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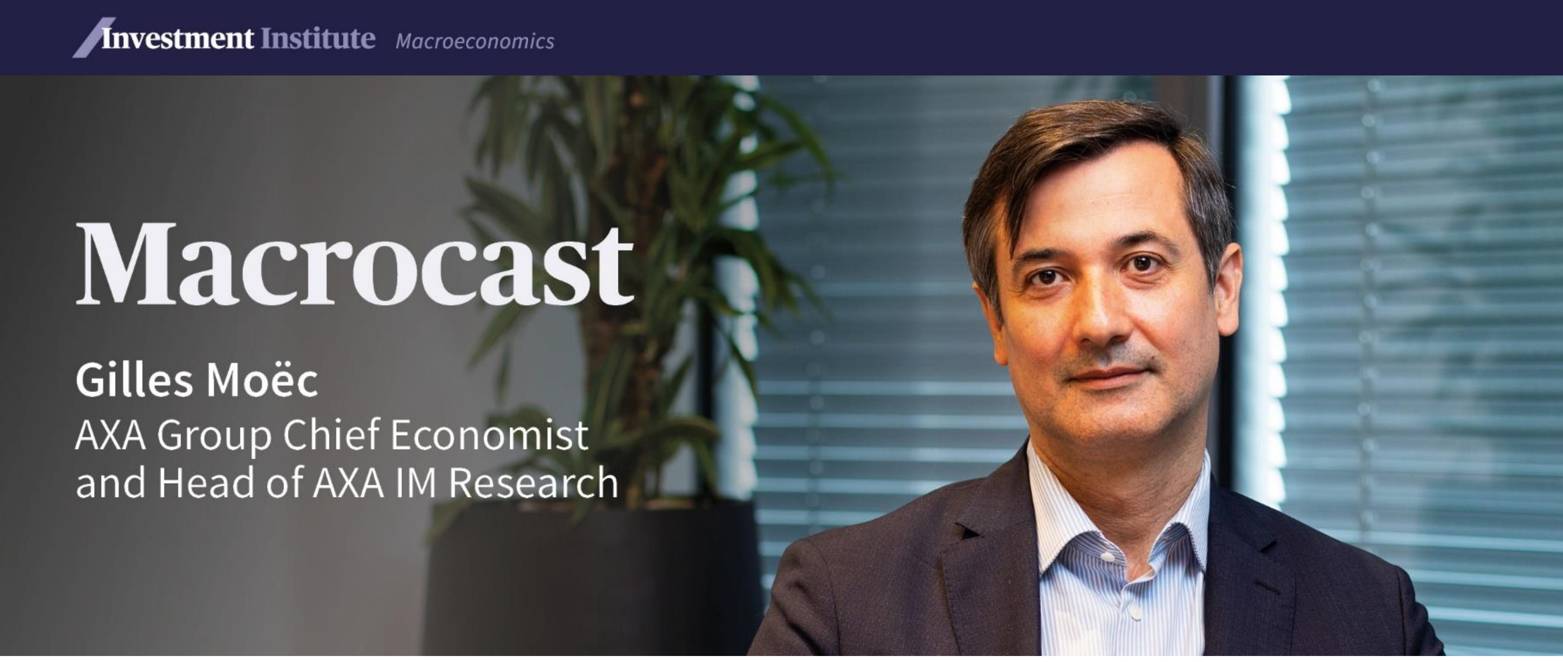


Magic Money Bonsai

- Monetarism is trying a comeback. It may not help much to deal with our current inflation predicament
- Japan is a case in point. Rather than the gyrations in money supply, it's the emergence of actual inflation which is questioning the current policy stance just as an "outsider" is about to take the helm of the BoJ.

The quest for the "dovish pivot" has been halted for now by the dataflow and stern signals from policymakers. It's a fragile truce between the market and central banks though, so strong is the nostalgia for the friendly monetary policy of the previous decade. Yet, times are definitely changing, and the arrival of an "outsider" at the Bank of Japan is another sign. With Kuroda, the "last dove standing" is leaving the global stage, even if we don't expect action from the BoJ for months after Ueda takes office in April.

It's probably unsurprising in these circumstances that monetarism is attempting a comeback. We explore the pros and cons of returning to the "Old Faith". Claudio Borio, who has just produced a thought-provoking note on the information content of excess money growth, concludes that taking on board developments in money supply would have improved the accuracy of the forecasts of the current inflation shock.

Our contention though is that, as much as the wild money creation of the pandemic may well have played a role in the current high-inflation episode, focusing on the gyrations of M3 may not help us in gauging the chances of proper disinflation in 2023 and 2024. The pandemic phase was very specific, as money supply rose for largely exogenous reasons – an acceleration in QE. In our view, a permanent high inflation/high money growth configuration would require the endogenous engine of money creation – bank credit – to switch on, which is not happening – quite the opposite if one takes a look at the credit impulse in Europe. However, the pandemic was not only characterized by excess money growth, but also by a collapse in the velocity of money, as cash holdings remained idle. The fate of this accumulated cash will determine to a large extent how the economy – and inflation – lands in the coming two years. This gets us back to the very reasons why monetary policy frameworks focused on monetary aggregates were quietly shelved two decades ago: as appealing as they might be theoretically, their practical use is limited.

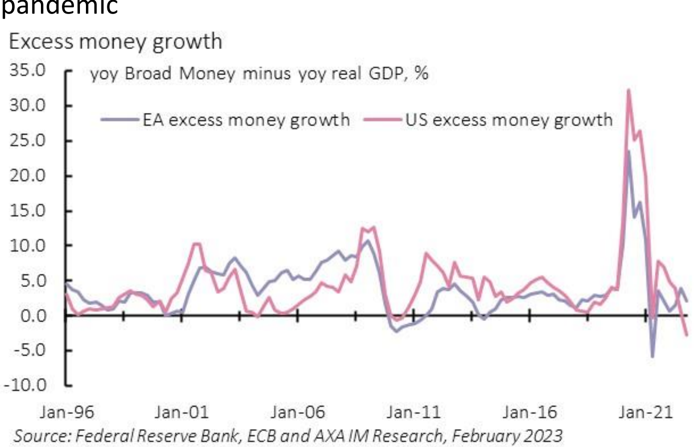
Monetarist avengers (try to) assemble

A sense of theoretical deja-vu is a side-effect of spending three decades in the economist profession. Dominant paradigms come, go, and return, leaving your humble servant often sceptical about their universal explanatory power. Monetarism, considered for more than two decades as a historically interesting object with limited practical use, is attempting a comeback. Martin Wolf in the Financial Times has written a very interesting piece in the Financial Times last week on some attempts to resurrect the Old Faith. **Our contention, however, is that, as always, looking at the gyrations in money supply is going to be useful to understand the recent past, while being of poor use to try to predict the near future.**

One paper mentioned by Wolf is by Claudio Borio, from the Bank of International Settlements. He matters. He came up with one of the most interesting breakthroughs in monetary policy decision-making by spotting how, in a globalized economy, capacity utilization across the world may matter more for inflation in any particular country than domestic conditions. It may sound obvious now, but just like every great intellectual innovation, someone had to spot it and articulate it. So, when Claudio Borio decides to look at excess money growth in its relationship with inflation in our current configuration, you know it's time to dust off your Friedman and make sure you know your M1 from your M2.

Borio's starting point is that money supply may not usually matter much, but it becomes interesting in times of high inflation. He substantiates this empirically by looking at the correlation across around 30 developed and emerging countries between excess money growth (the difference between the change in a broad money aggregate and the change in real GDP) and inflation for various inflation regimes. The relationship becomes tighter the higher inflation is. This is key. This would suggest that once inflation had been tamed in the 1980s in all developed economies, to move within a tight "tube" around 2%, there was little point in looking at money aggregates for guidance. Of course, we are now in one of those "high regime" situations, combining, in response to the pandemic, a massive acceleration in money supply followed by the ongoing inflation spike (see Exhibit 1). Borio shows, looking at vintages of economists' forecasts of inflation, that **the under-prediction errors of the current pace of inflation were the largest in countries which had experienced the largest rise in excess money growth**, suggesting that adding measures of the money stock in models would have improved the quality of the forecasts.

Exhibit 1 – Unusual gyrations in excess money since the pandemic



Source: Federal Reserve Bank, ECB and AXA IM Research, February 2023

What we also find interesting in Borio's paper is that he "follows the trail" and sets out to explain the various mechanisms through which this combination of excess money growth and inflation has just re-emerged. In principle, a fiscal stimulus does not trigger a rise in money supply, at least not directly. To transfer cash to non-financial agents, the Treasury issues debt, which forces investors to swap cash for securities (they change their asset allocation, but their total asset/liabilities don't rise). This changes when debt issuance is funded by the central bank, crediting the government's cash account with new money as they purchase the bonds (its assets and liabilities both rise). **What we experienced during the pandemic was one of the purest historical examples of fiscal reflation.** Inflation is then not the product of a rise in money creation by some "magic trick" but results at least partly

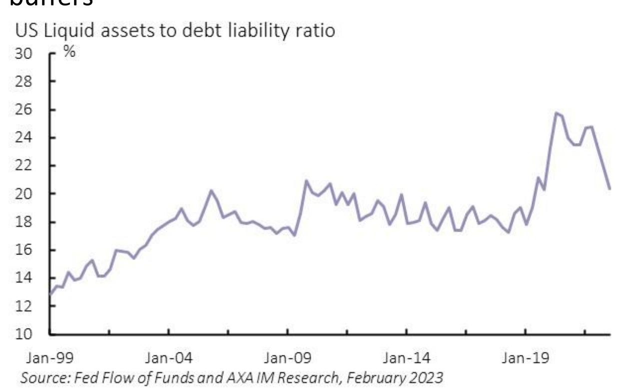
from the fact that the fiscal push permitted by more quantitative easing drove the economy in a situation of excess aggregate demand – in a context of depleted supply at the time of the lockdown.

That helps to understand the recent past. The question is whether the current and expected path for money supply will add much information to predicting inflation in 2023 and 2024. The "fiscal reflation" mechanism we described above was exogenous. It was the product of a policy decision, by both governments and the central banks (it may have also taken the form of emergency bank loans to corporations, but as the response to a government incentive, not under as a result of a spontaneous behaviour by banks). But there can also be an endogenous phenomenon – the normal operation of money creation via bank credit without government intervention. Borio raises the question of the transition from one regime to another but does not explore it. This is where we think the endogenous/exogenous distinction can be operative. **The high money creation/high inflation regime could become permanent if credit issuance were to build upon the initial signal from Quantitative Easing (QE) to perpetuate excess demand and excess money growth. Note that this failed to happen in the previous decade**. For instance, there was no visible acceleration in excess money growth in the Euro area after the European Central Bank (ECB) finally opted for QE in 2015 (its pace remained below the pre-2008 trend), since the endogenous engine of money creation – credit – was weak enough to offset the mechanical impact of the bond purchases by the central bank (the softness in credit was precisely one of the reasons which drove the ECB into this extra step of extraordinary measures).

What are the risks this happens in our current configuration? **It's already questionable if money growth is still excessive.** In the United States (US), broad money is already growing slower than real GDP (hence the line falling into negative territory in the last part of Exhibit 1) while excess money growth stands at only about 2% in the Euro area, which looks small relative to inflation. We discussed last week how **the tightening in bank lending standards was triggering a sharp fall in the Euro area's credit impulse. Banks are not "prolonging" the effect of QE, which obviously is now being replaced by Quantitative Tightening, on both sides of the Atlantic**.

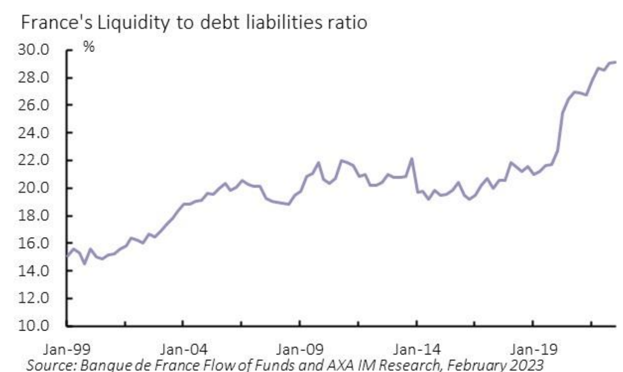
Moreover, **a nagging issue in the inflation/money stock relationship is the velocity of money** – how many transactions are executed with the same unit of money in a given time. As long as central banks' digital currencies do not dominate, velocity cannot be directly tracked. Instead, it can be obtained at the macro level by dividing GDP – nominal this time, representative of the number of transactions at the given price level – by money supply. **Velocity crashed during the pandemic, as the lockdowns paralysed cash holdings. A lot of the money creation of that period ended up sitting idle on current accounts. This is well known for households, but it's true for businesses as well**. This explains why their liquidity ratio – liquid assets, such as cash accounts and instant access savings, as a percentage of debt liabilities - has in general improved. In the US, firms have started to draw on their liquidity, but the ratio remains historically high. In France, which has the most leveraged corporate sector among the major Euro area economies, the liquidity ratio in the business sector has hit a historical peak (see Exhibit 2 and 3).

Exhibit 2 – US firms have not yet spent all their liquidity buffers



Source: Fed Flow of Funds and AXA IM Research, February 2023

Exhibit 3 – French firms still cash-rich by historical standards



Source: Banque de France Flow of Funds and AXA IM Research, February 2023

So, what do we know at this stage? We know that money supply has started to fall, thanks to the termination of QE, leaving way to Quantitative Tightening, and the new lending stance of commercial banks. This would suggest that, from a monetarist point of view, the risk of settling into a permanent high inflation scenario is low. Yet, there remains a question mark: what non-financial agents decide to do with their accumulated liquid assets in the near future. The existence of these buffers – bigger in the Euro area than in the US – could well impair the transmission of monetary policy: businesses can cope better and longer than usual to a restriction of credit. But we knew that already, without having to resort to monetarist mechanisms. It's just another way to think about the absorption of the excess savings accumulated during the pandemic, a major theme of cyclical analysis since the middle of last year.

These considerations get us back to the sources of the demise of monetarism in the late 1980s/early 1990s: monetary aggregates do not provide precise enough indications for the actual conduct of monetary policy. **Borio's correlations were run over samples of 10 years, starting as early as 1951. Using shorter timespans, e.g., the 2-3 years ahead which is today the common "policy-relevant" horizon of central banks, the correlation would fall drastically**. This helps explain why, from a practical point of view, targeting, or even following, monetary aggregates has fallen out of favour in the 1990s. All we know is that "at some point" the effect of money supply on inflation may materialise – although, as Borio makes a big point of stating, causality is not proved – but we can't know when, or to which degree.

Japan provides an example of the limits of monetarism

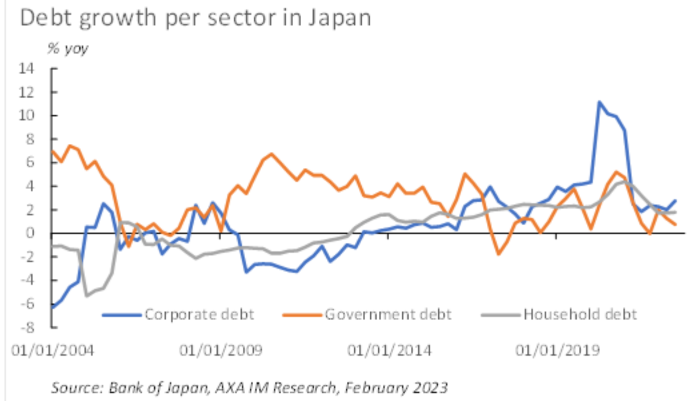
Japan is very much in focus at the moment given the leaks, last Friday, on the replacement of Bank of Japan Governor Kuroda, triggering feverish speculation around the timing and magnitude of the expected monetary policy change. Japan is actually quite topical in our exploration of the usefulness of money growth indicators.

At first sight, excess money growth in Japan (see Exhibit 4) has been very similar to the profile observed in the US and the Euro area, with a peak during the pandemic already in course of correction. Yet, the scale is very different. **Between peaks, excess money growth has been particularly sluggish in Japan despite extreme monetary policies**, averaging 1.4% per annum between 2010 and 2019, against 2.0% in the Euro area and a robust 3.4% in the US, reflecting the ranking in terms of inflation "performance" at the time. The peak of 2020-2021 was lower in Japan than in the other two regions. QE's "magic money tree" was not particularly fruitful in Japan.

Still, while just like in the US and the Euro area money supply has decelerated sharply in 2022 in Japan as the economy normalised after the pandemic, what we find striking is **that credit origination to corporations and households has been positive since 2015** (see Exhibit 5), suggesting that the endogenous engine of money growth had switched on again for some time, even if it remains stuck in low gear. The current pace of loan growth in Japan is not particularly high when compared with the 2015-2019 average pace**. What changed the policy discussion is the emergence of actual inflation, not what monetary aggregates would tell us may be happening**.

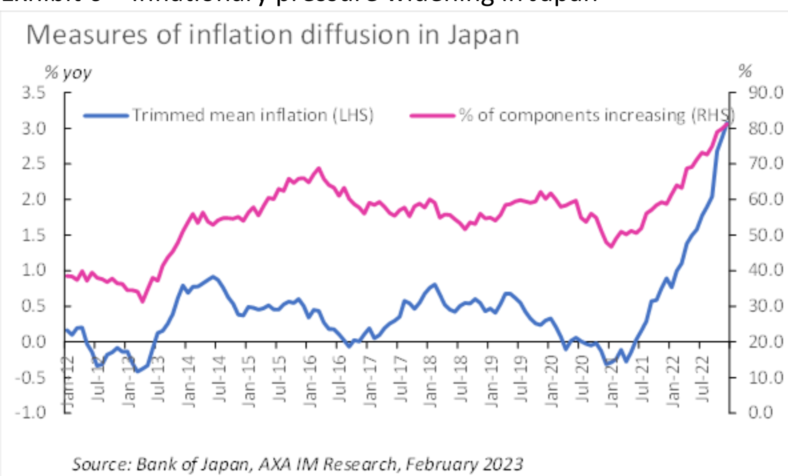
Exhibit 4 – Sluggish excess money growth between peaks

Exhibit 5 – Some signs of life in private credit since 2013



Inflation has finally woken up in Japan, albeit in a much more measured way than in the US and the Euro area. This is not only a mechanical response to higher energy prices, since the percentage of the index components rising has now exceeded 80% (see Exhibit 6).

Exhibit 6 – Inflationary pressure widening in Japan



Source: Bank of Japan, AXA IM Research, February 2023

In this context of rising inflation, pressure on the current stance by the Bank of Japan (BoJ) has been piling up, the central bank being torn between (i) defending at all cost yield curve control (YCC), which implies that it has de facto lost control of its balance sheet, since the quantum of bonds being purchased is purely driven by investors' readiness to sell them and threaten the yield limit or (ii) accept a weakening of the currency which further fuels inflation. With Governor Kuroda leaving in April, a window of opportunity for a policy change opens.

The government's unexpected choice of Kazuo Ueda, an academic – although specialised in monetary policy matters and a former member of the BoJ board 2 decades ago – rather than choosing a continuity candidate from the current leadership of the central bank could be interpreted as the signal of an accelerated breakaway from YCC. This was the first reaction of the market, before poring over Ueda's opinions triggered a re-think. His public point about the BoJ's current stance being *"appropriate"* can be understood as a willingness "not to rock the boat" and proceed carefully. This makes sense, given what is at stake.

We can see three reasons for caution. First, although inflation is back, it remains significantly lower than in the US and Europe and one wants to make sure that it is not going to end up as a one-off "supply shock" but actually filters through wages. The results of the next wage bargaining round will be crucial. Second, the backlash from giving up on YCC can be significant. A simple "fundamental" model of the Japanese 10-year yield would suggest that were it not for the BoJ intervention, long-term interest rates would be 1 to 1.5% higher. Even without taking in consideration the risk of a technical over-reaction, this would be a big jump, getting us back to yields unseen in more than 15 years. The same model suggests the influence from the US interest rates on the Japanese yield curve is significant – again when controlling for the BoJ counteracting efforts. Tactically, the BoJ may be tempted to wait until the Federal Reserve (Fed) is "done" before moving as well. Finally, the central bank needs to decide what operational framework it would follow once YCC is terminated, with two sub-questions: what to do with the policy rate (market would probably expect it to rise soon after the end of YCC) and whether or not to let the long end of the curve move freely. Some "discretionary QE", in which the BoJ tries to steer the bond market to avoid over-reactions but without disclosing an explicit target, can be a temptation. Resolving these issues may take many months after Ueda takes office in April – he first needs to be confirmed by the Diet this week - and we may have to wait until 2024 for action.

Yet, even if we do not expect precipitous decisions in Japan, **with Kuroda departing it seems that the "last dove standing" will also leave the global stage.** Ueda, in an interview to Nikkei a few months ago, warned against hasty decisions but still made it clear that change is on its way: *"there is a need for the Bank of Japan to prepare its exit strategy"*.

Having the BoJ normalizing its policy set-up, albeit later than the other major central banks, will nail the point home that there is no return to the "pre pandemic" time for monetary policy anywhere. Habitual readers of Macrocast know that over the last few months we've been sceptical about any hasty "dovish pivot" from the central banks, which we think to some extent is an expression of nostalgia for the market friendly central banks of the previous decade. There is however no need for a return to 1980s-like monetarism for this to happen.

Country/Region	What we focused on last week	What we will focus on in next weeks
	• President Biden delivered State of the Union focusing on legislative achievements and seeking to work together. Considered a re-election statement • Fed Chair Powell and several Fed speakers reinforced higher rates and prolonged restrictive policy message. Markets paid more heed in wake of strong payrolls • US trade balance (Dec) widened to $67.4bn • Jobless claims rise to 196k – still low – continuing claims also rose higher	• CPI inflation (Jan) is expected to fall further, but pace of decline to slow without sharp gasoline price drops and used car prices likely to rise • Retail sales (Jan) car sales to boost, but wider rebound expected after Dec slump • Empire & Philly Fed Surveys (Feb), mixed messages from surveys over immediate recession outlook • Housing starts (Jan) for any easing in housing market pressure
	• ECB speakers maintained their hawkish statement • Ge Prelim HICP (Jan) declined to 9.2%, below our forecast (9.7%). EMU headline HICP should be revised up to 8.6%yoy, +0.1pp • Ge industrial orders up by 3.2%mom in Dec (after –4.4%). But excluding bulk, there were declines • IP (Dec) dropped in Ge (-3.2%mom). All components were down. Italy up by +1.6%mom	• GDP 2nd estimate (Q4) • Final HICP (Jan) in Spain and France • EMU Industrial production (Dec) expected in contraction territory after large drop in Ge. • Ge Producer Prices (Jan)
	• GDP (Q4) 0%qoq with monthly GDP (Dec) -0.5%mom sees UK avoid a technical recession in 2022 • BRC data suggest retail sales dipped further in Jan • RICS house price balance fell to -49, lowest since April 2009 • UK extends NI election deadline by a year 18 Jan 2024	• Labour market data (Dec/Jan) for any further signs of slack and wage pressures • CPI inflation (Feb) headline expected to decline further to 10.3% with core expected sticky • Retail sales (Jan) expected to decline by 0.5% BRC suggests some risks to the downside
	• Nikkei reports Kazuo Ueda former professor and BoJ policy board member as new BoJ Gov, Shinichi Uchida and Ryozo Himino expected as deputy governors • Labour survey (Dec) per-capita wages up 4.8%yoy driven by increase in winter bonus payments • Real hh spending down 0.2%mom	• Kishida Gov expected to present BoJ Gov and DG candidates to Diet 14 Feb • Q4 GDP expected at 0.5%qoq • Trade data (Jan)
	• CPI (Jan) inflation edges up to 2.1% from 1.8% in line with expectation • PPI (Jan) deflation deepens, falling 0.8% lower than expected • High-frequency data generally shows continued improvement in mobility and services activity, while house and auto sales remain weak	• Credit (Jan) growth to grow strongly on seasonality and strong policy support • MLF rate to stay steady • House price (Jan) to show some improvement in large cities
	• CB: India +25bp (6.5%), Romania (7%) Poland (6.75%) & Russia (7.5%) on hold, unexpectedly Mexico +50bp (11%) and Peru (7.75%) on hold against 25bp hike exp • Q4 GDP contracted in Malaysia (-2.6%qoq) accelerated in Indonesia (+1.5%qoq) • Jan inflation accelerated in Mexico, Chile, Colombia, Philippines, Taiwan, Hungary, Czechia; slowed in Thailand, Brazil	• CB: Philippines (+25bp), on hold Indonesia • Q4 GDP in Thailand Romania Hungary Poland Russia Colombia • Jan inflation in Poland, India

Upcoming events		
	US:	Tue: NFIB small business optimism (Jan), CPI (Jan); Wed: Retail sales (Jan), Empire State manf. survey (Feb), Ind. prod. (Jan), Business inventories (Dec), NAHB housing market indx (Feb), Long-term investment flows (Dec); Thu: PPI (Jan), Weekly jobless claims (11 Feb), Philly Fed Indx (Feb), Housing starts (Jan, Building permits (Jan); Fri: Leading indx (Jan)
	Euro Area:	Tue: EU20 GDP (Q4), Unemp. (Q4), Fr ILO Unemp. rate (Q4); Wed: EU20 Ind. prod (Dec), Sp HICP (Jan); Fri: HICP (Jan)
	UK:	Tue: Unemp. (Dec), Average earnings (Dec); Wed: CPI, CPIH, RPI, PPI input & output (all Jan); Fri: Retail sales (Jan)
	Japan:	Mon: GDP (Q4); Tue: Ind. prod. (Dec); Wed: Trade balance (Jan), Private 'core' machinery orders (Dec)

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