AXA Investment Managers

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Investment Institute Macroeconomics

Pulling the Liquidity Thread

- US banks are now in full "precautionary mode", but the Fed may be reconciled with a credit crunch, as long as it's not too disruptive
- The ECB cannot rely on the same wealth of near-real time indicators as the Fed to gauge the impact of the banking stress on the real economy – the burden of proof to alter the policy stance is however high in our view

The Fed can rely on a wealth of near-real time indicators to gauge the ramifications of the banking stress for the real economy, with weekly data on deposits, banks' leveraging and lending. It is now clear that the entirety of the US banking system – and not just the smaller institutions – has put itself in "precautionary mode" hoarding cash, often obtained by a massive recourse on the Fed. Generous liquidity cannot deal with solvency issues, but it can provide breathing space to banks. More creativity could be seen in this field in the coming weeks. Beyond emergency support, the Fed may also have to re-think its framework as banks have to deal with the attractiveness of money market funds, to which their participation to parts of the Fed's own liquidity management system contributes.

Last week's decision by the Fed to hike by 25 basis points and maintain a tightening bias for the path ahead – albeit a weak one – is testament to the strength of the "separation principle" we discussed last week. True, the tightening in monetary conditions, explicitly acknowledged by the FOMC, makes it less likely the Fed will have to go much further – we now expect only one additional hike in May – but like the ECB, the Fed "would rather" continue to hike. We think we are faced with a central bank which may conclude that a credit crunch is a painful, risky but ultimately necessary and probably unavoidable step on the way to disinflation.

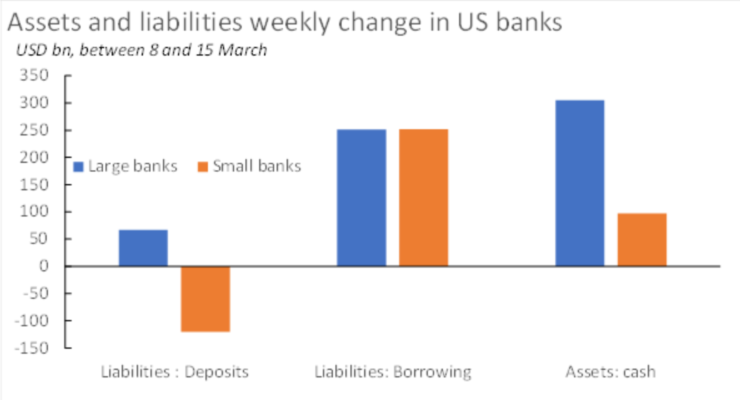
The ECB cannot rely on the same wealth of near-real time indicators. We will have to wait until only 2 days before the next Governing Council in May to get qualitative information on the banks' outlook for credit origination (in the next Bank Lending Survey) and actual volumes of credit originated in March. Our impression is that the burden of proof to alter the tightening path is high. The ECB is probably taking some comfort in the fact that Spain, the "usual suspect" in terms of quick adverse reaction to higher rates in the Euro area, is faring much better than the "canaries in the coalmine" in the North of Europe, notably Sweden, we highlighted a few weeks ago.

Large US banks in precautionary mode

The Federal Reserve (Fed) released on Friday the asset and liabilities data for large and small domestically chartered United States (US) banks for 15 March, offering a first quantification of the impact of the turmoil triggered by the resolution of Silicon Valley Bank (SVB) and Signature Bank (the first signs of pressure on SVB emerged on 9 March). As expected, large banks in general reported an inflow of deposits (USD67bn in a week in seasonally adjusted terms) while small banks lost USD120bn. They did not burn through their liquid assets, since the overall stock of securities small banks hold barely moved. Instead, they massively raised their borrowing (+USD252bn), notably from the Fed, beyond what was made necessary by the deposit migration, leaving them with a rise of nearly USD97bn in "precautionary cash" to deal with the possible continuation of deposit flight.

Interestingly **large banks have also adopted a precautionary behaviour**. Their borrowing also rose by USD250bn, while their cash holdings were lifted by USD300bn (see Figure 1). Note however that the Fed breakdown between "large" and "small" institutions can be misleading, as we mentioned last week: First Republic and SVB are considered as "large" in the Fed's statistical tables. **The overall picture of the US banking system is however typical of crisis mode: more reliance on the central bank combined with cash hoarding. This is hardly a configuration conducive to a relaxed attitude to lending to the non-financial sector.**

Exhibit 1 – Heavy borrowing and cash hoarding in US banks



Source: US Federal Reserve Board, AXA IM Research, March 2023

True, in absolute levels, US banks' cash assets are far from the peak seen in 2021 (USD1tn difference) but at the time, banks' reserves were swollen by Quantitative Easing. This was a central bank push, not a banks' pull. This time, the "liquefaction" of the banks' assets, despite the context of Quantitative Tightening, is an expression of banks' stress, which fortunately the Fed has accepted to meet. We don't have fresher data on the deformation of banks' balance sheet than 15 March, but the persistence of pressure – although without any sign of accentuation - was plain to see in the volume of Fed liquidity injection as of 22 March. Cash borrowed at the discount window fell relative to the previous week (from USD152.9bn to 110.2bn) but this was offset by the new, more generous Bank Term Funding Program (BTFP) taking off: the Fed allocated USD53.7bn through this conduit against only 11.9bn the week before. We maintain that the BTFP is powerful: injecting liquidity without imposing a haircut on collateral, valued at par rather than at market pricing, alleviates a lot of the pressure on the banks faced with deposit migration. Yet, there are limits. What will happen to the banks which, in a year from now, won't have rebuilt the cash base needed to repay the Fed without putting their capital ratio at risk?

When banks engage in precautionary cash hoarding with the Fed, they incur no cost, since the interest they earn on their reserves is very close to the interest rate they pay to secure liquidity from the Fed. However, if some of these reserves need to be used to make good on deposit transfers, the cost starts emerging. Ultimately, banks must have enough cash to unwind the liquidity injections, even the most generous ones. Your humble servant is a big fan of "The Economist" but admits a strong disagreement with the article in last week's issue ("*Don't unleash the zombies*") which advocates a form of watchful laissez-faire from US authorities. The piece treats Fed borrowing as an acceptable substitute to deposits. It's not, at least not in the long run.

Especially with Fed Funds rate having hit 4.75-5.00%, this borrowing does not come cheap, and it comes with a hard stop – unless the Fed extends the terms.

Central banks are not supposed, nor equipped, to deal with solvency issues… but they can do a lot to postpone the moment a liquidity problem triggers solvency concerns. A Bloomberg article on Saturday alluded to the Fed's readiness to alter the conditions of BTFP. Pushing the term further (2 years?) could give the struggling banks additional breathing space. Broadening collateral eligibility rules – thus extending the overall capacity of banks to raise cash, currently curtailed by the volume of risk-free securities they hold – which accounts for less than 20% of their assets for smaller banks – could be another avenue but allowing loans as collateral is a road on which central banks rarely venture, at least not without serious restrictions.

Stress may subside. The absence of "bad news" on individual banks, on top of renewed support commitment from the Fed and the government, may well do the trick and halt deposit migration. Yet, beyond the downward impact on lending which deposit flight triggers given the low loan to deposit ration of large banks (which we discussed last week) expectations **of a regulatory/supervisory backlash could still stifle bank lending, together with a "beauty contest" among US banks to offer the best guarantees of sustainability to investors**. A push upward of capital ratios should be expected, which would incentivize banks to further displace their asset allocation towards risk-free ones (e.g., government bonds) rather than loans.

Deposits under competition from money market funds

An interesting aspect in the current configuration is also that there has been some significant leakage in the migration of deposits from smaller to larger institutions, with a net decline of some USD50bn of deposits in a week across the *entire* banking system. This gets us to the competition from money market funds (MMF). Beyond the usual difference in remuneration between MMFs and bank deposits – which becomes more glaring when interest rates rise - in times of distrust for banks it becomes very tempting to invest cash in those liquid assets, which are backed by short-term private of public securities. Assets held by MMFs rose by USD117bn last week, after 120.9bn the week before.

In principle, MMFs cannot deplete the *overall* volume of deposits in the banking system, simply because MMFs are not deposit-taking institutions. If a bank client decides to invest in a MMF, her bank will simply credit the bank account held by the MMF, which will then use it to purchase an asset – for instance commercial paper – which will turn into a deposit on the account of the seller of the asset. Things can however change if MMFs start using their deposits to lend cash to the Federal Reserve against securities through the Reserve Repo Facility. In this case, those deposits "escape" from the banking system, reducing a source of cheap resources to fund the origination of credit to the economy.

This phenomenon was expected by the Fed. In a note of July 2022, the New York Fed estimated a flow of deposits into MMFs of about USD400bn by 2024 based on the trajectory for policy rates expected by the market at the time. This could be seen as part and parcel of monetary tightening. MMFs purchase existing assets, they don't originate credit – i.e., create new money. Only banks do. **By eroding the deposit base of banks, growing competition from MMFs aided by their participation to the Reverse Repo facility would hasten the contraction of excess demand and hence inflation. It can however be claimed that this process is happening far too fast at the moment**.

The capacity of MMF to participate to the Reverse Repo operations provides these entities with a very strong source of appeal to bank clients: their counterparty risk on this part of their activity is non-existent – they trade cash and securities with the central bank, while the interest rate they earn has become quite attractive relative to bank deposit rate (4.8% at the auction conducted on 24 March, while even saving accounts continue to pay less than 1% at banks).

Given the issue competition from MMFs is creating, a seemingly obvious solution would consist in either reducing the reverse repo rate, or restricting the capacity of MMFs to participate, but this would be seen as a breach in the "separation principle" between financial stability and monetary policy. Indeed, reverse repos are precisely there to create an effective floor on money market rates to ensure a swift transmission of the Fed's stance. At this stage, the central bank is not ready to make a clear decision on its future course.

The Fed's soft tightening bias

Jay Powell benefited from the fact he spoke after Christine Lagarde, who provided an interesting and largely successful lab experiment in how a "dovish hike" can be delivered. The European Central Bank (ECB) had opted for removing all trace of forward guidance in the prepared statement, while providing some "contingent guidance" in the Q&A by explaining that rates would have to rise higher ("*we know we have more ground to cover*") *if* its baseline for the macro outlook – established before the banking turmoil emerged – were to materialise despite the banking turmoil. Upon hiking by 25bps – which we expected since we believed a pause last week, against a background of high inflation, would have been received as a capitulation and would have seriously impaired its credibility - **the Fed chose to maintain an explicit, albeit weak, tightening bias, in the prepared statement** ("*some additional policy firming may be appropriate*"). The impact of the banking turmoil on tighter credit conditions, weighing on the economy and ultimately on inflation was duly noted, but the concluding sentence in this paragraph ("The Committee remains highly attentive to inflation risks") acted as a reminder of where the central bank's priorities lie. True, Jay Powell's Q&A followed Lagarde's playbook as he insisted on uncertainty and pledged to take a hard look at credit conditions ahead. Yet, **we are still dealing with two central banks which would "rather continue to hike", a stance at odds with the market pricing.**

The Federal Open Market Committee (FOMC) forecasts can be "nimbler" than the ECB's. In the Fed's case, it's the simple collection of FOMC members' general view for a small number of key variables, while the ECB forecast exercise is a complex, model-based affair, with an explicit cut-off date for assumptions on interest rates, exchange rates and energy prices which can make the projections already obsolete by the time they are published. It has been possible for FOMC members to "pencil in" some impact from the ongoing banking stress in their views. The revision in the median GDP forecast was minimal however for 2023 (0.4% against 0.5%). This may merely stem from substantial transmission lags from tighter lending conditions to the real economy. The downward revision to 2024 GDP growth is bigger (1.2% against 1.6%). Yet, what we find striking is that despite this less optimistic view of the real economy, the median of the FOMC projections for core inflation in 2024 has still been revised up, to 2.6%, a pace still hardly in line with the Fed's target, against 2.5% in the December batch. This acknowledges the resistance of inflation to a softening of the economy. **In September 2022, the Fed was counting on a cumulative GDP growth of 2.9% over 2023 and 2024. It has now come down to 1.6%, while core inflation for 2024 has been revised up by 0.3pp.**

This is key in our view. We read many comments on the fact that the FOMC still does not want to contemplate the possibility that a proper recession results from the current bank turmoil. This may be evolving rapidly. Neel Kashkari – who shifted from a generally dovish stance to a hawkish one in the course of this tightening cycle – stated this weekend that the current banking stress "definitely brings us closer" to a recession**. Our point though is that the Fed is now convinced that taming the current inflation shock is likely to entail a large sacrifice in terms of growth and employment.** Rather than a central bank which would be "blind" to the risks, we think we are faced with a central bank which may conclude that a credit crunch is a painful, risky but ultimately necessary and probably unavoidable step on the way to disinflation. Of course, the rising probability of this credit crunch means that the Fed may need to hike less from where it is today. The median forecast in the dot plot for the policy rate was unchanged from the December batch and consistent with only one more hike to 5.25% after last week move. This is also our new central scenario. Without the banking turmoil, we would have expected to see the median rate at 5.5% or even above. Yet we still think the bar is high for the Fed to reverse its stance quickly and cut rates to mitigate the looming credit contraction.

The Euro area's data availability problem

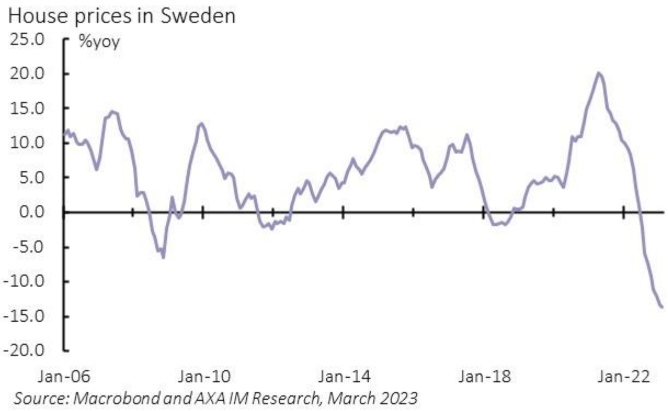
Beyond this baseline of the Fed hiking "one more time", the balance of risks has probably moved to the downside. Even if the distribution of the dot plot is consistent with more than just one additional hike, **there is a sizeable risk that**

the ongoing banking trouble triggers a "sudden stop" in lending which would then send the economy into the sort of recession which would go beyond what is strictly needed to tame inflation, opening the door to rate cuts. At least the Fed – and the market - will be able to monitor this in "near real-time" and adjust its policy swiftly. Its statistical apparatus provides plenty of data on a weekly basis. That should allow the FOMC to get an "early warning" on a credit crunch. Similar data comes with a much longer lag in the Euro area, at least on an aggregate basis.

Some European banking names were under renewed pressure at the end of last week, with no clear triggers. Given the way banking supervision is organized in the Euro area, and the fact that, unlike in the US under the Trump administration, there has not been any noticeable relaxation in the post-2008 regulation, stress should normally be limited on this side of the pond. Yet, the Credit Suisse episode has triggered one of those episodes of "emergency scrutiny" in which investors take a harsh look at banks to allay – and down the road contribute to – fears of contagion. A problem though is that **there is no way – unlike in the US – to get a sense in near real time of what are the implications for movements on deposits and lending activity in the Euro area**. Of course, Governing Council members will likely take a hard look at banks in their constituency, but we will have to wait for the next Bank Lending Survey to get fresh aggregate news on how the current turmoil is affecting banks' qualitative attitude towards credit, and hard data on how actual lending responded won't be available before the March M3 release (both will come out on 2 May). The ECB's Governing Council will have them just before their next meeting on 4 May, but in the meantime volatility – both in the market in the communication of the council members – may be rife as no precise, comprehensive data will emerge.

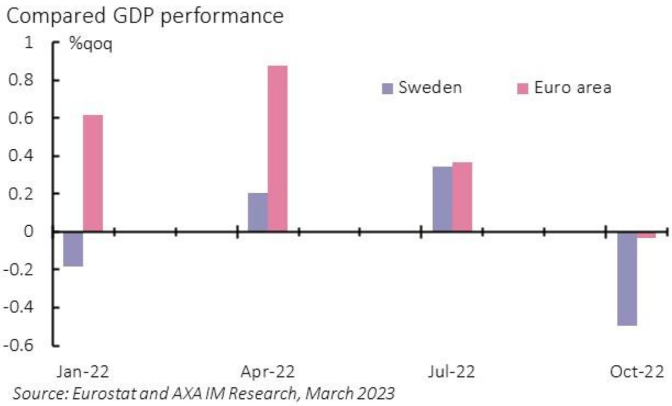
For now, the ECB is clearly unwilling to be seen as over-reacting to the ongoing banking turmoil in the realm of monetary policy; Christine Lagarde's speech at the ECB Watchers' conference was clear on the validity of the "separation principle" we discussed last week: *"there is no trade-off between price stability and financial stability. We have plenty of tools to provide liquidity support to the financial system if needed and to preserve the smooth transmission of monetary policy."* The central bank will be watching carefully for signs of emergence of an "intermediation wedge" which would magnify the pass-through of its policy stance to the real economy, but our impression is that the "burden of proof" is quite high. **Christine Lagarde conversely focused on why the monetary policy pass-through may have weakened**. The fall in the share of variable-rate mortgages was among the reasons we mentioned. This gets us back to the theme of the "canaries in coalmine" we developed a few weeks ago. We focused on Sweden, where variable-rate mortgages dominate and house prices are in free-fall (see Exhibit 2), and the economy is under-performing the Euro area (see Exhibit 3).

Exhibit 2 – Swedish house prices in free-fall



Source: Macrobond and AXA IM Research, March 2023

Exhibit 3 – Sweden under-performing the EA on growth

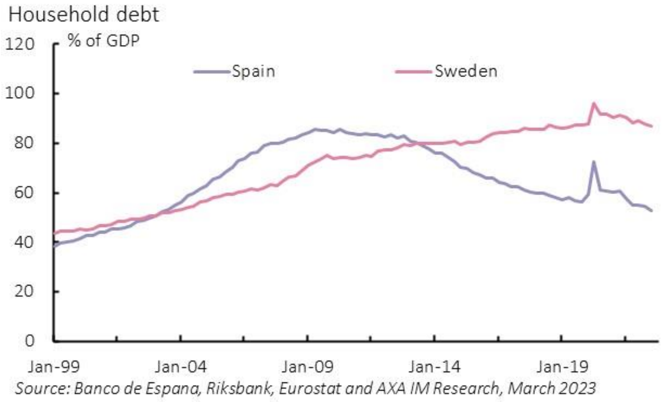


Source: Eurostat and AXA IM Research, March 2023

Even if the ECB cannot focus on individual countries' developments, it can't be blind to risks of localized disruptions. Spain is the Euro area's large country where – informed by the 2010-2012 crisis – attention turns to when policy transmission via variable rate mortgages is discussed. It may well be, however, that **this time the risks are clearer in the North of Europe than in the South**. True, the Spanish government has already taken measures to mitigate the impact of mortgage-resetting on consumers' purchasing power. Yet, the magnitude of the problem is much more limited than in

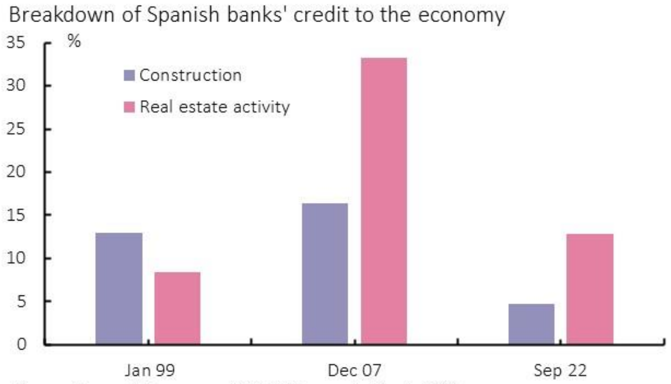
Sweden. Financial stability in Spain is buttressed by a regular deleveraging since the peripheral crisis. Household debt has declined by 30% of GDP since then. Actually, the household debt ratio is today higher in Sweden than it was in Spain before the crisis struck in 2009 (see Exhibit 4). A key weakness of Spanish banks at the time was their massive exposure to the real estate space. It now accounts for less than 20% of total credit to the economy, against nearly 50% then (see Exhibit 5). This probably gives the ECB a measure of tranquillity and contributes to steer it away from making quick changes to its stance.

Exhibit 4 – Spaniards deleveraged; Swedes leveraged on

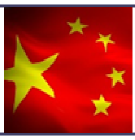


Source: Banco de Espana, Riksbank, Eurostat and AXA IM Research, March 2023

Exhibit 5 – Spanish banks are much less exposed to RE now



Source: Banco de Espana and AXA IM Research, March 2023

Country/Region	What we focused on last week	What we will focus on in next weeks
	• FOMC raised FFR 0.25% to 5.00%, as we expected. Dot plot showed one more hike. Powell said tighter credit condition expectations had reduced rate outlook • Fed emergency bank lending stable in latest week; balance sheet $390bn larger in 2-weeks, reverse repo rises reflecting past deposit flight to MMFs • Treasury Secretary Yellen has not enacted full deposit insurance, but suggests any losses recouped for now • Home sales (Feb) jump by 12.7%mom to Sept 22 level	• Developments in US banking, including weekly liquidity updates from the Fed • PCE inflation (Feb), including core which is expected to be unch in annual terms • GDP (Q4, final) headline expected unch, 2.7% (saar) • Conf Bd consumer conf (Mar) any impact from bank turmoil • House prices (Jan) and latest in mortgage applications, which have been rebounding
	• "Flash" PMI composite output gained over 2points in March to 54.1, only driven by services • Eurozone "flash" consumer confidence edged lower to -19.2 in March pointing to persistent depressed levels	• Euro area "flash" headline HICP likely to fall meaningfully further driven by energy. On core, we see upside risks from February's 5.6%yoy • Eurozone February monetary aggregates, although by definition will not capture any ramification from March banking turmoil • France & Spain February consumer spending & March national business surveys (IFO, INSEE)
	• BoE hiked by +25bp in line with our call to 4.25%, we now expect to see one further hike before pausing • CPI inflation (Feb) jumped to 10.4% from 10.1% driven by rising food and clothing inflation • GfK cons conf (Feb) post gradual improvement to -36 • Retail sales (Feb) up 1.2%mom	• BoE household lending data (Feb) • GDP (Q4) national accounts – risk of downward revision to 1st est of 0% • Current account (Q4) deficit expected to narrow • Nationwide house price index (Mar) likely to continue to decline as mortgage costs rise
	• CPI inflation (Feb) headline slows to 3.3%yoy down 1ppt as gov't energy subsides come into effect. Core (ex frsh food and energy) still rising to 3.5% from 3.2% • Reuters Tankan Mfg & non Mfg index (Mar) point to weakness in sentiment in large Mfg firms • Flash PMIs (Mar) Mfg edges up reversing Feb drop	• Tokyo CPI (Mar) headline set to continue slowing to 3.1% as energy and food begin to drop out • Industrial output (Feb) expected up 2.7%mom • Service PPI (Feb) • Leading indication (Jan) • Labour market data (Feb)
	• 1y loan prime rate (LPR) remained flat at 3.65% in March, 5Y rate at 4.30%	• NBS manufacturing (Feb 52.6) and non-manufacturing (Feb 56.3) PMI survey for March to be released – some consolidation likely after the strong February prints which have surprised on the upside
	• CB: Philippines +25bps to 6.25%, Taiwan +12.5bps to 1.876%. Turkey stood on hold (8.5%) • Feb CPI (%yoy) South Africa higher than expected (7.6%), especially core (5.0%) • Q4 GDP: Chile grew 0.1%qoq and contracted 2.3%yoy. Revised data for previous quarters showed the economy was previously in recession • First 20-day Mar. exports fell sharply in Korea	• CB: +25bps hike expected in Thailand, South Africa, Mexico & Colombia. Czech and Hungary expected on hold. Egypt likely to deliver 100-150bp hike • Mar CPI: Poland • Mar 31 target date for Hungary to deliver the RRP's 27 super milestones (unlikely to be met) • Unemployment (Feb): Colombia, Chile, Mexico & Brazil

Upcoming events	US:	Tue: Goods trade bal. (Feb), Wholesale inventories (Feb), C-S & FHFA HPI (Jan), Conference Board consumer conf. (Mar); Wed: Pending home sales (Feb); Thu: Weekly jobless claims (25 Mar), Core PCE (Q4), GDP (Q4); Fri: PCE & Core PCE (Feb), Personal income & spending (Feb), Chicago PMI (Mar), Michigan consumer sentiment (Mar)
	Euro Area:	Mon: EU20 M3 (Feb), Ge IfO business climate indx (Mar); Tue: Fr Insee manf. confidence (Mar), It ISTAT business & consumer conf. (Mar); Wed: Insee consumer conf. (Mar); Thu: Ge CPI & HICP (Mar), It Unemployment (Feb), Sp HICP (Mar); Fri: EU20 CPI (Mar), Unemployment (Mar), ECB Lagarde keynote speech, Ge Unemployment (Mar), Fr Consumer spending (Feb), Fr & It HICP (Mar)
	UK:	Mon: Distributive Trades survey (Mar); Wed: BRC Shop price indx (Mar), M4 (Feb), Consumer credit (Feb), Mortgage approvals (Feb), Net mortgage lending (Feb); Fri: GDP (Q4), Business investment (Q4), Current account (Q4), Private consumption (Q4)
	Japan:	Thu: Leading indx (Jan); Fri: Unemployment (Feb), Ind. prod. (Feb), Housing starts (Feb)
	China:	Mon: Ind. prod. (Feb); Fri: Official manf. & non-manf. PMIs (Mar);

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