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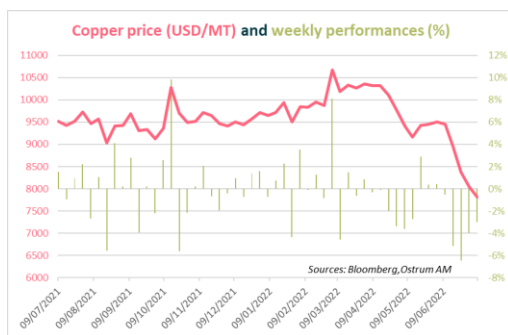
● Topic of the week: Focus on the financing of the US mortgage market

- Non-banking institutions occupy a predominant place in the financing of the American real estate market;
- If they offer certain advantages, they have weaknesses related to their mode of operation;
- They depend on short-term lines of credit to finance themselves and have little capacity to absorb negative shocks. They therefore represent a risk to financial stability;
- The sharp rise in rates, the slowdown in the real estate market and the deterioration in the financial situation of households, especially the less well-off, risk weakening this players and weighing on the financing of the American real estate market.

● Market review: Fed: inflation as its sole goal

- Fed focused on inflation;
- US job growth remains robust;
- Euro-dollar exchange rate skirting parity;
- Some respite on risky assets.

● Chart of the week



The price of copper, also known as “Doctor Copper”, as a marker of the health of the global economy, fell by -12.6% in June, and nearly -20% since the beginning of the year. The July 7 Bloomberg article revealed a \$200 billion infrastructure plan to try to kick-start the Chinese economy hit by Covid lockdowns. Will that be enough to wake up “Dr. Copper”? Infrastructure projects require sustainable funding and take time. This is therefore part of a medium-long-term investment strategy, which should support the Chinese construction sector, provided that China does not return to lockdowns.

● Figure of the week

80

Source : Ostrum AM

China's share in the main production stages of solar panels is more than 80%. The international energy agency warns that this strong dependence represents a threat to the energy transition.



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• **Topic of the week**

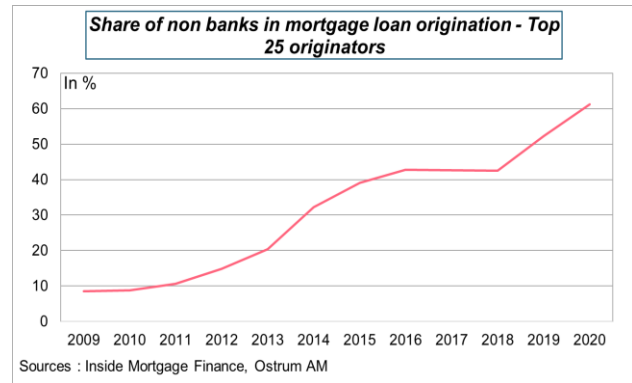
Focus on the financing of the US mortgage market

Since the financial crisis of 2008-2009, American banks have withdrawn from the financing of real estate loans in favor of non-banking establishments which now occupy a predominant place, in particular among the less well-off households (nearly 90% of Ginnie Mae's loans). These institutions are much less regulated and have a number of weaknesses. During periods of stress, they can be subject to a liquidity crisis and threaten financial stability. The sharp rise in interest rates, the drop in loan applications and the deterioration in the financial situation of households risk weakening the financing of American real estate.

Non-banks have become major players

Since the financial crisis of 2008-2009, the share of non-banks in the financing of the American real estate market has increased sharply. The share of all non bank in loan origination has grown from just over 20% before the crisis to 68% in 2020, according to Inside Mortgage Finance. Among the 10 largest lenders 7 are non-banks in 2020.

Non-banks also occupy a very important place in the loan servicing activity. Their share increased from 6% in 2011, to 27% in 2014 and 60% in 2021 according to the same source. This market is highly concentrated since 90% of loan services provided by non-banks are provided by the 10 largest establishments. The loan service activity consists of collecting principal repayments and interest from the borrower on behalf of the end investor, as well as taxes and loan insurance.



This strong growth results from the disengagement of commercial banks in the financing of mortgage loans to households and more particularly to the less well-off. This is mainly due to the big banks, which have only kept loans to the wealthiest households. The significant costs incurred by them during the subprime crisis and the strong tightening of regulations are the main reasons for this. Non-banks have therefore filled the void. These establishments also offer certain advantages. Some of them have invested in advanced technologies and thus reduce their operating costs. They allow households to quickly obtain an online loan with fewer requirements.

A prominent place in loans to the most fragile

The presence of non-banks in the financing of loans to households benefiting from a federal program facilitating access to property has increased sharply since the financial crisis. Their share in the origination of loans securitized and sold to Fanny Mae and Freddie Mac agencies was thus just over 70% in May 2022, according to the Urban Institute, compared to less than 20% before the crisis.

Their share is disproportionate in loans securitized by Ginnie Mae and guaranteed by the Federal Housing Administration and the Department of Veterans Affairs. These loans are generally granted to less well-off households and the most able to cope with a loss of employment and income. Non-banks originate almost 90% of the loans purchased by Ginnie Mae in May 2022 compared to 20% in 2007. Their weight is also very important in servicing this type of loan.

Loans originated by non-banks being mainly granted to households benefiting from a federal program have a median FICO score (credit score of borrowers) that is still lower than banks (724 against 747 in May 2022), which remains a high score. For loans sold to Ginnie Mae, the score is lower: 670 for non-banks and 680 for banks.

Systemic liquidity risk

Unlike commercial banks, which grant credit with the deposits they receive, non-banks do not receive deposits. They borrow from commercial banks and are therefore

dependent on lines of credit granted by them to finance their loans. These serve as collateral. These lines of credit are short-term, generally a fortnight, the time needed to sell the loan to end investors, most often federal agencies, and to securitize it.

This makes them vulnerable in the event of a shock, a sharp recession or a sharp downturn in the real estate market. In this more risky environment, commercial banks could be tempted to close their lines of credit and quickly seize the collateral in the event of breach of their commitments. However, non-banks, unlike commercial banks, do not have access to emergency liquidity from the Fed. While it is difficult to obtain data on their financial situation, these institutions generally have only a low level of liquidity according to the Conference of State Bank Supervisors. Most often carrying out only one activity, they also most often have only one type of asset: the loan or the rights to service the loans. Its value can fall in the event of financial stress or crisis and it can be quickly seized in the event of a breach of their covenants.

Liquidity risk mainly concerns the loan servicing activity

Liquidity risk is greater in the loan service business. In the event of financial difficulties for households leading them not to pay the loan installments on time or to default, non-banks are required to advance the amount of interest, insurance and taxes to the end investor. These institutions will ultimately be reimbursed either by the investor or by the sale of the property, but in the interim period, non-banks will have to find the necessary financing to make these advances. This can be difficult in times of financial stress or crisis.

This risk is even greater for loans guaranteed by Ginnie Mae given a relatively higher default rate of borrowers compared to loans guaranteed by Fannie Mae and Freddie Mac agencies and a longer period of time during which non-banks will have to advance loan services. This can last up to a year.

Systemic risk

These establishments are therefore particularly vulnerable in times of crisis. The US Treasury only realized this a few years ago. In December 2019, the Financial Stability Oversight Council for the first time highlighted the potential risk that these institutions represented on financial stability. It cites in particular their dependence on short-term financing and their limited capacity to absorb shocks in the event of

deterioration in market conditions. It therefore recommends the continuation of coordination between federal and state institutions to collect and share data in order to identify risks and strengthen the supervision of these establishments. The latter are indeed not regulated at the federal level by the Fed or the FDIC but at the level of the States and governmental institutions. Non-banks are thus less well regulated and it is difficult to obtain data. For an analysis of the risks and weaknesses of non-banks see the following paper¹.

The bankruptcy of one institution can lead to suspicions about the financial situation of other institutions and lead commercial banks to massively withdraw their lines of credit. The bankruptcy of a large establishment or several of moderate size would pose a major problem for the financing of the real estate market given their weight. Loans are also mainly granted to the least privileged households and the least able to find other lenders in the event of the bankruptcy of their establishment. This would thus have the consequence of threatening financial stability and accentuating the crisis at work. During the subprime crisis, half of non-banks went bankrupt. A paper written by three economists from the Fed and two from the University of California highlighted this systemic risk².

In the event of major bankruptcies, the financing of the real estate market would be severely disrupted and more particularly for the most modest households. Beyond the losses that the government would have to bear under the explicit or implicit guarantee of the State, it could be called upon to intervene in a broader way to support the non-banking system and avoid a dislocation of the housing market.

How did non-banks behave during the Covid-19 crisis?

To mitigate the unprecedented shock since the 2nd World War of the Covid-19 crisis on the economy, the government and the Fed have taken exceptional measures. Regarding the real estate market, the government has introduced a repayment suspension of up to 12 months for federally guaranteed loans at the request of the borrower. A moratorium on foreclosures of federally guaranteed mortgages has also been introduced for a period of at least 60 days.

¹ <https://www.im.natixis.com/images/docs/articles/Ostrum-AM---IDEAS---2020-01---Risks-related-to-nonbank-mortgage-lending-in-US.pdf>

² Liquidity crisis in the mortgage market » https://www.brookings.edu/wp-content/uploads/2018/03/5_kimetal.pdf

These measures have raised fears of a liquidity crisis for non-banks responsible for servicing loans, since they are required to make payments to the investor on behalf of the borrower in the event of late payments³. Despite requests from industry professionals, the Fed has not created a liquidity facility for them. However, they have not been subject to a liquidity crisis, for three reasons.

The first is that requests for payment suspensions from households have been lower than expected. They were less than 10% for loans insured by Fannie Mae and Freddie Mac and 15% for those insured by Ginnie Mae. The Conference of State Bank Supervisors estimated that 25% to 50% of borrowers would request a suspension of payment.

The second reason is that non-bank institutions have benefited from a boom in refinancing linked to the sharp drop in interest rates. The 30-year mortgage rate thus fell from 3.5% at the end of February 2020 to 2.7% at the end of December 2020. This was the direct consequence of the very accommodating monetary policy conducted by the Fed. At the beginning of March 2020, it lowered its rates by 150 basis points in 15 days, to bring the Fed funds rate down to [0; 0.25%] then massively bought government bonds and MBS (bonds backed by real estate securities). The income from the refinancing activity thus made it possible to compensate for the loss of income in the loan services activity. Profits have increased.

The real estate market also held up very well during the crisis due in particular to low rates, massive aid granted to households and the search for larger apartments or houses outside the big cities following confinements and the wider deployment of telework. In a context of very low inventories, real estate prices rose sharply.

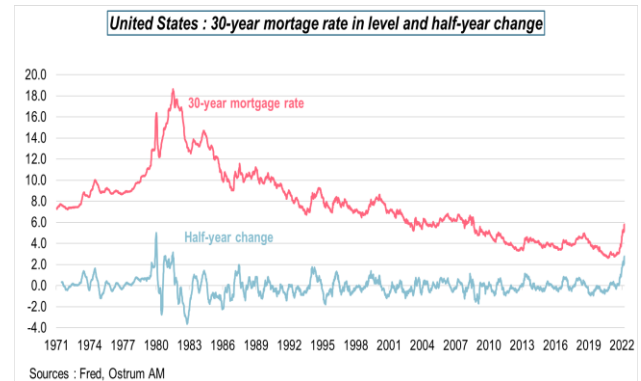
Finally, the 3rd reason is that government agencies have taken measures to relieve non-banks. Fannie Mae and Freddie Mac notably set a ceiling on the number of late payments that non-banks had to advance. In the case of Ginnie Mae, the measures were more limited but provided an emergency safety net for non-banks responsible for servicing loans.

Financing of the real estate market is likely to come under pressure

Sharp and rapid rise in interest rates

Unlike in 2020, interest rates have risen considerably since the start of the year due to the sharp tightening of monetary policy by the Fed. To fight against the strong acceleration of inflation and its maintenance at a high level since 1981 (8.6% in June), the Fed has raised its rates three times since March 2022: +150 basis points in total to bring the range change in Fed Funds at [1.5%, 1.75%] on June 15. The central bank has also hinted at rate hikes of the same magnitude by the end of the year, its priority being to fight against inflation deemed "far too high" and to contain inflation expectations, even if this is done at the risk of generating a recession. The Fed also announced the reduction in the size of its balance sheet from June 1 via the non-reinvestment of part of the repayments of maturing bonds. However, this took place at a slower pace than expected in June.

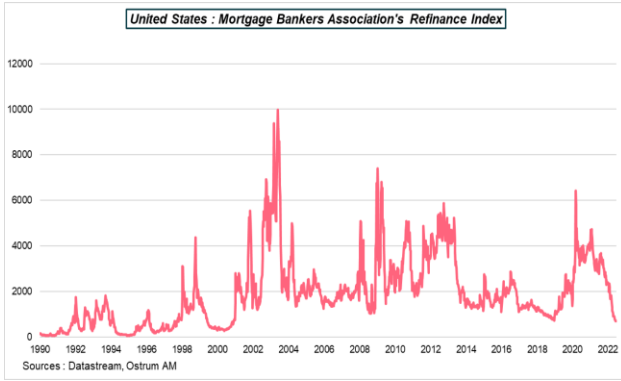
This net tightening of monetary policy resulted in a sharp rise in mortgage rates. The 30-year mortgage rate thus returned at the end of June 2022 to its highest levels since December 2008: at 5.7%, after having reached 5.8% the June 21 week. In 6 months, it recorded a dizzying increase: +260 basis points, i.e. the largest half-year variation since October 1981.



Sharp drop in mortgage applications

Unsurprisingly, this considerable rate increase resulted in a sharp decline in mortgage applications. The index published by the Mortgage Banker Association's reveals a drop in loan applications of 47% since the start of the year, including 21% for the purchase of real estate and above all 70% for refinancing applications which are at the lowest level since December 2000.

³ <https://www.ostrum.com/fr/article-insight/risques-sur-le-marche->

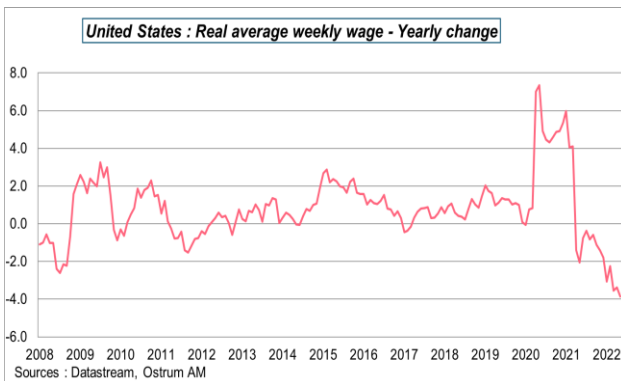


Households are facing both the sharp rise in mortgage rates and the continued high level of real estate prices. For an analysis of the current state of the US housing market see *MyStratWeekly* June 27⁴.

The sharp and rapid decline in loan demand is weakening non-banking institutions specializing in the origination of loans both for the purchase of goods and especially for refinancing. They suffer a drop in their income leading some of them to lay off.

The loan service activity threatened by the deterioration of the financial situation of households

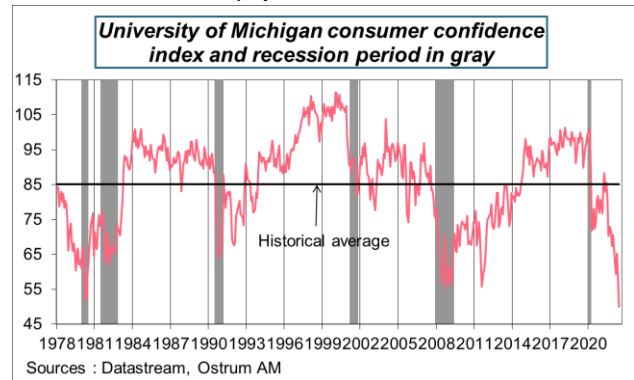
American households are also affected by the loss of purchasing power linked to the sharp acceleration in inflation. The increase in wages is indeed not sufficient to offset the sharp rise in consumer prices, which is reflected in a sharp decline in real household wages: -3.9% over one year in May.



Losses in purchasing power, the sharp rise in interest rates and more recently the rise in gasoline prices to a record level have resulted in a drop in consumer confidence. The University of Michigan index hit an all-time low in June. This reflects a marked deterioration in the outlook for their

financial situation. Confidence as measured by the Conference Board has also deteriorated due to the sharp rise in fears of recession.

The least advantaged households are the most affected by these losses in purchasing power since the share of basic necessities, such as food products, and energy represent a larger share of their income. They are thus the most likely to suffer a deterioration in their financial situation, which could lead them to fail to repay their loan on time.



Their financial situation is also likely to deteriorate further with the continuation of rate hikes by the Fed and the increased risk of recession that the tightening of financial conditions and the losses in purchasing power generate. The resulting rise in the unemployment rate will indeed weaken them further. Default rates, which remain relatively low today, could thus increase significantly.

Conclusion

During the Covid-19 crisis, non-banks did not experience liquidity crises due to lower requests for loan repayment suspensions than expected, the boom in refinancing activity, the measures taken by the agencies and the massive aid paid by the government to the households most affected by the consequences of the crisis. Their profit even increased.

Today, the configuration is completely different. The exceptional measures put in place by the government to cushion the shock of Covid-19 on demand have ended and the Fed is tightening its monetary policy sharply to counter high inflation. Interest rates have thus risen sharply, generating a drop in demand for loans, especially refinancing, and households are weakened by the sharp drop in their purchasing power.

This will first affect the less well-off, thus putting pressure on non-banking establishments which provide almost all of the financing for their mortgages. However, as we have seen,

⁴ <https://www.ostrum.com/en/publication/mystratweekly-june-27th->

they are required to make loan repayments to the end investor on behalf of the borrower for a certain period of time. These factors thus increase the risk of a liquidity crisis for certain institutions that could weigh on the financing of the US real estate market and amplify the coming recession. Nevertheless, in the event of major bankruptcies, the government would probably have to intervene to avoid a

dislocation of the real estate market.

Aline Goupil-Raguènes

• **Market review**

Fed: inflation as its sole goal

Technical rebound in risky assets, the Fed focused on inflation given the strength of employment

The rebound in risky assets after the latest FOMC minutes partly corrects the extreme weakness observed last week. Central bankers appear to be ruling out a recession scenario. The 90 mentions of the word “inflation” in the minutes leave little doubt as to the US Central bank’s main concern at this juncture. The ISM services index also alleviates fears of a disruption in activity growth, but the inconsistency of the surveys is puzzling. The dollar is at its zenith before the release of the June US CPI next week. The widening pressure on credit spreads is moderating in Europe in the wake of the rebound in equities. However, sovereign spreads failed to respond to the risk rally due to uncertainties surrounding the ECB’s anti-fragmentation policy tool.

The US economy is a subject of permanent debate among economists. The national income and product accounts seem inconsistent as a rapid increase in domestic income is concomitant with a weakening of domestic final demand. Yet, accounting identities are not debatable. This unjustifiable discrepancy was noted by participants at the last FOMC. Employment and profits cannot grow rapidly without demand expansion. The job market remains upbeat given elevated job openings data. In June, the US economy also added 372k jobs, in line with the first five months of the year and still higher than the trend increase in the working-age population (100-150k trending). Hours worked are up 4% at annualized rate, a far cry from the Atlanta Fed’s GDP estimate, which projects a 2% GDP contraction in the second quarter. This has data inconsistency written all over it. The next CPI (projected at 8.8% by the consensus) crystallizes the attention of market participants in the run-up to the July 27 FOMC. A further acceleration in consumer prices would only confirm a hike of 75 bps. In the euro area, the energy crisis is mobilizing the German government. The supply of Russian gas via Nordstream I, already reduced by the impossibility of maintenance operations due to international sanctions, will decrease further. Gas prices are stratospheric (>€170/MWh) especially as US LNG supply remains limited after the incident at the Freeport terminal. In this context, the ECB will opt for a timid 25 bp rate hike in July, as the design of the much-anticipated anti-fragmentation tool is far from unanimous. The devil is in the detail, but the mechanism could prove costly politically. The decline of the euro, counterpart of the strength of the dollar, also testifies to the dissensions specific to the monetary union.

The fixed income market is still showing considerable

volatility. The dearth of collateral seems to partly explain the reappearing tensions on swap spreads. The Schatz asset swap is trading at 74bp, confirming the scarcity of collateral implied in the slide in the repo rate. The rise in the Bund (1.25%) thus remains measured though the yield curve is steeper. Sovereign spreads did not benefit from the (albeit precarious) improvement in sentiment towards European equity markets. The French OAT is most exposed to a mechanism that reallocates flows towards lower-rated debt. France’s budget situation is reminiscent of Italy’s in 2011, which prompted Finance Minister Bruno Lemaire to say that debt targets are now obsolete. In the United States, bond yields with maturities of 2 to 10 years converged towards the 3% area. The narrative centered on the risk of recession seems incompatible with the stability of real bond yields. At the same time, the spontaneous disappearance of inflationary risk as described by the inverted term structure of inflation expectations could turn out to be ‘wishful thinking’. In our opinion, 30-year TIPS are perhaps the most appropriate asset class in the current environment as inflation breakeven look cheap at 2.22%.

The credit market sees light at the end of a long tunnel of negativity. Spreads are down 7 bp this week on European investment grade (211 bp against Bund). Protection buying flows are being trimmed, having played their role around the half-year close. The renewed tensions on swap spreads should nevertheless be monitored. New bond issues, already rare given market conditions and seasonality, will decrease before the start of the corporate earnings season. Swedish property companies remain a point of attention. The high yield market is also benefiting from the recovery in equity markets. Spreads are stabilizing around 650bp. The iTraxx Crossover dips back below the 600bp threshold. The primary market for speculative-grade bonds remains at a standstill.

The rebound in equities is accompanied by a jump in cryptocurrencies and a drop in implied volatility. This suggests short-selling hedges and technical flows are the drivers of the rally. The S&P 500 regains ground up to 3900 points thanks to technology and consumer stocks. However, there are some small buying flows on European equity funds (ETFs) after weeks of outflows. High beta stocks (cyclicals, technology) lead the European market higher. Growth and quality partially erase their recent underperformance.

The foreign exchange market remains dominated by the strength of the dollar. The DXY index is up 2% this week. The euro-dollar is approaching parity, with the spread between short rates set to widen further at the end of the month. The Japanese yen (135) is still under pressure despite a short-lived jump on the news of the assassination of former PM Shinzo Abe. The yuan is hovering around 6.70, as the Chinese government announced a new borrowing plan costing CNY 1,500 billion.

Axel Botte
Global strategist

● Main market indicators

G4 Government Bonds	11-Jul-22	1wk (bp)	1m (bp)	2022 (bp)
EUR Bunds 2y	0.44%	-18	-53	+106
EUR Bunds 10y	1.25%	-9	-27	+142
EUR Bunds 2s10s	79.8bp	+9	+26	+36
USD Treasuries 2y	3.03%	+20	-3	+230
USD Treasuries 10y	2.99%	+11	-17	+148
USD Treasuries 2s10s	-5bp	-9	-14	-82
GBP Gilt 10y	2.18%	-2	-27	+121
JPY JGB 10y	0.25%	+2	+3	+4
€ Sovereign Spreads (10y)	11-Jul-22	1wk (bp)	1m (bp)	2022 (bp)
France	61.8bp	+3	+4	+24
Italy	196.68bp	+5	+4	+62
Spain	108.96bp	+1	+0	+35
Inflation Break-evens (10y)	11-Jul-22	1wk (bp)	1m (bp)	2022 (bp)
EUR 10y Inflation Swap	2.39%	-5	-22	+33
USD 10y Inflation Swap	2.63%	-4	-43	-14
GBP 10y Inflation Swap	3.99%	-6	-21	-20
EUR Credit Indices	11-Jul-22	1wk (bp)	1m (bp)	2022 (bp)
EUR Corporate Credit OAS	205bp	-11	+43	+110
EUR Agencies OAS	80bp	+4	+14	+31
EUR Securitized - Covered OAS	90bp	+7	+17	+44
EUR Pan-European High Yield OAS	646bp	-14	+175	+328
EUR/USD CDS Indices 5y	11-Jul-22	1wk (bp)	1m (bp)	2022 (bp)
iTraxx IG	118bp	-2	+14	+70
iTraxx Crossover	584bp	-5	+64	+341
CDX IG	91bp	-10	-6	+42
CDX High Yield	528bp	-50	-39	+235
Emerging Markets	11-Jul-22	1wk (bp)	1m (bp)	2022 (bp)
JPM EMBI Global Div. Spread	538bp	-2	+84	+169
Currencies	11-Jul-22	1wk (%)	1m (%)	2022 (%)
EUR/USD	\$1.009	-3.214	-3.344	-11.3
GBP/USD	\$1.190	-1.751	-2.259	-12.1
USD/JPY	JPY 137	-1.173	-2.272	-16.2
Commodity Futures	11-Jul-22	-1wk (\$)	-1m (\$)	2022 (%)
Crude Brent	\$105.5	-\$8.0	-\$13.5	41.08
Gold	\$1 738.6	-\$68.3	-\$90.3	-4.95
Equity Market Indices	11-Jul-22	-1wk (%)	-1m (%)	2022 (%)
S&P 500	3 864	1.00	-0.96	-18.9
EuroStoxx 50	3 476	0.68	-3.43	-19.1
CAC 40	5 998	0.74	-3.05	-16.1
Nikkei 225	26 812	2.52	-3.64	-6.9
Shanghai Composite	3 314	-2.70	0.88	-9.0
VIX - Implied Volatility Index	26.21	-1.84	-5.55	52.2

Source: Bloomberg, Ostrum AM

Additional notes

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