another way, is the Fed about to make a policy mistake, as Larry Summers suggests? (see quote above).

Or is it, as the bulls suggest on the other side of the debate, appropriate that central banks normalise policy? That is, is emergency monetary policy no longer fitting for the US economy, given rapid real economic growth (+7% annualised forecast this quarter[ii]) and high inflation.

[1] Albeit we would note that there are some inconsistencies within recent BAML FMS reports (especially with respect to bond positioning).
[ii] See Atlanta Fed GDPNow forecast for Q4 2021.

If the bulls are correct, and the US and global economy can absorb/withstand that policy normalisation, then it will **drive a number of key themes in markets next year (and beyond).** In particular, history would point to a high likelihood of: An uptrend in US Treasury yields; higher real bond yields; a flatter yield curve; and an ongoing cyclical bull market in equities, led by cyclically sensitive sectors (e.g. see fig 1b below, which shows the recent tight correlation between TIPS yields and the performance of cyclical sectors relative to long duration growth).

Fig 1b: US 10 year TIPS yield (%) vs. cyclicals relative to long duration growth



Source: Longview Economics, Macrobond

Four Reasons to be Bullish

In our view, the bulls are correct and policy normalisation should be the key theme in markets in 2022. We therefore (continue to) favour a risk on tilt in our recommended strategic portfolio (see sections 2 & 3 for detailed recommendations). **The rationale for that view is four fold.** In particular:

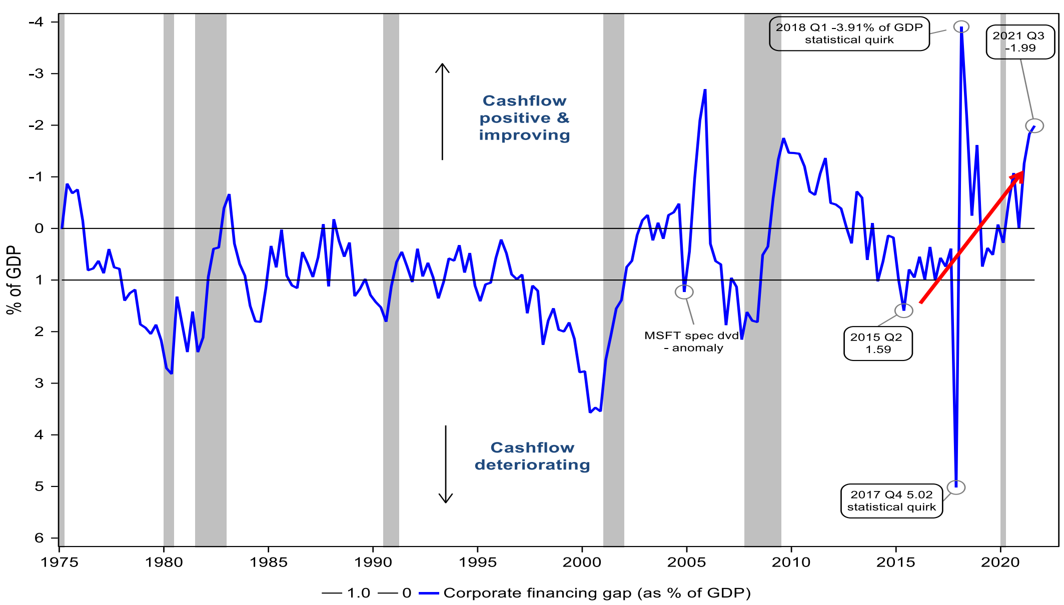
1. **The US economy is in strong health, with boom like economic and earnings growth likely to persist**. Of note US corporate sector cashflow is close to record high levels on latest data (fig 1c), profit growth is rapid, the profit share of GDP is at a record high (fig 1g), and (GDP profit share) margins are expanding. Added to which, US households are cyclically and structurally strong (on many fronts, e.g. see fig 1) and should continue to drive growth in the US economy. Elsewhere, the Eurozone growth outlook is reasonably robust while it's increasingly likely that China will experience a soft landing, followed by a phase of economic reflation next year.

   For full analysis of the global economy see:

   - 8th December '21 Asset Allocation Extract "US Economy: Inflation Pressures Peaking?";
   - 10th December '21 Asset Allocation Extract "Eurozone: Strong Growth Underpinnings";
   - 15th December '21 Asset Allocation Extract "China Soft Landing: In the Balance – But Most Likely Outcome".

   As such, and given that the global economy is considerably stronger than it was in the last economic cycle, it's likely, over time, to successfully absorb a longer/larger rate hiking cycle (e.g. compared to 2016-18). If correct, real and nominal bond yields should trend higher (for detail see 3rd December 2021 Longview Letter No. 136: "The Real Bond Yield Conundrum") and the bull market in equities should persist.

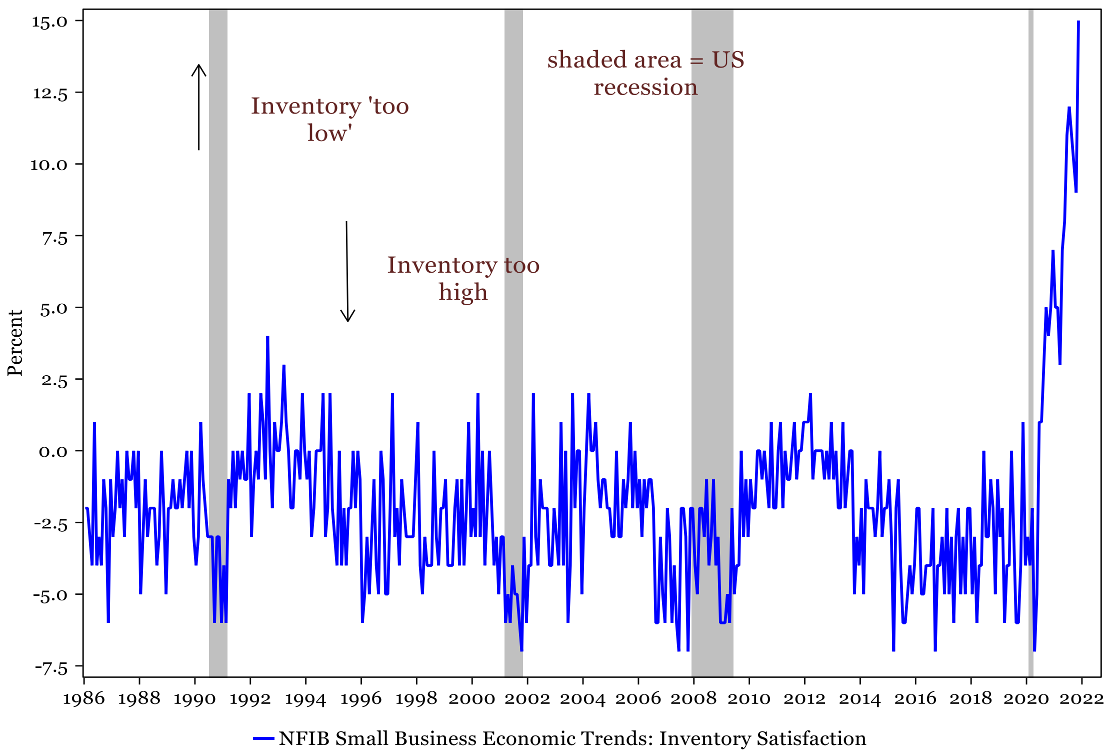
Fig 1c: US corporate sector financing gap (% of GDP)



Source: Longview Economics, Macrobond

2. **Inventory restocking is likely** and adds to the case for strong economic momentum and an uptrend in bond yields. As we've shown in prior research, the relationship between bond yields and inventories is reasonably tight and can be traced back to the 1960s (for detail see Longview Letter No. 121 "The Rhythm of 'mini-cycles' a.k.a. Bond Yields, Inventories & Orders"). In that respect, inventories in Western economies are currently too low. This week's NFIB small optimism survey, for example, points to an extreme lack of inventory (fig 1d) while, in Europe, manufacturing inventories are close to a multi-decade low. Naturally, low inventory partly reflects supply chain tensions (and well as strong demand given high levels of stimulus). As such, and as the global economy moves **from pandemic to endemic**, the ability of companies to rebuild stock levels should improve (i.e. as those tensions ease). That should generate strong economic activity. Of interest, there's also some early evidence that the Omicron strain, once infection rates have reached high levels, may support the transition from pandemic to endemic (for detail see Longview COVID-19 Virus Update, 1st December '21: "Omicron – Is It All Bad?").

Fig 1d: NFIB small business optimism: Inventory satisfaction

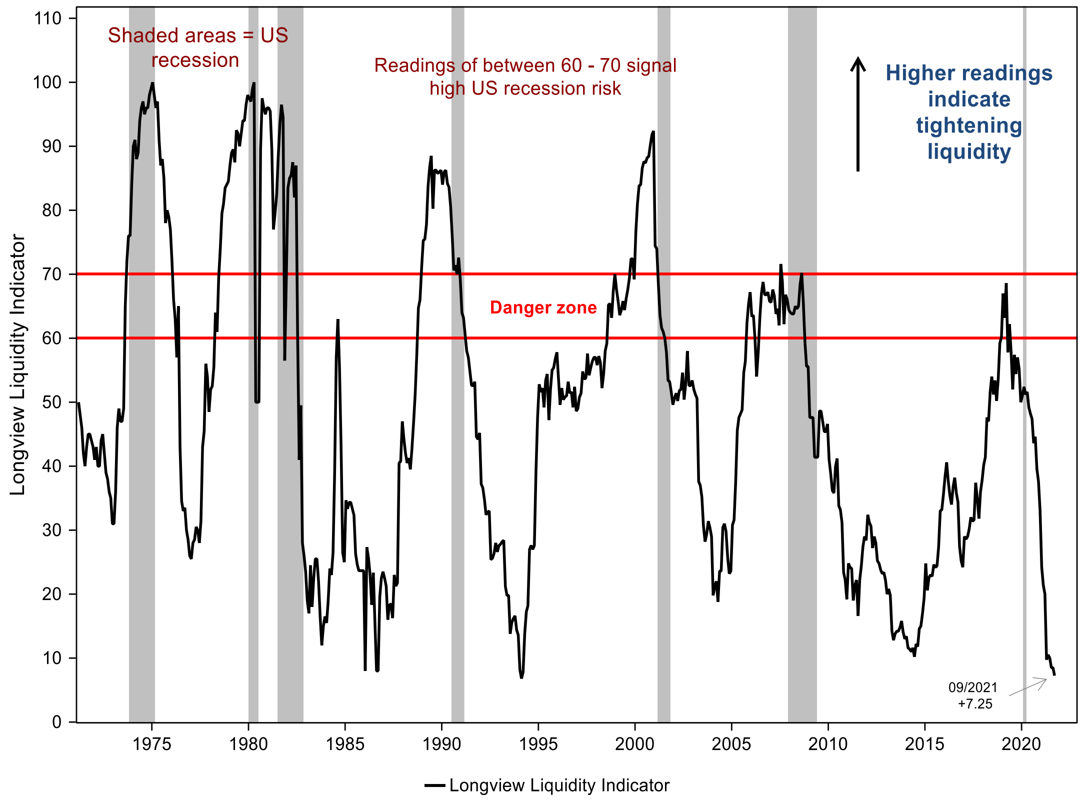


Source: Longview Economics, Macrobond

3. **Liquidity remains plentiful.** Cyclical bull markets in equities are typically driven by three key factors: **(i)** Ongoing economic & earnings growth (which is likely next year – see points 1 & 2 above); **(ii)** plentiful liquidity; and **(iii)** the absence of shocks. Shocks, by definition, are difficult to forecast (although the stock market has so far proven resilient to shocks this year).

With respect to (ii), we track several key barometers of 'the tightness of money', which are the inputs into our Liquidity Indicator, shown in fig 1e below. Currently, this indicator has a reading of +7, one of its lowest readings on record, highlighting plentiful liquidity in the US economy and banking system – and suggesting that the risk of a Fed policy mistake is low. In other words, significant tightening is necessary before monetary policy becomes 'too tight'. All of that adds to the case that the conditions for policy normalisation are in place.

Fig 1e: Longview Liquidity Indicator, shown with US recessions



Source: Longview Economics, Macrobond

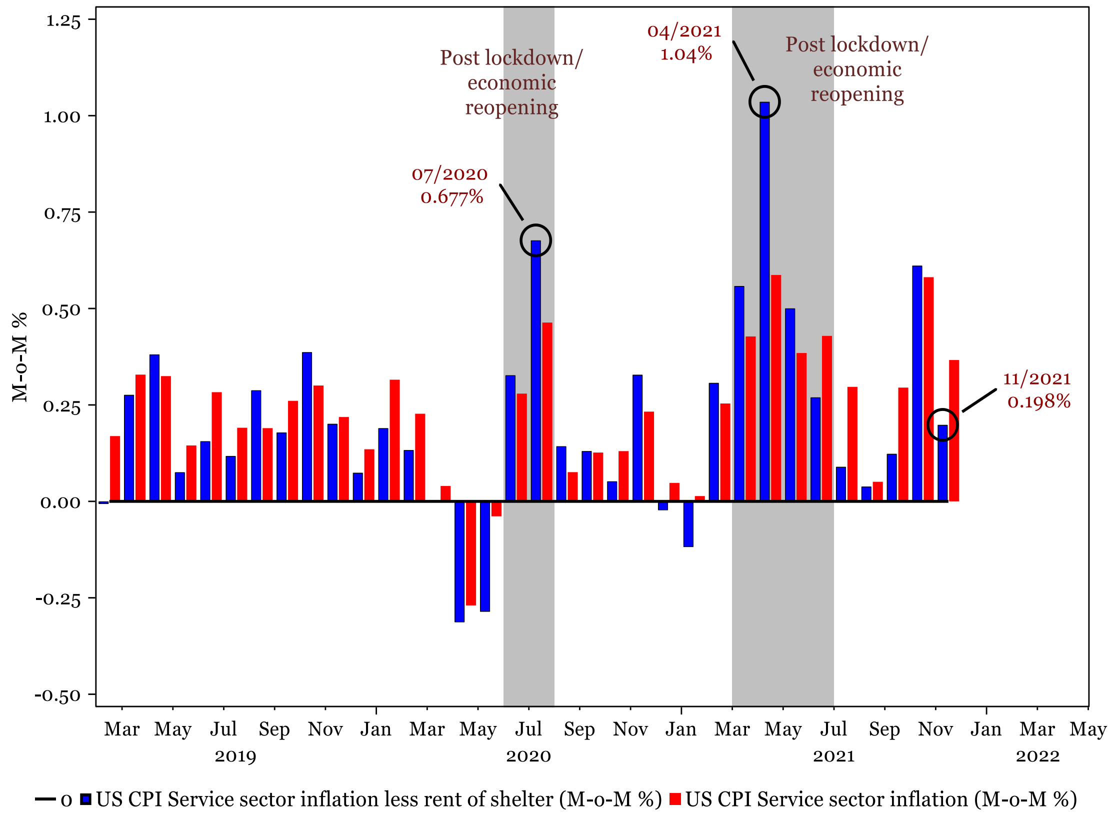
4. **US inflation should soften**, at least in the first half of next year. That, in turn, should reduce the pressure on the Fed to raise interest rates early in 2022 (and aggressively), and therefore help underpin the case for further strength in equities/risk assets. In particular, headline inflation should fall as goods inflation softens given: i) recent weaker commodity prices; ii) signs of easing supply chain tensions; as well as iii) various monetary factors (e.g. a slowing of money supply growth relative to capacity), for detail see 8th December Asset Allocation Extract "US Economy: Inflation Pressures Peaking?".

   Of note in that respect, goods prices are the key current source of high US inflation (along with shelter prices). Service sector inflation, in contrast, is reasonably tame (but accounts for 60% of the CPI basket). Last month, for example, services (ex. shelter) was just +0.2% M-o-M. Excluding the

October spike, (which appears to be a one off), **services ex-shelter has averaged 0.11% M-o-M in the past five months** (i.e. since the April – June phase of strong inflation due to the economic reopening, see fig 1f). The underlying trend in service sector prices is therefore relatively muted.

As such, if we're correct and goods inflation softens, then the **pressure on the Fed to tighten next year should fade somewhat**. That would further support the uptrend in global equities and other risk asset prices.

Fig 1f: US CPI services inflation vs. services less rent of shelter (M-o-M %)



Source: Longview Economics, Macrobond

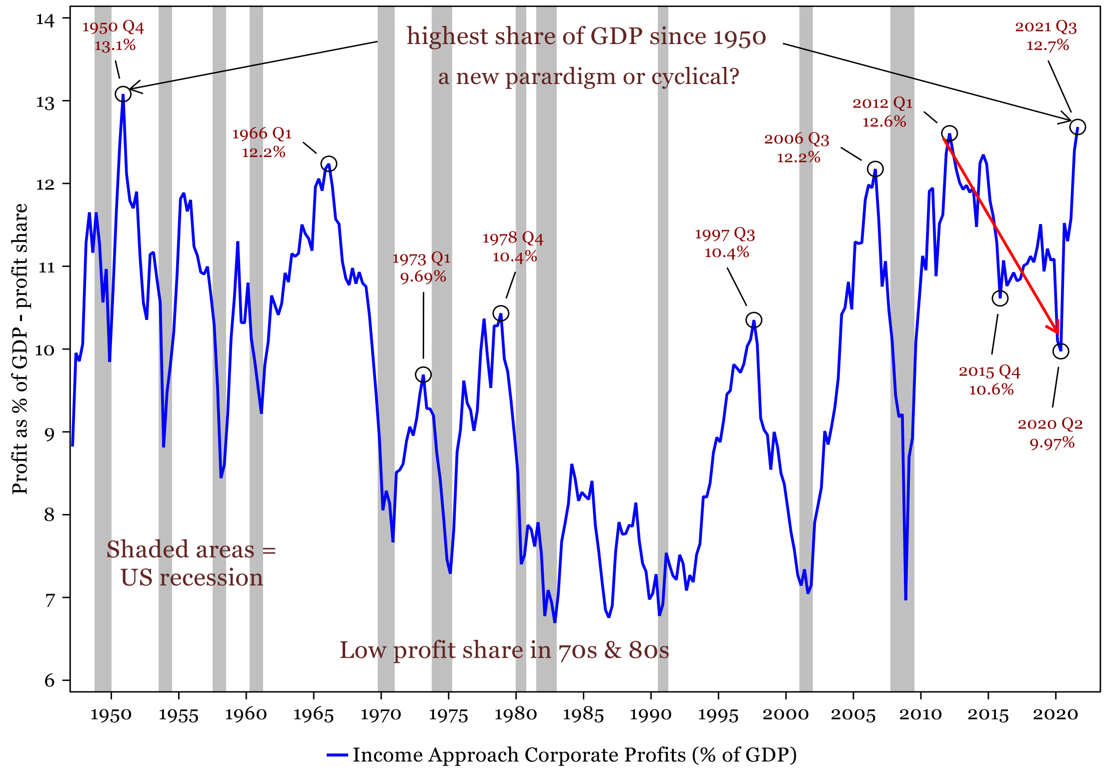
Risks to that outlook, as always, are multiple and include:

(i) **Omicron** and, in particular, the possibility that this variant proves to be more deadly than expected (albeit the early evidence is encouraging). European economies, in particular, have begun to reinstate various restrictions.

(ii) **'Taper blow-ups'**: It's possible that tapering results in stress in certain parts of the global economy, especially in the most vulnerable and structurally challenged economies. Turkey, for example, is in the midst of a currency crisis. While most of that is driven by domestic policy choices (i.e. rate cuts despite high inflation), tighter Fed policy is likely adding to the stress at the margin.

(iii) **A possible fall in the profit share of GDP**. While a high/rising profit share is positive for equity markets, the bears argue that it's reached a peak (at its highest level since 1950), and will now shrink as a result of rapid wage growth. While that's possible, a falling profit share does not preclude an ongoing equity bull market. From 2012 – 2015, for example, profits trended down as a share of GDP, yet the equity market continued to trend up and make new all time highs. There were similar dynamics in the late 1960s and late 1990s (fig 1g).

Fig 1g: US profit share of GDP (%) shown with US recession bands



Source: Longview Economics, Macrobond

(iv) **Productivity** growth is a two way risk to markets. In particular, if productivity growth weakens, that will add to current inflationary pressures, and potentially speed up the pace of Fed tightening. Equally, it's possible that the post pandemic world brings about a phase of strong productivity growth (i.e. it's possible that the pandemic has accelerated technological advances and adoption of those new technologies). Naturally that would dampen inflation and potentially slow the speed of Fed tightening.

See Sections 2 & 3 for detailed asset allocation recommendations.

Section 2: Top Level Portfolio Weightings

This quarter we favour keeping top level weightings unchanged from our last strategic asset allocation update.

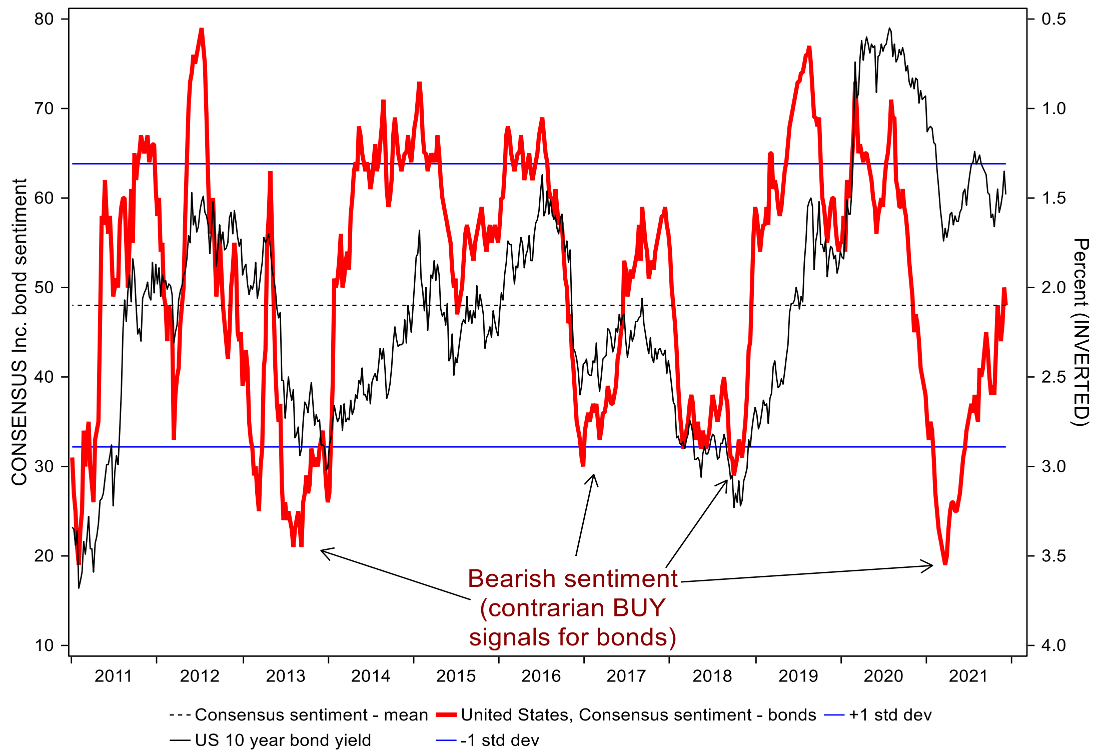
In particular, key themes in the portfolio include staying **UW US Treasuries** as well as other safe havens/Treasury proxies (i.e. high grade bonds). Of note, bearish sentiment in bonds has unwound in recent quarters, see fig 2 below. On that basis, the risk of a bond rally has faded considerably and the sentiment setup looks a lot like mid-2017.

We also favour staying **OW global equities** (in both EM & DM, see table 2 below). Given our view on bonds we continue to recommend large OW positions in Europe and other cyclically sensitive parts of the global equity market (and retain a NEUTRAL position in US equities relative to the benchmark).

While we recommend keeping total **commodities** exposure unchanged, we favour zero weighting gold (give our view on TIPS, see section 1 for detail), i.e. in favour of increasing exposure to energy (see table 2a).

We also recommend staying NEUTRAL **high yield credit** given that spreads remain reasonably tight relative to history. In particular, while it's possible that yields continue to trend lower, we prefer to express our positive risk view through other asset classes.

Fig 2: Bond sentiment vs. 10 year bond yield (NB scale INVERTED)



Source: Longview Economics, Macrobond

Table 2: Benchmark & Recommendations[2]

RISKY Assets				**SAFE Assets**			
Asset	L'view B'mark (%)	Dec '21 weight'g (%)	OW/UW (pp)	Asset	L'view B'mark (%)	Dec '21 weight'g (%)	OW/UW (pp)
DM Equities	25	35	+10	DM Sovereign Debt	25	15	-10
EM Equities	10	14	+4	Cash	15	15	-
Commodities	5	8	+3	HG Corporate Debt	10	3	-7
HY & EM Corporate Debt	5	5	-				
EM Sovereign	5	5	-				
Total RISKY	***50***	***67***	***+17***	**Total SAFE**	**50**	**33**	***-17***

Source: *Longview Economics*
[2] split of safe haven assets vs. risk assets (& vs. benchmarks)

Table 2a: Top level 'Long Term' Recommended Asset Allocation (% weightings)

Asset Class	**NEW** % of total (Updated – Dec '21)	% Breakdown	Change from last update	**OLD** % of total
Equity:	**49**		-	**49**
- Developed		35	-	35
- Emerging		14	-	14
Corporate Debt:	**8**		-	**8**
- US High grade corporate		2	-	2
- EZ High grade corporate		1	-	1
- US High yield corporate		4	-	4
- EZ High yield corporate		1	-	1
- EM corporate debt		-	-	-
Commodities:	**8**		-	**8**
- Gold		0	-1	1
- Silver		0	-	0
- Agricultural		1	-	1
- Base metals		5	-	5
- Energy		2	+1	1
Sovereign debt:	**20**		-	**20**
- Developed		15	-	15
- Emerging		5	-	5
Cash	**15**	15	-	**15**

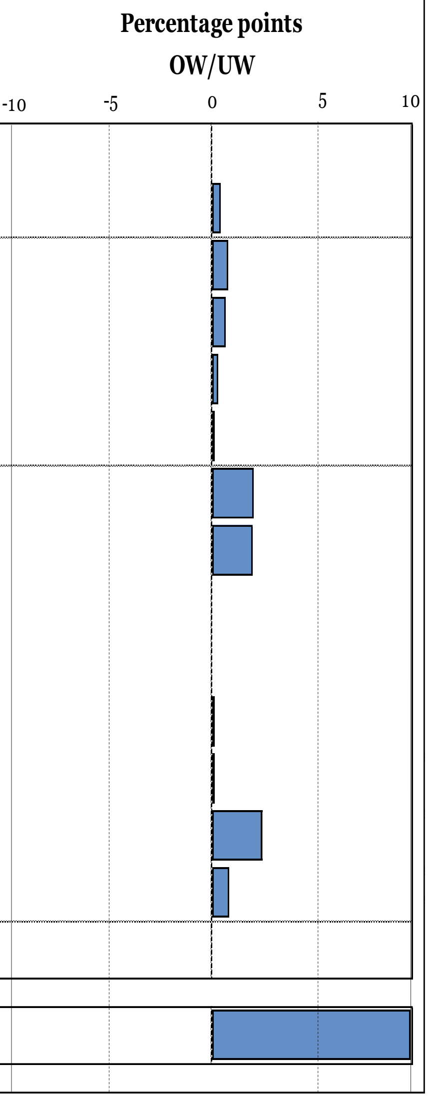
Source: *Longview Economics*

Section 3: Detailed Asset Allocation Recommendations

Developed market equities: As noted above, we recommend staying 10pp OW DM equities. Key OW positions are in the cyclically sensitive country indices, including Germany and Sweden as well as the value parts of the market (UK and Italy).

Fig 3: Longview DM Equity OW/UW recommendations vs. S&P DJ Benchmark Weightings[3]

Region	Category/ Theme	Country	DM index weighting	B'mark allocation	OW/ UW	Total allocation
Americas	Tech/Growth	USA	64%	16.1	0.0	16.1
	Commodity	Canada	3%	0.8	0.4	1.2
Asia & Oceania		Australia	2%	0.6	0.8	1.4
	US Dollar	Japan	8%	1.9	0.7	2.6
		South Korea	2%	0.5	0.3	0.8
		Hong Kong	1%	0.2	0.1	0.3
Europe	Cyclicals	Germany	3%	0.7	2.1	2.8
		Sweden	1%	0.3	2.1	2.4
	Defensives	Switzerland	3%	0.7	0.0	0.7
		Spain	1%	0.2	0.0	0.2
	Growth/ Expensive	Netherlands	1%	0.4	0.1	0.5
		France	3%	0.7	0.2	0.9
	Value	UK	4%	1.1	2.5	3.6
		Italy	1%	0.2	0.9	1.1
Other			3%	0.8	0.0	0.8
DM Equities			100%	25.0	10.0	35.0



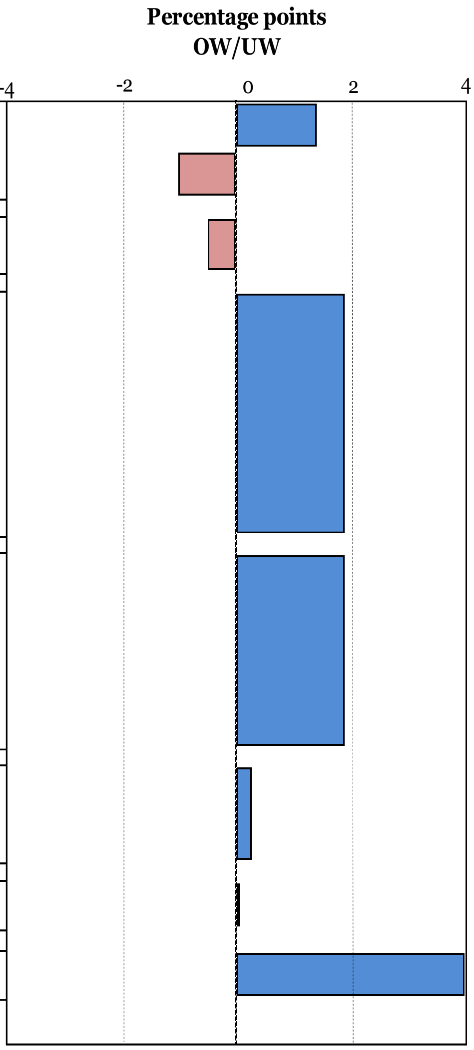
Source: Longview Economics, S&P Dow Jones DM index
[3] Other includes: Denmark, Singapore, Belgium, Finland, Israel, Norway, Ireland, Austria, New Zealand, Luxembourg, Portugal & Iceland.

Emerging market equities: We favour staying OW EM equities by +4pp relative to the benchmark. In particular, we continue to favour OW exposure to China, given that the authorities have begun to meaningfully ease policy. We also recommend OW positions in key commodity producing markets and in countries with high levels of global trade exposure.

Fig 3a: Longview EM Equity OW/UW recommendations vs. S&P DJ Benchmark EM Weightings

Category	Country	EM index weighting	B'mark allocation	OW/ UW	Total allocation
Largely autonomous growth models	China	37%	3.70	1.4	5.1
	India	15%	1.50	(1.0)	0.5
Tech/growth proxy	Taiwan	17%	1.67	(0.5)	1.2
Commodity producers	Brazil	6%	1.63	1.9	3.5
	South Africa	4%			
	Russia	4%			
	Mexico	2%			
	Chile	1%			
Southeast Asian exporters /global trade proxies	Malaysia	2%	0.63	1.9	2.5
	Thailand	2%			
	Indonesia	1%			
	Philippines	1%			
Bond yield proxies/cyclicals	Turkey	1%	0.15	0.3	0.4
	Poland	1%			
Other*		7%	0.72	0.1	0.8
EM Equities		100%	10.0	4.0	14.0

*Includes Saudi Arabia, Qatar, Kuwait, UAE, Colombia, Peru, Greece, Hungary, Egypt, Pakistan, & Czech Republic. These have been excluded from our analysis due to their small weightings and/or lack of liquidity

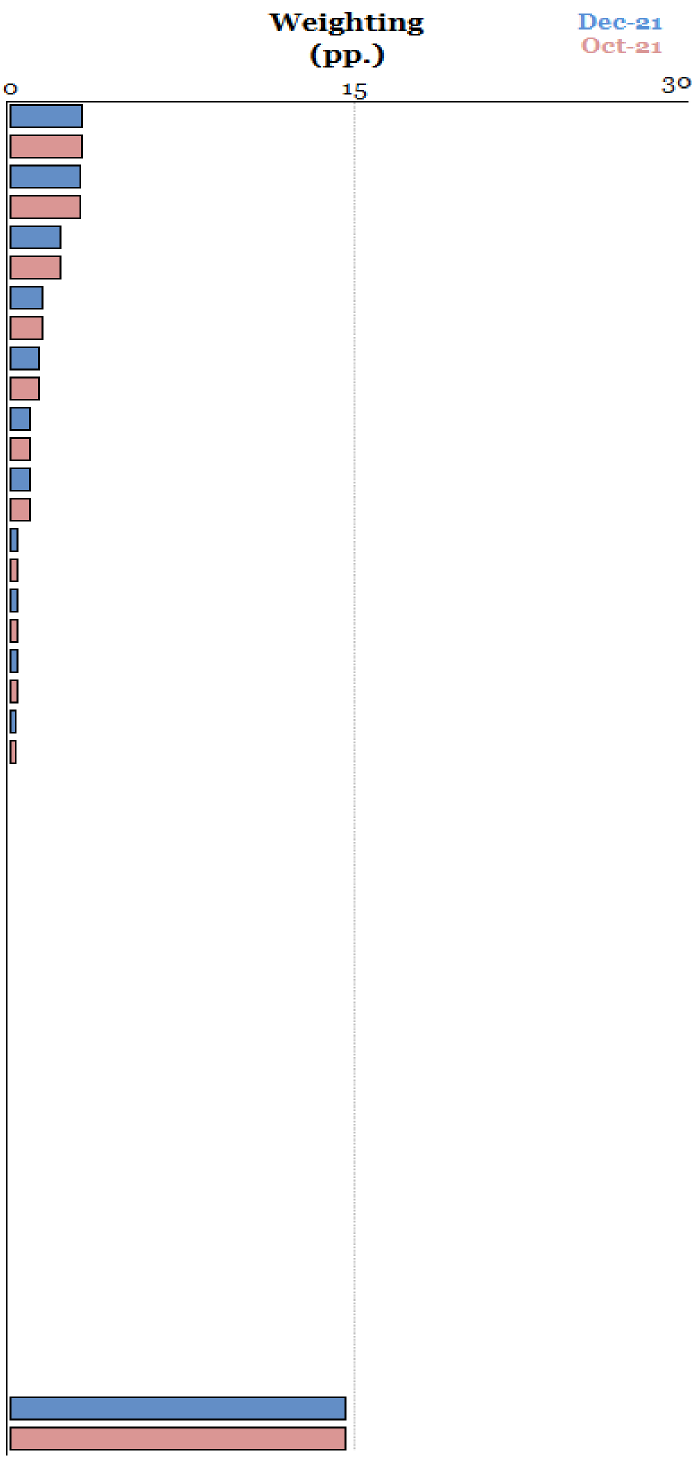


Source: Longview Economics, S&P Dow Jones EM index

Developed market sovereign bonds: Given the rationale laid out above, we recommend UW exposure to sovereign bonds relative to the benchmark.

Fig 3b: Longview DM Sovereign Bond weightings

Country	Dec-21 Weighting
US 10 Yrs	3.3
US 30 Yrs	3.2
UK	2.3
Norway	1.5
Australia	1.3
Canada	0.9
NZ	0.9
Germany	0.4
Spain	0.4
Portugal	0.4
Italy	0.3
Austria	0.0
Belgium	0.0
Finland	0.0
Holland	0.0
France	0.0
Denmark	0.0
Sweden	0.0
Greece	0.0
Ireland	0.0
Japan	0.0
Sovereign Bonds	**15.0**

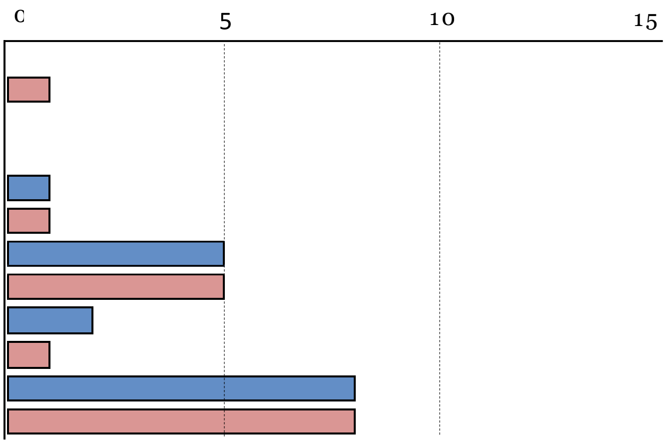


Source: Longview Economics

Commodities: Given the growing likelihood of an OPEC+ supply response to falling oil prices early next year, and our view on real bond yields, we favour switching away from gold and into energy.

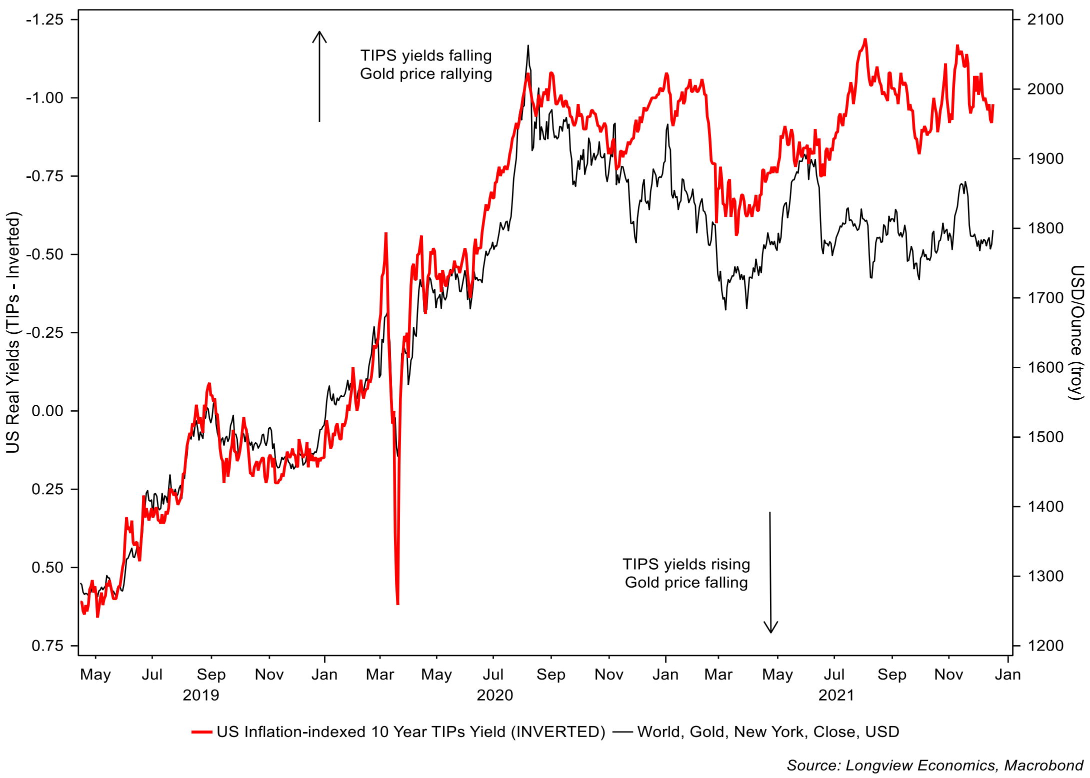
Fig 3c: Commodities weightings

Commodity	Dec-21 Weighting
Gold	0.0
Silver	0.0
Agricultural	1.0
Base metals	5.0
Energy	2.0
Commodities	**8.0**



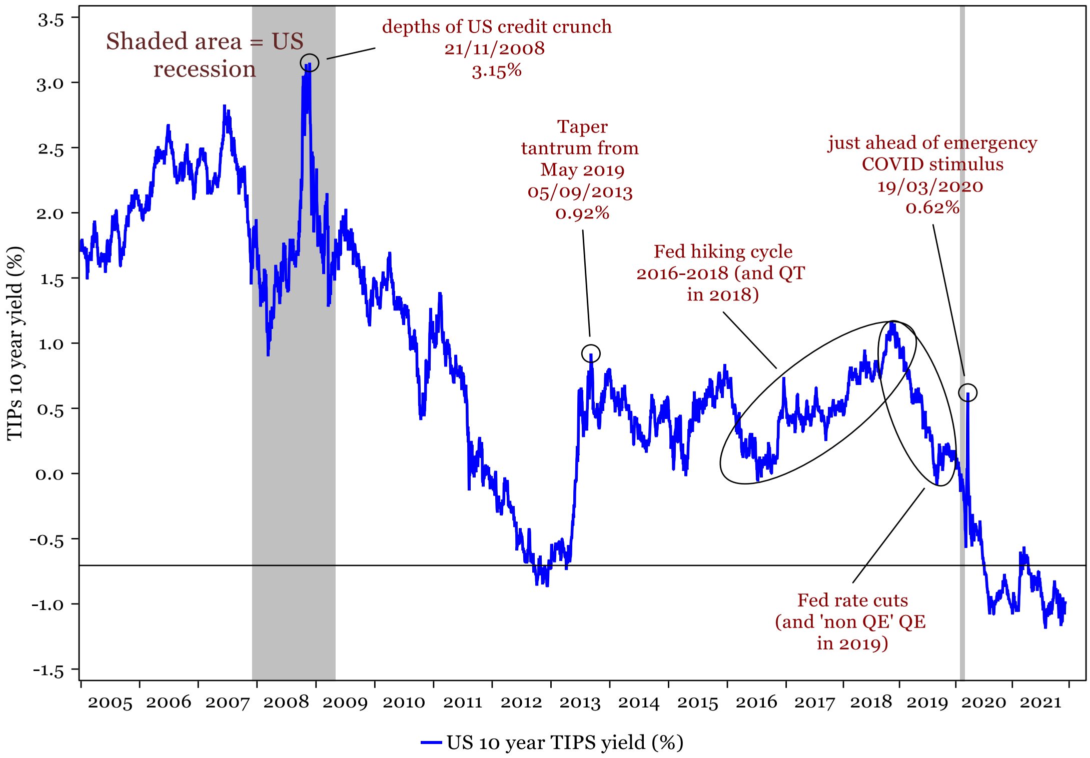
Source: Longview Economics

Fig : US 10 year TIPS yield (%), scale INVERTED vs. gold price (US$/oz)



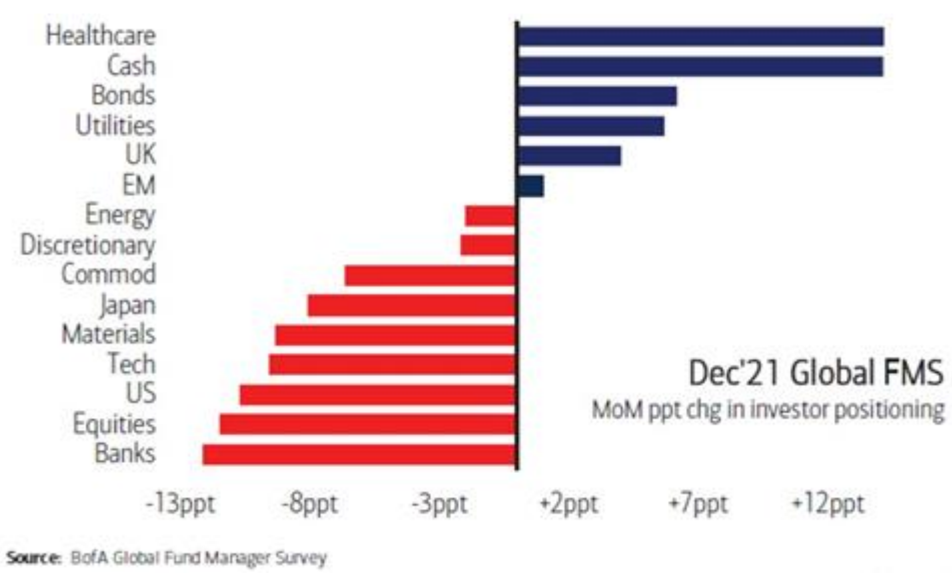
Section 4: Key charts

Fig 4: US 10 year TIPS yield (%)



Source: Longview Economics, Macrobond

Fig 4a: Month on month change in FMS investor positioning



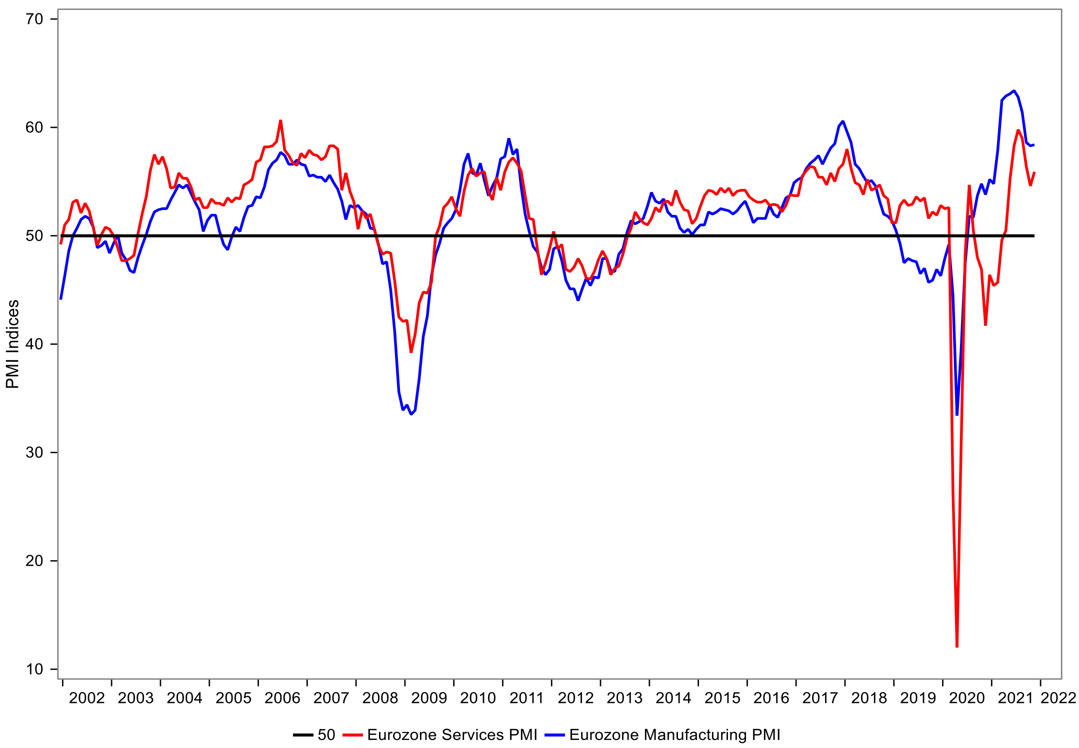
Section 5: Global PMI trends

Table 5: Various trends in PMI indices – Western economies

Country - PMI Type	11/21	10/21	9/21	8/21	7/21	6/21	5/21	4/21	3/21	2/21	1/21	12/20
US - ISM Manufacturing	61.1	60.8	61.1	59.9	59.5	60.6	61.2	60.7	64.7	60.8	58.7	60.5
US - ISM Non-Manufacturing	69.1	66.7	61.9	61.7	64.1	60.1	64.0	62.7	63.7	55.3	58.7	57.7
Eurozone - Manufacturing	58.4	58.3	58.6	61.4	62.8	63.4	63.1	62.9	62.5	57.9	54.8	55.2
Eurozone - Services	55.9	54.6	56.4	59.0	59.8	58.3	55.2	50.5	49.6	45.7	45.4	46.4
Germany - Manufacturing	57.4	57.8	58.4	62.6	65.9	65.1	64.4	66.2	66.6	60.7	57.1	58.3
Germany - Services	52.7	52.4	56.2	60.8	61.8	57.5	52.8	49.9	51.5	45.7	46.7	47.0
France - Manufacturing	55.9	53.6	55.0	57.5	58.0	59.0	59.4	58.9	59.3	56.1	51.6	51.1
France - Services	57.4	56.6	56.2	56.3	56.8	57.8	56.6	50.3	48.2	45.6	47.3	49.1
UK - Manufacturing	58.1	57.8	57.1	60.3	60.4	63.9	65.6	60.9	58.9	55.1	54.1	57.5
UK - Services	58.5	59.1	55.4	55.0	59.6	62.4	62.9	61.0	56.3	49.5	39.5	49.4
Italy - Manufacturing	62.8	61.1	59.7	60.9	60.3	62.2	62.3	60.7	59.8	56.9	55.1	52.8
Italy - Services	55.9	52.4	55.5	58.0	58.0	56.7	53.1	47.3	48.6	48.8	44.7	39.7
Sweden - Manufacturing	63.3	64.2	64.6	60.1	64.5	64.8	65.7	68.7	64.2	62.1	62.9	64.7
Sweden - Services	68.7	68.0	69.7	65.0	69.1	67.2	71.0	66.1	61.9	62.4	60.2	56.7

Source: Longview Economics, Macrobond

Fig 5: Eurozone manufacturing & service sector PMIs



Source: Longview Economics, Macrobond

Table 5a: Various trends in PMI indices – Asian economies

Country - PMI Type	11/21	10/21	9/21	8/21	7/21	6/21	5/21	4/21	3/21	2/21	1/21	12/20
China - Manufacturing (Offical)	50.1	49.2	49.6	50.1	50.4	50.9	51.0	51.1	51.9	50.6	51.3	51.9
China - Services (Official)	52.3	52.4	53.2	47.5	53.3	53.5	55.2	54.9	56.3	51.4	52.4	55.7
China - Manufacturing (HSBC)	49.9	50.6	50.0	49.2	50.3	51.3	52.0	51.9	50.6	50.9	51.5	53.0
China - Services (HSBC)	52.1	53.8	53.4	46.7	54.9	50.3	55.1	56.3	54.3	51.5	52.0	56.3
Japan - Manufacturing	54.5	53.2	51.5	52.7	53.0	52.4	53.0	53.6	52.7	51.4	49.8	50.0
Japan - Services	53.0	50.7	47.8	42.9	47.4	48.0	46.5	49.5	48.3	46.3	46.1	47.7
India - Manufacturing	57.6	55.9	53.7	52.3	55.3	48.1	50.8	55.5	55.4	57.5	57.7	56.4
India - Services	58.1	58.4	55.2	56.7	45.4	41.2	46.4	54.0	54.6	55.3	52.8	52.3
South Korea - Manufacturing	50.9	50.2	52.4	51.2	53.0	53.9	53.7	54.6	55.3	55.3	53.2	52.9
Singapore - Manufacturing	50.6	50.8	50.8	50.9	51.0	50.8	50.7	50.9	50.8	50.5	50.7	50.5
Taiwan - Manufacturing	54.9	55.2	54.7	58.5	59.7	57.6	62.0	62.4	60.8	60.4	60.2	59.4
Indonesia - Manufacturing	53.9	57.2	52.2	43.7	40.1	53.5	55.3	54.6	53.2	50.9	52.2	51.3
Hong Kong - Manufacturing	52.6	50.8	51.7	53.3	51.3	51.4	52.5	50.3	50.5	50.2	47.8	43.5

Source: Longview Economics, Macrobond

Table 5b: Various trends in PMI indices, other countries

Country - PMI Type	11/21	10/21	9/21	8/21	7/21	6/21	5/21	4/21	3/21	2/21	1/21	12/20
Brazil - Manufacturing	49.8	51.7	54.4	53.6	56.7	56.4	53.7	52.3	52.8	58.4	56.5	61.5
Brazil - Services	53.6	54.9	54.6	55.1	54.4	53.9	48.3	42.9	44.1	47.1	47.0	51.1
Russia - Manufacturing	51.7	51.6	49.8	46.5	47.5	49.2	51.9	50.4	51.1	51.5	50.9	49.7
Russia - Services	47.1	48.8	50.5	49.3	53.5	56.5	57.5	55.2	55.8	52.2	52.7	48.0
Turkey - Manufacturing	52.0	51.2	52.5	54.1	54.0	51.3	49.3	50.4	52.6	51.7	54.4	50.8
Poland - Manufacturing	54.4	53.8	53.4	56.0	57.6	59.4	57.2	53.7	54.3	53.4	51.9	51.7
Hungary - Manufacturing	52.2	52.9	52.0	55.6	55.8	55.0	53.1	51.0	48.8	49.0	54.5	51.6
Czech Rep. - Manufacturing	57.1	55.1	58.0	61.0	62.0	62.7	61.8	58.9	58.0	56.5	57.0	57.0
Canada - Manufacturing	61.2	59.3	70.4	66.0	56.4	71.9	64.7	60.6	72.9	60.0	48.4	46.7
South Africa - Manufacturing	57.2	53.6	54.7	56.2	43.5	57.4	57.8	56.2	57.4	53.0	50.9	50.3
Australia - Manufacturing	54.8	50.4	51.2	51.6	60.8	63.2	61.8	61.7	59.9	58.8	55.3	55.3
Australia - Services	49.6	47.6	45.7	45.6	51.7	57.8	61.2	61.0	58.7	55.8	54.3	54.3

Source: Longview Economics, Macrobond

LV Longview Economics

Investments. Trades. Macro.

US Economy: Inflation Pressures Peaking?

Harry Colvin, CFA, Director & Senior Market Strategist, Longview Economics
Email: harry@longvieweconomics.com; Direct Line: +44 (0) 207 062 8803

Section 7: Overview

"Inflation is an increase in the quantity of money without a corresponding increase in the demand for money, i.e. for cash holdings."

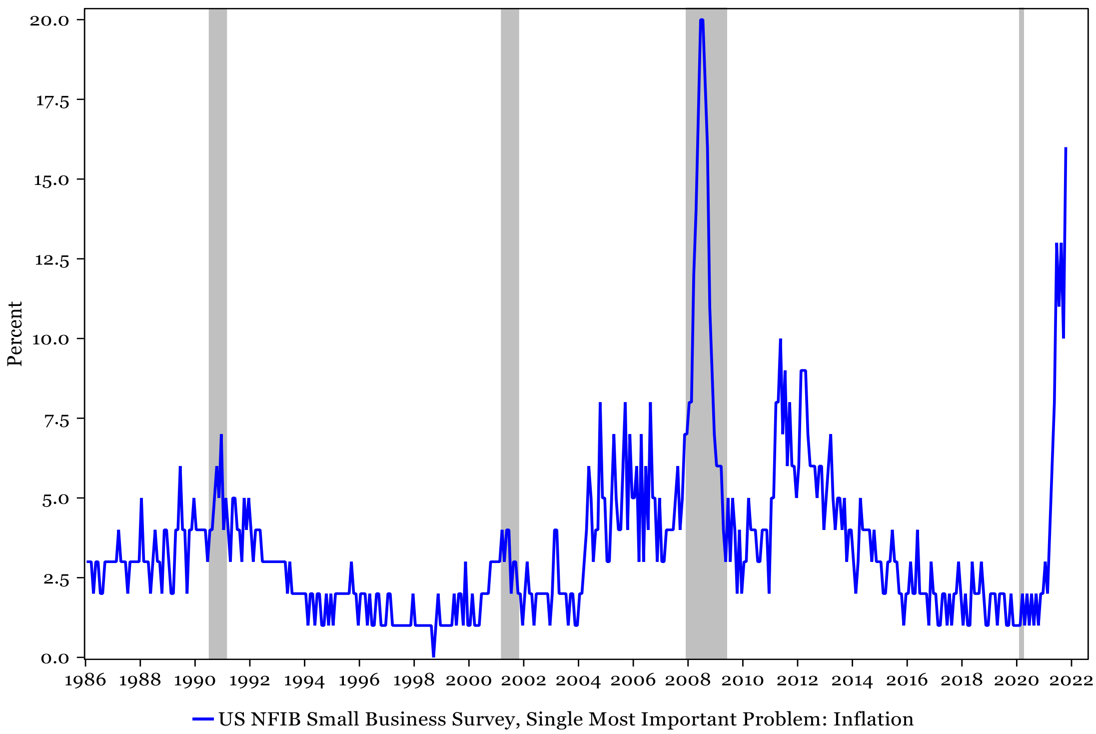
Source: Ludwig von Mises, Austrian economist

"No central banker would disagree with the proposition that inflation is primarily a monetary phenomenon. Not one of them will disagree that every inflation has been accompanied by a rapid increase in the quantity of money and every deflation by a decline in the quantity of money."

Source: Milton Friedman

There is a long worry list when it comes to the US growth outlook. In particular, many are concerned about high inflation. The bears argue that it will persist, and result in **(i)** a sharp tightening of Fed policy (and possibly an over-tightening); **(ii)** a real squeeze on household incomes; and **(iii)** a compression of corporate sector margins. All of that has the potential to shorten this economic expansion. The latest NFIB survey is troubling in that respect, with inflation ranking as one of the top problems facing companies (fig 7).

Fig 7: NFIB Survey – Single Most Important Problem: Inflation



Source: Longview Economics, Macrobond

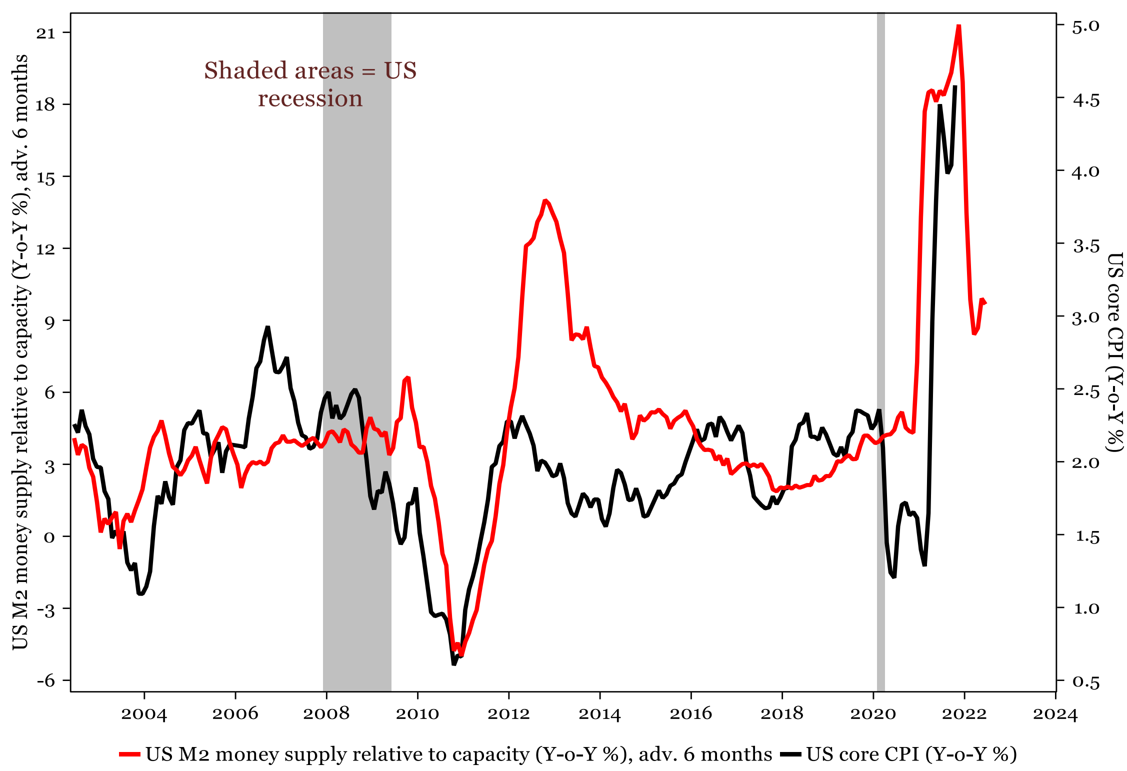
The key question, therefore, is: How pernicious and long lasting will the current phase of strong inflation be? And, linked to that, how strong is the outlook for the US economy?

Of note, there's strong evidence that US inflationary pressures will fade in coming months, at least in the first half of 2022.

That's the message of various monetary indicators. In particular, and while many factors drive inflation at any one time, significant and persistent money supply growth has clearly been a key factor in the past 12 months. Naturally, in the eyes of the monetarists, it's been the only factor (as the quotes above suggest).

The chart below is interesting in that respect, and shows the Y-o-Y change in the ratio of US money supply (M2) relative to the total capacity of the US economy. In other words, inflationary pressures typically begin to build once money growth has accelerated relative to capacity (and vice versa). Typically, the lead time is around 6 months. While the relationship isn't perfect, this model points to an easing of core CPI inflation readings over coming months. Principally, that reflects the fall in various measures of money supply growth, which are sharply lower Y-o-Y compared to earlier this year (e.g. M2 money growth peaked at 27.1% Y-o-Y in February, and is now 13.0% Y-o-Y, latest data).

Fig 7a: Core CPI (Y-o-Y %) vs. M2 money relative to capacity[7] (6m adv., Y-o-Y %)



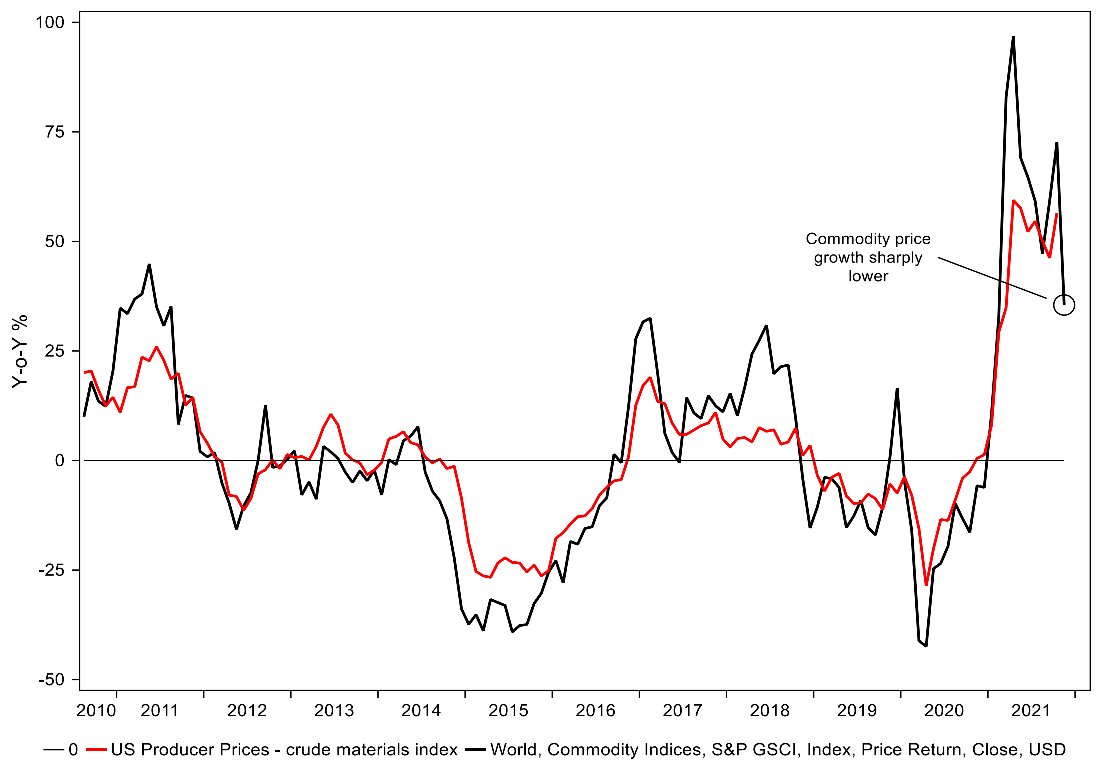
Source: Longview Economics, Macrobond

[7] Capacity in this analysis is measured by grossing up the economy's output (i.e. nominal GDP) by various capacity utilisation rates.

As we've highlighted in recent research, other factors also point to lower inflation readings in coming months. In particular, commodity prices including oil, natural gas, coal, iron ore, and lumber, amongst others, have fallen significantly in recent months and are likely to feed through into weaker PPI and goods CPI (e.g. see fig 7b below). Other factors point to weaker goods inflation including the sharp fall in shipping rates (e.g. the Baltic freight index), which is a key forward looking signal that global supply chain problems are beginning to ease (at least temporarily), for detail see 9th November Longview on Friday: "Themes and Potential Surprises 2022".

Added to which, it's encouraging that US labour market participation continues to increase (i.e. suggesting that higher wages are beginning to draw workers back into the labour force and/or covid fears have eased sufficiently such that workers are now returning). In theory that should result in a normalisation of wage inflation (and in turn somewhat dampen service sector inflation).

Fig 7b: US producer price inflation (Y-o-Y %) vs. S&P GSCI index (Y-o-Y %)



Source: Longview Economics, Macrobond

In addition to softer inflation readings (likely in coming months), there's evidence that the US economy is in a phase of **boom like economic growth** (NB latest Atlanta Fed GDP Now reading for Q4 is 8.6% annualised growth). That's being led by both US household and corporate sectors, which are structurally and cyclically strong and are **beginning to re-leverage; draw down on 'spare' levels of cash; and which are benefitting from strong wealth effects/a return of animal spirits** (see points 1 & 2).

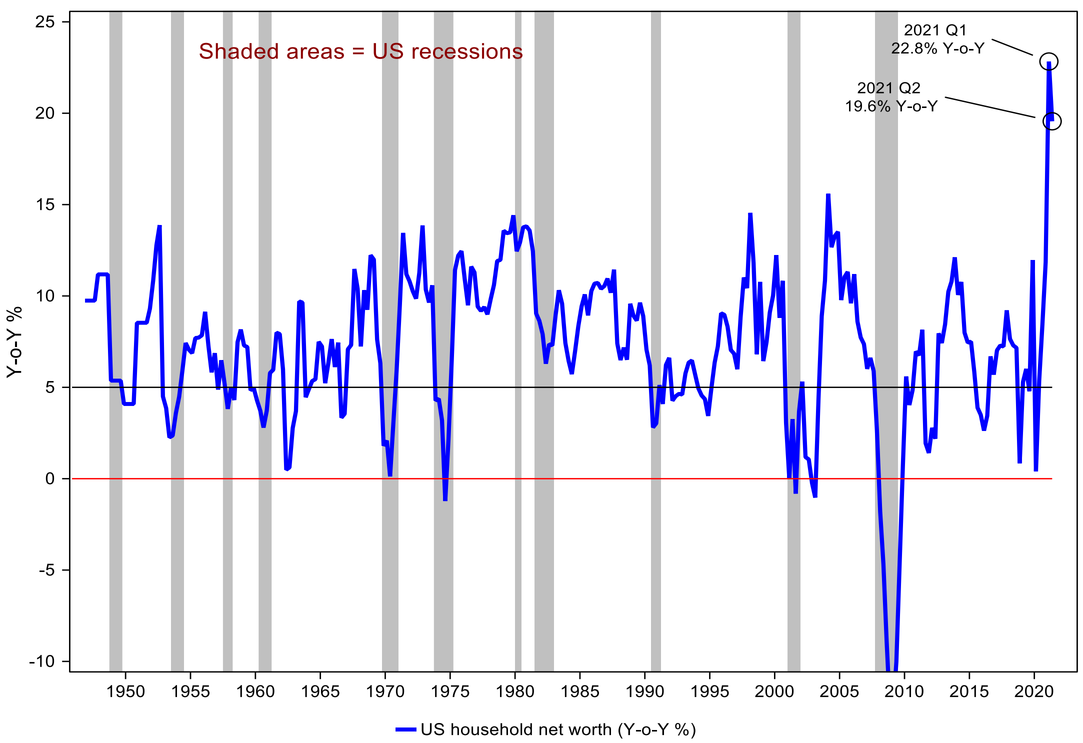
Key Points

1. US households are cyclically and structurally strong, and should continue to drive strong growth in the US economy.

In particular:

(i) **A powerful wealth effect is boosting consumer appetite to spend and re-leverage**. In recent quarters, US household net wealth has grown rapidly (by around 20% Y-o-Y). As the chart below shows, household wealth only fell modestly/briefly in 2020. The Y-o-Y comparison is therefore not particularly distorted by base effects. That speed of acceleration is the fastest on record (i.e. since 1950) and equates to a significant increase in US dollar value of household wealth (which has risen to new highs of $141 trillion, i.e. an increase of $23 trillion in the past four quarters). Of interest, the increase in wealth is also high amongst lowest income groups (+10% Y-o-Y on latest data), i.e. amongst those with the highest propensity to spend (for detailed analysis see 12th November 2021 Longview on Friday: "What's Worrying the Bears").

Fig 7c: US household net wealth (Y-o-Y %), shown with US recession bands



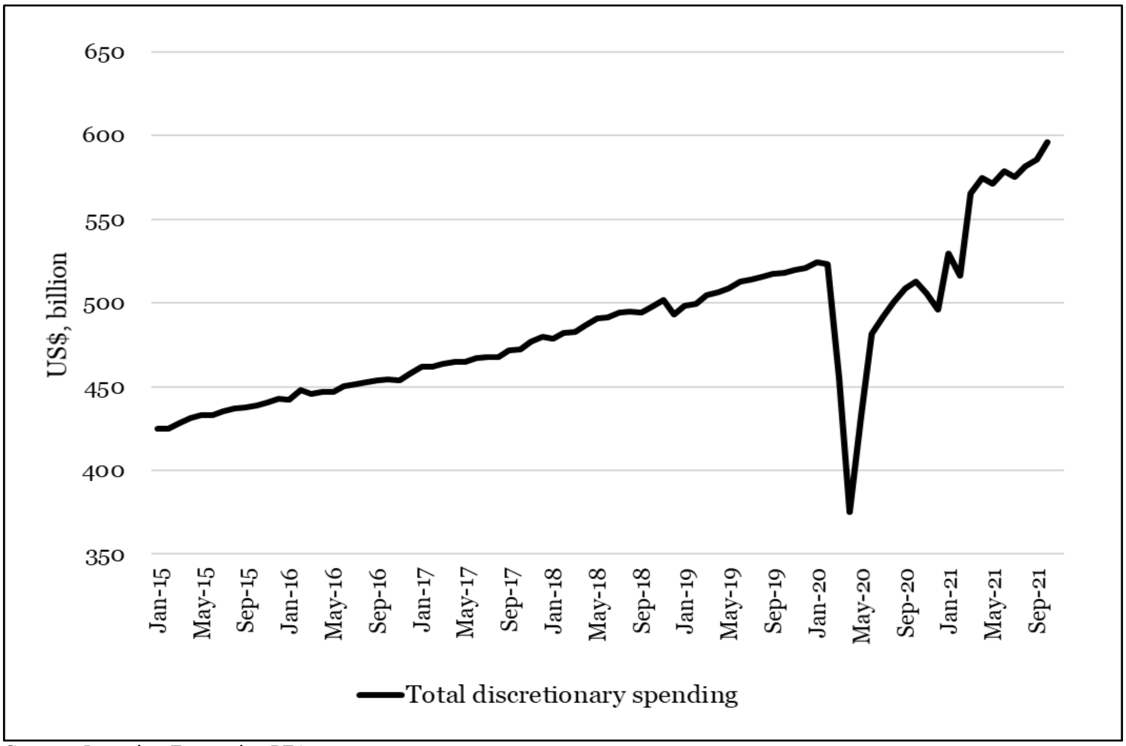
Source: Longview Economics, Macrobond

(ii) Consistent with point (i), household **spending on 'discretionary items' is trending sharply higher**, illustrating consumers' high propensity to spend. At a top level, that's highlighted by the latest PCE readings, which show spending growing by 12% Y-o-Y (nominal prices).

Breaking spending down into 'discretionary' and 'non-discretionary' items, though, reveals a much stronger consumption picture. In particular, total spending growth has been somewhat dampened by spending on 'non-discretionary' items[7i], which is only growing by 8.8% Y-o-Y.

Household spending on 'discretionary items', though, which is a better gauge of household propensity to consume, is growing at 16% Y-o-Y. The underlying shape of households' discretionary spending is shown in fig 7d below. Even after adjusting for inflation, spending on discretionary items is growing by 11% Y-o-Y. Given strong wealth effects, therefore, (i.e. see point i), households increasingly appear to be drawing down on their 'spare' levels of cash which they have built up during the pandemic (as well as starting to borrow – see below). We estimate that extra cash in bank accounts is $3.3 trillion (fig 7k). For a detailed breakdown of monthly US household income and spending please see table 7.

Fig 7d: Household discretionary spending (billion, USD, monthly)

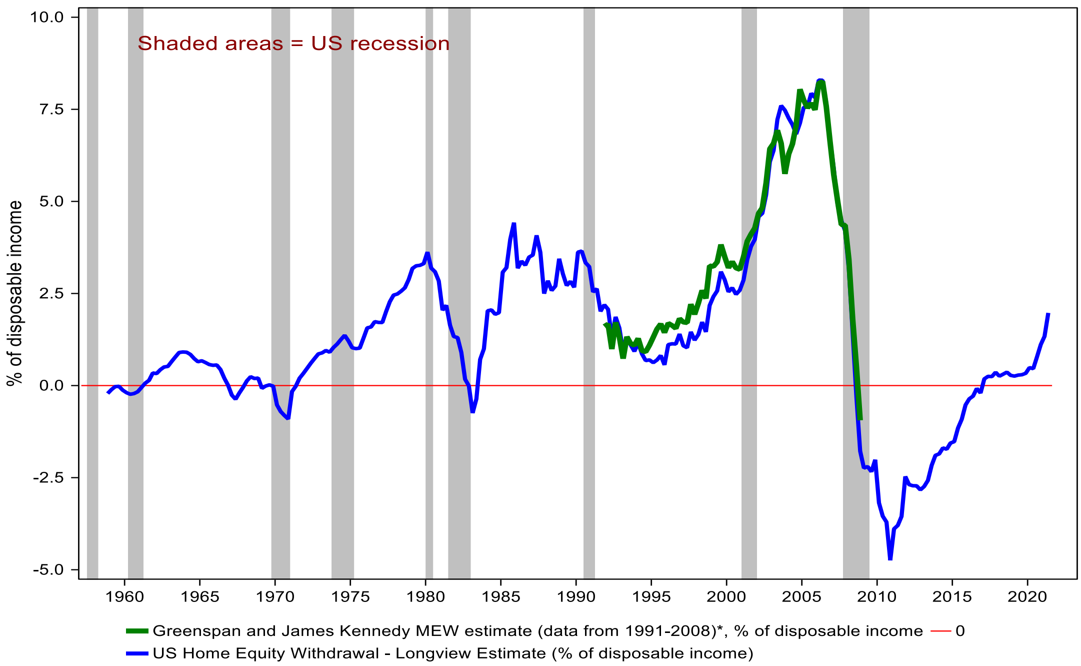


Source: *Longview Economics, BEA*

[7i] Which is principally comprised of mortgage costs, rent, costs of food and drink, insurance and transportation costs amongst others – see table 7 for detail.

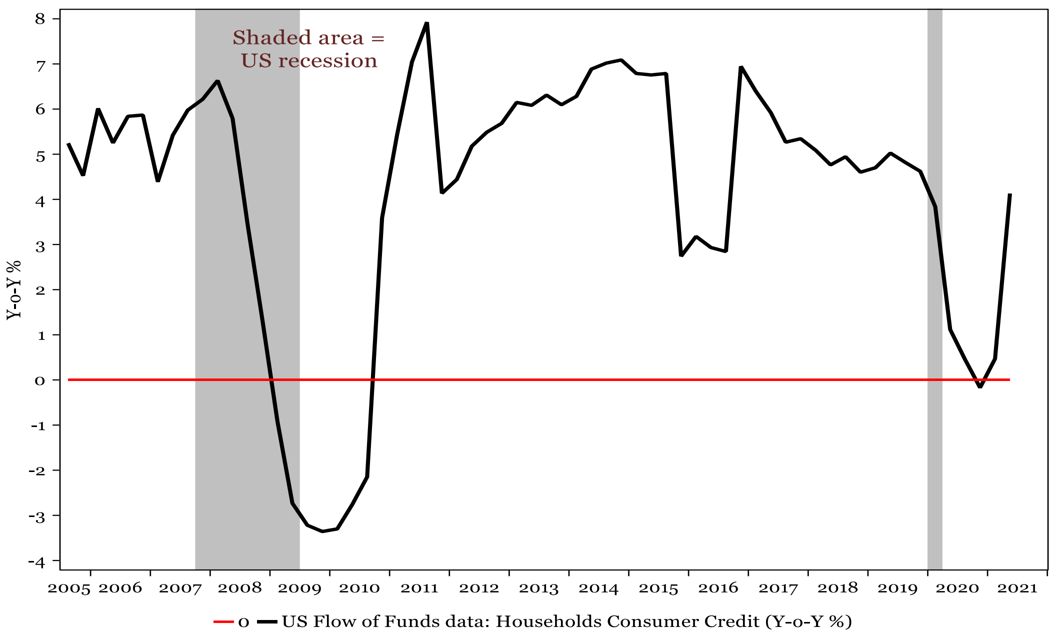
(iii) Added to which, **US households are beginning to re-leverage**. That's happening via two key channels, including: **(i)** a sharp increase in home equity withdrawal (HEW), which has risen to 2.0% of disposable income on latest data (Q2 '21), from 0.5% in Q2 last year (see fig 7e). Of note, in the late 1990s/early 2000s, HEW rose as high as 7.5% of disposable income; and **(ii)** a renewed phase of strong consumer credit growth (in which outstanding consumer credit has risen to new record highs in recent months), and is growing reasonably rapidly, see fig 7f. Of note in that respect, **households have ample capacity to (continue to) re-leverage**. The total household debt ratio, for example, has fallen to a relatively low level this past decade (i.e. 75% of GDP, down from 100% in 2008); while credit conditions remain ultra-loose (fig 7h).

Fig 7e: Home equity withdrawal (various calculations), % of disposable income



Source: Longview Economics, Macrobond

Fig 7f: US consumer credit (Y-o-Y %)

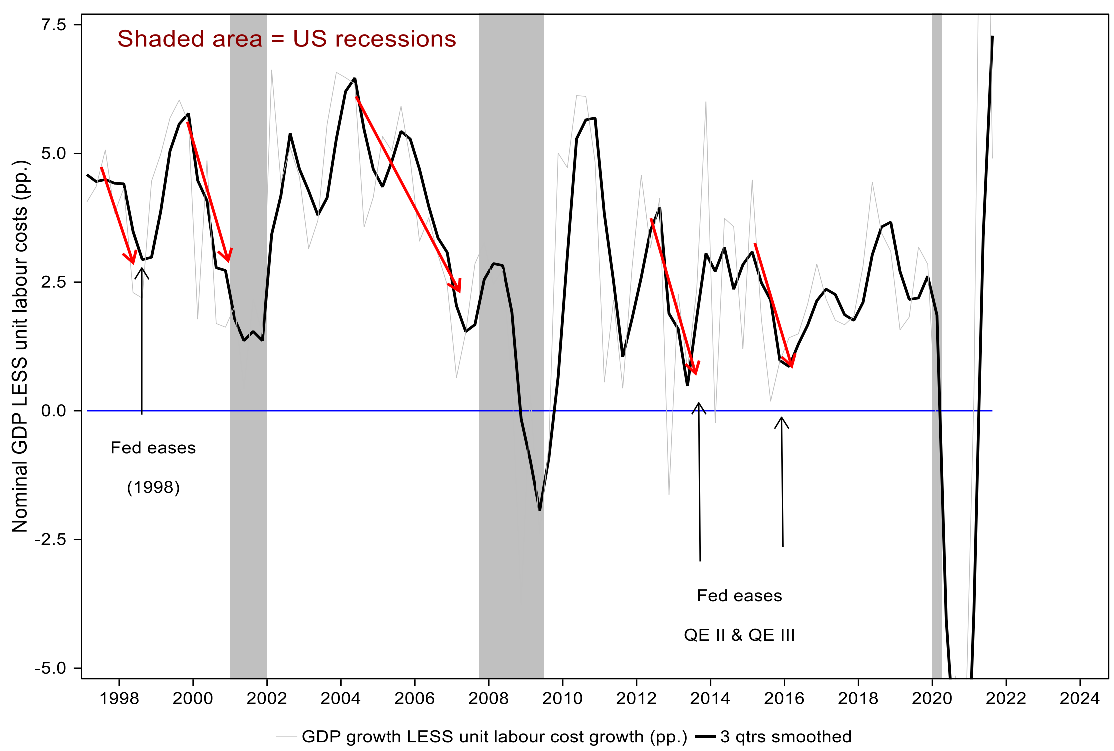


Source: Longview Economics, Macrobond

2. The US corporate sector is in structurally strong health, with high <u>levels</u> of 'spare' cash, robust cash <u>flow</u>, rapid growth in profits, and strong margins. As such, it appears increasingly likely to (continue to) drive above trend growth in the US economy.

In particular, and despite fears of a real terms margin squeeze as a result of high inflation (e.g. see fig 1), corporate sector margins are growing at their fastest pace on record. We measure that by comparing growth in nominal GDP (as a proxy for corporate sector revenues) with growth in unit labour costs (as a proxy for the biggest/key costs for companies). The difference is shown below in fig 7g, and points to **strong margin expansion in recent quarters**. As the chart suggests, 'margin squeezes' are usually followed by either a slowdown in the US economy or a recession. Margin expansion is consistent with ongoing growth.

Fig 7g: US corporate sector margins model, shown with US recession bands



Source: Longview Economics, Macrobond

Consistent with that robust margins backdrop, corporate sector cashflow remains healthy (with companies throwing off free cash flow to the tune of 1.7% of GDP, one of its highest/best readings on record, fig 7m). That's typical of the start of a new economic expansion and highlights high levels of cashflow which is likely to be put to work (i.e. as companies increase capex, create jobs, re-build inventories, and so on). Or, put another way, recessions typically occur once the corporate sector financing gap has become significant (a deficit of 2% of GDP, or greater) – i.e. once corporate sector excess is in place. There is currently no excess and therefore recession risk is low.

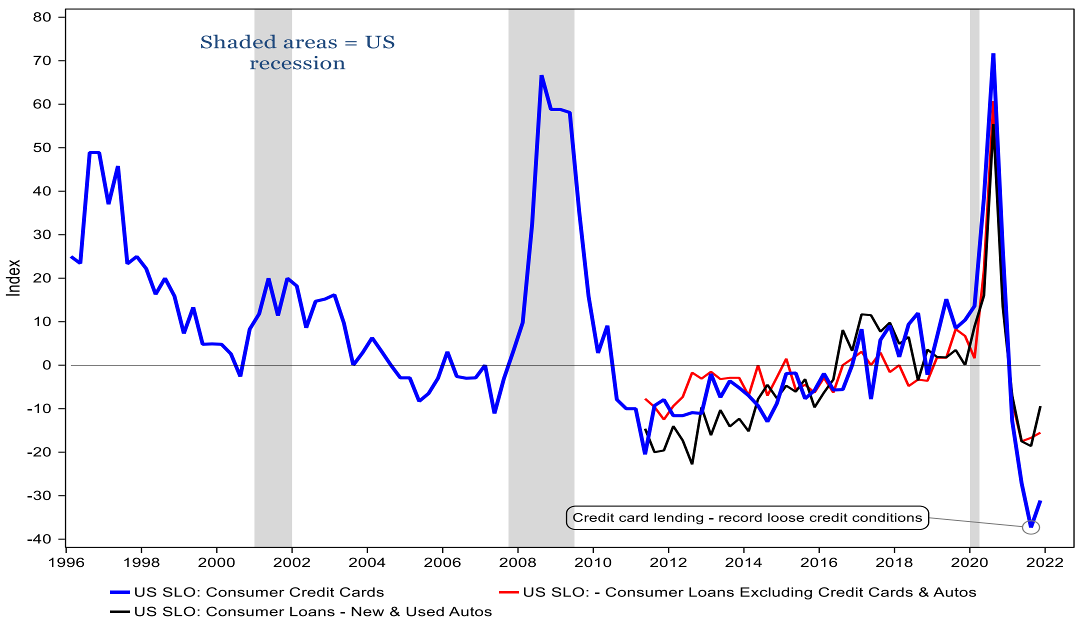
Conclusion: A number of forward looking indicators suggest that inflation in the US economy should ease in 1H 2022. That should boost real household incomes, take the pressure off the Fed to tighten policy, and help to support corporate sector margins/activity.

Added to which, there's evidence that the US economy is in a phase of **boom like economic growth**. In particular, in the **household sector**, spending is growing reasonably rapidly, wealth effects are particularly strong, and a phase of re-leveraging appears to be underway (aided by ultra-loose credit conditions, e.g. see fig 7h below). The **corporate sector** is also in good health, from a profits, cashflow, and margins perspective and likely to (continue to) increase capex, rebuild inventory, and create new jobs. Of note in that respect, there's historically a tight relationship between profits and capex (with high/improving profits usually resulting in/driving strong capex), see figs 7j & 7l.

Those household and corporate sector dynamics are likely to be enhanced by the ongoing transition in the US economy, **from pandemic to endemic** (which should prompt the release of pent up demand/spending of spare cash, and add to growth momentum in the economy).

All of that is confirmed by our traffic light indicators, which are almost all flashing 'GREEN' and pointing to a robust/ongoing economic US expansion (for detail see table 7a for detail). These confirm that credit, financial and monetary conditions remain loose (i.e. GREEN), while the corporate sector, as mentioned above, is in good health whilst other leading indicators of the economy are flashing GREEN. Aggregating those signals, our recession model is at low levels (i.e. signalling a very low likelihood of a recession in coming quarters, see fig 7i).

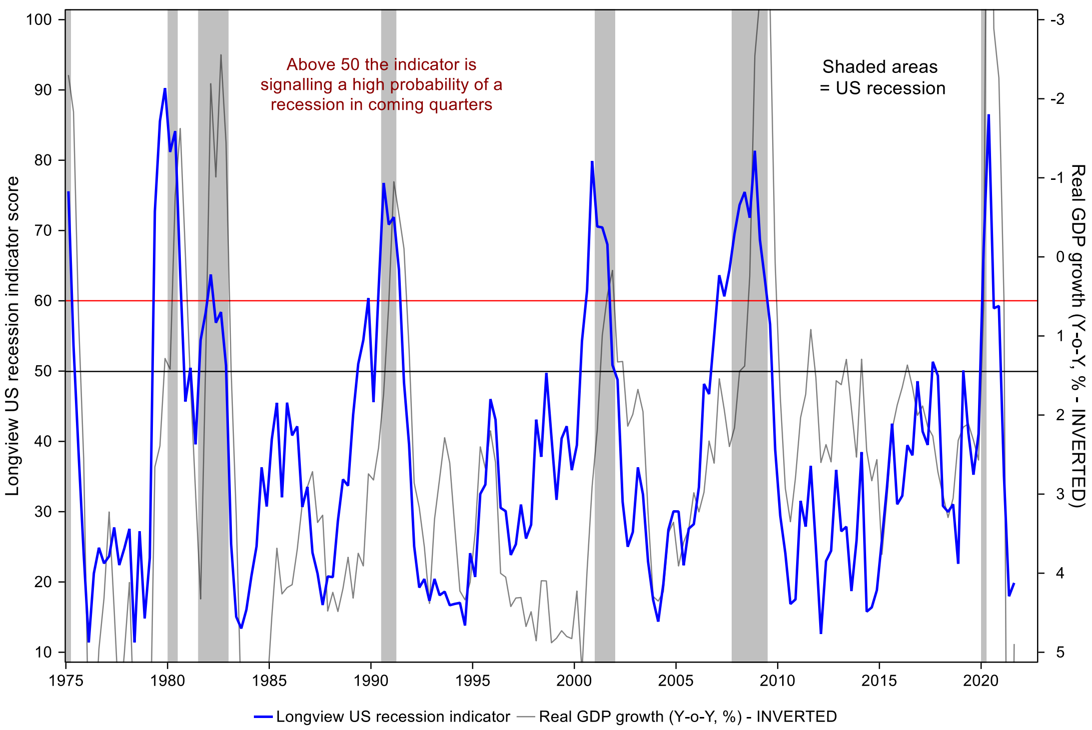
Fig 7h: US SLO consumer credit conditions, shown with NBER recession bands



Source: Longview Economics, Macrobond

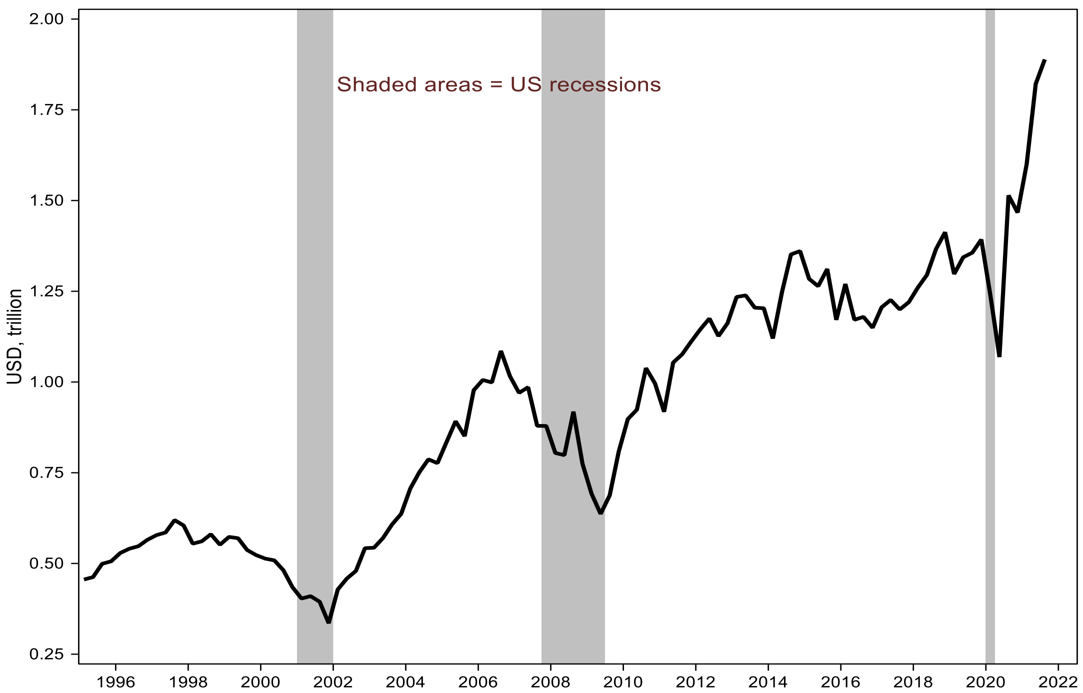
Key charts & tables

Fig 7i: Longview Recession indicator vs. US real GDP growth (inverted)



Source: Longview Economics, Macrobond

Fig 7j: US NIPA corporate profits (US$, trillion)



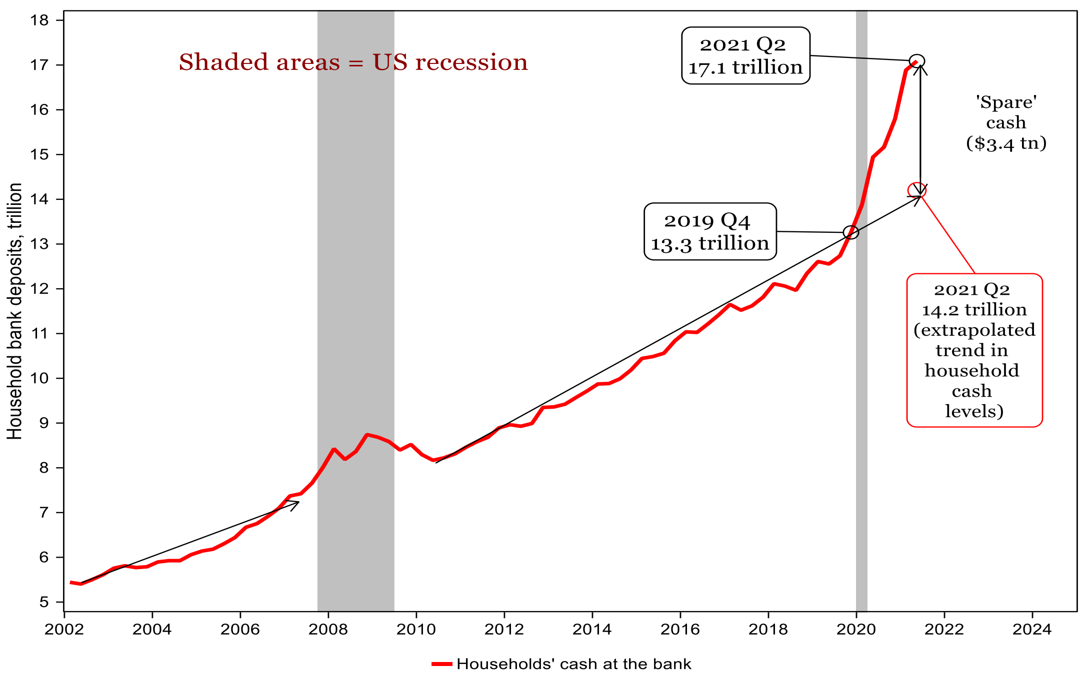
Source: Longview Economics, Macrobond

Table 7: Summary of monthly US household income and spending (US$, billion)

US$, billion	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
Cash income	1,330	1,313	1,322	1,483	1,353	1,701	1,431	1,394	1,397	1,414	1,418	1,399	1,406
1. Wages & salaries	807	816	823	823	820	826	839	848	858	867	871	878	886
2. Self employed income	157	141	135	137	141	150	152	154	155	156	155	153	153
3. Rental income	60	59	59	59	60	60	60	60	59	60	61	61	62
4. Personal income on assets	239	242	247	241	242	242	243	244	245	246	246	246	248
Interest income	134	134	134	135	136	137	137	137	137	137	137	137	138
Dividend income	105	107	113	105	106	106	107	108	109	109	109	109	111
5. Other income	192	180	185	351	218	550	266	219	211	220	220	195	193
Social security	91	91	91	92	92	92	92	92	93	93	93	93	94
Unemployment insurance	25	24	27	48	46	47	43	41	36	31	29	8	4
Veterans' benefits	12	12	13	13	13	13	13	13	13	13	14	14	14
Other - including stimulus cheques	60	48	50	193	61	392	112	67	62	77	78	74	75
Other transfers from business (net)	5	5	5	5	5	5	5	5	7	6	5	5	6
6. LESS Social Insurance contributions	124	125	126	128	127	128	130	131	132	133	134	135	136
Less Personal Current Taxes	186	188	191	191	191	191	191	191	191	191	191	191	191
Equals Disposable income	1,144	1,125	1,131	1,292	1,162	1,510	1,240	1,204	1,206	1,223	1,227	1,208	1,215
Total spending	938	929	920	960	947	1,008	1,018	1,016	1,029	1,027	1,039	1,044	1,058
Non-discretionary spending	425	423	424	430	431	443	443	445	450	452	457	458	462
Household utility bills (water, electricity & gas)	25	24	26	25	26	25	25	25	26	26	27	27	27
Actual rent	54	54	54	54	55	55	55	55	55	55	55	55	55
Insurance (Household, Health & Financial)	69	69	70	70	70	72	71	71	71	72	72	73	73
Non mortgage interest costs	22	21	20	21	21	22	22	22	23	23	23	23	23
Food & Drink (@ home)	94	95	93	98	96	101	100	100	101	100	103	104	105
Out of pocket health care spending	43	43	43	43	43	43	43	43	43	43	43	43	43
Transportation (public)	30	29	29	29	29	29	31	33	35	36	38	38	39
Transportation (private - motor fuel)	21	20	21	23	24	28	28	29	30	31	31	32	34
Mortgage cost - total	68	68	67	67	67	66	66	66	65	65	64	64	64
Discretionary spending	513	506	496	530	517	565	575	571	579	575	581	586	596
Motor Vehicles & Parts	51	50	50	53	52	64	67	62	61	57	55	56	58
Furnishings & Durable Household Equipment	35	35	33	38	37	40	40	39	39	38	39	40	40
Recreational Goods & Vehicles	44	43	41	46	44	49	49	48	48	47	48	49	50
Other durable goods	20	19	19	21	21	23	23	23	24	23	24	24	24
Clothing & Footwear	34	33	32	36	34	40	39	40	40	39	40	41	41
Other non-durable goods	111	110	108	112	109	116	116	115	117	115	118	118	120
Recreation	35	35	34	36	36	38	40	41	42	43	42	43	44
Food & Accommodation (hotels/meals out etc)	71	69	67	72	71	79	83	86	88	90	90	91	91
Other services	94	95	95	96	96	97	99	100	102	104	107	107	109
Transfer Payments (e.g. money abroad)	18	18	18	18	18	18	18	18	18	18	18	18	18
'Spare' post tax monthly cash flow	206	196	211	332	215	502	222	187	177	197	188	164	157

Source: Longview Economics, BEA

Fig 7k: US household bank deposits (US$), actual data with Longview forecast



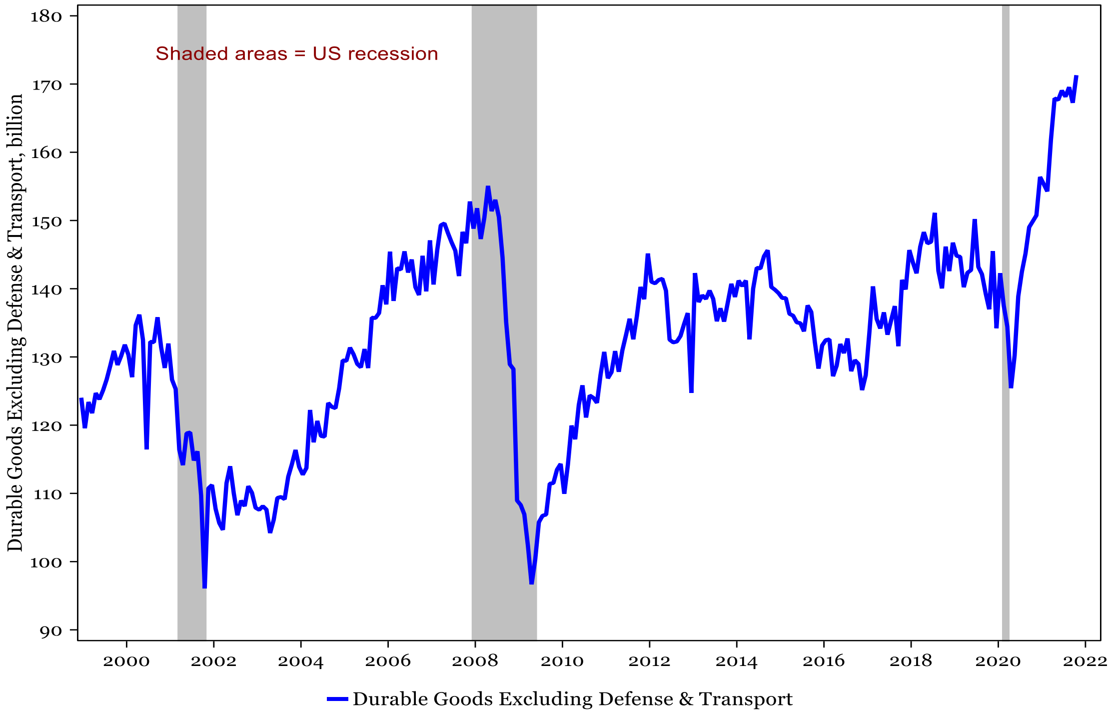
Source: Longview Economics, Macrobond

Table 7a: US Traffic Light Indicators

i) Tightness of Monetary Conditions		
Yield curve	AMBER/GREEN	Steepening trend (with some flattening since March)
Real short rates	GREEN	Negative real rates
Real shadow Fed funds rate	GREEN	(real) Shadow Fed funds is negative
M1 money supply growth	GREEN	Rapid growth (albeit distorted by a change in banking regulation)
Median ratio of new mortgage rates to old rates	GREEN	Was above 1 in 2018 & 2019 but now back to low levels (i.e. 0.7). (NB readings above 1 typically signal a forthcoming recession)
ii) Tightness of Credit Conditions		
Credit conditions – corporate (tightening lending standards)	GREEN	Tighter in Q4, but still at loose levels relative to history
Credit conditions – corporate (Increasing Spreads of Loan Rates)	GREEN	Tighter in Q4, but still at loose levels relative to history
Credit conditions – household	GREEN	At extreme/loose levels
Credit Conditions – Banks: Economic outlook as reason for easing/tightening conditions	GREEN	Sharp loosening in recent quarters
Credit Conditions Banks' reasons for easing/tightening: 'Specific Industry problem'	GREEN	Significant loosening in the past year
NACM Credit Managers Indices (Manufacturing & Services)	GREEN	At loose levels on latest data
NFIB small business credit conditions	GREEN	Reasonably loose – close to multi year highs on some measures
iii) The state of financial conditions		
US HY Corp bond spreads	GREEN	Spreads are tight relative to history
TED spreads	GREEN	Close to record tight levels
Kansas City Financial Stress index	GREEN	At low levels relative to history
US CCC HY corporate bond spreads	GREEN	Close to/just above record tight levels
iv) State of Corporate Sector Health		
Corporate financing gap	GREEN	Strong cashflow surplus (i.e. consistent with ongoing economic expansion)
Corporate cashflow earnings less uses (non-financial, i.e. post share buybacks)	GREEN	Modest surplus – consistent with ongoing economic expansion
NIPA Corporate profits	GREEN	Rapid growth Y-o-Y
Corporate profit margins model (nominal GDP growth LESS unit labour costs)	GREEN	Sharp expansion on latest data
v) The message of leading economic indicators		
Leading Economic Indicators (conf. board Y-o-Y%)	GREEN	Strong M-o-M readings (Y-o-Y growth rate distorted by base effects)
vi) Wealth effect and other indicators		
Car sales	AMBER/RED	Sharply weaker in recent months
Housing	AMBER/GREEN	Housing activity is starting to reaccelerate (having softened somewhat over the summer)
Weekly jobless claims (smoothed)	AMBER/GREEN	Back at pre-pandemic levels
US H'hold Wealth Effect	GREEN	Net household wealth at record highs in Q3

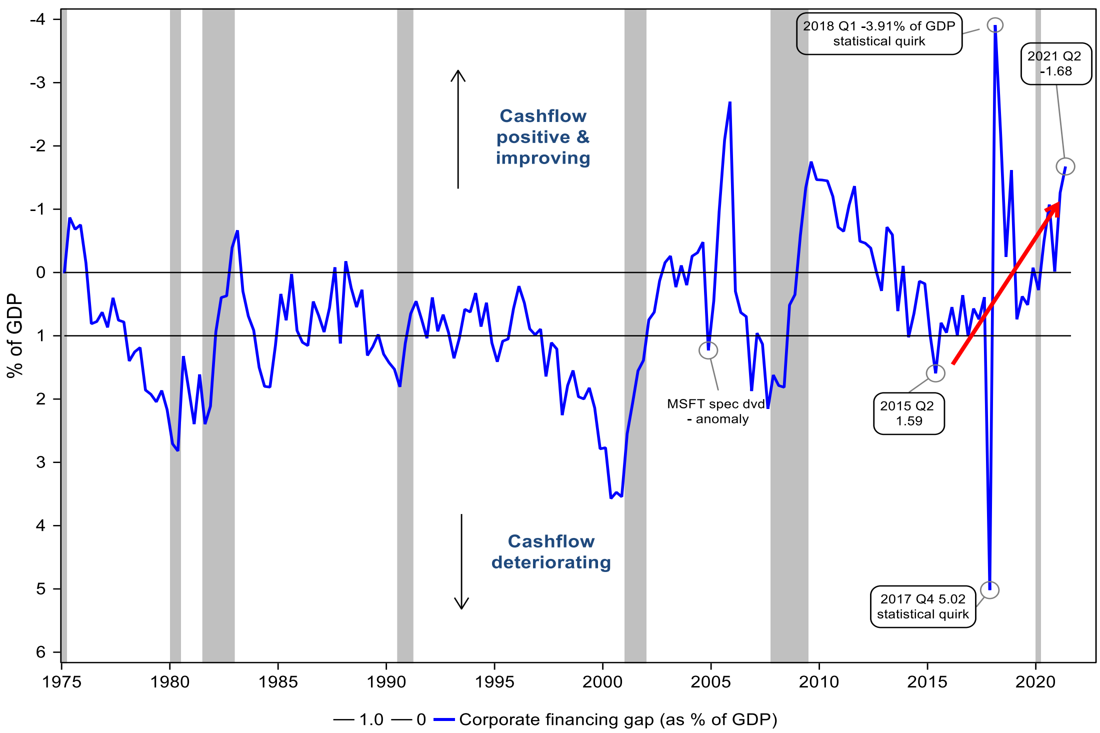
Source: *Longview Economics*

Fig 7l: US core durable goods orders (US$), shown with US recession bands



Source: Longview Economics, Macrobond

Fig 7m: US corporate sector financing gap (% of GDP)



Source: Longview Economics, Macrobond

Eurozone: Strong Growth Underpinnings

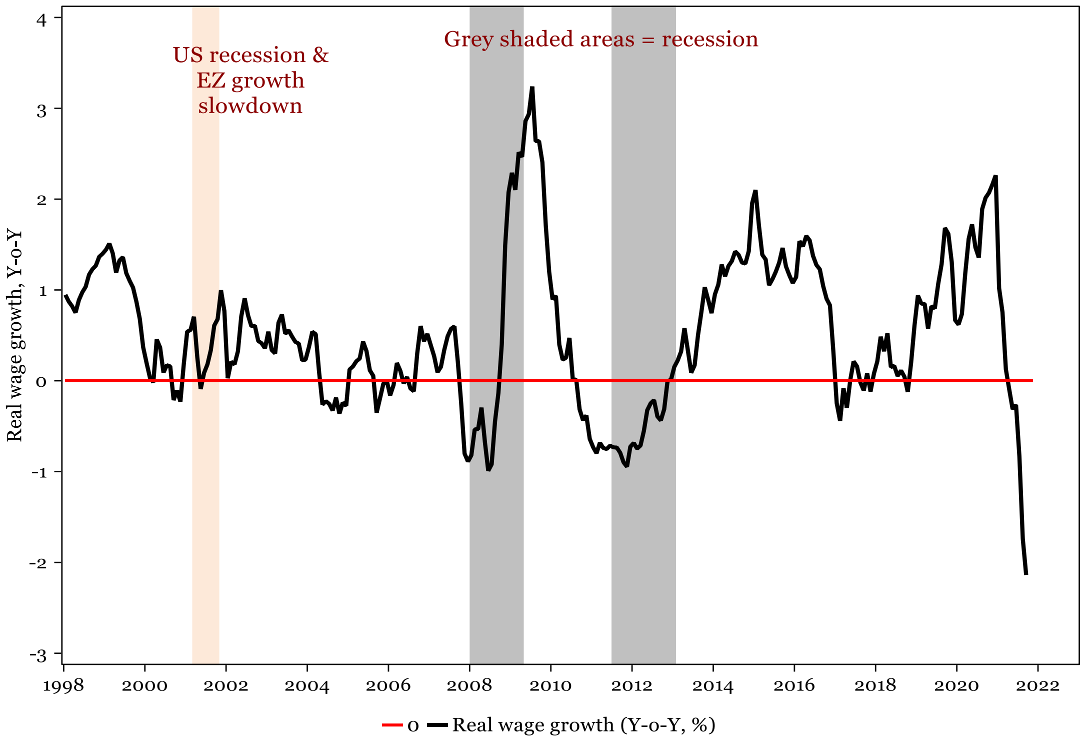
Harry Colvin, CFA, Director & Senior Market Strategist, Longview Economics
Email: harry@longvieweconomics.com; Direct Line: +44 (0) 207 062 8803

Section 6: Summary & Conclusion

Bearishness around the Eurozone macro outlook has increased in recent months. In particular, covid restrictions have been tightening up (notably in Germany and the Netherlands[6]) and, given the spread of the Omicron variant, a number of countries are considering tightening further, if they haven't already (e.g. Italy & Denmark this week).

With that, and after a sharp recovery in 1H 2021, momentum in the Eurozone economy has slowed: Leading indicators are falling (e.g. ZEW, Ifo, Sentix); German new manufacturing order volumes have shrunk by 13% in the past 3 months; car sales have contracted further; and consumer confidence and PMI readings have rolled over. Reflecting that, amongst other factors, our traffic light indicators for the Eurozone are flashing 'AMBER', 'RED', or 'AMBER/RED', see table 6a.

Fig 6: Eurozone real wage growth (Y-o-Y %), shown with recession bands



Source: Longview Economics, Macrobond

[6] According to Oxford University Stringency Indices.

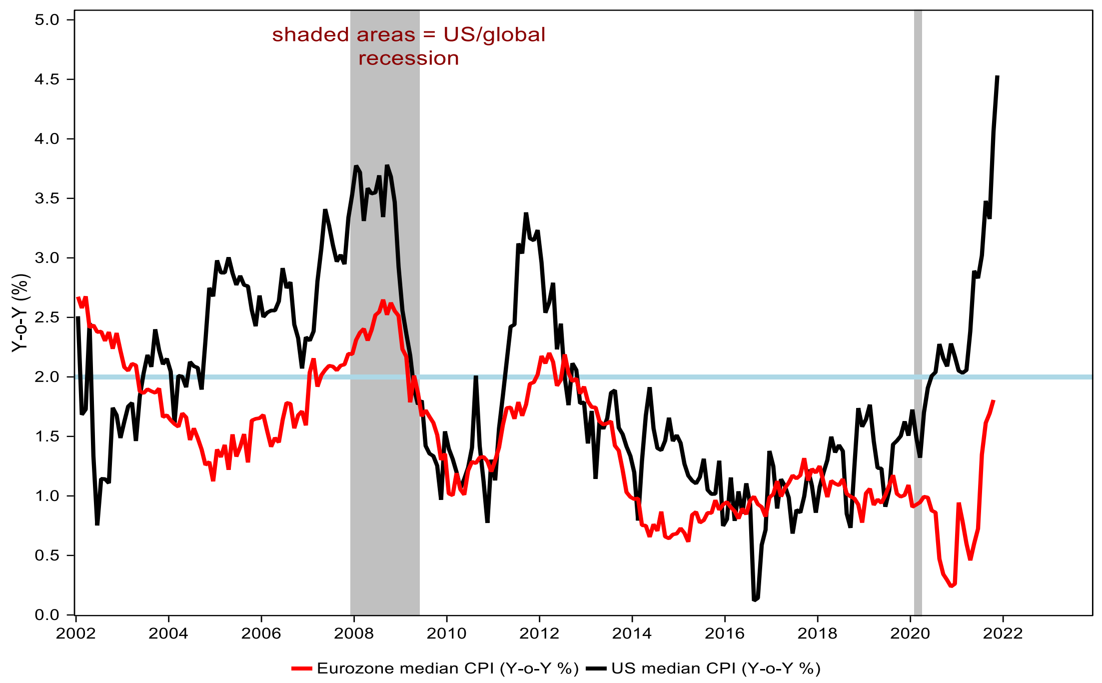
Added to which, inflation has accelerated to the upside in Germany (+5.3% Y-o-Y); France (+3.4%); Italy (+4.0%); Spain (+5.6%) and for the Eurozone overall (+4.0%). Real household incomes are therefore shrinking rapidly (fig 6).

As such, the key question is: How persistent will inflation (and the real income squeeze) be? Is Europe rolling over into another lockdown induced recession? And, when Europe recovers from this current soft patch, how robust will the expansion be?

Importantly in that respect, though, high inflation in Europe is not broad based. Illustrating that, headline CPI (+4.0% Y-o-Y) is running significantly above core CPI (+2.6%), highlighting the distortion created by (mostly) energy prices. Added to which, the median inflation rate in the Eurozone is low, i.e. just 1.8% Y-o-Y (compared to 4.5% in the US, see fig 6a). That's below the ECB's inflation target (2%), and is lower than prior major peaks in median inflation (e.g. in 2008 and 2012).

In other words, **underlying inflationary pressures in Europe are relatively low** and, as commodity prices normalise (or even fall) Y-o-Y in Euro terms, the challenges associated with high inflation should fade (and real income growth return).

Fig 6a: Median inflation rate of CPI subcomponents (Eurozone vs. US)



Source: Longview Economics, Macrobond

Added to that, Eurozone households' spending capacity remains significant, given **(i)** high savings rates (a key flow measure of savings); and **(ii)** high levels of 'spare' cash which has been saved during the pandemic (a key stock measure of savings). As such, and as the pandemic transitions to endemic (potentially next year[6i]), **the consumer should be a significant source of strong, above trend economic growth** (as that savings capacity is tapped).

[6i] For detail see COVID-19 Report, 1st December 2021 "Omicron – Is It All Bad?"

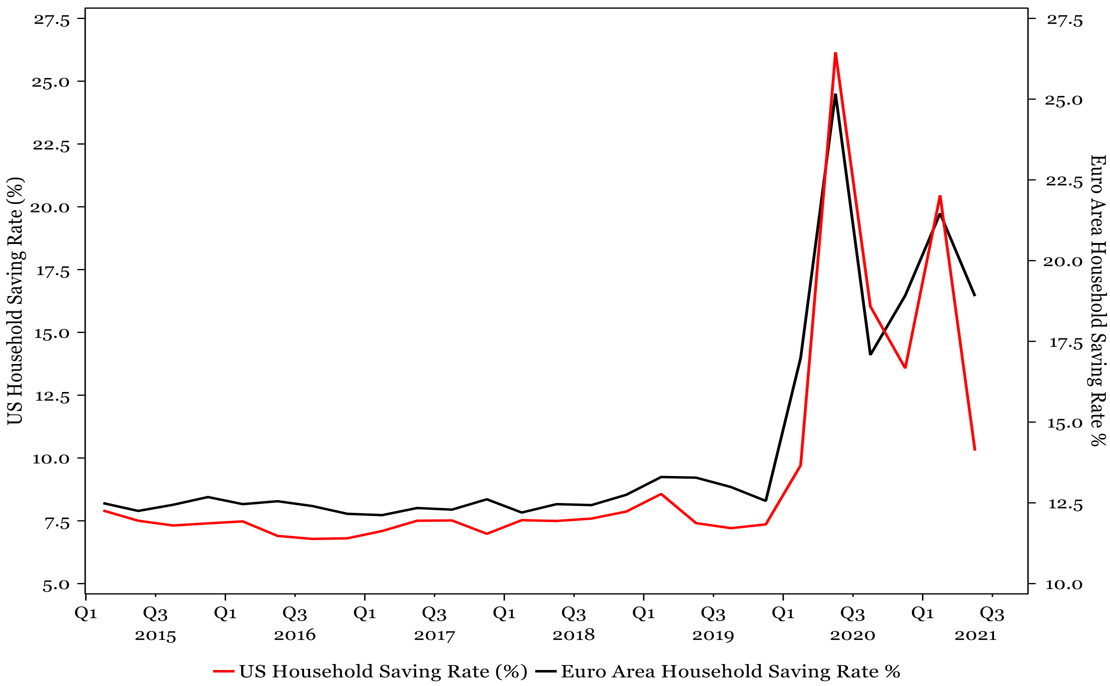
Eurozone households & corporates: How Much Firepower?

In the near term, the Eurozone economy is likely to remain under pressure from the impact of tighter restrictions, with lockdowns in some countries. **Once restrictions ease**, though, robust growth is likely to come from two key fronts in particular:

- **Strong corporate sector activity**. Companies are throwing off a record level of spare cashflow (approx. 2.7% of GDP, fig 6g). As we've addressed in recent research, they are likely to put that cash to work by creating jobs; increasing capex; and rebuilding inventories (for detail see Quarterly AA Eurozone Macro Extract No 47, 1st September 2021: "Robust Growth Ahead (for now)").

- **Households should significantly increase spending** as **(i)** the savings ratio falls/normalises from high levels (i.e. a **modest 'one-off' boost** to spending); and **(ii)** consumers begin to draw down on high levels of 'spare' cash in their bank accounts, which has been built up during the pandemic. That's likely to provide a **large, more prolonged boost** to spending. Combined, those two factors could add approx. 2.3 pp. to GDP growth next year and result in a significant reversal in the recent fall in Europe's consumption share of GDP[6ii] (based on conservative assumptions – see below for full analysis).

Fig 6b: US & Eurozone household savings rates (% of disposable income)



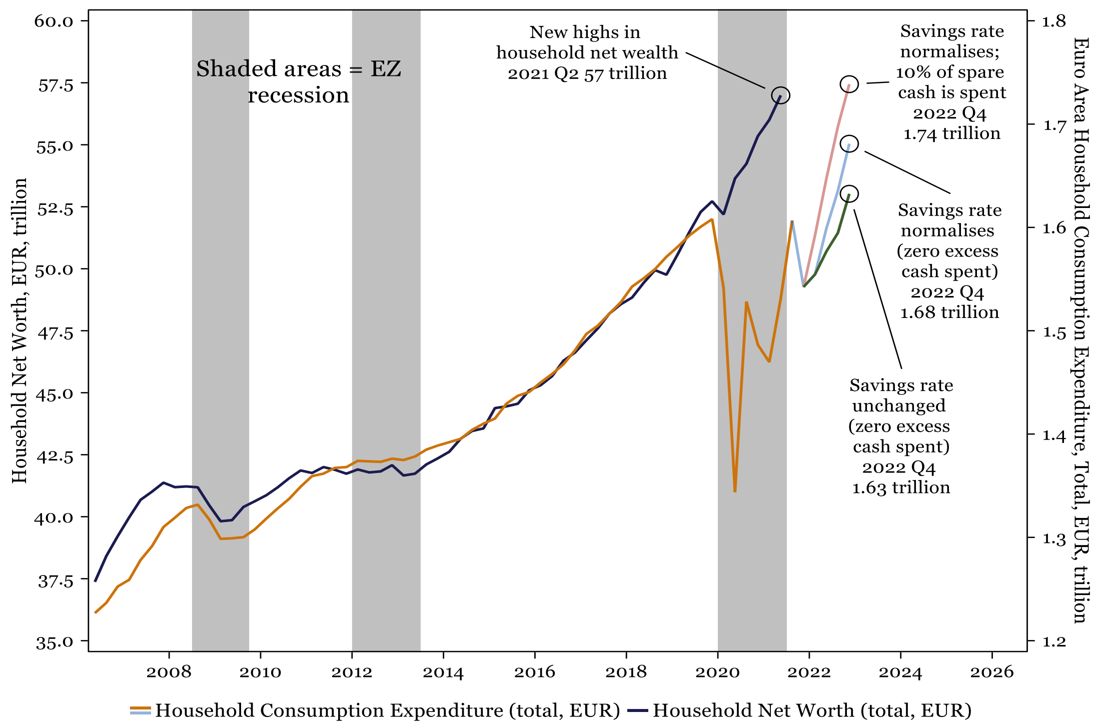
Source: Longview Economics, Macrobond

[6ii] Albeit probably a temporary reversal. Of note, while there's a case for a short term reversal in the consumption share of GDP, the Eurozone faces a number of longer term challenges which should dampen spending growth, including ageing and shrinking populations as well as high levels of indebtedness.

Of further note, with respect to points (i) and (ii):

(i) Savings ratio normalisation: We estimate that the household savings ratio will be 20% of disposable household income in Q4 (see table 6 below). Once lockdowns are lifted, that is likely to fall back to 'normal' levels (as is happening in the US, see fig 6b). Assuming a modest increase in household income[6iii], the fall in the savings ratio would increase spending by €140bn (i.e. increasing total spending by ~9% and pushing it out to new highs). We model that scenario with the blue line in the chart below, which shows spending rising to €1.68 trillion by Q4 next year. Naturally, if lockdowns/restrictions are lifted quickly, that one off boost to spending could happen rapidly (e.g. within one or two quarters/before year end 2022).

Fig 6c: Eurozone household spending vs. household net wealth (EUR, trillion)



Source: Longview Economics, Macrobond

[6iii] Of 2.7% Y-o-Y (i.e. similar to Q4 21 growth, but notably below Q2 peak growth rates of 8.9%).

(ii) Spending of 'excess' cash. Before the pandemic, spare household cash flow was around €200bn per quarter. Since the pandemic started, spare cashflow has risen to between €300bn – €440bn (table 6 & fig 6e). We consider that additional saving (over and above the usual €200bn per quarter) to be 'excess' savings in the household sector (due to the pandemic). Cumulatively, since the start of the pandemic, those excess savings have grown to €1.17 trillion (i.e. approx. 10% of GDP). Some of that cash is likely to be spent over coming years. In our model above, we assume that 10% of the excess cash is spent next year (which, in addition to the savings ratio normalising, would take total consumption to as high as €1.74 trillion, see fig 6c – the orange line). If that happened, that would boost GDP next year by an extra 2.3pp.

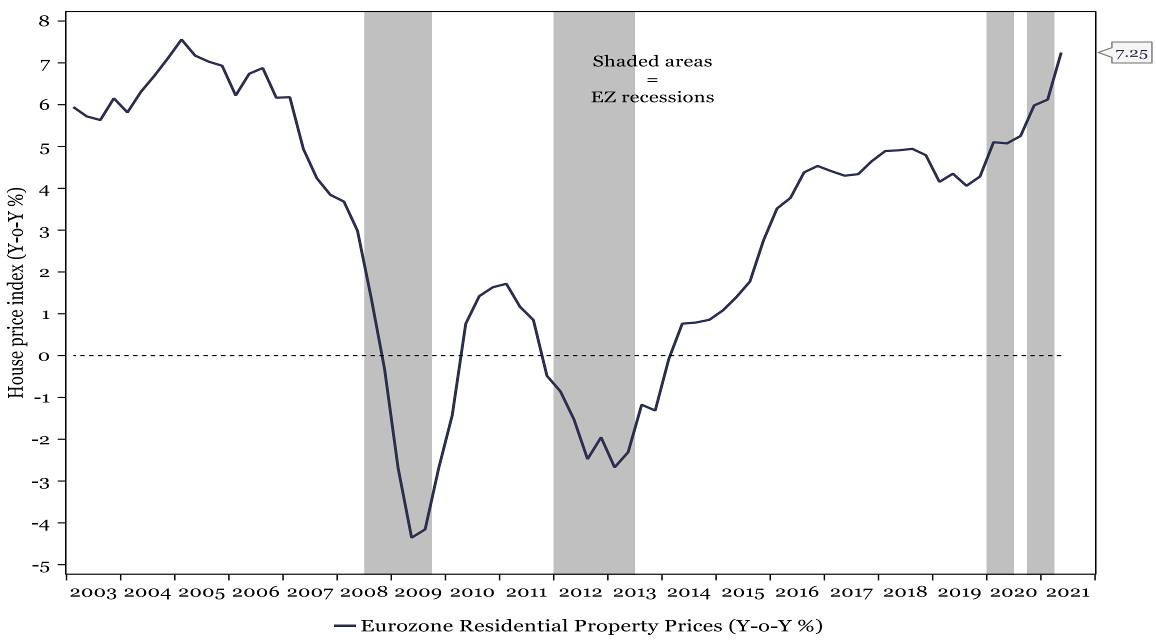
The key question, therefore, is: To what degree will savings rates normalise? And, perhaps more importantly: How much spare cash will be spent?

The answer hinges somewhat on the shape of the pandemic and how quickly lockdowns/restrictions are lifted and confidence returns. In that sense the answer is difficult to judge (albeit there are reasons to believe that the Omicron variant will/could bring about the end of the pandemic, for detail see COVID-19 Report, 1st December 2021 "Omicron – Is It All Bad?").

In addition, and as fig 6c suggests, **the propensity for households to normalise the savings rate and draw down on excess savings will also be determined by wealth effects from rising house prices** (i.e. given the tight relationship between spending and net wealth).

In that respect the current message from various housing indicators is encouraging and suggests that pent up demand for households to spend their spare cash is high. Of note, at a Eurozone wide level, house prices are growing at their fastest pace since 2006 (i.e. +7.3% Y-o-Y), with that strength reasonably broad based across key economies, e.g. with robust house price growth in Germany (+13.9%), France (+5.7%), and Spain (+8.3%).

Fig 6d: Eurozone house price index (Y-o-Y %), shown with recession bands



Source: Longview Economics, Macrobond

Conclusion: High inflation rates in Europe are likely to subside and ease the pressure on real income growth in coming quarters. In addition, and as the pandemic transitions to endemic, high levels of pent up household sector demand are likely to be released (with strong spending enhanced by wealth effects from rising house prices). As such, and given a strong corporate sector outlook, a phase of robust above trend growth in Europe is likely in 2022.

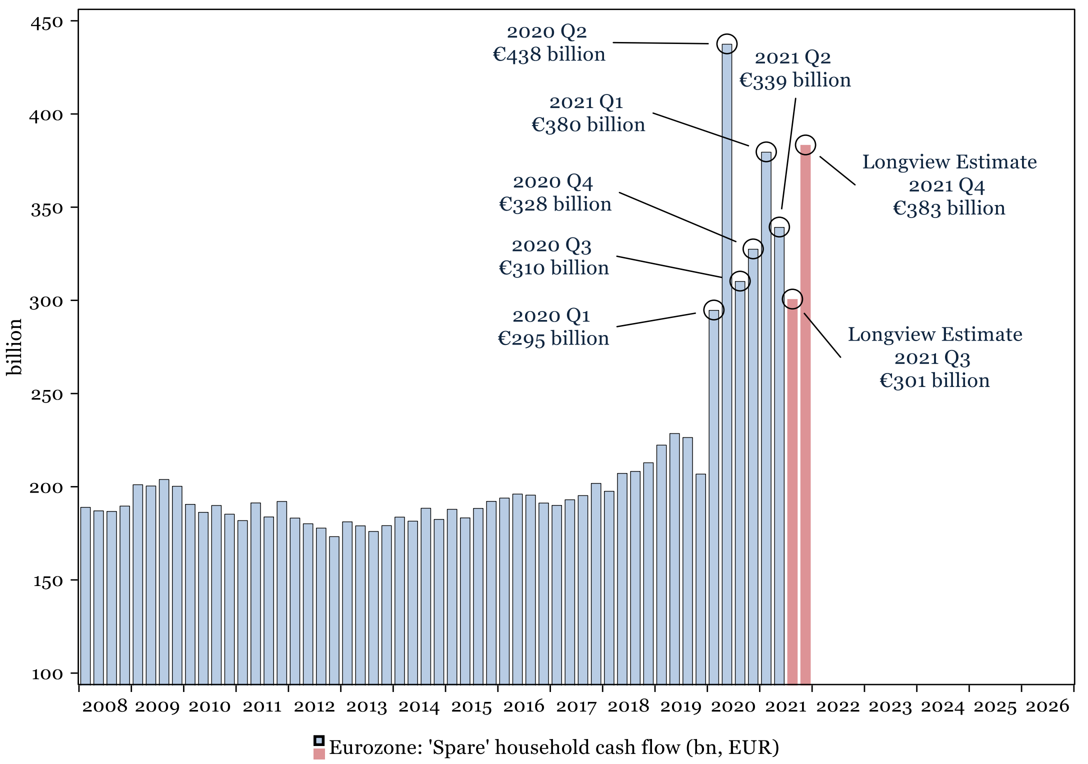
Key charts & tables

Table 6: Eurozone household cashflow (€, billion, unless otherwise stated)

	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Longview Estimate Q3 2021	Q4 2021
Primary income	2,041	2,039	2,051	2,064	2,108	2,125
Wages	1,428	1,442	1,451	1,462	1,491	1,500
Operating Surplus & Mixed Income	440	433	438	446	455	460
Property Income	173	165	163	156	162	165
Less taxes of social contributions	205.4	224.7	205.1	193.0	200.7	199.1
Net Social Contributions Paid	541.7	543.6	548.2	551.5	573.6	569.0
Benefits Received (ex. payments in kind)	-607.1	-612.3	-618.7	-625.2	-650.2	-645.0
All taxes	297.3	320.4	299.5	294.2	306.0	303.5
Other Current Transfers	-26.4	-27.0	-23.9	-27.5	-28.6	-28.4
Gross Disposable Income	1,838.6	1,814.1	1,849.3	1,870.5	1,907.4	1,925.8
Individual consumption expenditure	1,528.2	1,486.4	1,469.7	1,531.1	1,606.7	1,542.4
'Spare' household cash flow	310.3	327.6	379.7	339.3	300.7	383.3
Spare cash (% of disposable income)	16.9%	18.1%	20.5%	18.1%	15.8%	19.9%

Source: *Longview Economics, Eurostat*

Fig 6e: Spare Eurozone household cashflow (€, billion)

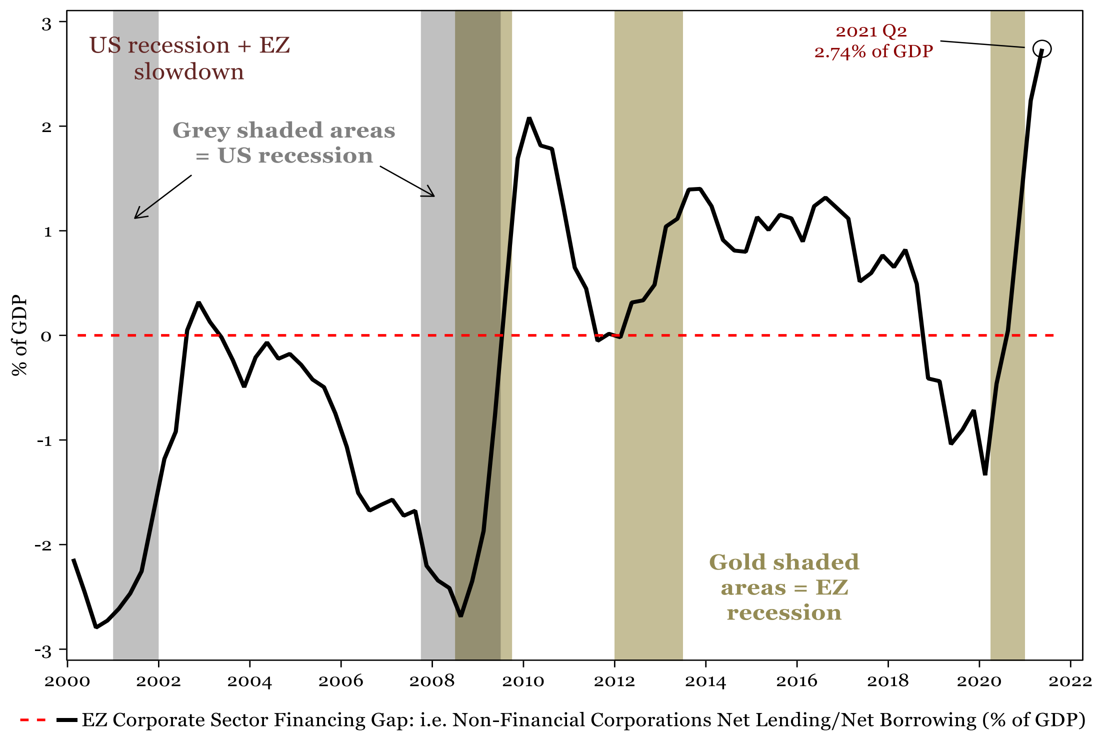


Source: Longview Economics, Macrobond

Fig 6f: Eurozone Manufacturing Inventories (finished goods)

Source: Longview Economics, Macrobond

Fig 6g: Eurozone corporate sector lending/borrowing (% of GDP)



Source: Longview Economics, Macrobond

Table 6a: Traffic light indicators

Key Leading Indicators

Indicator	**Status**	**Comment**
Leading indicators	AMBER/RED	Contracting M-o-M (just)
Belgian leading indicators	AMBER	Rolling over (albeit from high levels)
German IFO expectations less current conditions	RED	At low levels relative to history
New car sales	RED	Poor underlying trend
German new manufacturing orders	AMBER/RED	Both domestic & foreign orders sharply lower

Credit Indicators

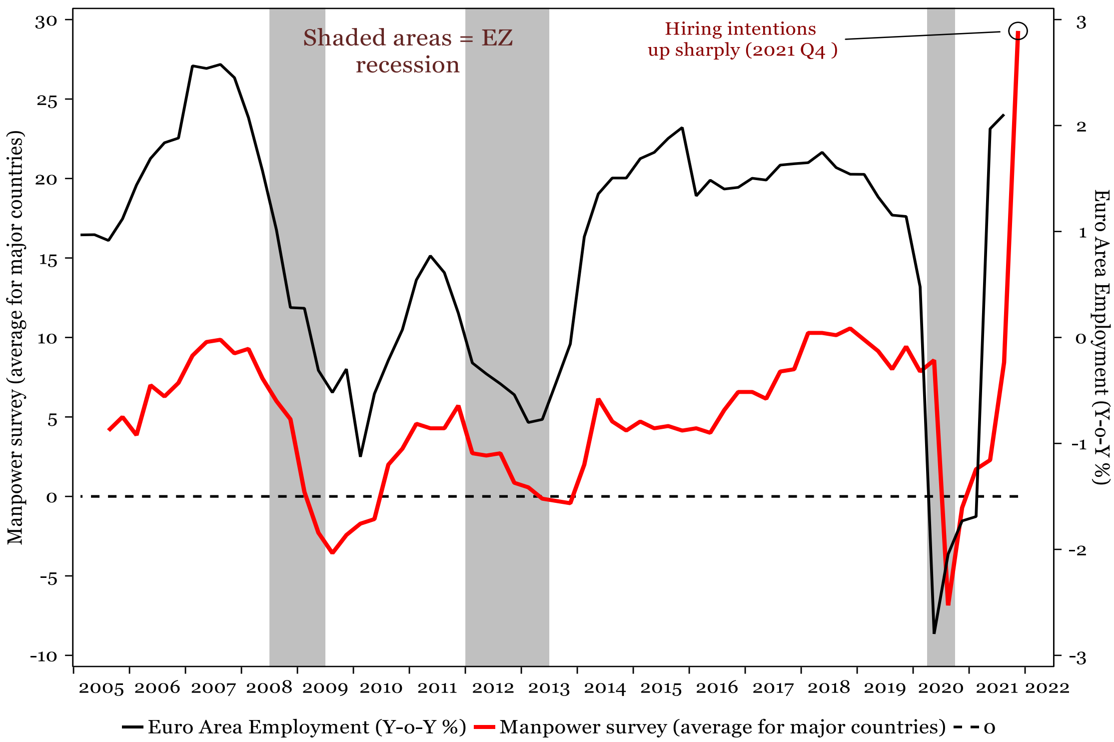
Indicator	**Status**	**Comment**
Private sector credit growth	AMBER	Positive, but softer growth in 2021
Consumer credit growth	AMBER	Mostly negative in recent months
German yield curve	AMBER	Flattening since mid-October
Monetary conditions	GREEN	At multi year loose levels
Real M1 growth	AMBER/RED	Rolling over (albeit from high levels)
M3 money supply growth	AMBER/RED	Sharp slowing of growth rate in 2021
Credit conditions – businesses	AMBER	Neutral overall
Credit conditions – mortgages	AMBER	Neutral

Coincident Indicators

Indicator	**Status**	**Comment**
Consumer confidence	GREEN/AMBER	Starting to roll over?
Business confidence indices	GREEN	Stable at high levels
Euro zone Manufacturing PMI	AMBER	Rolling over
Euro zone Services PMI	AMBER	Rolling over

Source: *Longview Economics*

Fig 6h: Eurozone employment (Y-o-Y %) vs. Manpower survey (3 months advanced)



Source: Longview Economics, Macrobond

LV Longview Economics

Investments. Trades. Macro.

China Soft Landing: In the Balance – But Most Likely Outcome

Harry Colvin, CFA, Director & Senior Market Strategist, Longview Economics
Email: harry@longvieweconomics.com; Direct Line: +44 (0) 207 062 8803

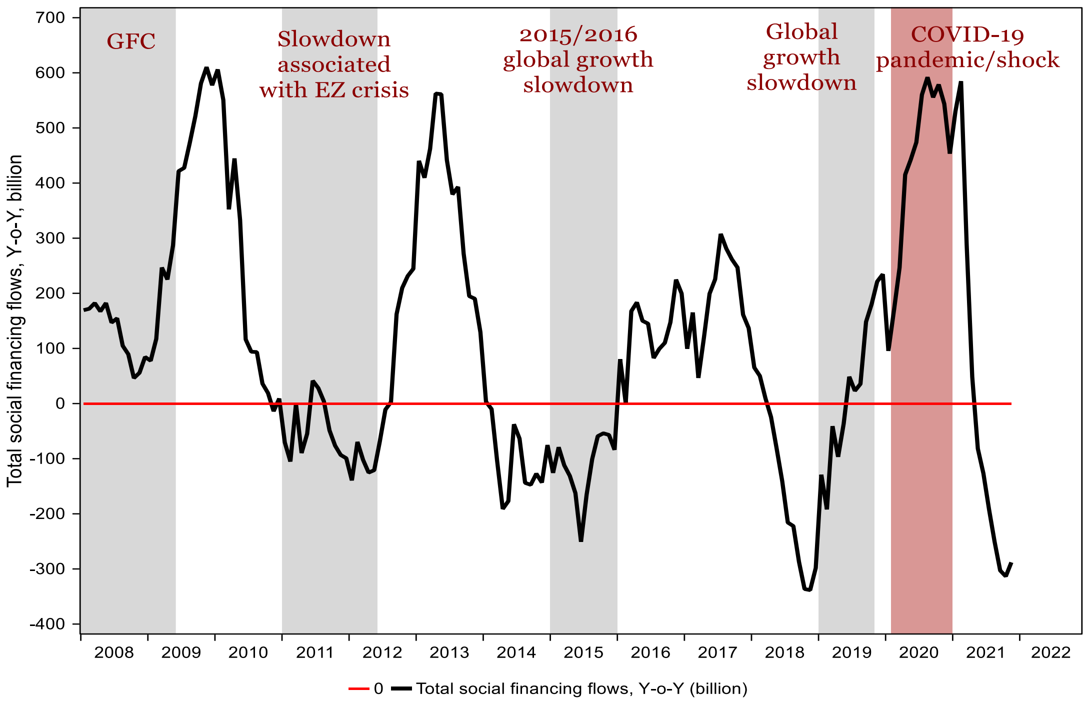
Section 8: Summary

"We present new and significantly updated data to suggest the real estate sector has an outsized footprint on China's economy, and [...] constitutes 29% of China's economy, even higher than previous estimates."

Source: 'Peak China Housing', August 2020, Rogoff & Yang (NBER working paper)

Whenever money tightens up in China's financial system, the Chinese housing cycle turns lower. Given its size (29% of GDP), the economy also slows sharply. That's been the experience of the past decade. That is, all the three major economic slowdowns of the past 10 years (in 2011/2012, 2015, and in 2019) were *preceded* by both 'tight PBoC policy' and, linked to that, **a fading credit impulse** (fig 8), which then resulted in a bout of weak housing activity (as well as in other areas of the economy) and a growth slowdown.

Fig 8: Chinese credit impulse: Chinese TSF credit flows (Y-o-Y change, 12 months smoothed, RMB trillion)

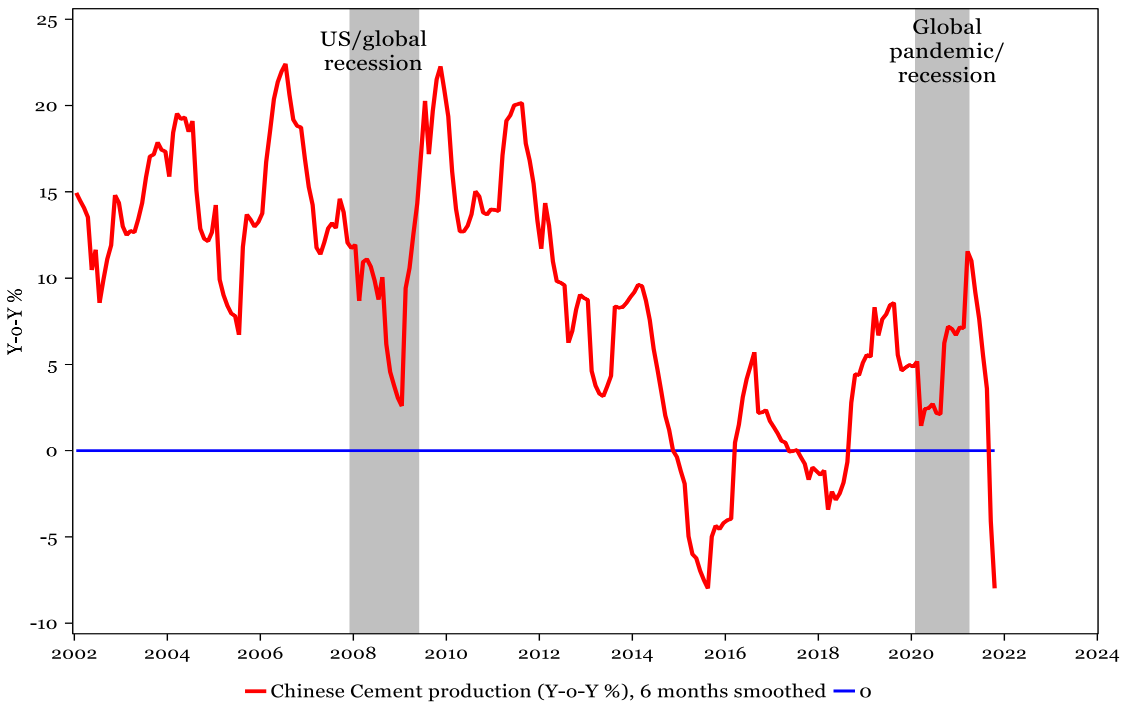


Source: Longview Economics, Macrobond

On each occasion, the PBoC then responded by easing policy and reflating the economy. In other words, 'loose monetary policy' stimulating housing activity, has been the key to China generating robust economic growth.

On balance, another soft landing is probably likely (see below). There are, though, **two troubling observations/key risks** with respect to the current slowdown in China: **(i)** weakness in housing has spread and is now broad based and marked across the economy (see Section 8a below); and **(ii)** the policy response has been both **delayed and disappointing** (so far).

Fig 8a: Chinese cement production (Y-o-Y, %, 6 months smoothed)



Source: Longview Economics, Macrobond

In particular with respect to (ii), the government has a long term policy bias towards deleveraging and de-risking the economy, as well as more recently adopting a policy of aiming to achieve 'common prosperity for all' (i.e. an attempt to change the current growth model). As a result, **the economic pain threshold, at which policy action is triggered, has been raised** compared to other slowdowns.

The risk of a policy mistake, and a major growth shock, is therefore elevated at this juncture, particularly given the usual time lag between policy response and economic recovery. In 2014 and late 2011, for example, policy was rapidly loosened within just a handful of months of the housing downturn (*for detail see Global Macro Report, published 25th November 2021 "Chinese Housing: On a Knife Edge"*). In this slowdown, though, which began in early 2021, the authorities have allowed some of the excesses in the housing sector to start to unwind.

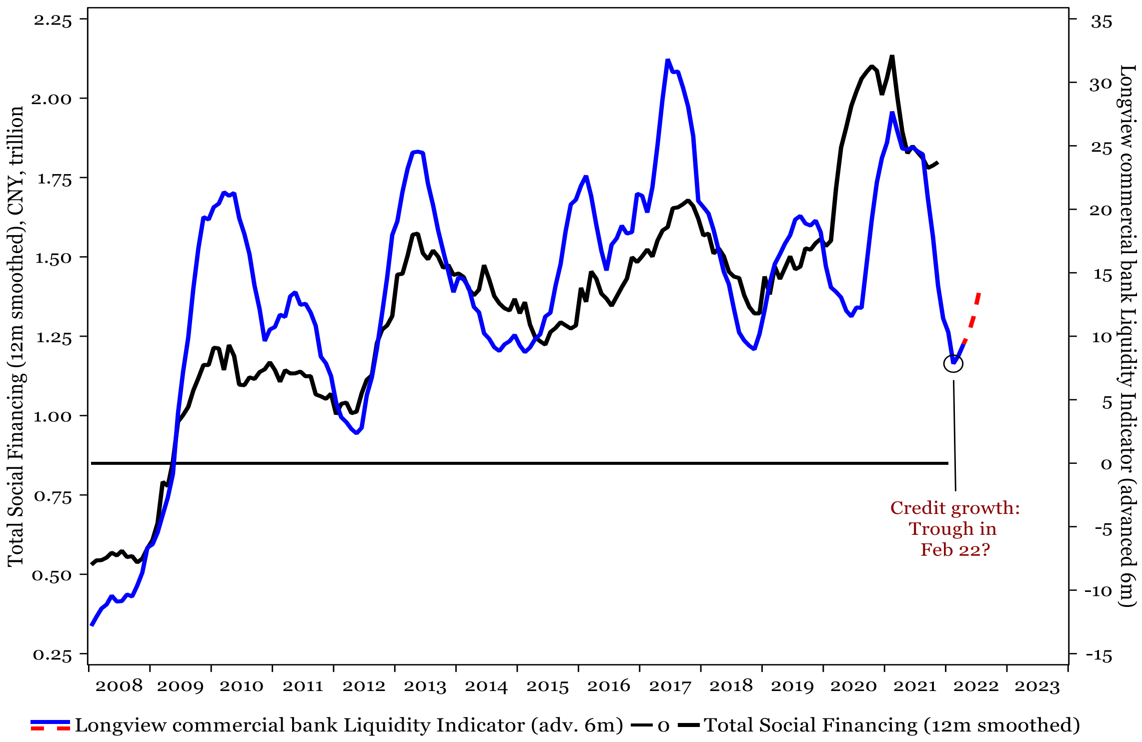
All of that begs the question: Is current policy easing **'too little, too late'?** Will the authorities lose control? OR, will they be able, once again, to engineer a soft landing in both housing and the broader economy?

On balance, our view is that **a soft landing is likely**. In particular, the authorities are beginning to pull down on major policy levers which, historically, have significantly reflated the Chinese economy. Of note in that respect:

1. **A new cycle of RRR cuts is likely underway**. The RRR was initially cut by 50bps in July. A further 50bps cut (announced 6th December) becomes effective tomorrow[8]. Given the change towards more dovish language amongst policy makers (see below), and given that the slowdown in the economy has recently accelerated and broadened (see Section 8a), further RRR cuts are likely in coming months in our view. Of interest in that respect, cycles of RRR cuts have been getting progressively larger with every slowdown. In 2011, RRR cuts totalled 150bps. The cutting cycles in 2015/2016 (300bps) and 2018/2019 (400bps) were larger still.

   As such, in our liquidity model below, we assume that another 50bps RRR cut is announced next month. If that happens, and reserve money and other liquidity programs[8i] continue to grow at around current rates, then **the trend in total credit growth should turn higher**. That's the message of our liquidity indicator, which suggests that **credit growth should begin to accelerate from February 2022 onwards** (see fig 8b).

Fig 8b: Longview Liquidity Indicator for China[8i] (advanced 6m) vs. Total Social Financing (12m smoothed)



Source: Longview Economics, Macrobond

[8] I.e. reducing the weighted average RRR for Chinese banks to 8.4% (from 8.9%).
[8i] The model above is based on three key inputs including (i) growth in commercial banks' deposits held with the PBoC; (ii) the RRR; and (iii) the provision of liquidity via various programs (e.g. MLF & PSL).

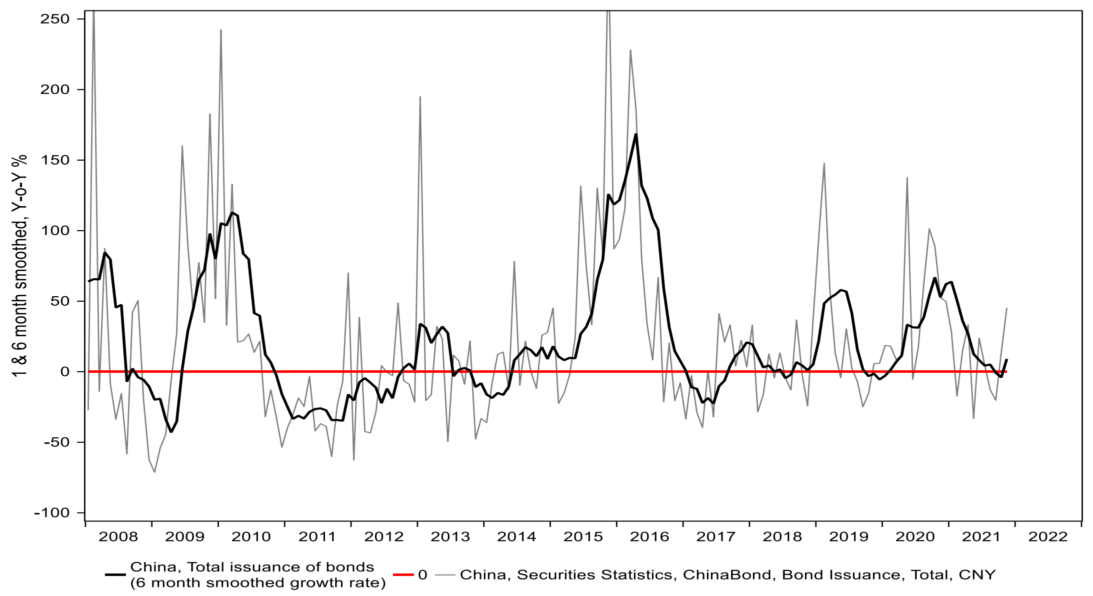
2. **Fiscal easing is likely next year.** Last week China's leadership laid out its economic plans for 2022 (i.e. during the three day 'Central Economic Work Conference' in Beijing). At the heart of those plans was the government's intention to 'maintain economic stability'. Of note the statement from the meeting acknowledged that the economy is under pressure and hinted that fiscal easing is therefore likely (e.g. as the quotes below suggest). As such, and while the precise scale, timing, and nature of that easing is not known at this juncture (and may not be announced until the March budget), it adds to the case for **further policy support next year** (i.e. in addition to monetary easing, see point 1).

"Our country's economic development is facing the triple pressure of demand shrinking, supply shocks and weakening expectations… …We shall ensure the intensity of fiscal spending and accelerate the progress of spending"

Source: Statement from 10th December 2021 Central Economic Work Conference

Added to which, the statement from the Politburo's 6th December meeting (i.e. pre last week's Economic Work Conference) excluded the phrase "houses are for living in, not for speculation" (i.e. language that had been used in prior commentary, e.g. the July '21 meeting, see table 8a below for a summary of key language changes). That's consistent with the recent loosening of housing related policy: China's 'three red lines', for example, have been eased; state developers have been instructed to buy land from local governments[8ii]; and local governments have been told that they can start selling 'special' bonds (i.e. designed to fund investment spending projects). As such, and while total bond issuance has slowed this year (fig 8c), it's likely to accelerate in 2022.

Fig 8c: Chinese total bond issuance (Y-o-Y %, underlying & 6 months smoothed)



Source: Longview Economics, Macrobond

[8ii]State developers have bought 75% of residential land sold at auctions in recent months (i.e. in 22 big cities by value, up from about 45% previously), according to the FT, for detail see 14th November article: "Chinese state developers step up land auction activity to rescue local governments".

Overall, therefore, and despite a marked slowdown in Chinese economic growth in recent months (Section 8a), ongoing policy loosening should result in a soft landing in China, and **significantly reduce the risk of a shock/downside growth surprise in 2022**.

Of particular note, when China turns on the 'policy easing taps', the impact is usually relatively rapid given that the government directly controls the spending taps (i.e. compared to Western/capitalist economies, where it takes longer for the private sector to respond to looser policy). The Chinese authorities therefore have a strong track record of generating soft landing outcomes.

Added to which, and despite signs of pressure in the property sector, there's a distinct **lack of stress in China's banking system**. That's illustrated by recent equity market behaviour: While the real estate sector made new multi-year lows last month, for example, the financials sector is testing multi-year highs (see fig 8d).

Fig 8d: Real estate vs. financials (Shenzhen sector indices)

Source: Longview Economics, Macrobond

Consistent with that, Chinese bank NCD spreads remain tight (highlighting ample liquidity in the banking system) while interbank/SHIBOR rates continue to trend down (which points to plentiful liquidity and, in addition, <u>is often a forward looking sign that credit growth is about to reaccelerate</u>, see fig 8g). In a similar vein, we would also note that Chinese 3 year bond yields have fallen sharply, which is typically a key leading indicator of housing activity (see fig 8h).

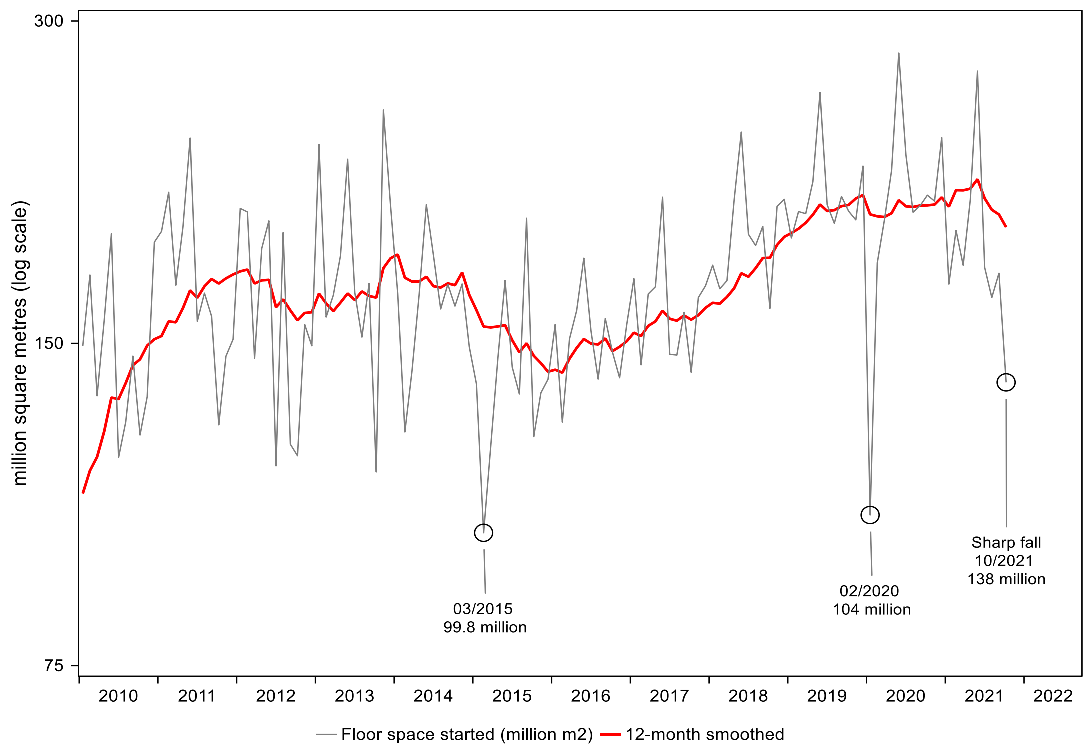
Section 8a: Chinese slowdown marked & broad based

There's strong evidence that weakness in the Chinese economy is both marked and broad based. As we've highlighted in recent research, housing is at the centre of the current slowdown, with activity contracting sharply across all of the key parts of the housing chain (i.e. from land sales, to construction, to housing transactions and so on, e.g. see cement sales, floor space started, and so on, e.g. figs 8a & 8e). Furthermore, there are growing signs of distress in key real estate companies (as we've shown in recent research, *for detail see Global Macro Report, published 25th November 2021 "Chinese Housing: On a Knife Edge"*).

Added to which, **the slowdown has spread more broadly** to other parts of the economy (e.g. see figs 8i & 8j). That's the message of our traffic light analysis (shown in table 8), which provides a snapshot of 38 key indicators which track the health of the economy (and relate to credit, GDP, trade, housing, industry, the consumer, public finances, and the message of various leading indicators). Of note, 23 of those 38 indicators (62%) are either flashing 'RED' or 'AMBER/RED'; 11 are flashing 'AMBER'; while only 4 are on 'AMBER/GREEN'. None are flashing 'GREEN' (see table 8).

Much of that data, though, is backward looking. In addition, and as we highlight in Section 8, policy easing is underway and likely to generate a soft landing in China.

Fig 8e: Chinese floor space started (million square metres, log scale)



Source: Longview Economics, Macrobond

Table 8: Chinese traffic light indicators

Leading Indicators

Indicator	Status	Comment
LEI – OECD (Trend Restored)	AMBER/RED	Growth rate slowing
Yield curve (10 yr less 2 yr)	AMBER	Broadly mid range relative to recent years
New export orders index (PMI subcomponent)	RED	Below 50

Credit Indicators

Indicator	Status	Comment
RMB lending growth	AMBER/RED	Slowing growth rate
System wide lending growth	AMBER/RED	Rolling over in recent qtrs
M2 money supply	AMBER/RED	Stable growth (albeit at low levels)
SHIBOR (2 wk & 1 month)	AMBER/GREEN	Stable at relatively low levels

GDP indicators

Indicator	Status	Comment
Longview Li Keqiang Index	AMBER/RED	Low readings this year
GDP (Y-o-Y & Q-o-Q)	AMBER/RED	Weak growth in Q3 (Y-o-Y & Q-o-Q)

Trade

Indicator	Status	Comment
Exports	AMBER/GREEN	Underlying trend stable/up
Imports	AMBER/GREEN	Underlying trend stable/up
Cargo handled at ports	AMBER	Trend is flat/modestly up
Imports from Asia	AMBER/GREEN	New highs in recent months
Imports of copper and iron ore	AMBER	Broadly stable in the past year
Imports of oil	RED	Shrinking sharply Y-o-Y

Housing & Consumer

Indicator	Status	Comment
Vehicle sales	RED	Shrinking Y-o-Y
House price growth (in 70 cities)	AMBER	Growth stable at low levels
Floor space started	RED	Trending higher (albeit slowly)
Retail Sales	AMBER/RED	Growth positive Y-o-Y but rolling over
Longview Luxury Index	RED	Sharp fall in recent months
Longview Household Index	AMBER	Relatively stable
Longview Personal Index	AMBER/RED	Index trending up

Industry

Indicator	Status	Comment
Supplier Deliveries (PMI subcomponent)	RED	Sharp fall in activity in recent months
Rail freight volumes	AMBER/RED	Mostly shrinking in recent months
Commercial vehicle sales	RED	Sharp contraction Y-o-Y
Industrial production	AMBER	Growth rolling over
Longview production index	RED	At multi year lows
Electricity production	AMBER	Growth rolling over
Fixed Asset Investment	RED	Mostly shrinking in recent years
Production of cement	RED	Shrinking 16% Y-o-Y on latest data
Steel production	RED	Shrinking 22% Y-o-Y on latest data
Manufacturing PMI (NBS data)	AMBER/RED	Below 50 (albeit only just)
Manufacturing PMI (HSBC data)	AMBER/RED	Below 50 (albeit only just)
Services PMI (NBS data)	AMBER	Trending down & volatile, currently above 50
Services PMI (HSBC data)	AMBER	Trending down & volatile, currently above 50
Manufacturing PMI (new orders)	RED	Export orders & new orders both below 50

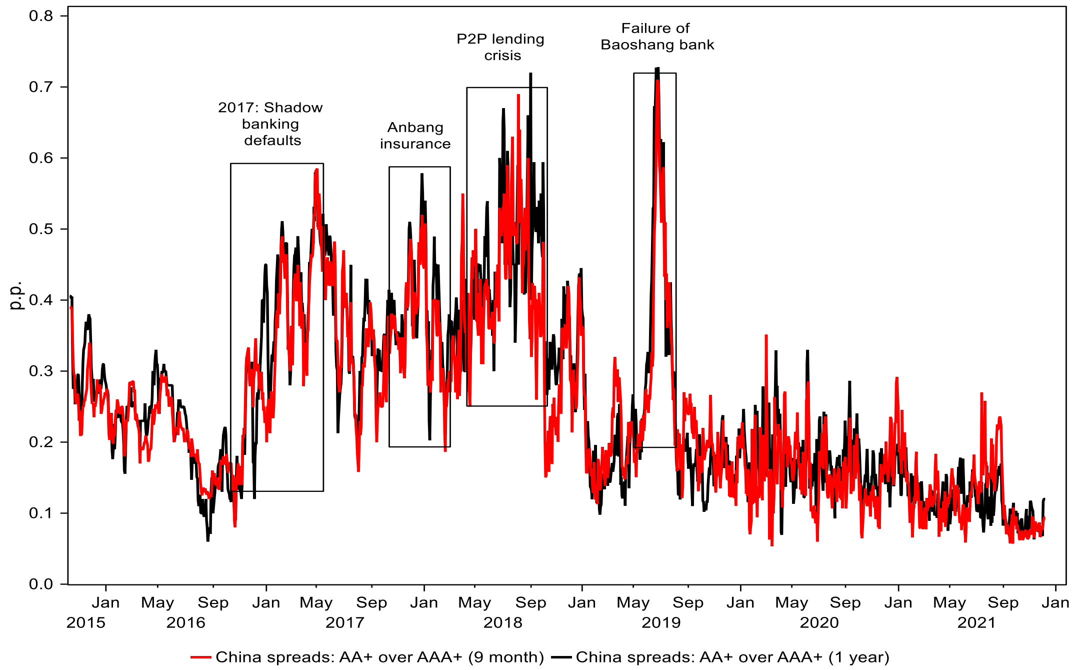
Public finances

Indicator	Status	Comment
Government revenues	AMBER	Slowing Y-o-Y
Government spending	AMBER	Growth close to ZERO Y-o-Y

Source: *Longview Economics*

Key charts and tables

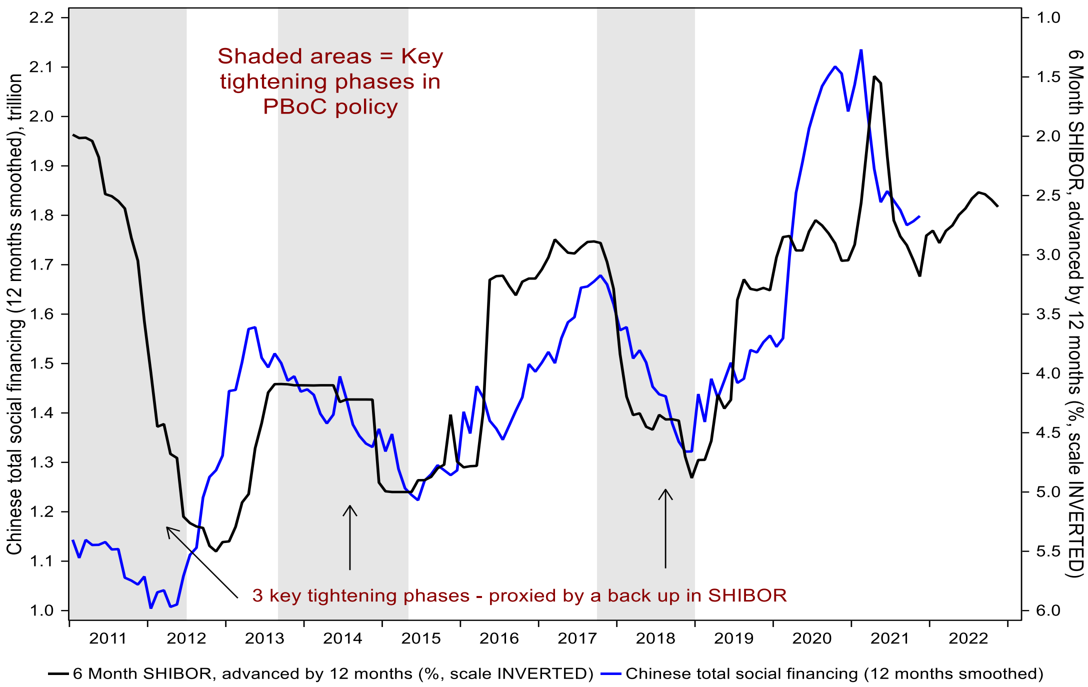
Fig 8f: Chinese bank NCD spreads[8i] (spread of yield on AA+ rated NCD over AAA+ NCD) 9 & 12 months (p.p.)



Source: Longview Economics, Macrobond

[8i] NCD = Negotiable Certificate of Deposit

Fig 8g: TSF credit growth (CNY, trillion) vs. 6 month SHIBOR (12m adv., scale INVERTED)



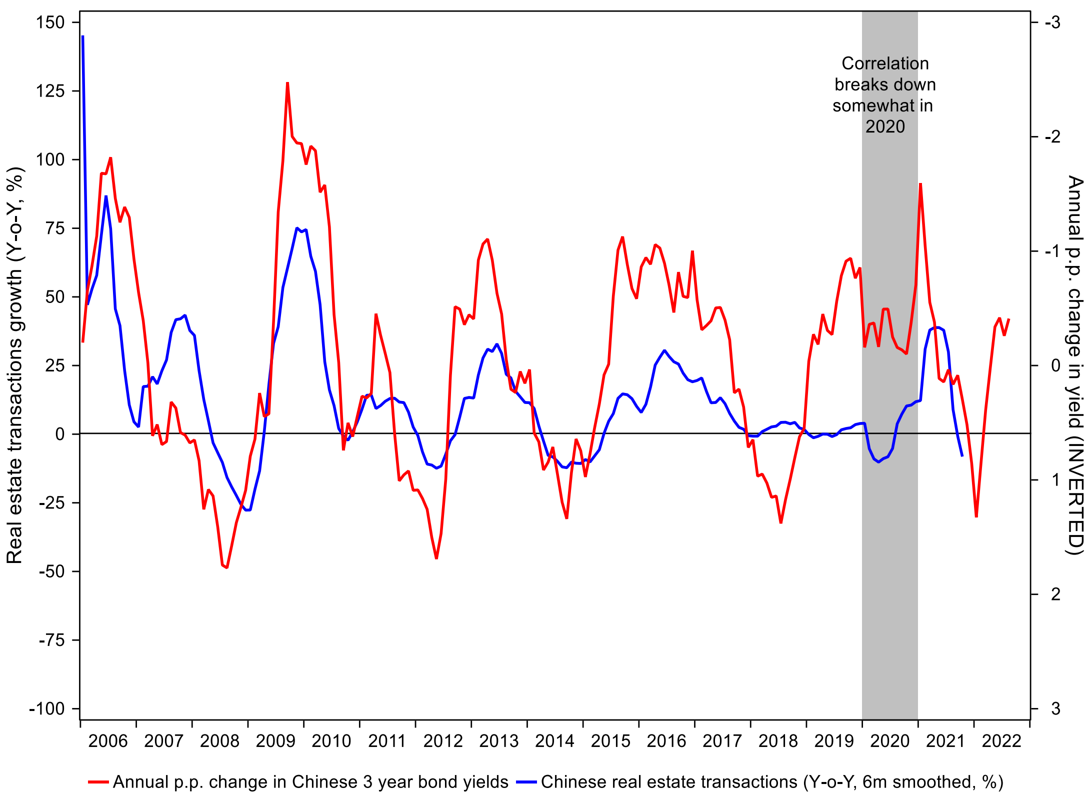
Source: Longview Economics, Macrobond

Table 8a: Language comparison of statements after Politburo meetings

	Dec. 2021 meeting	July 2021 meeting
Monetary policy	Prudent, flexible and appropriate, keep reasonably ample liquidity	Prudent, reasonably ample liquidity, assist SMEs, struggling sectors
Fiscal policy	Proactive, more targeted and sustainable	Proactive, more effective
Jobs	Employment as policy priority, push for birth policies to be implemented, improve access to public services	Improve service for college graduates, migrant workers, protect labor rights for gig economy
Manufacturing	Enhance competitiveness, strengthen supply chain's resilience	Support new energy vehicle development, strengthen innovation and resilience of supply chain
Consumption	Push for continued recovery, expand domestic demand	Tap domestic market, build e-commerce and logistics system in counties and villages
Property	Support the commercial housing market to better meet buyer's reasonable housing needs, build more subsidized housing, facilitate healthy development of property industry	Housing is for living in, not speculation; stabilize land prices, home prices and expectations; promote stable, healthy development of property market

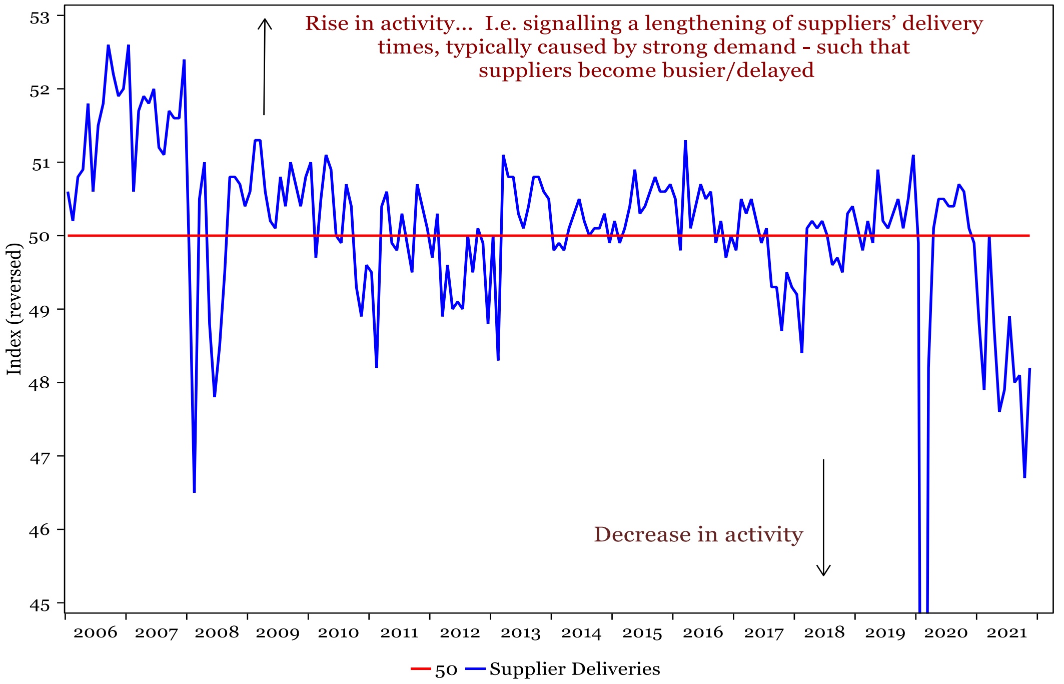
Source: *Xinhua News Agency, Bloomberg*

Fig 8h: Property transactions (Y-o-Y, %) vs. 3y yields (change, scale INVERTED, pp.)



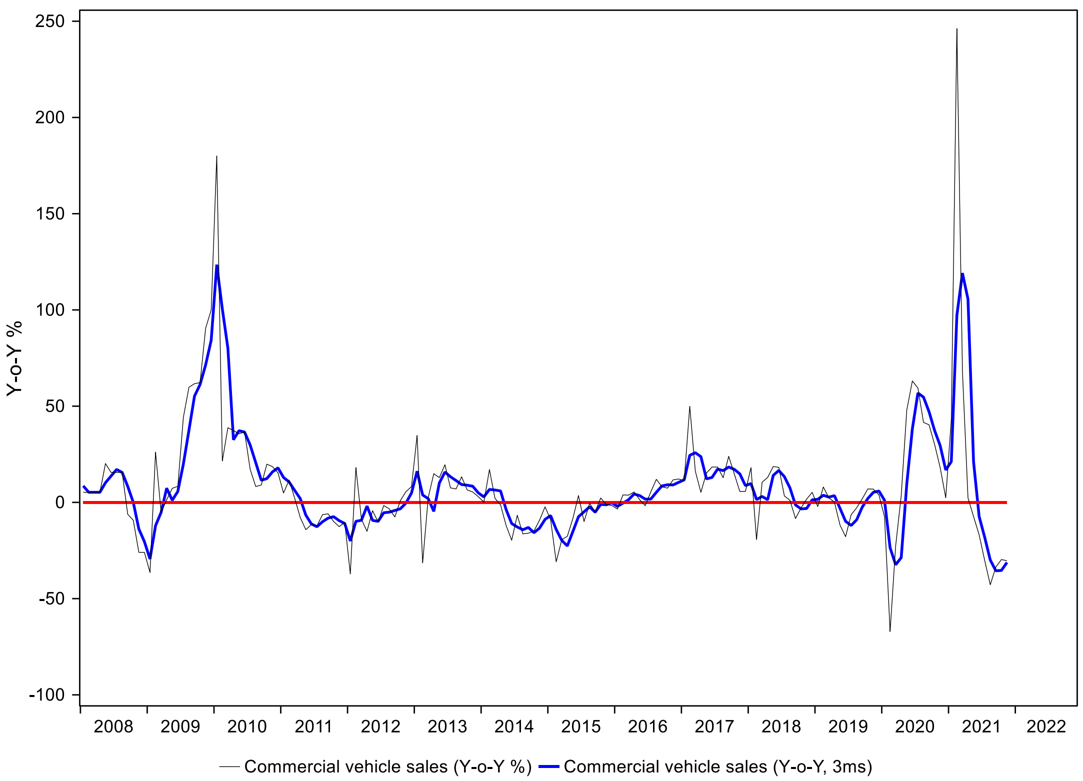
Source: Longview Economics, Macrobond

Fig 8i: Chinese supplier deliveries PMI



Source: Longview Economics, Macrobond

Fig 8j: Commercial vehicle sales (Y-o-Y %)



Source: Longview Economics, Macrobond

Section 9: Global Valuation Chartbook
'Change is Afoot'

10th December 2021

Chris Watling, CEO & Chief Market Strategist, Longview Economics
Email: chris@longvieweconomics.com.

Section 9: Valuation Overview

While absolute valuation has limited use for timing cyclical bull and bear markets (see structural asset allocation no 14, May 2006: "Does Valuation Matter"), it does provide insights into market sensitivities to challenging (or indeed positive) economic environments. Added to that, relative valuation can be particularly insightful – especially as a key building block for allocating between asset classes and geographies. This is why we dedicate a section of the quarterly global asset allocation to the analysis of valuation metrics.

Valuation: 'Change is Afoot'

In some ways the debate about valuation levels and related market risks remains largely unchanged in recent quarters. If we've squared the 'valuation circle' between 'stand-alone' and 'relative' valuation metrics correctly, though, then it's likely that the valuation landscape is going to change meaningfully over the coming 12 – 18 months: In particular it appears that (valuation) 'change is afoot'.

The *current* valuation debate, though, can be characterised as follows:

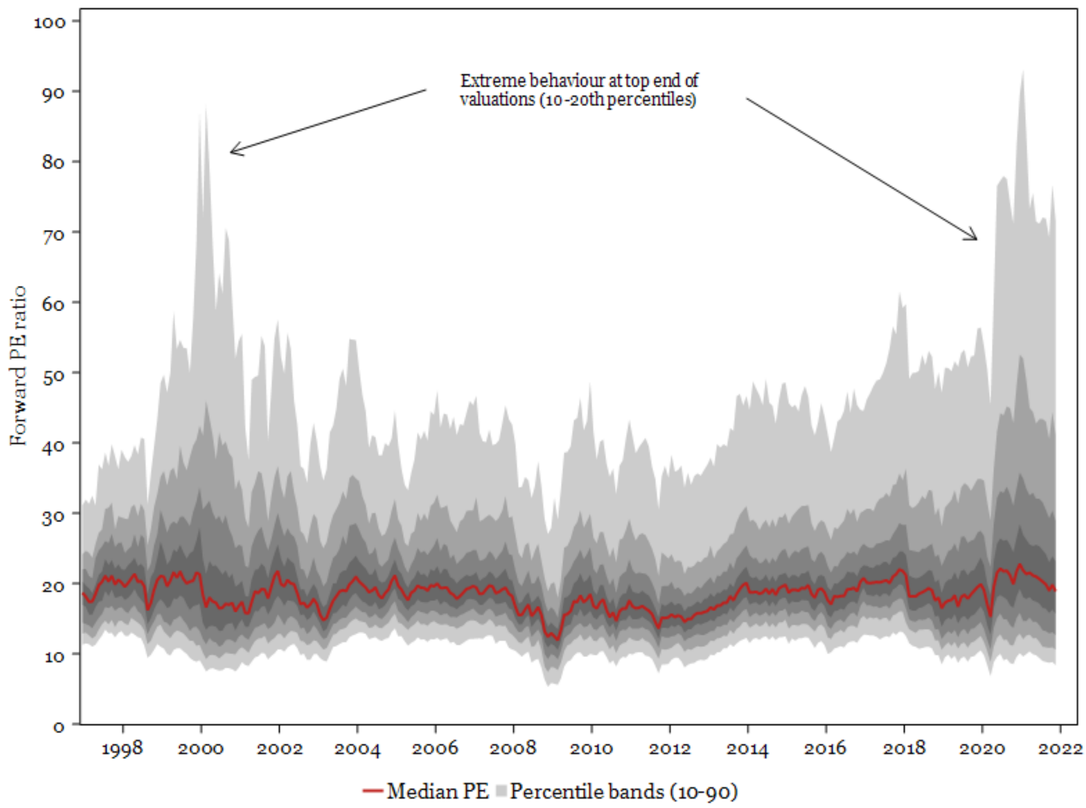
Fig 9: S&P500 combined (dividend and buyback) yield less real bond yield

Source: Longview Economics, Macrobond

On a stand-alone basis the **US equity market appears expensive**: The forward PE ratio for the S&P500, for example, is at 21.1x and close to its +2 standard deviation level (fig 9vii); on a Shiller (cyclically adjusted) PE ratio, the market is close to one of its most expensive levels on record (i.e. in 150 years –

fig 9viii); whilst on Buffett's favourite indicator (stock market capitalisation to GNP, which is akin to a PER for the whole economy), the market reached its highest ratio on record in Q2 (i.e. 2.7x GNP – fig 9ix). Added to which, digging down into the single stock detail of the US equity market, there's clear evidence of valuation excess. Fig 9i below shows the unusually high share of stocks with extreme PE ratios, which is at a similar level to the highs during the TMT bubble.

Fig 9i: US broad equity market shown with 10th – 90th percentile bands for single stock PE ratios[9]



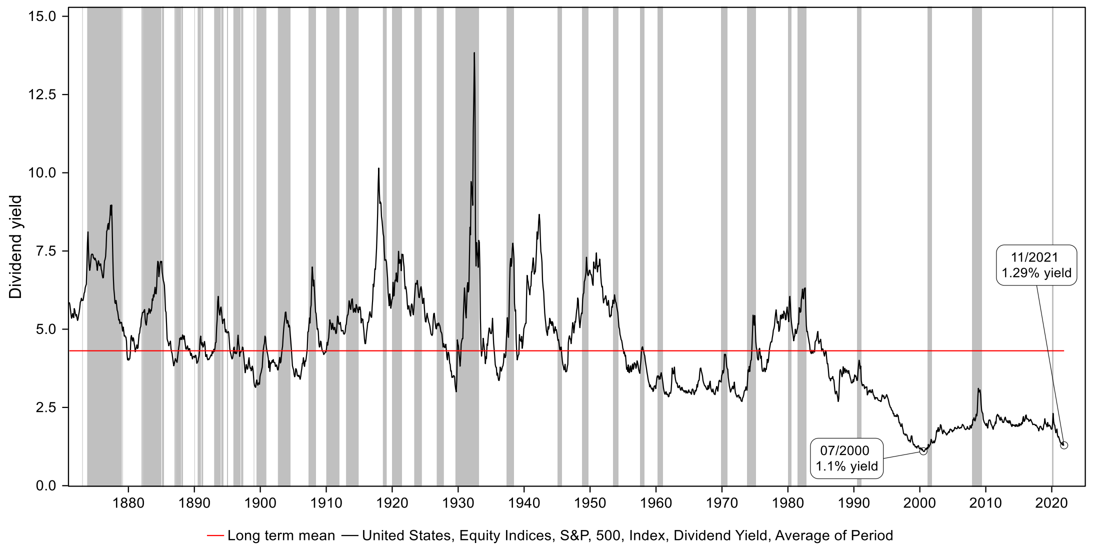
Source: Longview Economics, Macrobond

[9] NB the highest/light grey line is the 10th percentile. Above that are more expensive companies (not shown with percentile bands).

On a relative basis, though (i.e. versus other asset classes), the **US market seems fairly valued** (or even attractive). Using a classic equity risk premium, for example, the US equity market is trading modestly above average risk premia (relative to real bond yields – fig 9x). Against US high yield corporate bonds, equities are notably attractive (fig 9div); while against high grade corporate bonds, equities are offering an above average relative yield (9diii).

Or alternatively a comparison of the aggregated S&P500 yield (i.e. the buyback plus the dividend yield), against the real bond yield, also highlights the attractiveness of US equities. Whilst the S&P500's current dividend yield is close to the record lows of the past 150 years, at around 1.3% (see fig 9ii), if the buyback yield is added in and considered versus the negative real bond yield, then equities also appear attractive on this metric relative to history (i.e. offering a 4% yield pick-up – fig 9).

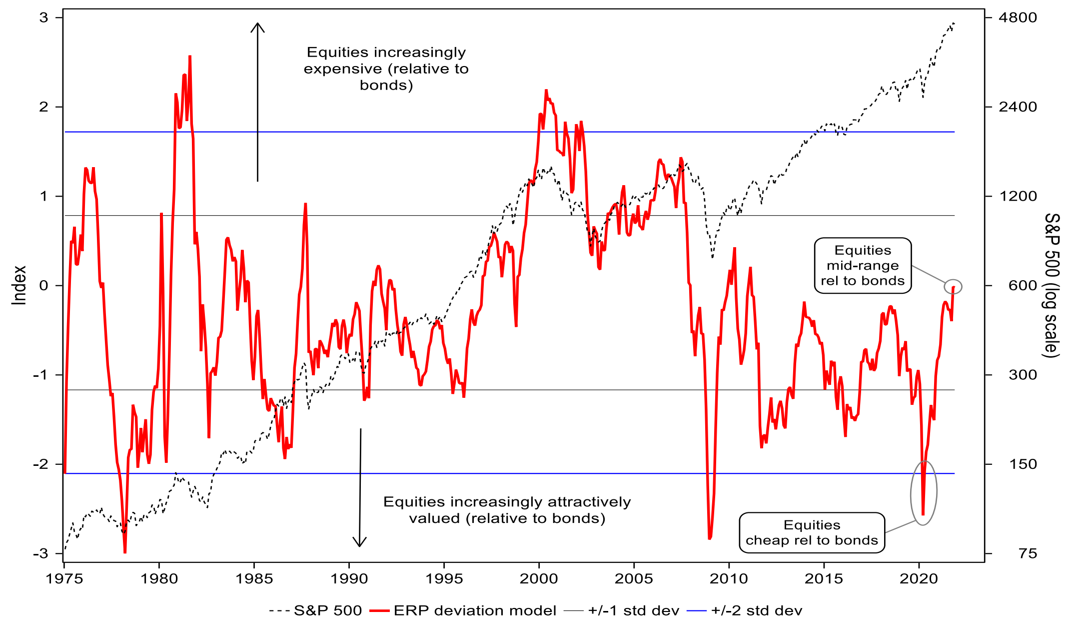
Fig 9ii: US S&P500 dividend yield (1870 to present, %)



Source: Longview Economics, Macrobond

A further illustration of the relative fair value comes from our proprietary valuation model. This looks at the current equity risk premium relative to its fair value (calculated by looking at the relative riskiness of equities and bonds). This model is also suggesting that equities are fairly valued. As recently as March 2020, this model generated a strong BUY signal. Since then, and as the market has rallied, this model has moved to zero (illustrating that the observed risk premium is in line with the calculation of its fair value – fig 9iii).

Fig 9iii: Longview US equities fair value risk premia model vs. S&P500



Source: Longview Economics, Macrobond

The 'TINA' Thesis and Valuation Metrics

At the heart of this dichotomy (i.e. the contrasting message of 'stand-alone' versus 'relative' valuation metrics), is the 'TINA' thesis (and with that low real and nominal bond yields and ongoing emergency monetary policy settings).

TINA (there is no alternative) is a, if not the, key reason for the record high stand-alone valuations. That is, of all the major asset classes available to investors, equities offer the most attractive relative yield. Cash is currently offering a negative real yield of 6% or 7%; real (TIPS) bonds are yielding negative 1%; while nominal 10-year sovereign bond yields are trading at only 1.5% (adjusting for inflation, therefore, they offer a considerably negative yield). Equally the ~5% yield available from US high yield corporate credit is approximately the same as that available from the (relatively less risky) US stock market (with a 21x PER and, therefore, a 4.7% earnings yield). Importantly, in that respect, the equity market's earnings yield is a real ratio (essentially because the companies that make up the index are hedged against inflation, in that they generate the price increases/inflation). As real risk-free yields (TIPS & real cash rates) have moved lower, therefore, they have pulled down the S&P500's earnings yield (i.e. pushed its PER higher).

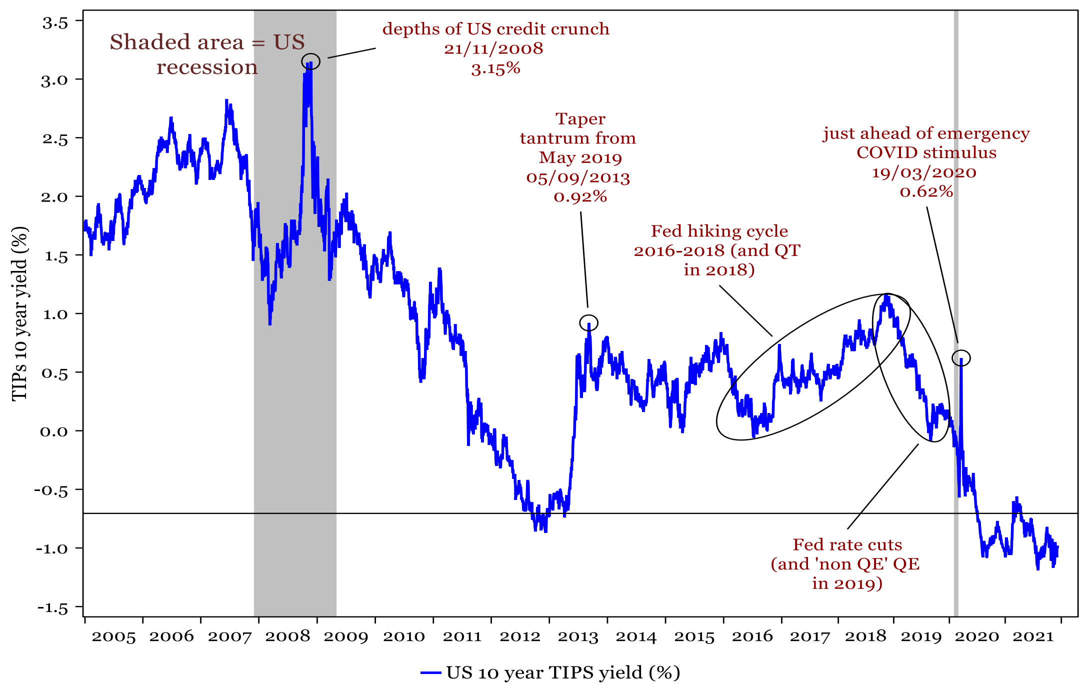
Critically **if TIPS yields remain low** (-1%) or move lower, then the equity market should benefit as earnings growth (and potentially a rising PER if TIPS yields fall) could then combine to drive the stock market higher.

If TIPS yields (and cash rates) move notably higher, though, pressure is likely to come on the stock market's PER as alternative asset classes slowly become more attractive (on a relative basis). Naturally ahead of time, it's difficult to determine at what level of TIPS yields that will occur. Clearly, though, once the model above (fig 9iii) reaches its +1 standard deviation level, then equities will have entered an historically troubling relative valuation level (other relative models should provide similar insights).

In that respect, though, and as we wrote about in our latest Longview Letter ("The Real Bond Yield Conundrum", published 3rd December 2021), TIPS yields are closely related to the outlook for US monetary policy. The correlation of Fed funds' rate expectations and TIPS yields (as fig 1 *in that report* shows), for example, is high. QE programs (& QT programs), both through their impact on inflation expectations as well as their associated direct buying of TIPS by the Fed, also impact those TIPS yields (NB the Fed now owns 22% of the US TIPS market).

Meanwhile, over the past 15 years, US TIPS have been through a series of phases (chapters – see fig 9iv), including: i) initially pricing in debt deflation risks (in October 2008); ii) then pricing in rising inflation risks to reflect the forceful policy response to the global financial crisis; iii) moving sharply higher during the taper tantrum (May 2013 – and broadly holding those levels through to 2016); then iv) pricing in the beginning of policy normalisation from 2016 through to 2018 (by the end of which time the Fed had overtightened); v) another, albeit brief, market credit crunch during the initial stages of the pandemic (with a spike in real yields in March 2020); and which was followed by vi) an aggressive policy response and therefore a reversion to low real yields as the market priced in rising/high inflation risk.

Fig 9iv: US 10 year TIPS yield (%), shown with US recessions



Source: Longview Economics, Macrobond

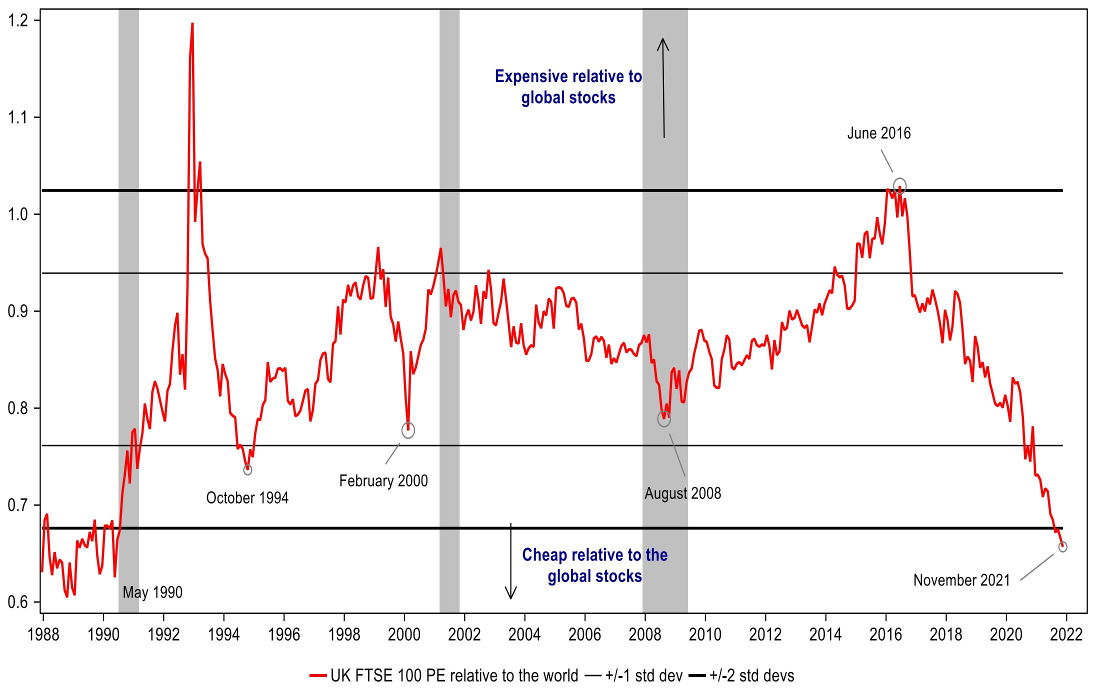
Currently TIPS yields remain at a level consistent with those high inflation risks and associated emergency monetary policy settings.

The Fed, though, is now starting to remove those emergency policy settings and begin its path to normalising monetary policy. Importantly, in that respect, the economy appears strong enough (structurally, with pent-up demand etc.) to be able to absorb a large part of that tightening. Structurally, as outlined in our latest quarterly US macro outlook, the household, corporate and banking sector are all strong. That suggests an ability for the economy to absorb higher interest rates. If correct, then real bond yields (and indeed much of the interest rate structure) should move higher which, given those high stand-alone valuations, at some point, will create significant challenges for the stock market.

The behaviour of TIPS yields is therefore a critical input into the behaviour of the US (& global) stock market over coming quarters. Initially we'd anticipate the market being able to absorb rising yields as a strong economy and strong earnings growth contributes to a continuation of the cyclical bull market. At some stage, though, in a manner like 2018, it's likely that the Fed will overtighten. At that point and, given the likely higher real TIPS yields that will be on offer at that time and the slowing outlook for earnings growth and the global economy (that will occur in response to the Fed overtightening), there will then be some significant challenges for the stock market.

Outside the US: Whilst the valuation dynamics are most marked/evident in the US financial markets, they are replicated in some other parts of the world. The NZ, Indian, Swedish and Danish stock markets, for example, all have high PE ratios. New Zealand is currently trading at 29x forward earnings (highest level on record); Indian equities are trading at 21x (one of their highest PE ratios since 1994); while Swedish and Danish equity markets are on 20.7x and 19.8x, respectively. Those countries real bond yields, other than in India, are also at low/negative levels (hence equities are attractive on the relative valuation metrics).

Fig 9v: UK FTSE 100 forward PER relative to the Global forward PER

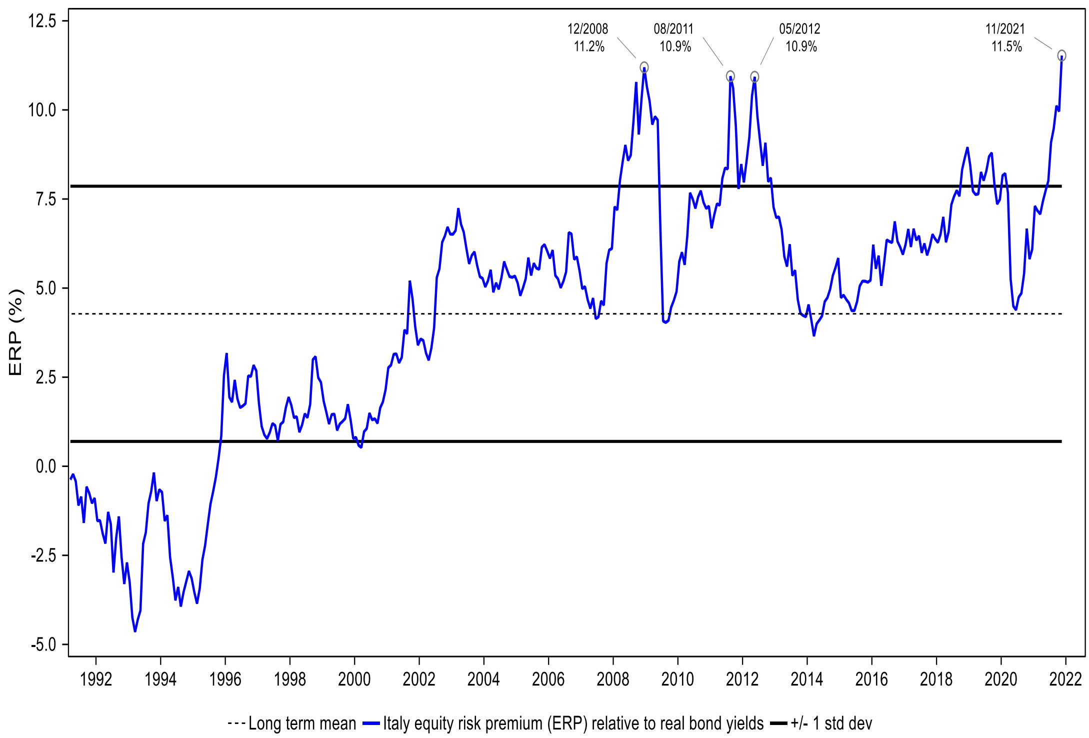


Source: Longview Economics, Macrobond

Other parts of the global equity landscape remain, however, attractively valued even on a stand-alone valuation basis. The UK (11.7x forward earnings), Japan (16.2x), Italy (11.5x) and Russia (5.5x) are all towards the lower end of their historical PE ranges. On various relative valuation metrics, as well, many of those markets are also attractive. In the UK, for example, the PE ratio is at its cheapest levels relative to the global PER since 1990 (fig 9v). The UK equity market's equity risk premium (i.e. against real bond yields) is back at 12%, one of its most generous in recent decades. UK equities are also cheap against cash rates and high yield corporate credit. In Italy, in particular, and Japan to an extent, similar comments can be made. The Italian equity risk premium, shown in fig 9vi, is at its highest level on record and has just moved above prior peaks during the GFC and the Eurozone crisis.

Conclusion: Overall, therefore, the valuation backdrop of the global financial market landscape remains similar to prior recent quarters. That is, the US remains expensive on a 'stand-alone' basis although more attractive on a 'relative' basis. Overseas markets, which were previously cheap, have remained so (including UK, Italy and Japan). In some instances, though, and on some metrics the attractiveness of the asset has increased (with close to/new record cheap valuations). Most critically, though, it now seems likely that the TIPS yield, which has facilitated the high stand-alone valuations in the US, is about to start rising. At some stage that will start to pressure the high US standalone PE ratio. Equally, other markets, with considerable valuation cushion (i.e. like the UK/Italy) are likely to be the beneficiaries of that rising TIPS/real bond yield.

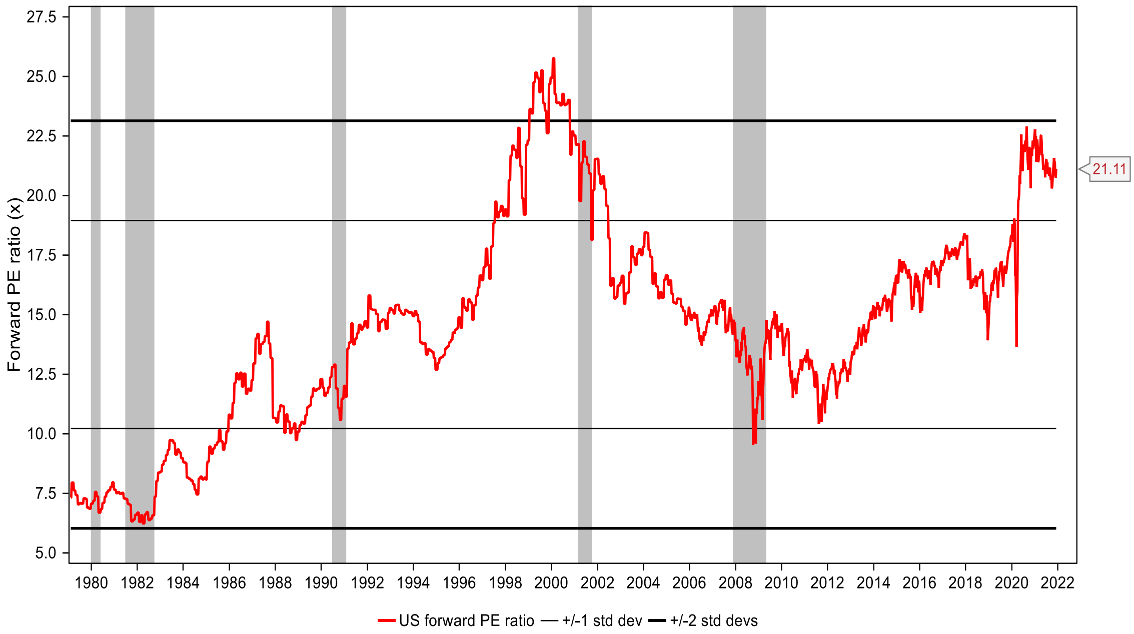
Fig 9vi: Italian Equity Risk Premium (earnings yield less real bond yield)



Source: Longview Economics, Macrobond

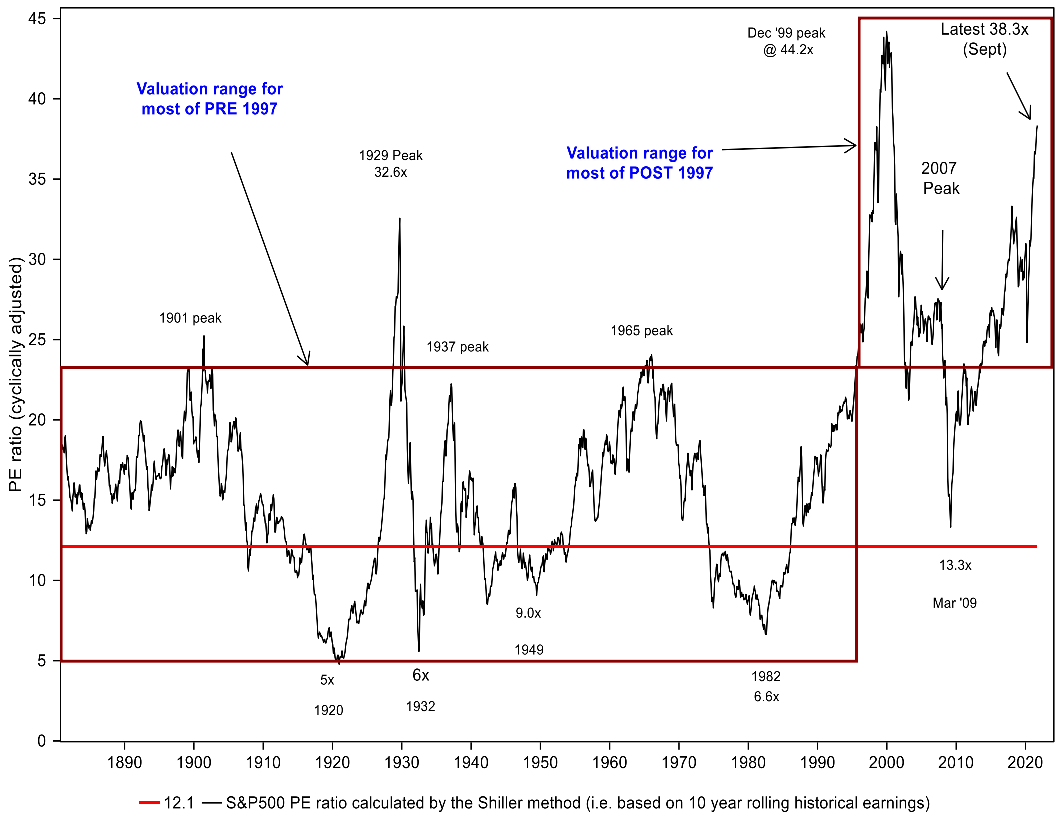
Stand-Alone Valuation Measures (US equity Market)

Fig 9vii: S&P500 12m forward PE ratios (based on rolling consensus EPS)



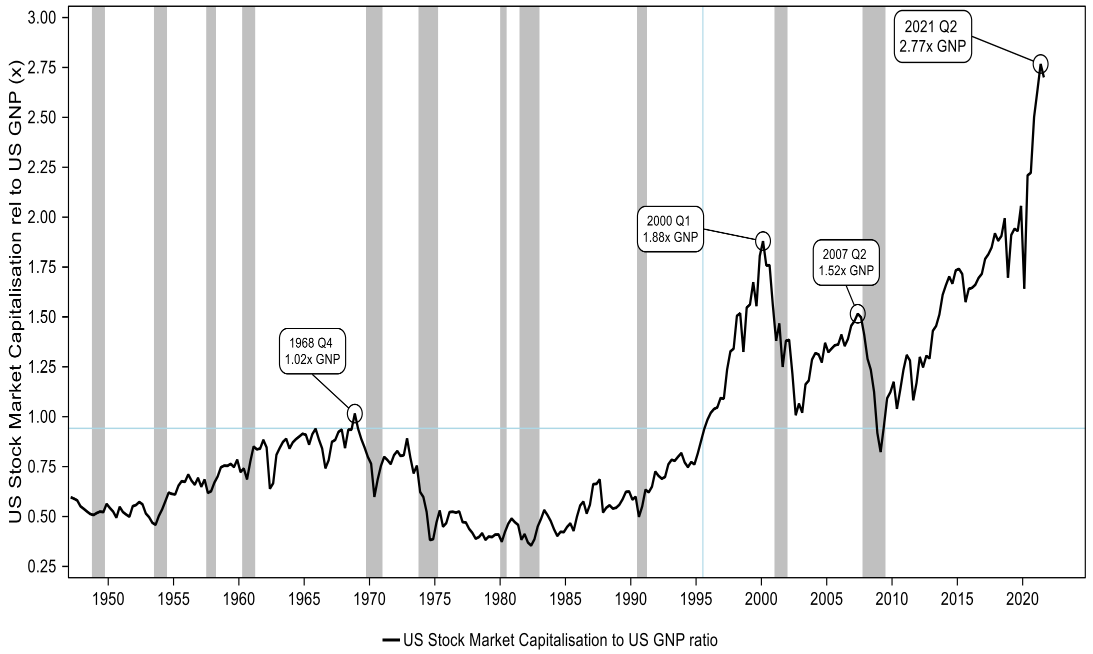
Source: Longview Economics, Macrobond

Fig 9viii: Long term US S&P 500 cyclically adjusted (Shiller) PE ratio



Source: Longview Economics, Macrobond

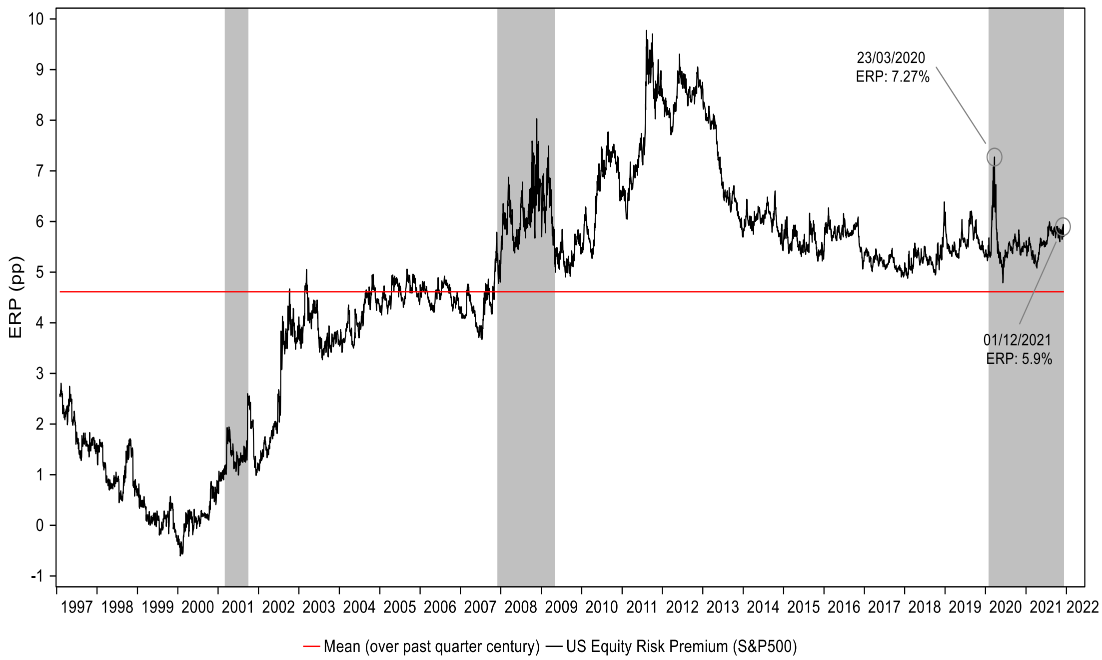
Fig 9ix: US stock market capitalisation to GNP (multiple thereof)



Source: Longview Economics, Macrobond

Relative Valuation Measures (US equity Market)

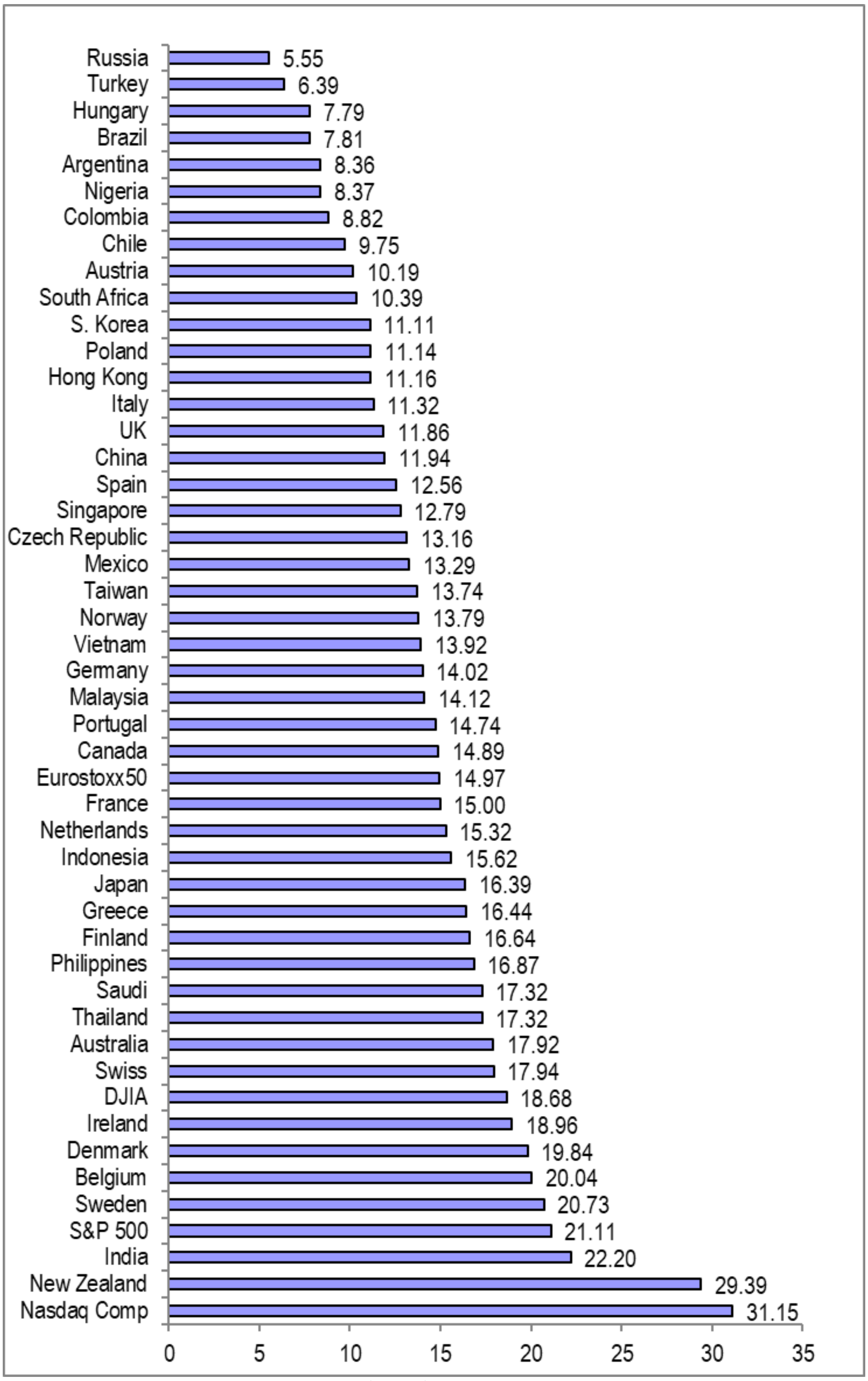
Fig 9x: US Equity Risk Premium (earnings yield less real bond yield)



Source: Longview Economics, Macrobond

Section 9a: Headline Country PE ratios

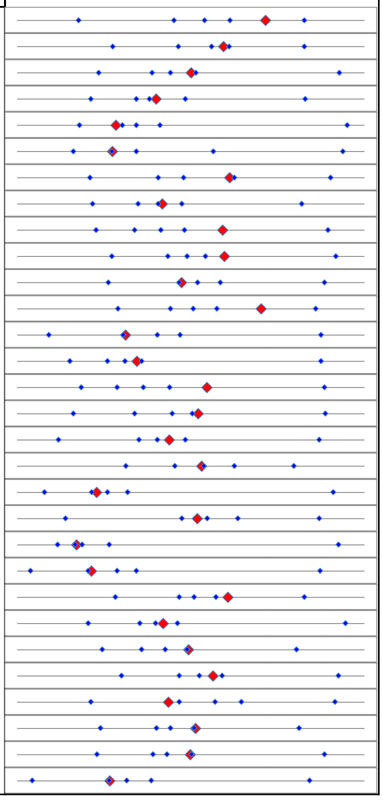
Fig 9ai: Standalone PE ratios – various country indices (based on 12m forward EPS)



Source: *Longview Economics, Bloomberg*

Fig 9aii: Standalone PE ratios – relative to history

10/12/2021	Current PE	Min PE	Lower Quartile	Median	Upper Quartile	Max PE	Percentile	Data Since
Australia	17.92	4.40	11.27	13.47	15.30	20.69	95	Aug-92
Canada	14.89	6.87	11.58	13.98	15.25	20.64	67	Jan-85
France	15.00	7.00	11.60	13.20	15.45	27.80	72	Jan-87
Germany	14.02	7.35	12.01	13.31	16.95	29.02	60	Feb-87
Italy	11.31	7.10	12.08	13.68	16.40	38.02	19	Jan-87
Japan	16.39	9.67	16.34	20.52	33.83	56.32	25	May-87
Netherlands	15.32	5.22	10.13	11.99	15.63	22.58	73	Jan-87
Spain	12.56	6.47	10.41	12.16	14.20	24.55	54	Mar-87
Sweden	20.74	7.89	11.82	14.48	16.85	31.28	91	Feb-87
Switzerland	17.94	8.16	12.95	14.64	16.27	27.51	89	Feb-87
United Kingdom	11.86	6.53	11.66	12.96	14.60	22.11	27	Nov-87
United States	21.11	8.70	13.22	15.17	17.25	25.76	88	Jan-85
Brazil	7.81	2.27	7.62	10.06	11.68	21.88	28	Oct-92
China	13.74	5.99	10.31	12.39	14.27	34.96	43	Nov-95
India	21.86	7.37	11.49	14.52	17.48	35.43	93	Feb-93
Indonesia	15.62	4.81	10.11	13.39	15.13	26.59	79	Oct-90
Korea	10.96	2.93	8.72	10.09	12.06	21.75	61	Mar-88
Mexico	13.29	7.80	11.34	13.43	15.63	19.90	48	Jun-92
Russia	5.74	1.93	5.35	6.44	7.93	22.76	34	Mar-98
South Africa	10.40	2.74	9.45	10.91	12.68	17.38	42	Nov-87
Taiwan	13.63	9.12	13.22	14.92	21.19	74.07	32	Feb-88
Turkey	6.39	1.07	6.06	8.58	10.28	26.16	27	Jun-92
World	18.19	8.42	14.01	15.24	17.14	24.82	82	Jan-87
EM	12.62	6.09	10.55	11.91	13.82	28.34	62	May-89
BRIC	12.34	6.10	8.95	10.63	12.21	20.10	77	Aug-93
Asia Ex-Japan	14.10	7.51	11.67	13.08	14.75	23.15	66	Jan-87
LatAm	8.73	4.23	9.34	11.40	12.88	18.31	15	Jun-92
Europe	15.42	7.18	12.01	13.20	15.25	24.34	76	Jan-87
EMU	14.96	6.84	11.69	12.92	15.03	26.51	75	Jan-87
Emerging Europe	6.68	1.07	6.62	7.84	9.62	21.06	27	Aug-92



Source: *Longview Economics, Bloomberg*

Table 9aii explained: Table 9 analyses each country's PE ratio against its own history, using all available data (see 9th column). We then 'percentile' all data points and score and colour code the current PE ratio (column 8). For each country, we then show the current PE ratio, its minimum PE ratio (i.e. of all its history), the lower quartile, the median, the upper quartile and the maximum. The dots to the right of the data are explained below and represent a pictorial representation of the outcome of the analysis

Key to above dot chart:

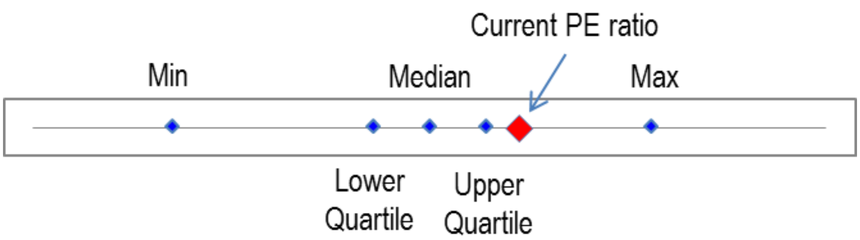


Fig 9aiii Cross-country PE heatmap

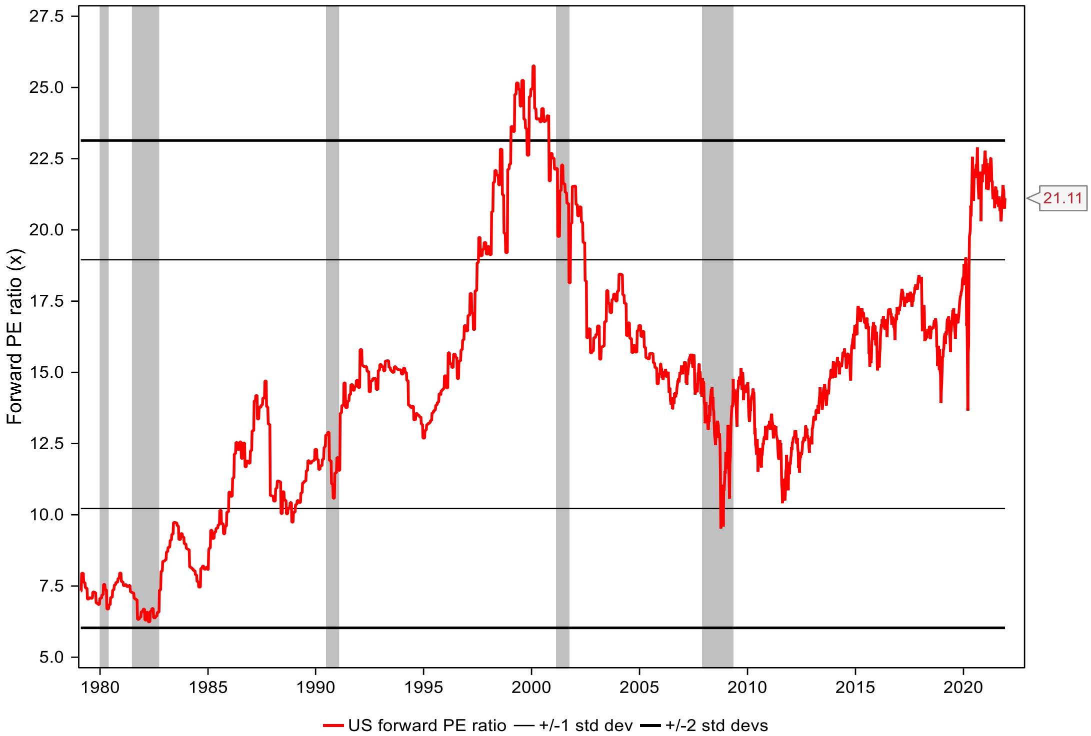
10/12/2021	Australia	Canada	France	Germany	Italy	Japan	Netherlands	Spain	Sweden	Switzerland	United Kingdom	United States	Brazil	China	India	Indonesia	Korea	Mexico	Russia	South Africa	Taiwan	Turkey	World	EM	BRIC	Asia Ex-Japan	LatAm	Europe	EMU	Emerging Europe	Average
Australia		3	14	7	1	1	27	10	65	30	1	60	8	18	73	29	7	4	4	4	2	13	47	6	19	18	5	14	30	7	18
Canada	98		59	54	15	27	74	39	93	79	12	94	27	48	94	73	61	46	35	24	30	25	64	63	74	58	16	59	56	14	52
France	87	42		21	1	4	78	29	98	89	4	100	29	36	90	59	49	39	21	27	16	28	80	46	56	51	23	70	70	18	47
Germany	94	47	80		8	3	80	48	100	92	30	100	35	42	96	67	54	43	22	52	24	32	96	49	61	65	29	81	90	25	57
Italy	100	86	100	93		43	97	94	100	100	77	101	48	70	100	90	85	63	46	60	60	39	100	84	91	88	46	100	100	44	79
Japan	100	74	97	98	58		90	77	101	100	66	101	54	60	99	86	88	62	43	65	66	39	100	90	89	95	50	98	99	40	79
Netherlands	74	27	23	21	4	11		9	92	53	4	82	23	33	80	51	43	31	19	19	17	27	50	42	56	40	17	28	30	14	35
Spain	91	62	72	53	7	24	92		95	92	20	97	34	50	92	64	58	47	32	37	38	30	84	58	70	59	30	82	78	31	58
Sweden	36	8	3	1	1	1	9	6		20	1	26	18	13	59	32	15	14	9	14	3	13	10	14	26	11	9	4	8	9	14
Switzerland	71	22	12	9	1	1	48	9	81		1	75	16	21	78	44	30	25	14	15	6	20	41	23	44	26	8	12	22	11	27
United Kingdom	100	89	97	71	24	35	97	81	100	100		100	38	67	96	89	74	61	50	49	47	39	97	75	82	77	32	100	96	48	73
United States	41	7	1	1	1	1	19	4	75	26	1		19	16	63	32	24	23	11	17	4	14	4	20	29	15	9	1	3	8	17
Brazil	93	74	72	66	53	47	78	67	83	85	63	82		62	93	90	83	77	65	72	62	46	78	86	94	82	44	74	72	64	73
China	83	53	65	59	31	41	68	51	88	80	34	85	39		94	71	64	52	38	50	47	26	77	66	76	70	31	69	69	24	59
India	28	7	11	5	1	2	21	9	42	23	5	38	8	7		16	4	7	1	5	2	10	24	6	5	6	6	12	17	7	12
Indonesia	71	27	42	34	11	15	50	37	69	57	12	69	11	30	85		26	18	18	10	9	21	56	34	41	41	9	48	48	11	35
Korea	94	40	52	47	16	13	58	43	86	71	27	77	18	37	97	75		40	22	32	13	32	71	46	59	55	15	58	60	22	47
Mexico	97	55	62	58	38	39	70	54	87	76	40	78	24	49	94	83	61		47	36	47	27	69	64	72	63	8	65	64	39	57
Russia	97	66	80	79	55	58	82	69	92	87	51	90	36	63	99	83	79	54		49	58	28	88	87	97	89	37	82	83	19	70
South Africa	97	77	74	49	41	36	82	64	87	86	52	84	29	51	96	91	69	65	52		41	39	77	70	85	69	13	79	74	47	65
Taiwan	99	71	85	77	41	35	84	63	98	95	54	97	39	54	99	92	88	54	43	60		39	96	89	86	92	38	89	87	43	72
Turkey	88	76	73	69	62	62	74	71	88	81	62	87	55	75	91	80	69	74	73	62	62		80	75	82	75	52	75	73	60	73
World	54	37	21	5	1	1	51	17	91	60	4	97	23	24	77	45	30	32	13	24	5	21		23	42	25	15	26	30	14	31
EM	95	38	55	52	17	11	59	43	87	78	26	81	16	35	95	67	55	37	14	31	12	26	78		76	70	3	61	63	16	48
BRIC	82	27	45	40	10	12	45	31	75	57	19	72	7	25	96	60	42	29	4	16	15	19	59	25		39	4	49	50	10	37
Asia Ex-Japan	83	43	50	36	13	6	61	42	90	75	24	86	19	31	95	60	46	38	12	32	9	26	76	31	62		8	55	54	17	44
LatAm	96	85	78	72	55	51	84	71	92	93	69	92	57	70	95	92	86	93	64	88	63	49	86	98	97	93		79	78	63	79
Europe	87	42	31	20	1	3	73	19	97	89	1	100	27	32	89	53	43	36	19	22	12	26	75	40	52	46	22		44	13	42
EMU	71	45	31	11	1	2	71	23	93	79	5	98	29	32	84	53	41	37	18	27	14	28	71	38	51	47	23	57		18	41
Emerging Europe	94	87	83	76	57	61	87	70	92	90	53	93	37	77	94	90	79	62	82	54	58	41	87	85	91	84	38	88	83		75
Average	83	49	54	44	22	22	66	43	87	74	28	84	28	42	89	66	54	44	31	36	29	28	70	53	64	57	22	59	60	26	

On a **relative** valuation basis (i.e. using forward PE ratios) compared with other indices since 1980 (data permitting) and then scored by percentile, Turkey is the world's cheapest major equity market. India is the most expensive by this metric. NB this table should be read as 'column header' relative to 'row header' - i.e. Australia is in its 90th most expensive percentile relative to Canada (compared to history).

Source: *Longview Economics, Bloomberg*

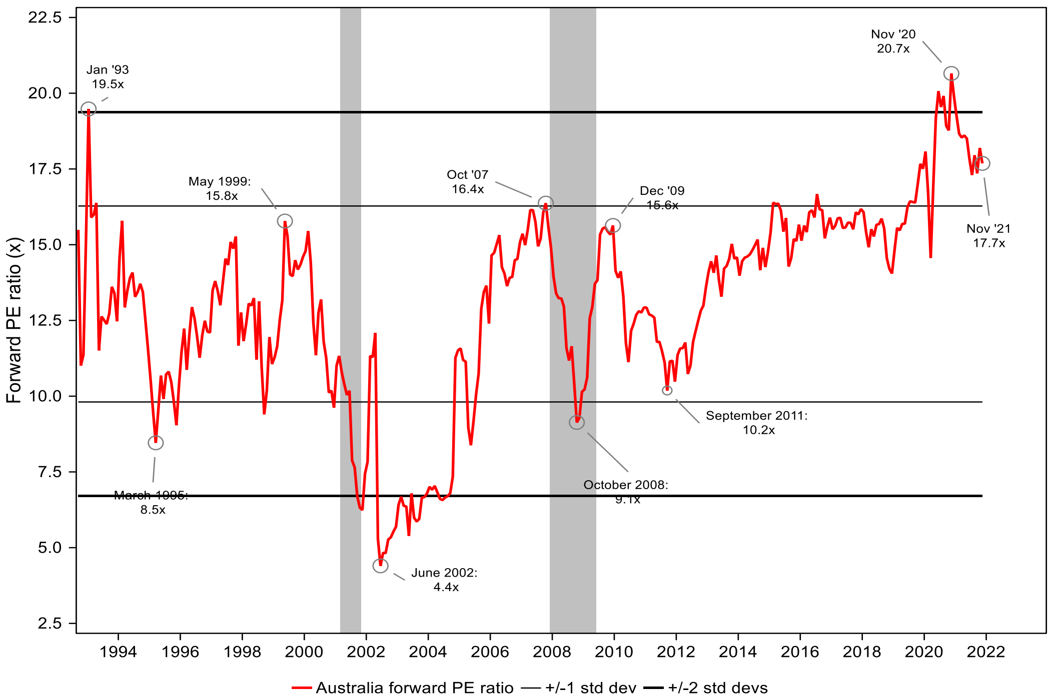
Section 9b: Standalone PE ratios of certain expensive/cheap countries

Fig 9bi: S&P500 12m forward PE ratios (based on rolling consensus EPS)



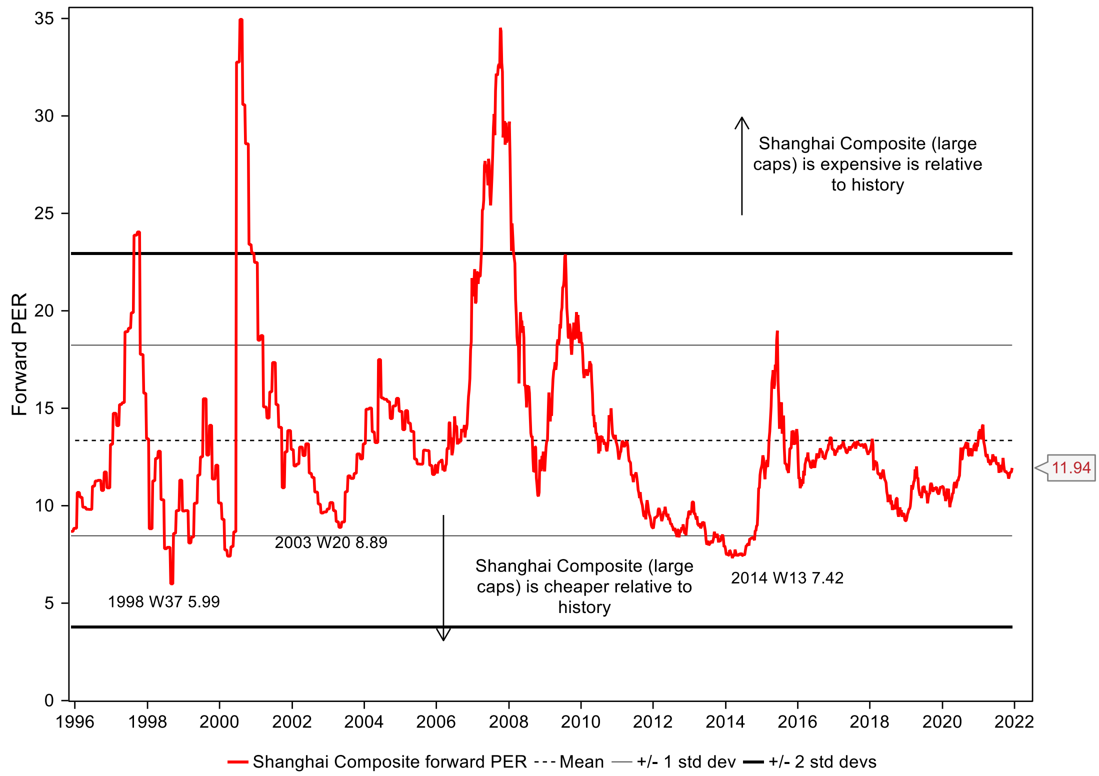
Source: Longview Economics, Macrobond

Fig 9bii: Australia forward PE ratio (based on rolling consensus EPS)



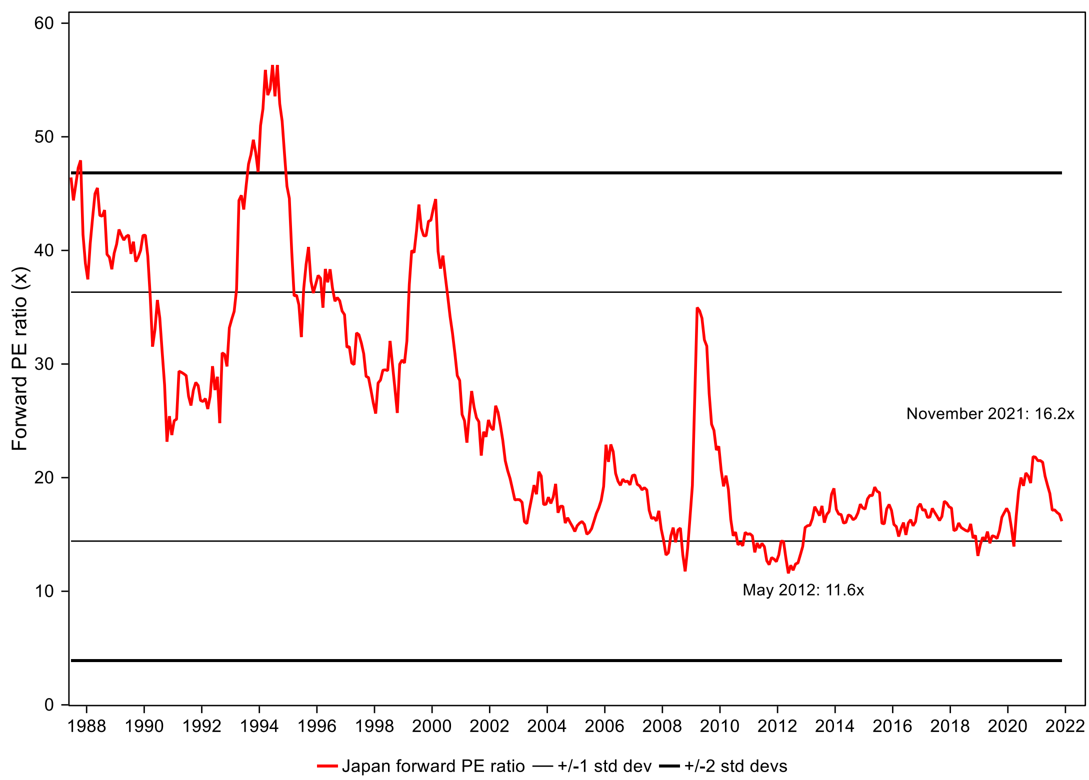
Source: Longview Economics, Macrobond

Fig 9biii: Chinese 12m forward PE ratios (based on rolling consensus EPS)



Source: Longview Economics, Macrobond

Fig 9biv: Argentina 12m forward PE ratio (based on rolling consensus EPS)



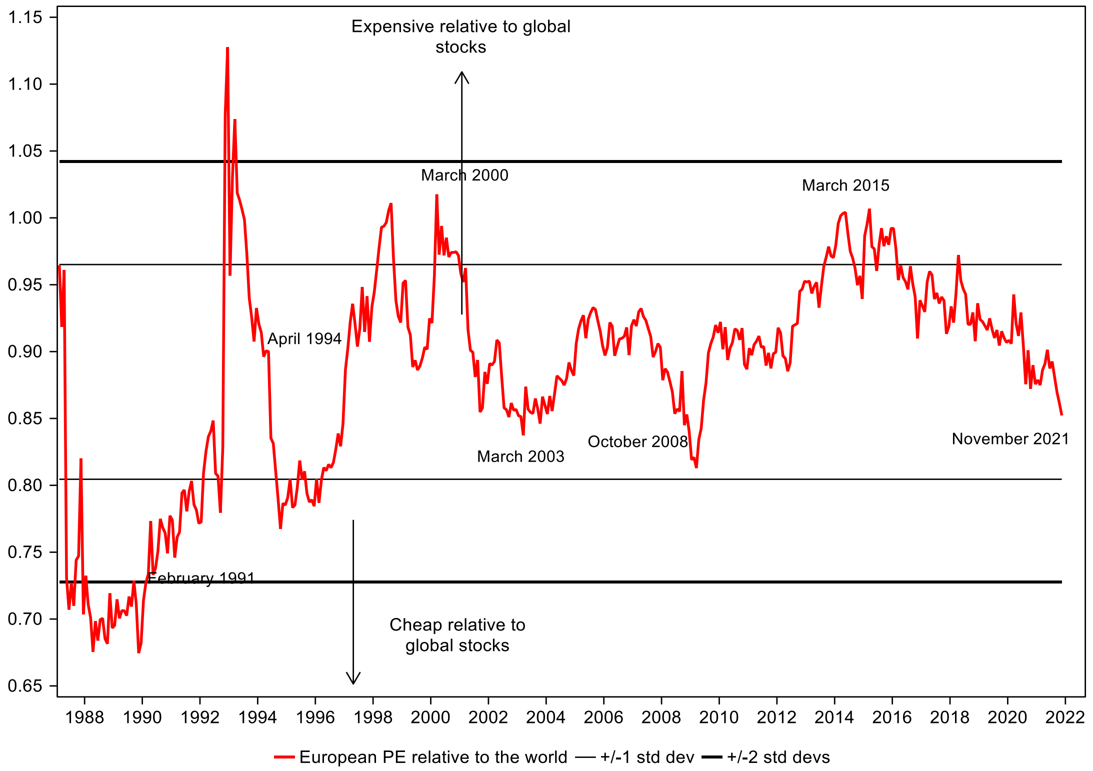
Source: Longview Economics, Macrobond

Section 9c: Various country PER relative to global PER (both on forward EPS)

Fig 9ci: US 12m forward PE relative to global 12m forward PE

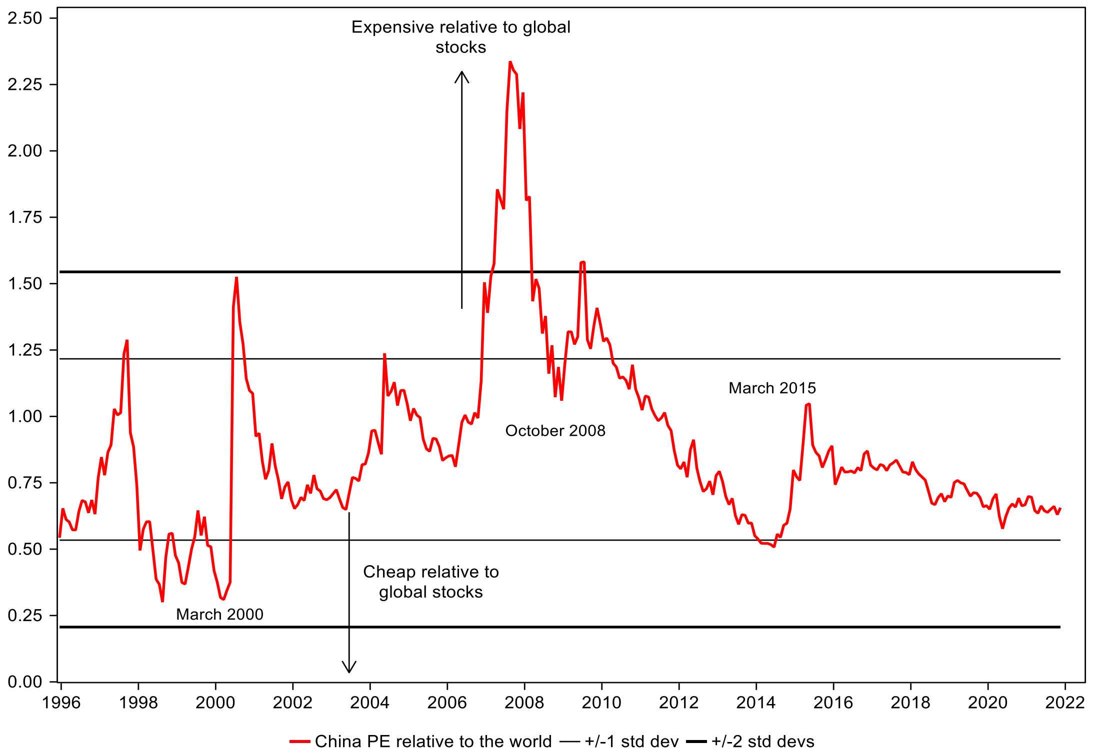
Source: Longview Economics, Macrobond

Fig 9cii: European 12m forward PE relative to global 12m forward PE



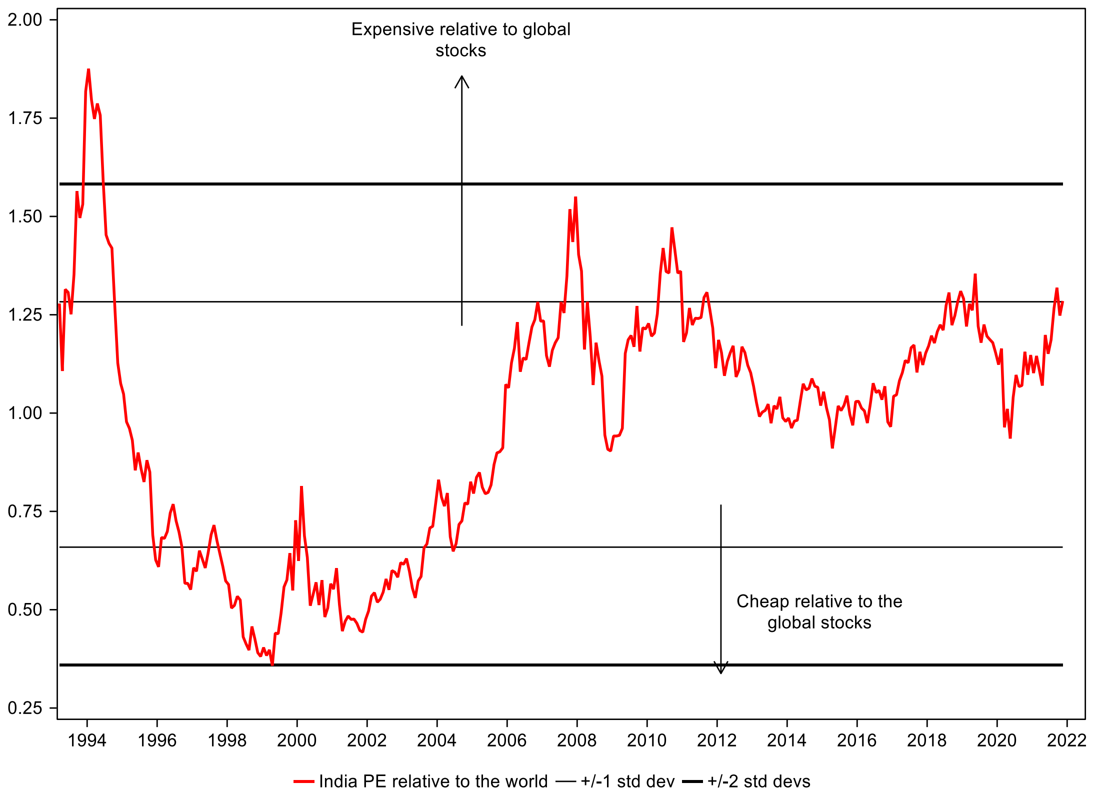
Source: Longview Economics, Macrobond

Fig 9ciii: Chinese 12m forward PE relative to global 12m forward PE



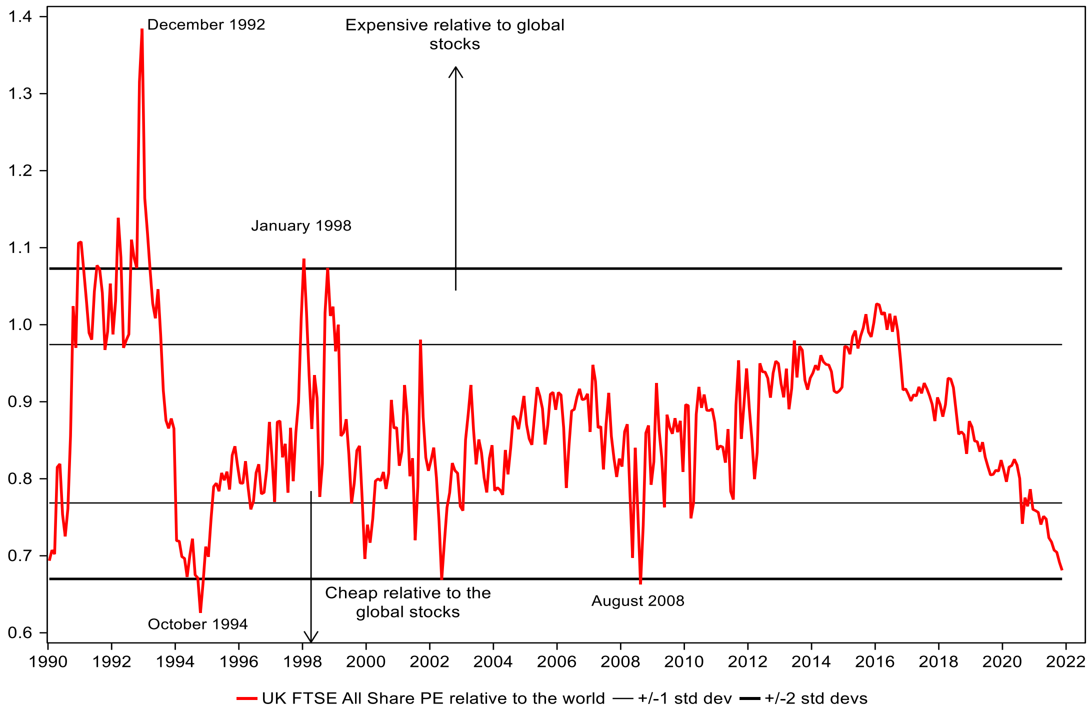
Source: Longview Economics, Macrobond

Fig 9civ: India 12m forward PE relative to global 12m forward PE



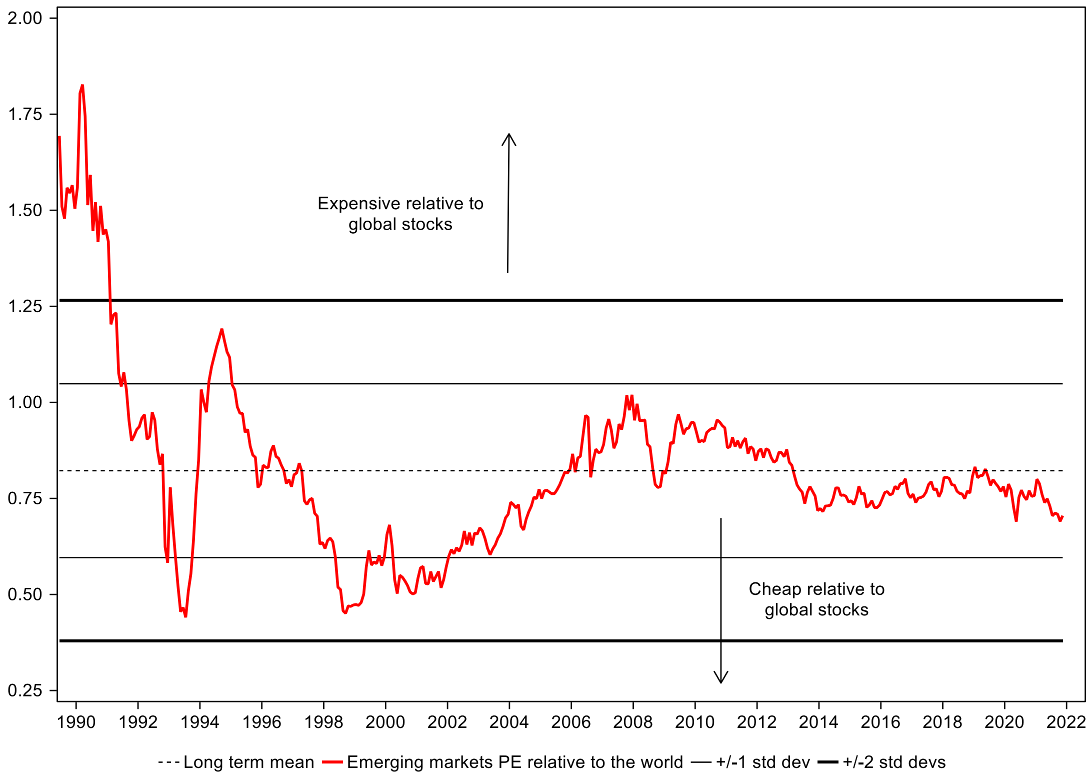
Source: Longview Economics, Macrobond

Fig 9cv: UK 12m forward PE relative to global 12m forward PE



Source: Longview Economics, Macrobond

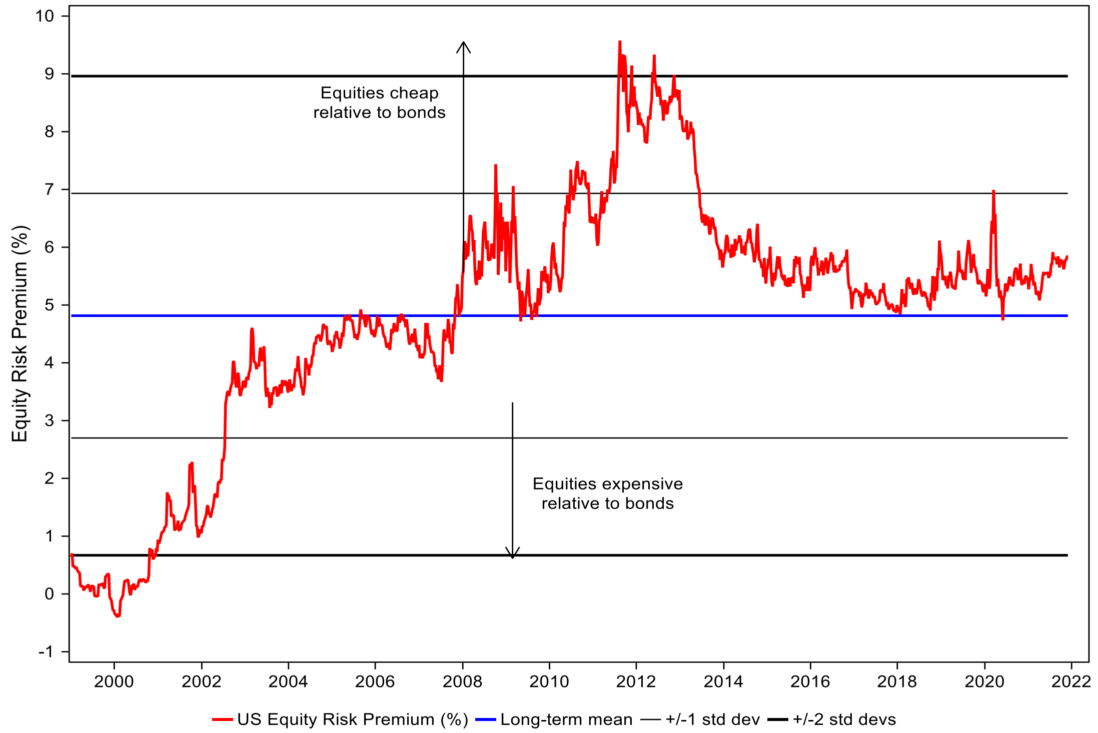
Fig 9cvi: EM 12m forward PE relative to global 12m forward PE



Source: Longview Economics, Macrobond

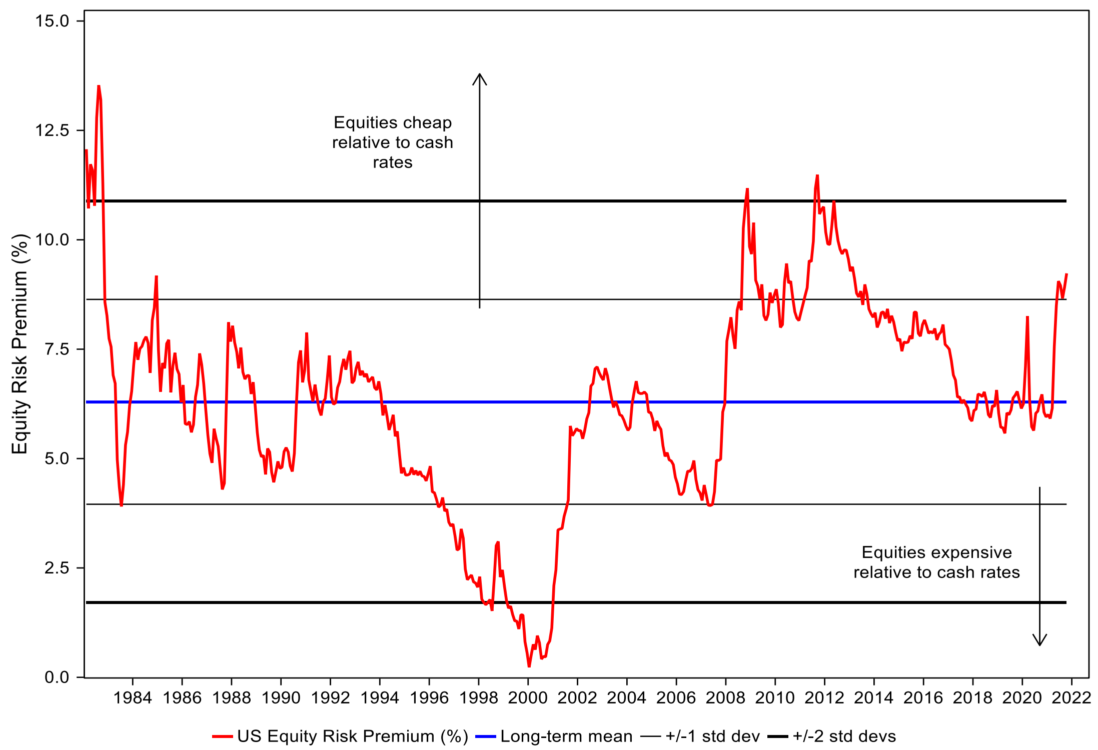
Section 9d: US Equity Risk Premia

Fig 9di: US Equity Risk Premium (earnings yield less real bond yield)



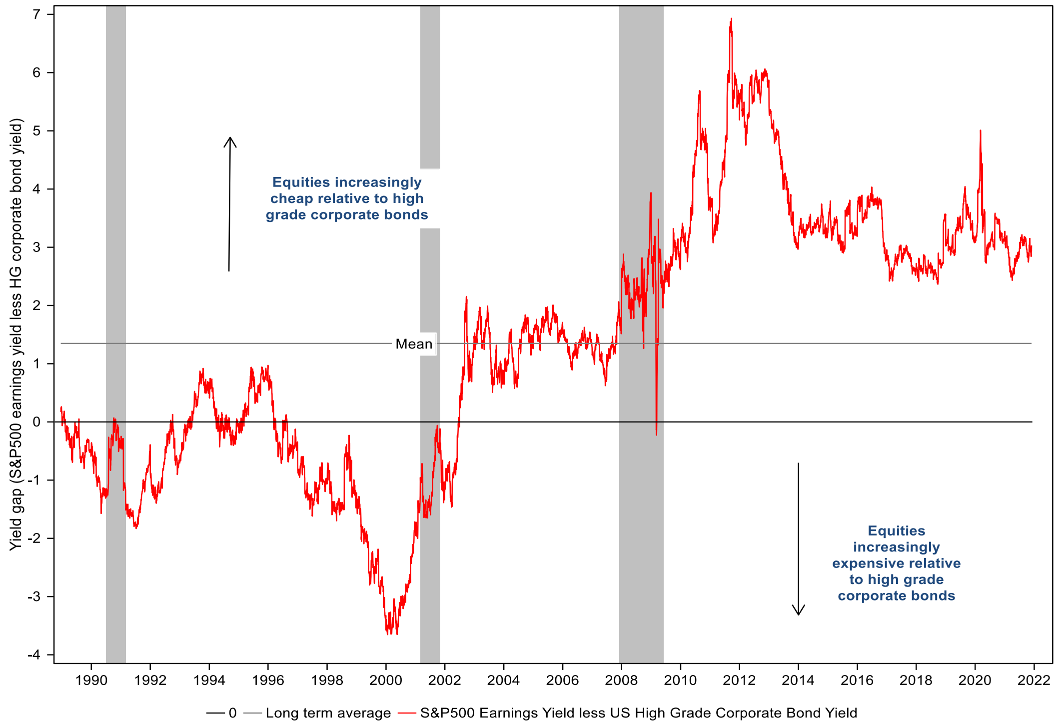
Source: Longview Economics, Macrobond

Fig 9dii: US Equity Risk Premium (earnings yield less real cash rates)



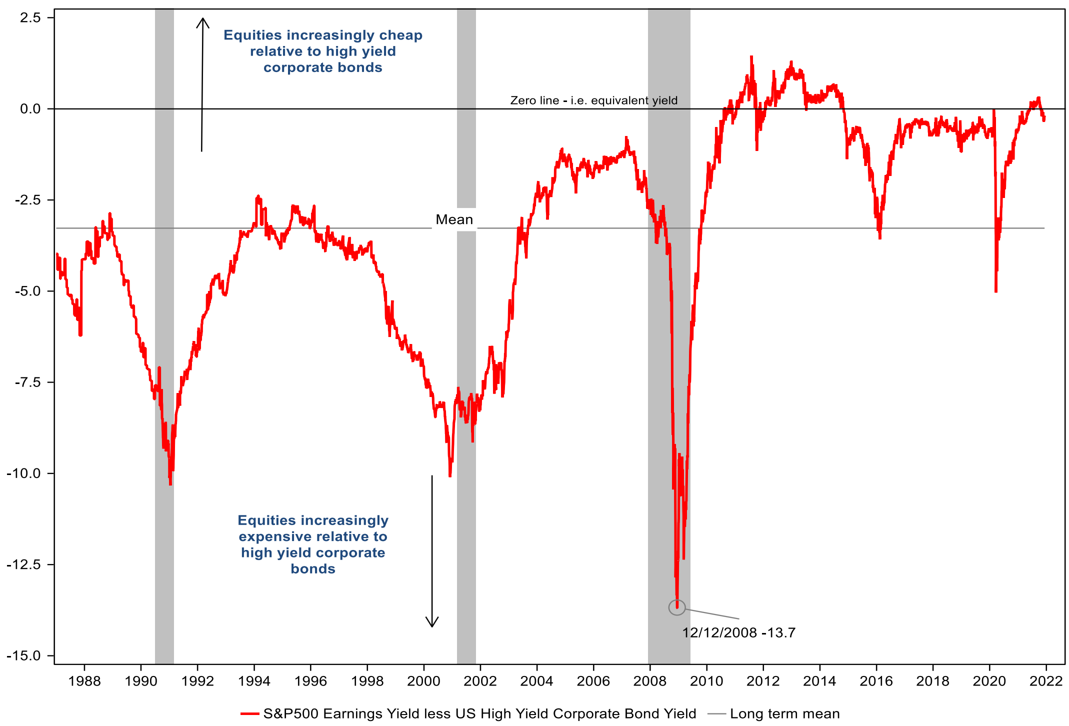
Source: Longview Economics, Macrobond

Fig 9diii: US Equity Risk Premium (earnings yield less IG corp bond yield)



Source: Longview Economics, Macrobond

Fig 9div: US Equity Risk Premium (earnings yield less HY corp bond yield)



Source: Longview Economics, Macrobond

Section 9e: UK Equity Risk Premia

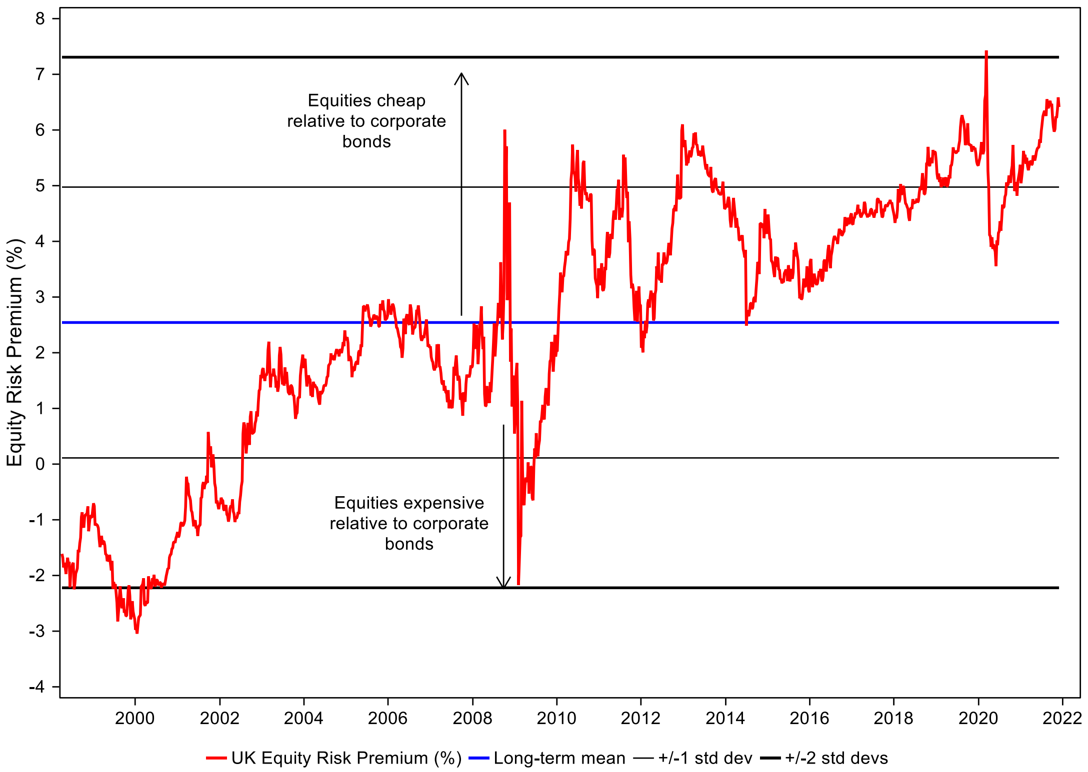
Fig 9ei: UK Equity Risk Premium (earnings yield less real bond yield)

Source: Longview Economics, Macrobond

Fig 9eii: UK Equity Risk Premium (earnings yield less real cash rates)

Source: Longview Economics, Macrobond

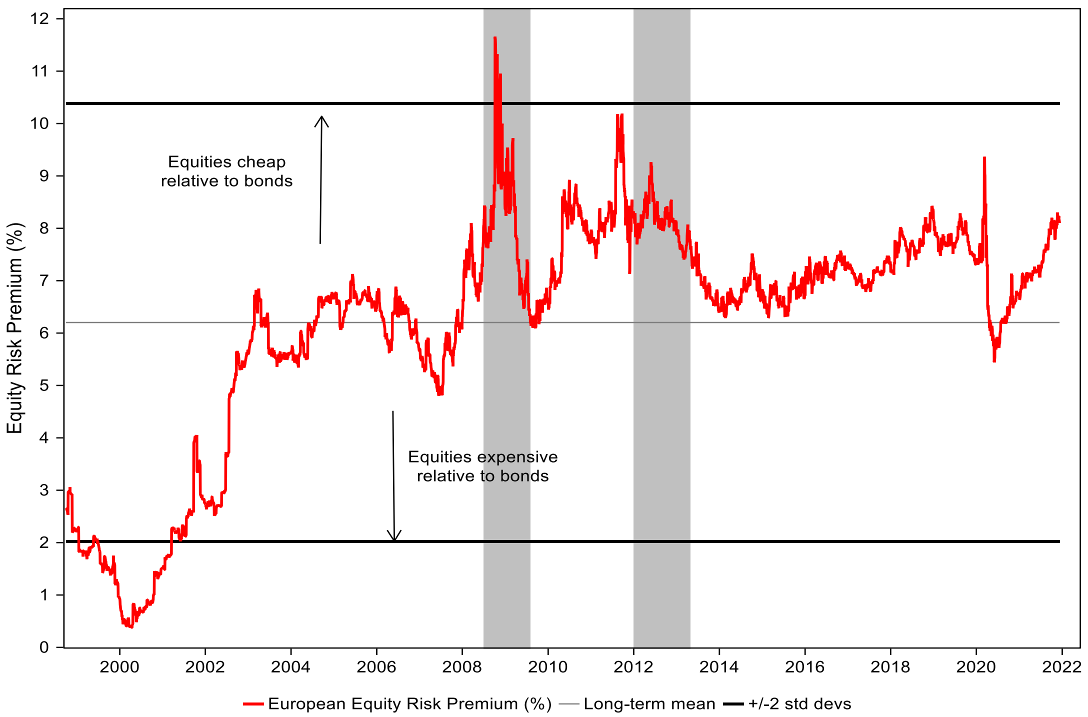
Fig 9eiii: UK Equity Risk Premium (earnings yield less BBB corp bond yield)



Source: Longview Economics, Macrobond

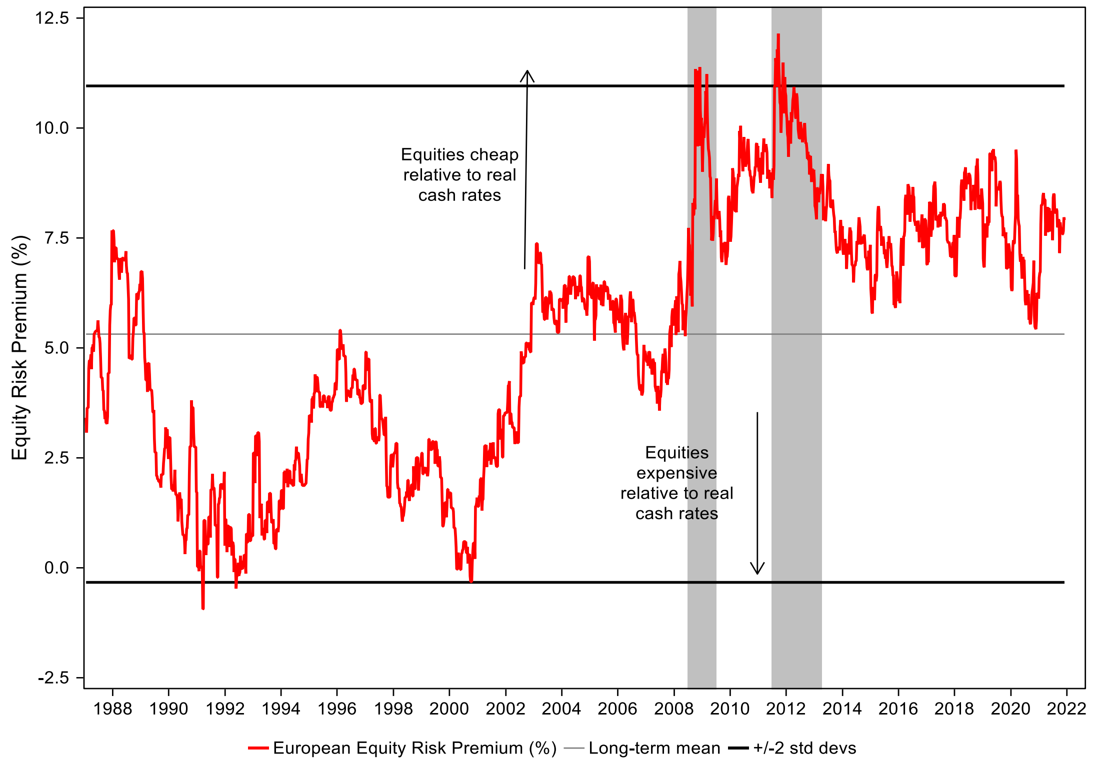
Section 9f: European Equity Risk Premia

Fig 9fi: European Equity Risk Premium (earnings yield less real bond yield)



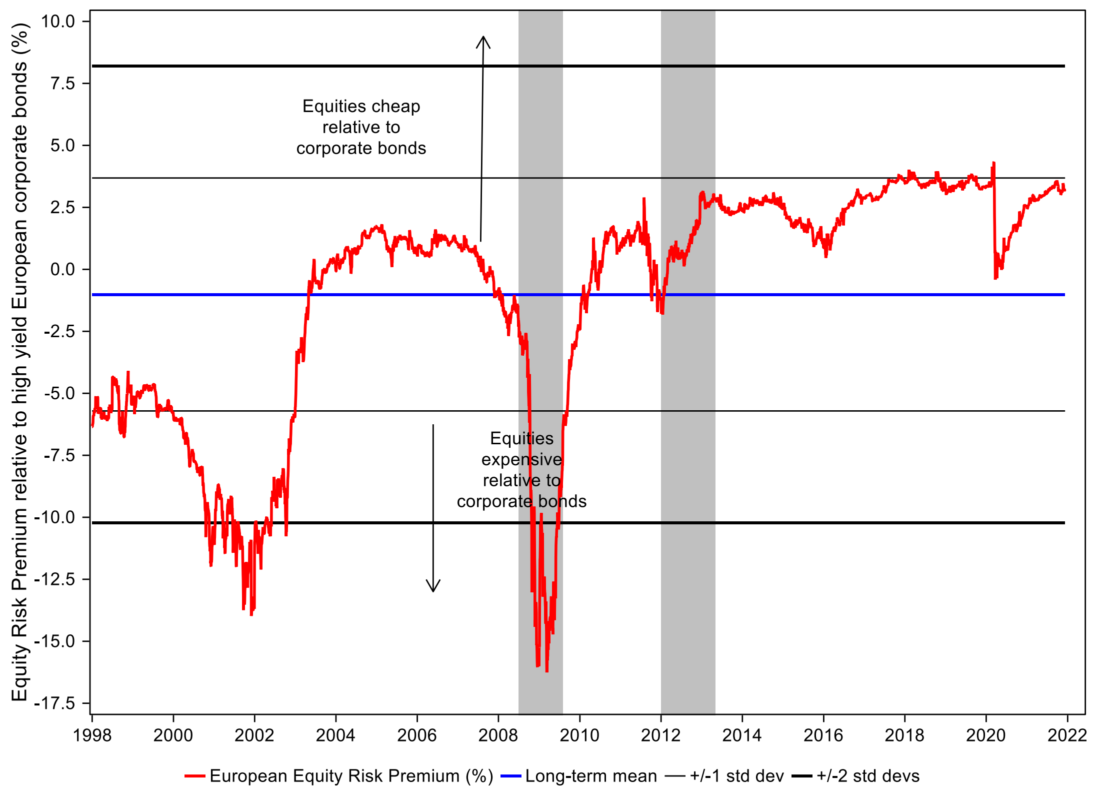
Source: Longview Economics, Macrobond

Fig 9fii: European Equity Risk Premium (earnings yield less real cash rates)



Source: Longview Economics, Macrobond

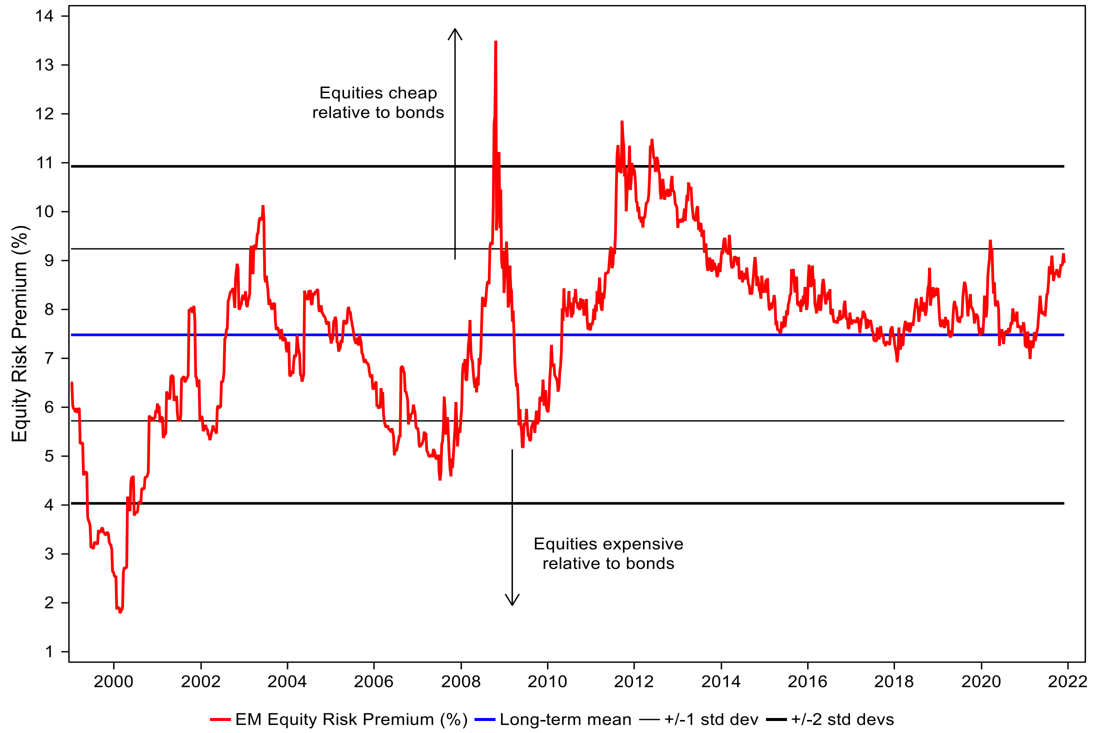
Fig 9fiii: European Equity Risk Premium (earnings yield less HY corp yield)



Source: Longview Economics, Macrobond

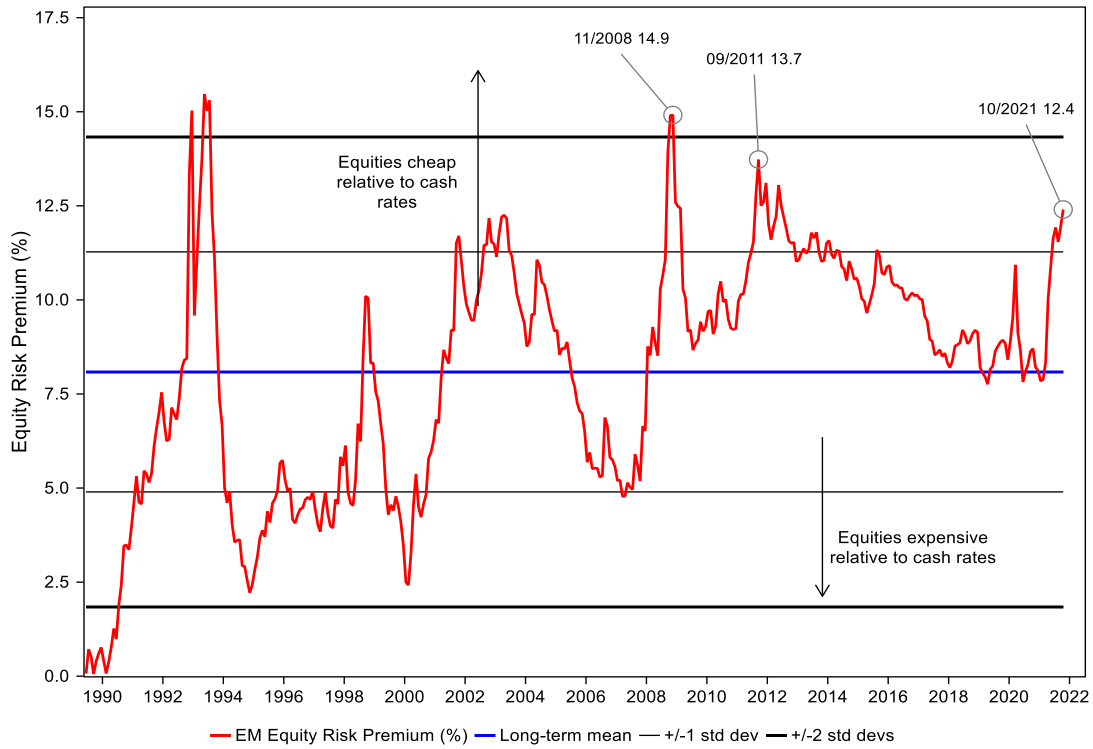
Section 9g: EM Equity Risk Premia

Fig 9gi: EM Equity Risk Premium (earnings yield less real bond yield)



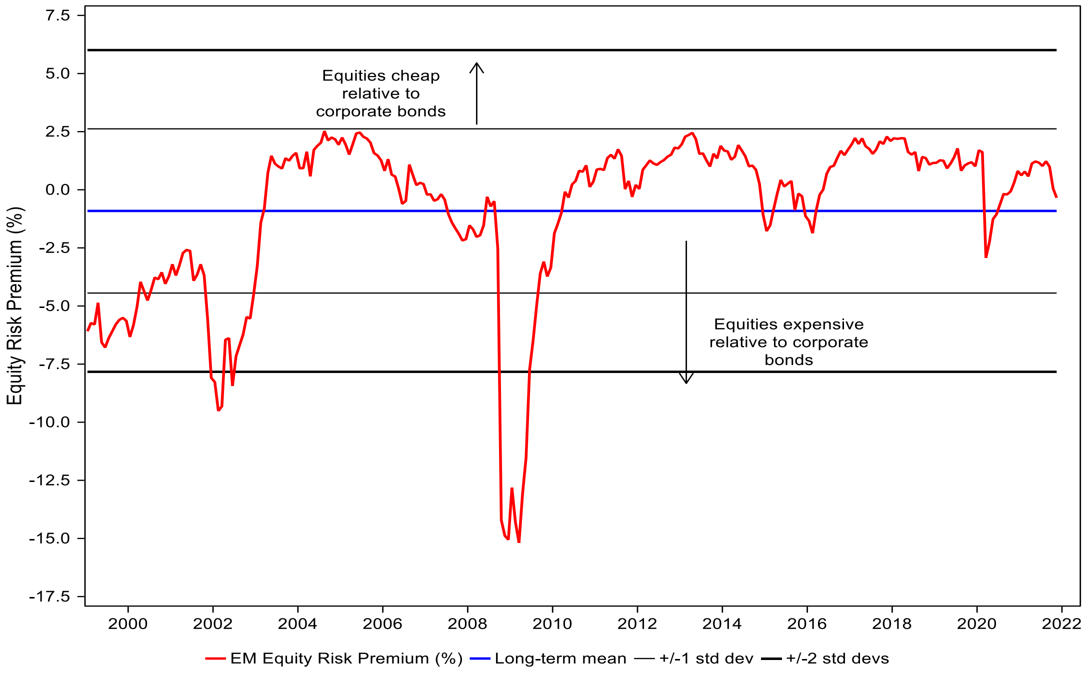
Source: Longview Economics, Macrobond

Fig 9gii: EM Equity Risk Premium (earnings yield less real cash rate)



Source: Longview Economics, Macrobond

Fig 9giii: EM Equity Risk Premium (earnings yield less real corp bond yield)

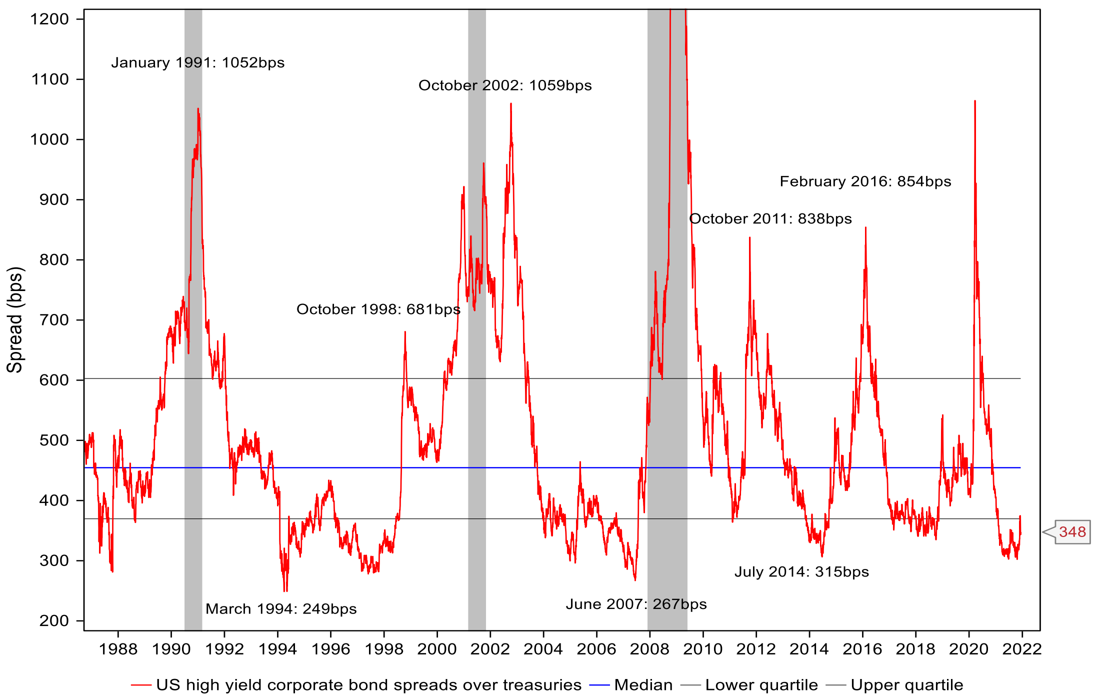


Source: Longview Economics, Macrobond

Section 9h: US Corporate Bond Spreads

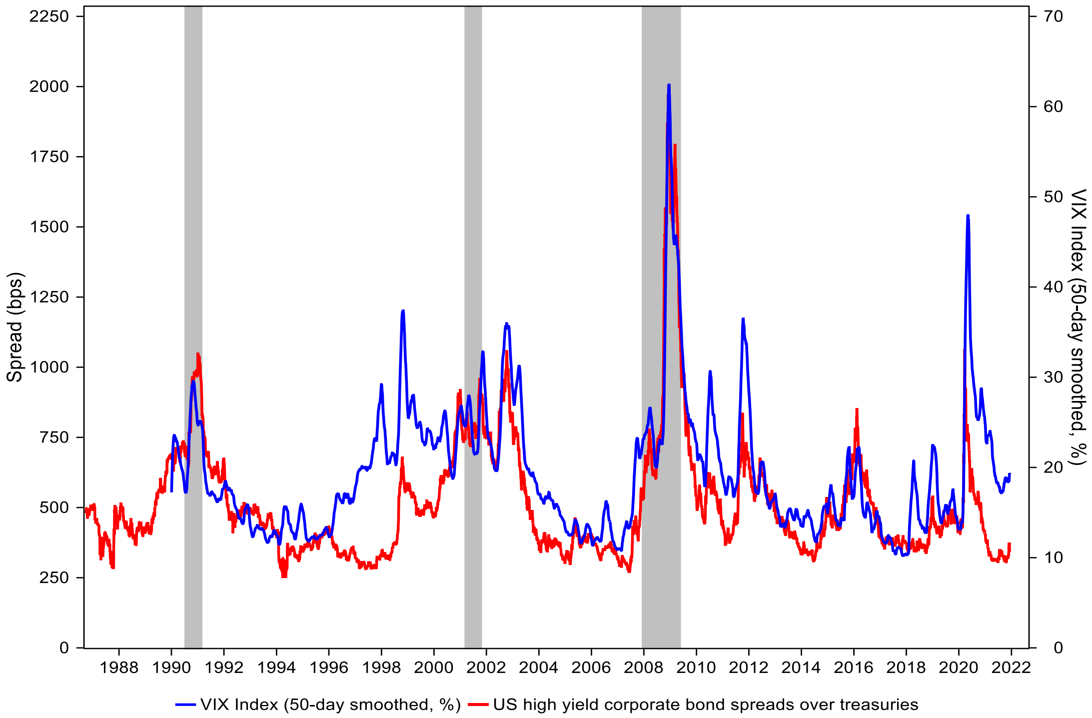
Due to the asymmetric nature of bond spread series, we have used a median & quartile analysis instead of mean & standard deviation analysis.

Fig 9hi: US high yield corporate bond spreads over treasuries (bps)



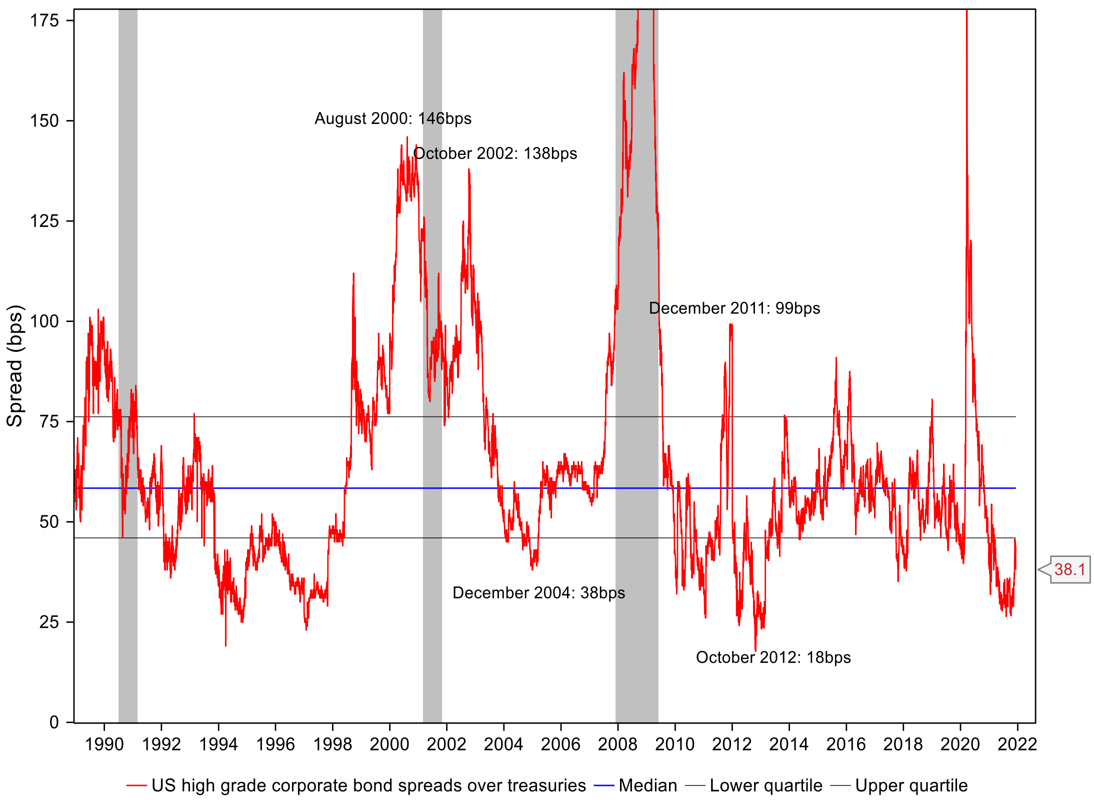
Source: Longview Economics, Macrobond

Fig 9hii: US high yield corporate bond spreads over treasuries (bps) vs. VIX



Source: Longview Economics, Macrobond

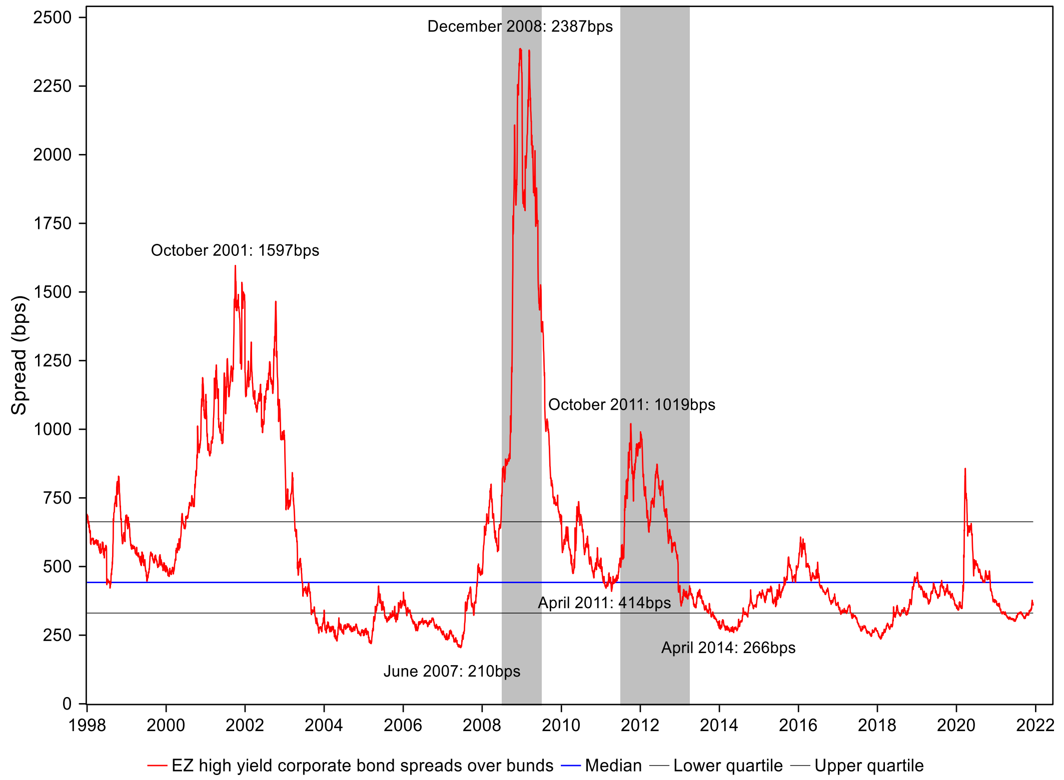
Fig 9hiii: US investment grade corporate bond spreads over treasuries (bps)



Source: Longview Economics, Macrobond

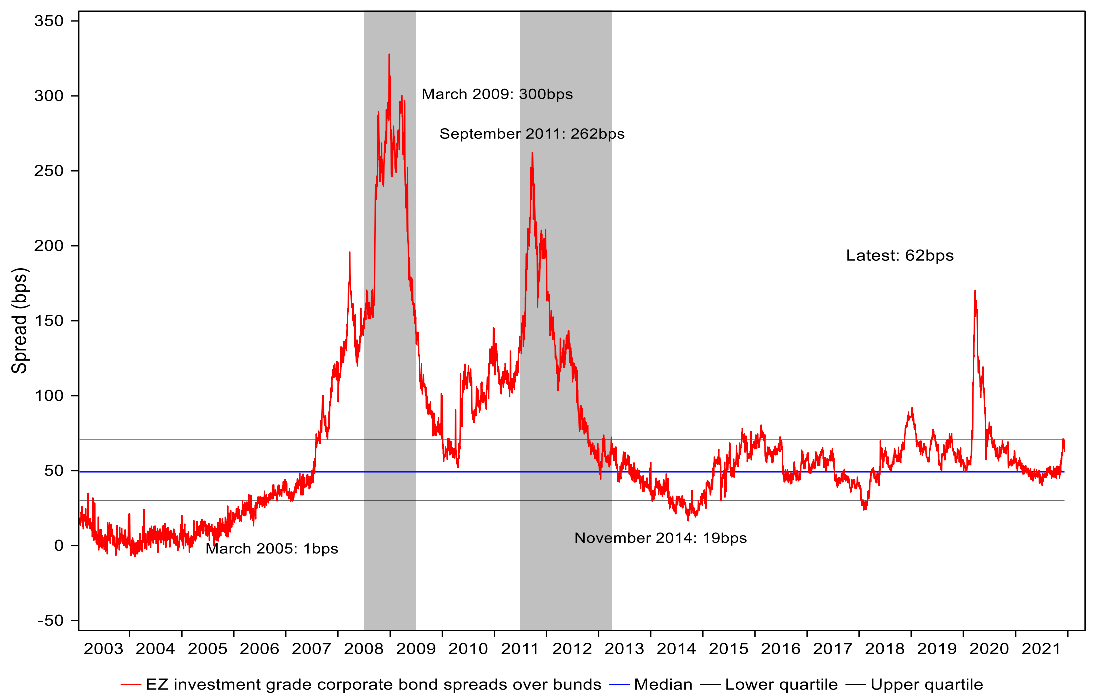
Section 9I: Euro zone Corporate Bond Spreads

Fig 9Ii: EZ high yield corporate bond spreads over bunds (bps)



Source: Longview Economics, Macrobond

Fig 9Iii: EZ investment grade corporate bond spreads over bunds (bps)



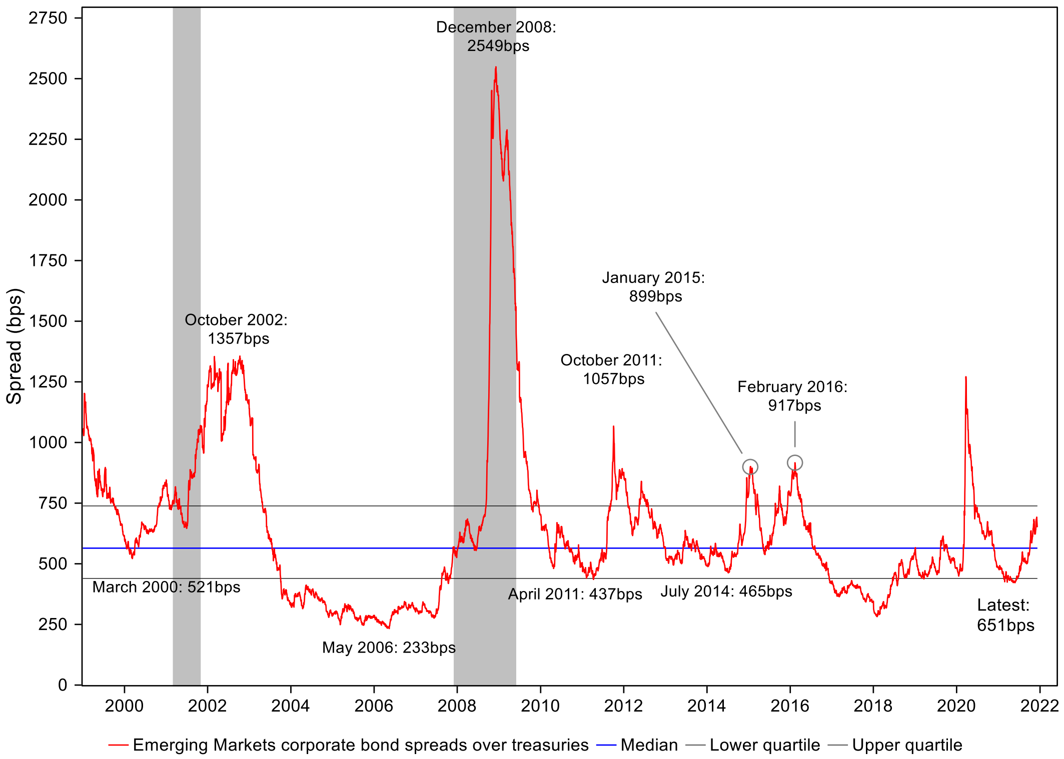
Source: Longview Economics, Macrobond

Section 9k: Emerging Market Bond Spreads

Fig 9ki: EM **government** bond spreads over treasuries (bps)

Source: Longview Economics, Macrobond

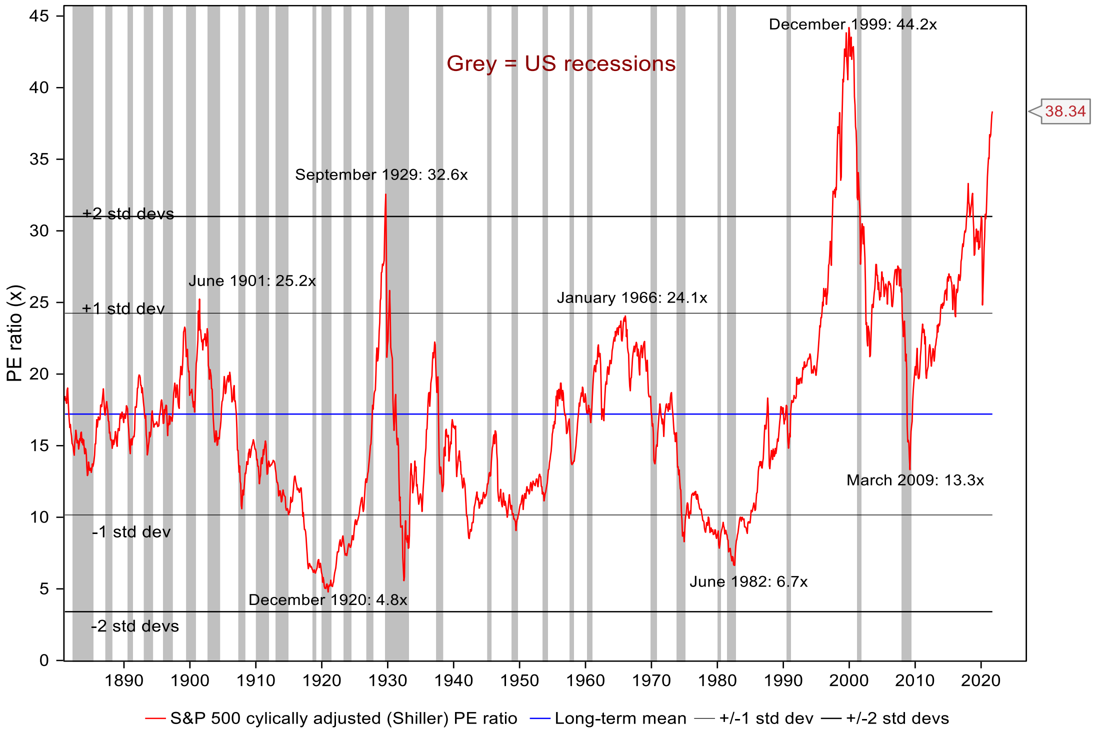
Fig 9kii: EM **corporate** bond spreads over treasuries (bps)



Source: Longview Economics, Macrobond

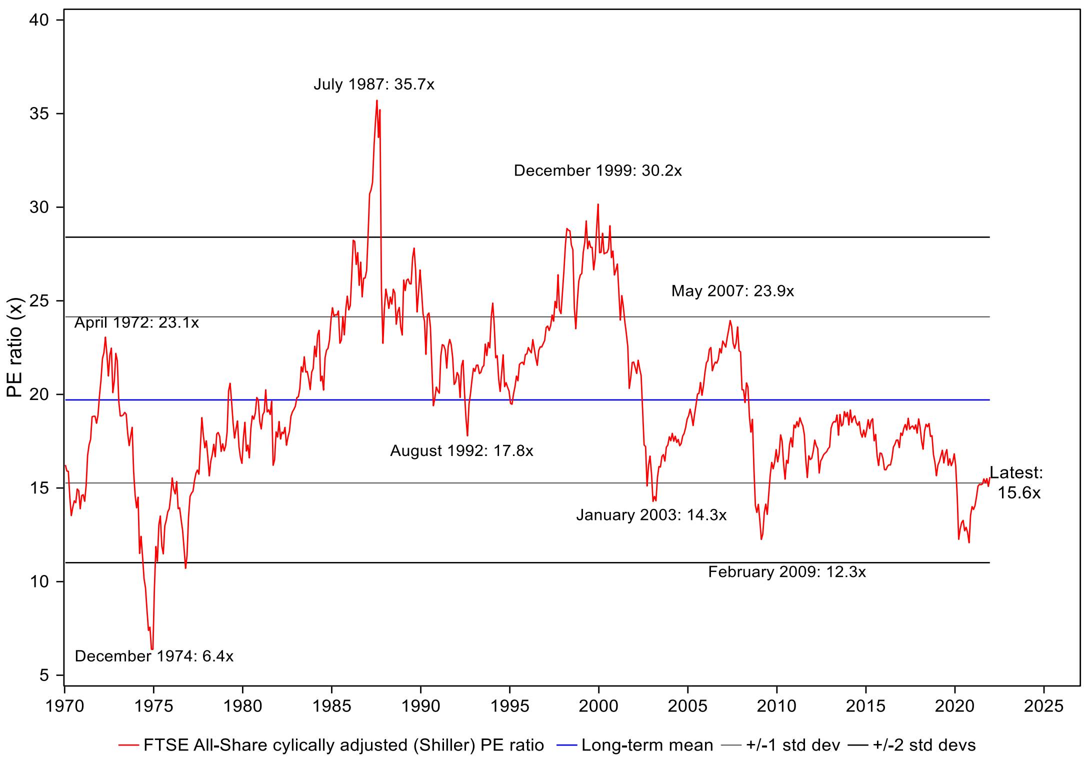
Section 9l: Shiller PE ratios

Fig 9li: Long term US S&P 500 cyclically adjusted (Shiller) PE ratio



Source: Longview Economics, Macrobond

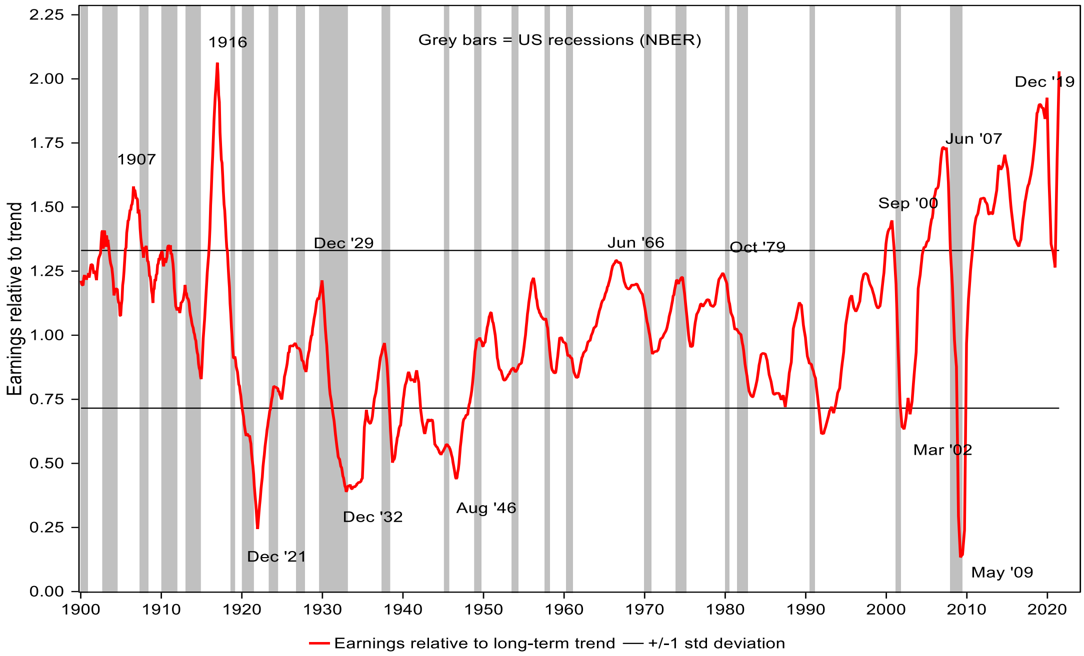
Fig 9lii: Long term UK FTSE All-Share cyclically adjusted (Shiller) PE ratio



Source: Longview Economics, Macrobond

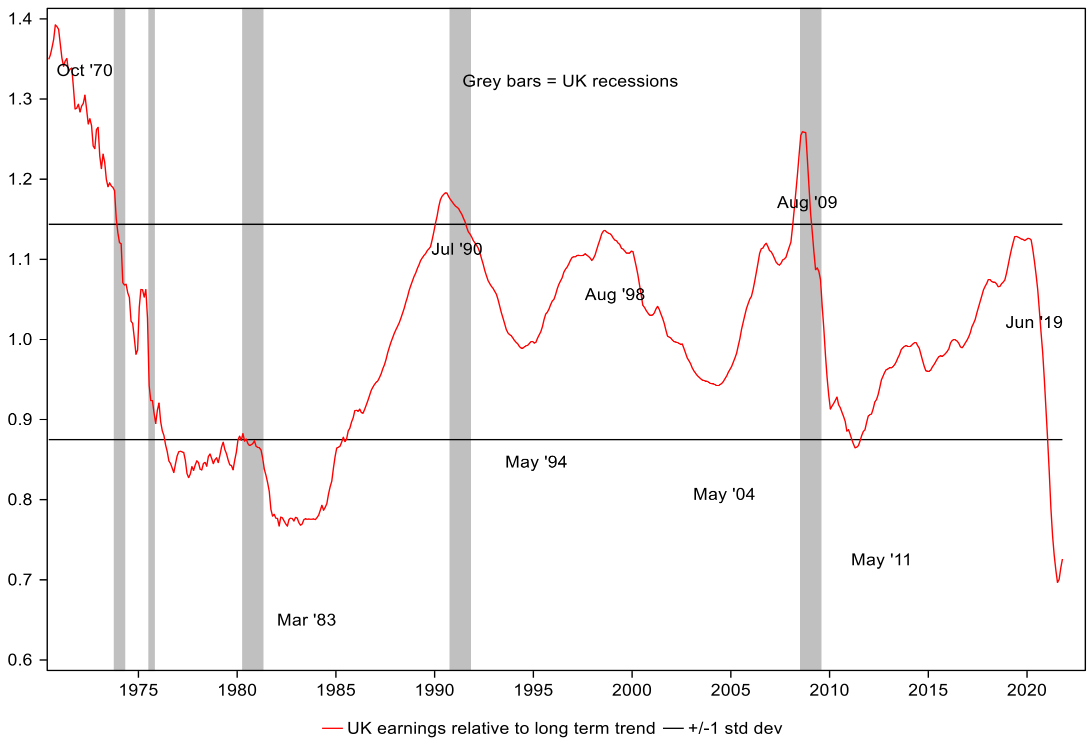
Section 9m: Earnings

Fig 9mi: US earnings (EPS) relative to long-term trend



Source: Longview Economics, Macrobond

Fig 9mii: UK earnings (EPS) relative to long-term trend



Source: Longview Economics, Macrobond

Section 9n: Global Sector Valuations

NB these tables are extracts from our global sector presentation. We also have presentations centric to US and UK markets. If you would like to be added to our monthly distribution list for any of these products, please let us know.

Fig 9ni: Global sector valuation heatmap*

10/12/2021 09:21	Cons disc.	Cons staples	Energy	Financials	Healthcare	Industrials	Info tech	Materials	Comm. Services	Utilities	Index
Cons disc.		5	1	5	9	5	67	2	30	38	6
Cons staples	96		5	25	50	91	99	18	84	91	95
Energy	100	96		99	99	100	100	97	98	100	100
Financials	96	76	2		74	92	93	32	84	94	94
Healthcare	92	51	2	27		80	95	24	84	86	83
Industrials	96	10	1	9	21		82	4	59	66	39
Info tech	34	2	1	8	6	19		7	28	27	16
Materials	99	83	4	69	77	97	94		88	99	96
Comm. Services	71	17	3	17	17	42	73	13		38	35
Utilities	63	10	1	7	15	35	74	2	63		34
Index	95	6	1	7	18	62	85	5	66	67	

Source: *Bloomberg Consensus Estimates, S&P, Longview Economics*

* NB This table should be read as 'columns versus rows' – i.e. the sector name above, relative to the sector name to the left.

Fig 9nii: Global sector valuation metrics*

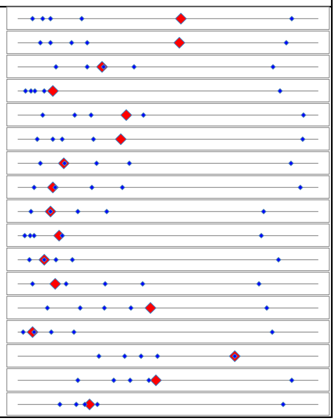
Name	Forward PE	Long Term Mean	Relative PE	Relative PE range	Over/Under Value*	Relative PE Percentile**	56-day RSI***	56-day RSI Percentile**
S&P GLOBAL 1200 INDEX	18.2	15.8	-	-	-	-	54.1	-
Energy	9.3	14.8	0.51	0.63-1.49	-45.5%	1	52.6	53
Materials	12.4	14.3	0.68	0.50-1.28	-25.9%	5	50.2	10
Industrials	19.6	16.5	1.08	0.77-1.42	31.4%	67	51.8	27
Consumer Discretionary	22.8	16.5	1.25	0.62-1.41	-14.2%	10	53.0	25
Consumer Staples	20.3	20.8	1.11	1.09-2.43	-14.4%	6	52.9	33
Healthcare	17.6	17.5	0.96	0.79-1.49	-12.8%	18	53.2	70
Financials	11.9	12.5	0.65	0.51-0.98	-18.8%	7	50.2	37
Info Tech	26.3	19.8	1.45	0.90-1.99	17.2%	85	58.0	84
Telecoms	18.8	16.1	1.03	0.61-1.79	3.9%	66	47.3	47
Utilities	18.1	14.1	0.99	0.49-1.35	9.0%	67	52.4	22

* This measures how expensive the sector is relative to the index, compared to its long term history (i.e. since 1987).

Section 90: Global Commodities Valuations

Fig 90i: Commodities Heatmap (all commodities relative to each other)

10/12/2021	Current Price (real)	Min Price	Lower Quartile	Median	Upper Quartile	Max Price	Percentile	Percentile (since Jan 1971)	Data Since
Palladium	6.52	0.57	0.98	1.31	2.54	10.96	97	96	Jan-1968
Gold	6.45	0.91	1.32	2.14	2.78	10.73	97	92	Feb-1901
Platinum	3.37	1.51	2.76	3.44	4.65	10.21	48	39	Jan-1910
Silver	8.14	1.71	3.12	3.95	6.24	61.18	89	74	Jan-1910
Brent	2.53	0.58	1.32	1.70	2.93	6.66	67	67	Oct-1985
WTI	2.40	0.45	0.82	1.04	1.76	6.64	85	63	Dec-1900
Soybeans	4.58	2.27	4.65	7.85	11.11	27.29	25	48	Nov-1913
Wheat	2.93	1.34	3.09	6.17	8.70	23.52	24	56	Feb-1901
Corn	2.17	0.90	2.20	4.00	5.89	16.37	25	58	Feb-1901
Nat Gas	13.70	2.26	4.20	5.41	14.79	80.96	71	44	Dec-1923
Cocoa	0.88	0.40	0.89	1.28	1.81	8.67	24	29	Jul-1959
Cotton	3.76	1.50	4.84	8.75	12.49	24.10	19	43	Sep-1902
Copper	15.43	3.44	7.29	10.08	13.18	29.00	85	89	Jul-1959
Sugar	6.78	2.42	7.42	15.72	26.32	118.45	21	44	Feb-1901
Tin	14425.74	5414.25	7120.42	8189.15	9293.66	14425.74	101	101	Feb-2012
Zinc	11489.07	4980.31	8006.63	9340.70	10925.74	22799.01	83	83	Jan-2004
Aluminium	9.57	5.57	7.76	8.89	10.64	35.30	65	65	Aug-1987



Source: Longview Economics

Fig 90ii: Commodities Heatmap (all commodities relative to each other)

10/12/2021	Palladium	Gold	Platinum	Silver	Brent	WTI	Soybeans	Wheat	Corn	Nat Gas	Cocoa	Cotton	Copper	Sugar	Tin	Zinc	Aluminium	Average
Palladium		15	3	9	9	4	7	8	8	6	5	5	13	6	46	13	8	10
Gold	84		0	12	13	22	3	7	6	28	2	6	33	3	100	48	22	24
Platinum	96	99		93	90	92	28	28	31	75	30	20	90	27	100	96	62	66
Silver	90	87	6		25	54	10	12	13	59	6	12	55	10	100	60	29	39
Brent	90	86	9	74		24	42	49	51	27	29	46	82	38	99	77	41	54
WTI	95	77	7	45	75		17	18	19	56	18	14	69	14	98	77	43	46
Soybeans	92	96	71	89	57	82		48	57	72	28	28	94	34	99	66	40	66
Wheat	91	92	71	87	50	81	51		61	66	23	28	84	28	85	48	23	61
Corn	91	93	68	86	48	80	42	38		67	19	24	86	26	98	47	23	59
Nat Gas	93	71	24	40	72	43	27	33	32		27	24	67	24	94	73	66	51
Cocoa	94	97	69	93	70	81	71	76	80	72		58	96	62	99	82	56	79
Cotton	94	93	79	87	53	85	71	71	75	75	41		84	39	97	44	44	71
Copper	86	66	9	44	17	30	5	15	13	32	3	15		11	99	42	14	31
Sugar	93	96	72	89	61	85	65	71	73	75	37	60	88		100	66	52	74
Tin	53	0	0	0	0	1	0	14	1	5	0	2	0	0		0	0	5
Zinc	86	51	99	39	22	22	33	51	52	26	17	55	57	33	99		37	49
Aluminium	91	77	37	70	58	56	59	76	76	33	43	55	85	47	99	62		64
Average	89	75	39	60	45	53	33	38	41	48	21	28	68	25	95	56	35	

Source: Longview Economics