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Global Monthly

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How vulnerable is the economy to a sharp fall in house prices?

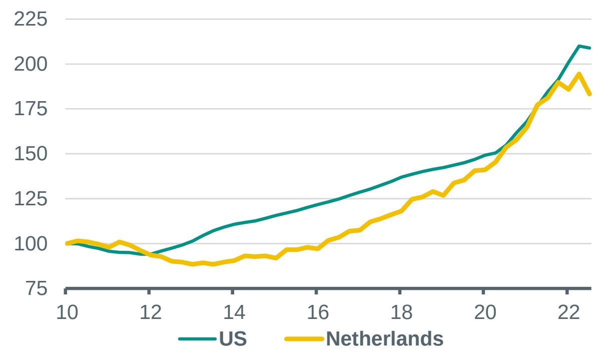
- **A potentially toxic cocktail for the housing market is emerging. Falling real incomes and fast rising interest rates are marking an abrupt end to the housing boom – aggravated by looming recessions**
- **Our base case is for a moderate correction, but house prices could ultimately drop by 20-30 percent**
- **The growth impact of deep housing market corrections would be strongest for the UK but milder in the eurozone and US. The drag on inflation would be biggest in the US**
- **Even if there is a major correction, strong financial buffers would prevent this from being systemic**
- **A notable exception is in China, with its mainly self-inflicted problems that are of a different nature**
- **Regional updates: Inflation looks to be peaking in *the eurozone*, while in *the Netherlands* we upgrade our growth forecasts modestly as the government steps up policy support**
- **Another month, another *UK prime minister*. The crisis is over, but the economic outlook is still bleak**
- **Pipeline inflationary pressures are cooling in *the US*, but inflation itself remains alarmingly high**
- ***China's* economy is not yet out of the woods, and Xi's third term means *no quick turn* on Zero Covid**

Global View: A major house price correction could be in the offing, just as economies fall into recession

The news flow on the macro front has been mixed over the past month. The good news is that a mild start to the autumn and ample LNG supplies have driven a sharp decline in European gas prices. Meanwhile, in the UK, a change in government alongside significant policy U-turns has averted what could have become a major crisis. The bad news is that, as we warned in our past two Monthly publications, a European recession is already 'baked in the cake', and this was confirmed by the flash PMIs from October, which showed a continued decline in business activity, while consumer confidence also declined further. Against this backdrop of high inflation, rising interest rates and a looming recession in advanced economies, vulnerabilities in our economic system can come to the surface. The housing market could be one such vulnerability. While our base case is that house prices will decline mildly on balance, the economic uncertainties are sufficiently large to analyse whether major price corrections could occur and what the implications for growth and inflation would be.

After a stunning run, house prices are correcting…

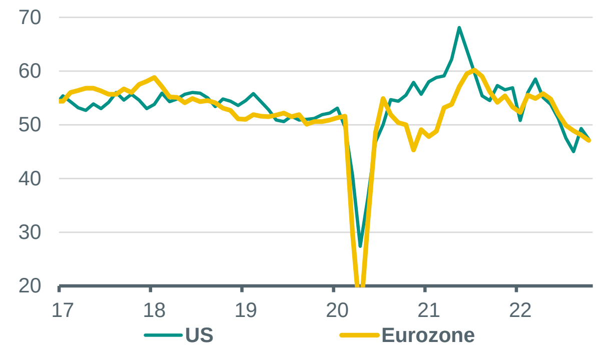
House price index; 100 = Q1 2010



Source: NVM, Bloomberg, ABN AMRO Group Economics

…just as advanced economies fall into recession

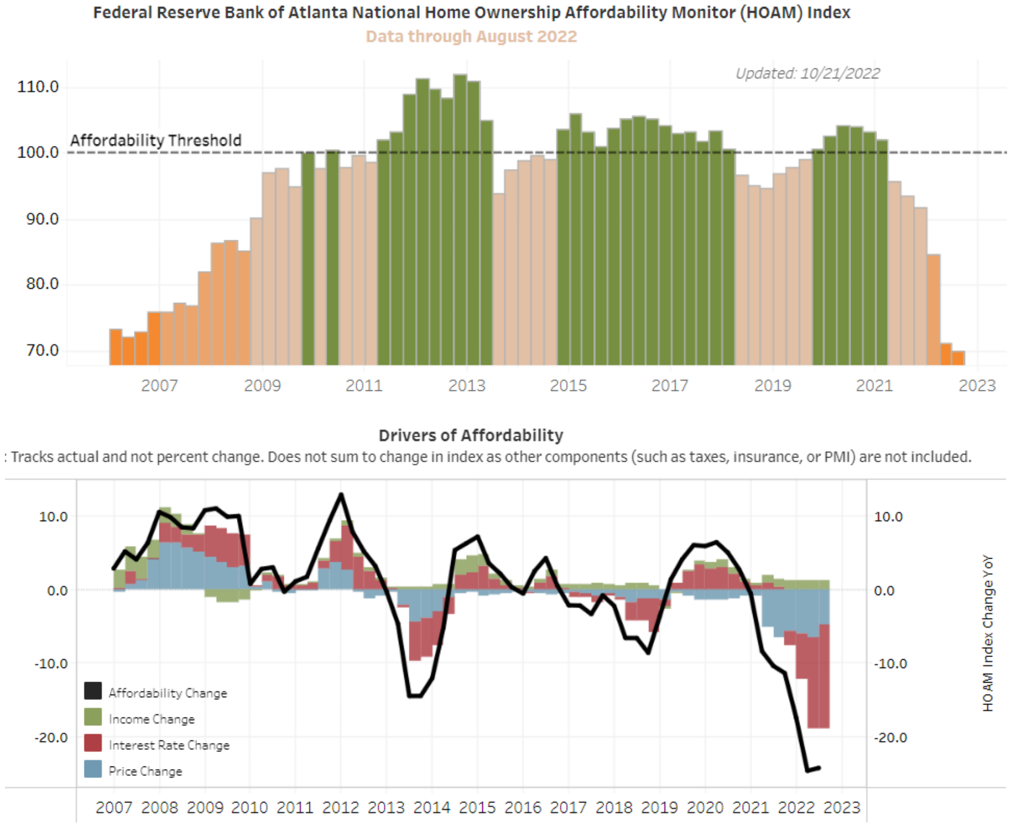
Composite PMI, index, >50 = expansion; <50 = contraction



Source: Refinitiv, ABN AMRO Group Economics

Unaffordable homes

Home ownership has become much less affordable for most developed economies, and this was the case even before interest rates started to rise. House prices boomed during the pandemic on the back of lower rates, excess savings and shifting preferences. At the same time, some housing markets have a structural supply shortage. With the war in the Ukraine, energy bills in Europe have soared, lifting inflation and also inflation expectations. This, in turn, led to fast rising interest rates and a tightening of financial conditions as central banks responded. The Atlanta Fed's Home Ownership Affordability Monitor illustrates this well for the US, and the picture is much the same on this side of the Atlantic.



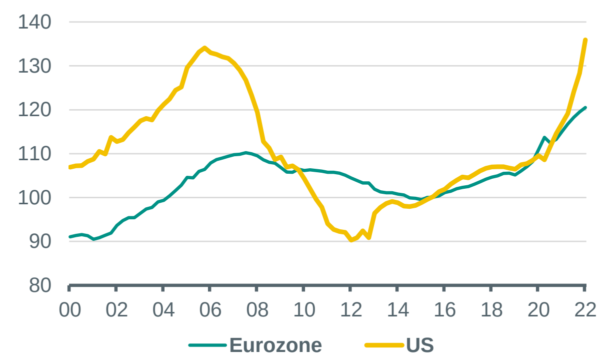
Source: Federal Reserve Bank of Atlanta

House price growth has significantly outpaced income growth

The rise in European house prices hovered between 4 and 4.5% yoy in each quarter of 2019, peaking at 9.8% in 2022 Q1. Particularly in Germany and in the Netherlands, house prices had already reached a level in the second half of 2021 at which affordability – and therefore purchases – were decreasing, even when mortgage rates were still low. Housing affordability – plotted below as the house price-to-income ratio – deteriorated sharply in both the eurozone and the US, but ratios are most out of line with historic averages in Germany and the Netherlands.

House prices have risen much faster than incomes…

House price to income ratio; index: 100 = 2015



Source: OECD, ABN AMRO Group Economics

…especially in Germany and the Netherlands

House price to income ratio, % vs long-term average (2000-2022)

Source: OECD, ABN AMRO Group Economics

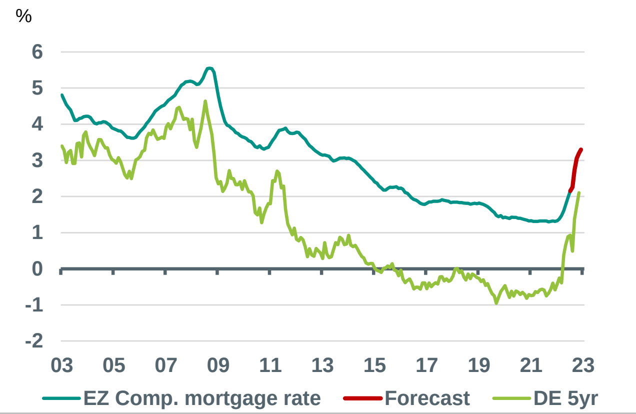
The inflation squeeze
Since the war started, housing affordability has deteriorated even further, as house prices continued rising while inflation eroded real incomes. Indeed, in most developed economies, income growth has failed to keep up with house price growth, reducing housing affordability and driving a fall in housing transactions, and subsequently in house prices.

Interest rate and mortgage rates
Interest rates rises, and subsequent mortgage interest rate rises, have clearly become another threat to housing affordability, as the Atlanta Fed indicator on the previous page shows. And interest rates are likely to rise even further, partly due to prior strength in the housing market, which continues to feed through to higher rents. September core inflation in the US, for instance, showed yet another increase in the housing related component of inflation (shelter). This happened against a backdrop of clear signals of cooling prices in other inflation categories due to the easing in global supply chain bottlenecks. The inflation rise since the post pandemic reopening in the US in the beginning of 2021 has already led to the Fed raising its policy rates 300 basis points this year, and we expect it to increase rates by another 125bp before year-end (see US chapter). Rising interest rates have also lifted mortgage interest rates, with the rate for 30-year US mortgages having doubled in a year's time to 6.9%.

In the eurozone, mortgage rates have risen for different reasons. The ECB has also raised its policy rates to fight inflation, albeit by a smaller magnitude than the Fed so far (125bp in rate hikes so far). However, broader market rates have also risen on the back of rises in US rates early this year, as well as higher risk premia stemming the energy crisis and increased recession risk.

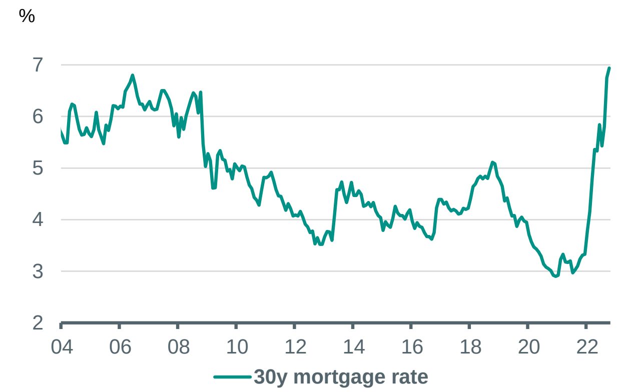
Looking forward, the downward impact of higher interest rates on the housing market has further to go. The ECB's composite cost of borrowing indicator for households for house purchase has increased from a record-low of 1.30% in September 2021 to 2.3% in August 2022. Changes in ECB policy rates and government bond yields since then, suggest that composite eurozone mortgage rates will rise to around 3.5-4.0% by the end of the year, which would bring the total rise to around 2 percentage points (see graph).

Eurozone composite mortgage rate



Source: Refinitiv, ABN AMRO Group Economics

US 30y mortgage rate



Source: Bloomberg, ABN AMRO Group Economics

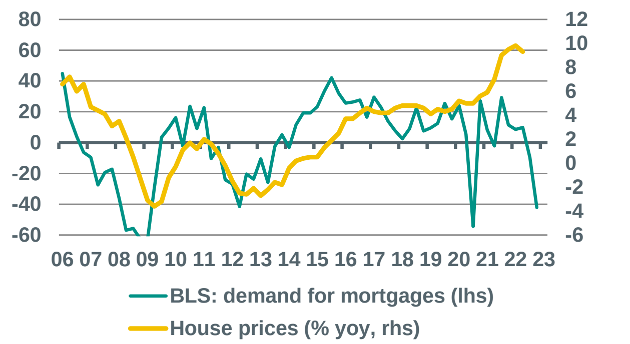
Income effects
However, there are also some factors that will support household disposable income. Although record-high inflation will at some point affect home owners' capacity to service their mortgage debt, strong labour markets and massive compensation schemes from governments are thus far limiting the fall in real incomes. This will support debt service capacity of households.

Mortgage demand drops ahead of price corrections

First time buyers and recent borrowers are most vulnerable to changes in mortgage interest rates. In the eurozone, the demand for mortgages – according to the ECB's Bank Lending Survey (BLS) – has been an a strongly declining path. Indeed, in the most recent BLS, 42% of banks reported a substantial drop in demand for housing loans, which was the biggest drop since the first quarter of 2012 (excluding the pandemic period). The rise in mortgage interest rates as well as a drop in consumer confidence were mentioned as key factors behind reduced demand for housing loans. This is a clear signal that rising borrowing costs have made housing less affordable to newcomers, which also have to deal with the recent rise in house prices. Meanwhile, refinancing of mortgages has naturally become unattractive as mortgage rates have surged. Changes in BLS mortgage demand tend to be a good leading indicator for turning points in the housing market, now pointing to significant price corrections.

Eurozone: House prices and demand for mortgages

percentage 'increase minus decrease' % yoy

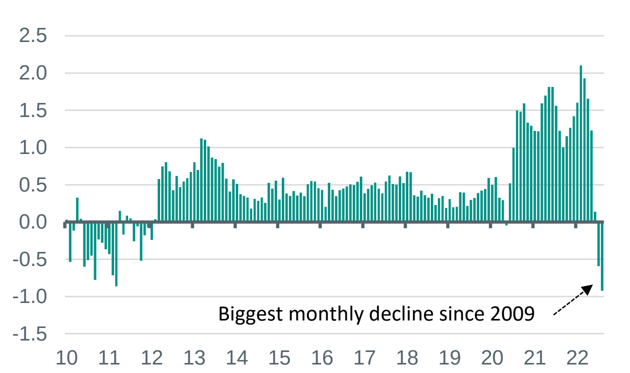


Source: Refinitiv, ABN AMRO Group Economics

Also in the US, mortgage demand excluding refinancing has dropped significantly, about 50 percent (y-o-y). On the other side of the Atlantic, house prices are already starting to correct on the back of lower demand and reduced borrowing capacity. In August, prices for new homes purchases fell 0.9% (m-o-m), the biggest monthly decline since 2009.

US house prices are beginning to correct…

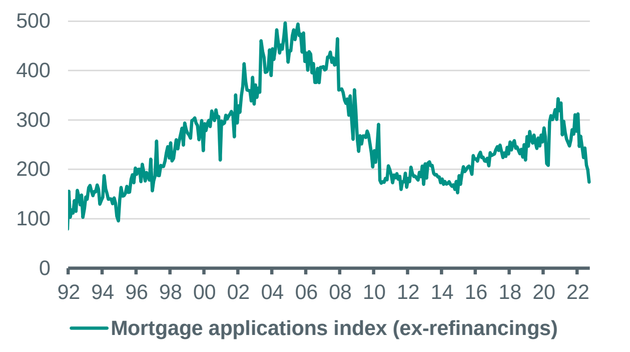
Average FHFA/S&P Case-Shiller house price growth, % mom sa



Source: Bloomberg, ABN AMRO Group Economics

…as mortgage applications drop sharply

MBA mortgage applications index



Source: Bloomberg, ABN AMRO Group Economics

Size of the potential drop

The increase in mortgage interest rates confronts home buyers with either higher monthly housing expenses, or a lower borrowing capacity. In the US, 30 year mortgages are now offered at 6.9%, more than twice as high as one year ago. This has reduced borrowing capacity by around one third. If we assume that no cushioning factors are in place that make up our base case scenario, a crude way to estimate the potential drop is to assume home buyers will keep their monthly expenses similar to the low rates era. This could imply a price correction of the magnitude of 25-30% in the US. This would almost take house prices back to pre-pandemic levels.

In the eurozone, a good way to estimate the size of the potential drop in house prices is to look at a model of the ECB. The ECB modelling outcomes suggest that housing dynamics in the eurozone are very sensitive to changes in mortgage rates.

Indeed, the ECB's model estimates that a 1 percentage point increase in mortgage interest rates from their historically low levels of the past few years, could result in a drop in house prices of around 9% after about two years. Given our expectation that mortgage interest rates will rise in total by around 2 percentage points by the end of the year, this would imply a drop of around 18 percent in house prices in the eurozone.

That being said, there are large differences between the various countries, due to local housing market regulation and tax regimes, while many countries suffer from a structural shortage of housing. These, but also other factors besides mortgage rates, also have a significant impact on house prices. For instance, there has been a notable shift in the preference of home owners during the pandemic towards larger houses. This shift will potentially cushion the blow. For these reasons, our base case is for a much milder correction in house prices than implied purely by the rise in mortgage rates, as explained at the end of this section.

Growth implications

Falling house prices lower growth via declining private consumption, wealth effects, as well as via consumer confidence. The latter is particularly impactful if home owners' loan-to-value ratio rises above 100 percent, i.e. they are faced with 'negative equity' (for the time being, average LTVs are relatively low in most countries). The impact on growth differs per jurisdiction and is mainly driven by borrowing levels and the distribution of fixed versus floating rate mortgage rates. For fixed-rate mortgages, the share of home owners with short-term contracts that end this year or next matter significantly for the aggregate effect on costs of living and consumption. The shorter the durations of fixed interest rate periods, the more home owners are exposed to rises in mortgage interest rates.

US impact: Mild

Macro prudential regulations since the global financial crisis have limited the build-up of household debt in the US. In 2021, household debt as a percentage of net disposable income was 101 percent in the US compared to 222 percent in the Netherlands. Also, most mortgages are typically fixed for 30 years, which acts as another layer of protection. Nonetheless, mortgage interest rate increases will still limit the purchasing power of new entrants to the housing market, and the resulting house price correction will still likely put downward pressure on consumption. In addition, home building is already seeing some impact from the downturn. Both of these factors will weigh on GDP growth over the coming quarters and are consistent with our expectations of a mild recession in the US.

UK impact: Severe

The growth implications of high mortgage rates and a more significant price correction will be much bigger in the UK than in the US. UK households are highly exposed to rising interest rates, given that mortgages in the UK are typically only fixed at relatively short time horizons. 25% of mortgages are immediately exposed as they are on variable rates, while half of the remaining mortgages on a fixed rate are due to expire in the next two years. Household debt as a percentage of net disposable income was at 148% in 2021, which is in between the US and the Netherlands. Given the political and economic turmoil in the UK, the sensitivity of a hit to real incomes from higher mortgage interest payments on top of existing hits from inflation and weak confidence, is one of the key reasons we expect a deeper recession in the UK. In the event of a major correction in the housing market, negative wealth effects would amplify the hit to real incomes, which leading to a greater loss of consumer confidence, which in turn would deepen the recession.

EU impact: Moderate

In the EU, the growth impact is likely to be more moderate, although northern European economies look much more exposed to a major house price correction than southern European economies. In Sweden, Denmark and the Netherlands, household debt is between 220-250% of net disposable income. In the Netherlands, the high debt-to-income is counterbalanced by an equally exceptionally high savings-to-income ratio from pension savings. That said, there is a risk that wealth effects from a steep house price correction will cause significant falls in consumption. This phenomena was seen in the aftermath of the financial crisis when wealth effects from house price declines tipped the Dutch economy into a double dip recession. Since then, regulatory changes have limited this risk, while Dutch households also tend to have very long fixed-rate mortgages, with many households having locked in low rates in previous years. For this reason, and as we elaborate on later, a major price correction is not our base case in the Netherlands.

In contrast, Sweden may be a notable exception to the moderate growth impact of a house price decline in the EU. 60% of Swedish mortgage owners have variable interest rates, on top of high debt levels, making the economy highly sensitive to a major house price correction. Finally, mortgage rates in many European economies are rising fast, but that rise is likely coming to an end. Looking ahead, we expect interest rates to peak around the end of this year, as recessions start to bite. Mortgage interest rates could increase a bit further, but are likely to fall back somewhat in 2023, in line with the expected move in government bond yields.

Inflation implications

The direct impact of a major house price correction on inflation depends significantly on the relative weightings of housing rents in the inflation index. Housing rents here are defined as 1) actual housing rents faced by those renting accommodation; 2) owner's equivalent rent (OER), which is an estimate of the foregone income a homeowner would receive from renting out their home. In the US, OER is included in the CPI, and as a result housing has a much higher share in the CPI than it does in the UK and the eurozone (in the Netherlands specifically, the CPI measure also includes OER, but not the HICP measure). Both the ECB and the statistics office in the UK have been working on new measurement instrument to take the owner-equivalent rent into account. Their first estimates show however that including owner-occupied housing costs are not creating huge differences in inflation.

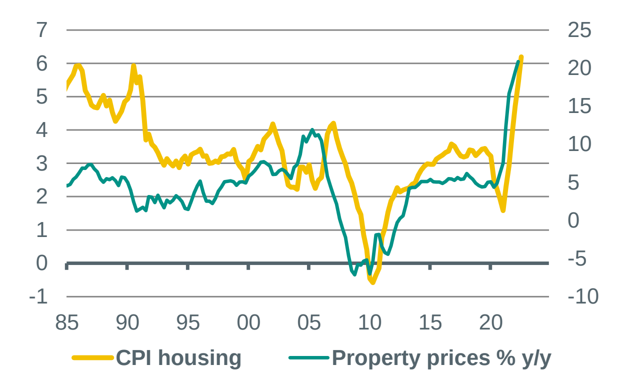
On both sides of the Atlantic, rental inflation is a relatively slow-moving and lagging component of inflation, and institutional differences between countries (eg. rent controls) affect the correlation between house price changes and the housing rents component of the CPI.

US: Large impact

In the US, where shelter makes up one third of the CPI, a downward correction in house prices would have a significant dampening effect on inflation. Rental inflation is lagging in the US (as in Europe), but unlike Europe, high rental inflation has been a much bigger contributor to the current high inflation rate (adding 2.2pp as of September). As such, a house price decline should eventually put considerable downward pressure on US CPI inflation.

US: Housing rents follow prices, with a lag

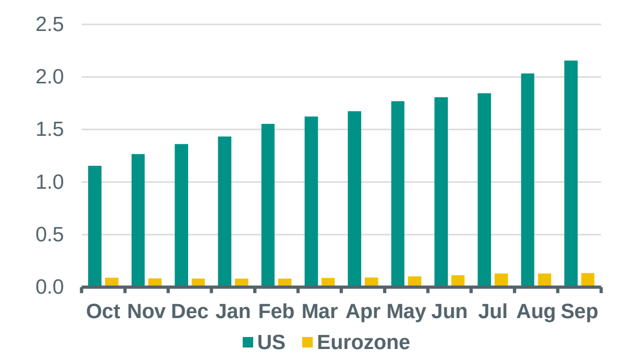
Average FHFA/S&P Case-Shiller house price growth, % mom sa



Source: Bloomberg, ABN AMRO Group Economics

Housing a much bigger inflation contributor in the US

Percentage point contributions of housing rents to inflation, y/y

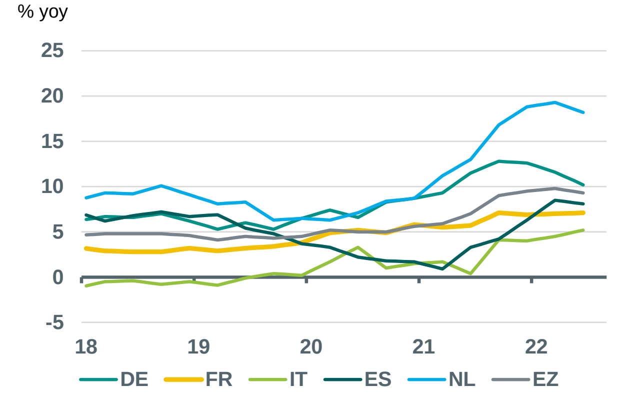


Source: Bloomberg, ABN AMRO Group Economics

Eurozone: Mild impact

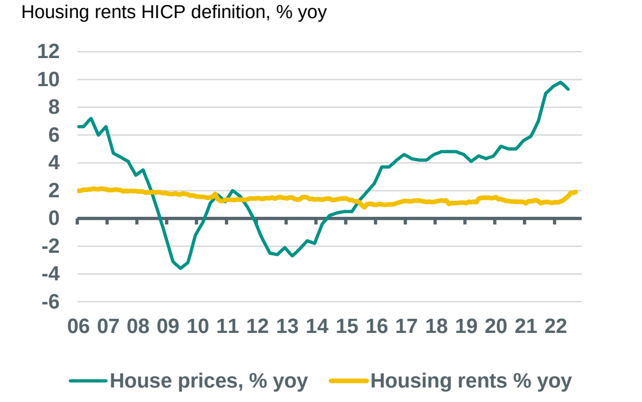
In Europe as a whole, housing rents are only about a tenth of the consumer price index. As such, a correction would only have a mild impact on inflation. Indeed, the link between house prices and housing rents according to the HICP definition is very weak in the eurozone (see figures below). The rise in housing rents (with a weight of 7.1% in the total HICP index) has increased from a low point of 1.1% in December 2021, to 1.8% in September 2022. However, the contribution of housing rents to total eurozone inflation was only 0.1pp in September. In the Netherlands specifically, the contribution is similarly small in the HICP measure, but bigger in the domestic CPI measure, where housing rents make up 23% of total inflation due to the inclusion of owners equivalent rent.

Eurozone house price growth is peaking…



Source: Refinitiv, ABN AMRO Group Economics

…but the impact on inflation will likely be limited



Source: Refinitiv, ABN AMRO Group Economics

Box: Inclusion of owner-occupied housing costs in eurozone HICP inflation is a long way off

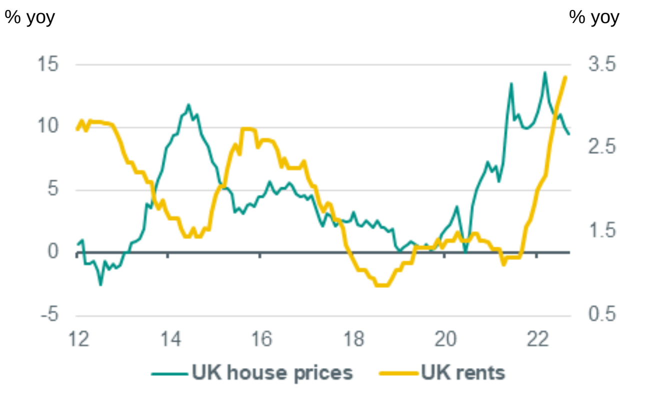
During its strategy review of 2020, the ECB decided to work towards including the costs of owner-occupied housing (OOH) into HICP inflation in future. The central bank has published a four-staged roadmap for this. The third stage should be completed by 2026, and no precise time-table is provided for the final stage, implying this could be at least around five years from now. The ECB has opted for a owner-occupied housing price index (OOHPI) according to the 'net acquisition' approach, which covers transactions between households and other sectors of the economy, implying that transactions between households will be excluded. Also buy-to-let purchases will be disregarded. ECB research from early 2022 shows that, in general OOHPI tends to be less volatile than house prices. The ECB's calculations show that over the last ten years, (ending mid-2021), the euro area HICP combined with the OOHPI has resulted in inflation rates that do not differ greatly from those of the HICP without OOH-related costs. Since 2011, the largest difference observed was 0.3 percentage points. Still, the results will have to be re-evaluated and should become more accurate when longer time series with official monthly OOHPI data become available.

UK: Mild impact

Housing rents follow house price rises in the UK with a 12-18 month lag, but changes in rental inflation are historically much smaller in magnitude than those for house price inflation (both on the upside and the downside). In addition, the share of rents in the CPI is only around 9 percent (compared to 1/3 in the US). As such, rental inflation currently contributes just 0.36pp to CPI inflation, which in total is currently running at 9.9 percent.

The statistics office in the UK (ONS) has developed a new CPI measure (CPIH) which does include an estimate of owner-occupied housing costs. This is currently running considerably lower than broader CPI inflation due to the relatively smaller weight of energy and goods – which are responsible for the bulk of currently elevated inflation. The BoE's target is in any case still the CPI, not the CPIH.

UK: House prices follow rents, with a long lag



Source: Refinitiv, ABN AMRO Group Economics

UK: CPIH inflation is running lower than CPI inflation

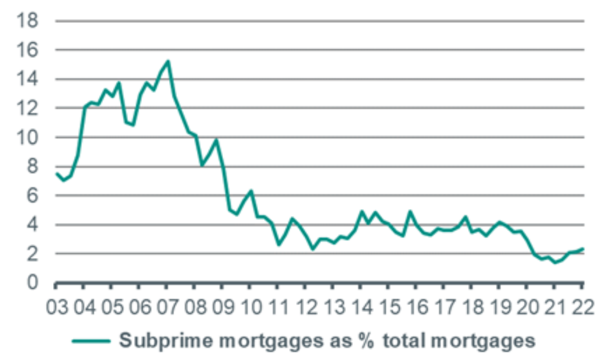
Source: Refinitiv, ABN AMRO Group Economics

5 reasons for our base case: A *mild* house price correction with modest macro effects

The sharp rise in interest rates has taken its toll on housing markets globally, triggering inevitable comparisons with the Great Financial Crisis. Then, house prices dropped by 10% on average globally, but by more than 20% in many advanced economies. We judge that both the price correction as well as the implications for growth and inflation will be more moderate this time, for at least five reasons:

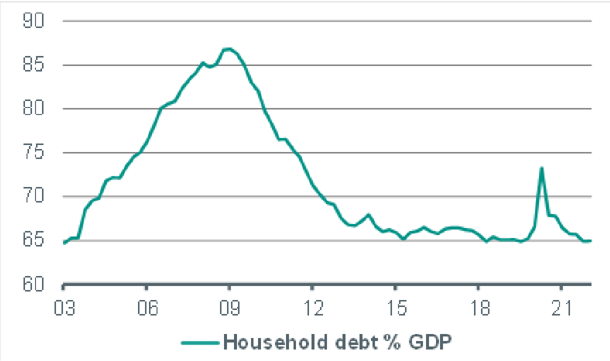
- First, mortgage interest rate increases are rising fast, but that rise is likely coming to an end. Looking ahead, we expect interest rates to peak around the end of this year, as recessions start to bite. Mortgage interest rates could increase a bit further, but are likely to fall back somewhat in 2023, in line with the expected move in government bond yields.
- A second related factor is that households are shielded from rising mortgage rates if their contracts have long durations. Particularly in the US, the vast majority of households – 79% as of Q2 22 – still have very long-term fixed rates (>15 years). As of Q2, around 2/3rd of households have mortgage rates below 4%. Also in the Netherlands, the average fixed-interest period of Dutch households mortgage loans was more than 15yrs at the end of 2021.
- The strong increase in value during the pandemic is partly due to a shift in **housing preferences**. This is particularly true for regions where people started working from home more frequently. The demand for house and outdoor space increased the most there. According to research, as much as half of the **price increase** in the United States can be attributed to the shift to working from home. This apparent hunger for space should limit house price falls.
- Fourth, there is a structural housing shortage in many developed economies. This shortage means that if prices start to fall, 'hidden' demand will come more to the fore, as housing becomes a little more affordable. Furthermore, higher construction costs and supply-side constraints limit the degree to which new housing can ease shortages.
- A fifth counterweight is tight labour markets in combination with low unemployment, and other factors supporting incomes such as government support and energy saving initiatives. Governments have spent roughly 3-5% of GDP to compensate households and firms, and early evidence shows that households and firms are significantly reducing energy use by either behavioural changes or investments in insulation and renewable energy sources. Higher income households still have large excess savings to finance these investments, and most governments are already (or gearing up) additional support for lower income households.

US: Subprime mortgages



Source: Refinitiv, ABN AMRO Group Economics

US: Household debt



Source: Refinitiv, ABN AMRO Group Economics

Finally, even *if* a major price correction would occur, systemic risks from such a correction to the overall economy are much less than during the financial crisis. Macro prudential tools such as loan-to-value and loan-to-income ratios – and more prudent mortgage lending criteria more generally – have made households financially more resilient to shocks to the housing market. For the US, this is for example visible in the quality of mortgage credit that is now much higher than in the past, with a far lower % of subprime borrowers (see graph below). Also, capital buffers at financial institutions are stronger, and household debt to GDP is much lower than before the 2008 financial crisis. Indeed, the Bank of England's latest stress test showed that UK lenders are able to absorb a 33% in house prices together with a rise in unemployment from 3.5 to 12 percent. Also in the Netherlands, the Dutch Central Banks stress test of households during the energy crisis shows only a 0.04 percent to 0.27 percent increase in mortgage defaults.

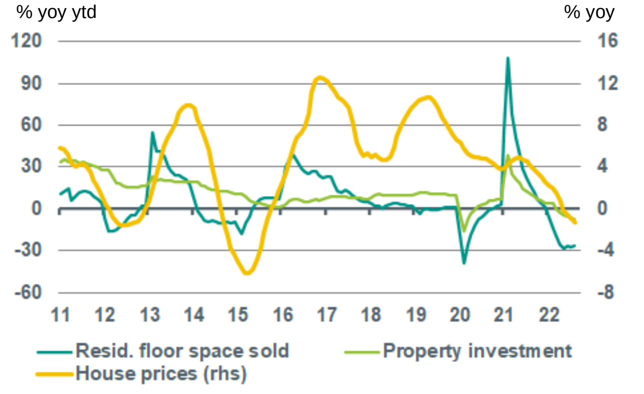
Nevertheless, while the system seems more financially resilient now than before 2009, inflation in combination with rising rates is causing financial vulnerabilities in many other parts of the household budget, such as the rising energy bill. A cost that is highly intertwined with affordability of housing.

Taking all of this together, we expect house prices to show a downward correction of some percentage points, something that has already started to happen across the globe. What is more, the fast correction we are recently witnessing in some countries probably reflects that sellers are currently more willing to accept a lower price. This is due to their price expectations (even lower prices in coming months) and the fact that some home owners might fear that their properties will even be in negative equity in a few months' time. But the extreme price rises since the pandemic (Q2 2022 versus Q4 2019) – 39,7 percent in the Netherlands, 45,3 precent in the US and 23,6 percent in the UK – also imply that most sellers still sell their home with a profits, increasing acceptance of a lower prices. Once the fast, but limited, correction has happened, we expect that hidden demand will come forward as affordability increases. (Sandra Phlippen, Bill Diviney, Aline Schuiling, Arjen van Dijkhuizen, Philip Bokeloh, Joost Beaumont)

Box: China's real estate slump – Self-inflicted, but not driven by monetary tightening and higher rates

- Whereas the main theme of this month's global outlook is the current impact of rising mortgage rates, a slowing economy and falling confidence on developed economies' housing markets, China has already undergone a serious property downturn for more than a year now. This downturn is to a large extent 'self-inflicted' and not triggered by a tightening of monetary policy and rising rates, but by tighter macroprudential policies – and aggravated by ongoing strict Covid-19 policies.
- In the summer of 2020, Beijing sharply tightened the financing restrictions for property developers, according to the so-called 'three red lines-policy' (introducing limits on debt to cash, debt to equity and debt to assets). With that policy, Beijing tried to cut leverage in the property sector, which had grown to outsized proportions and was the main driver of overall leverage in the Chinese economy. Other real-estate related regulation was also tightened, as the government tried to contain a rise in house prices following China's sharp recovery from the initial Covid-19 shock in early 2020.
- The crisis intensified in the summer of 2021, after the second-largest property developer Evergrande ran into payment difficulties. As banks and domestic and foreign investors became even more cautious, and housing demand was hit by strict Covid-19 policy and rolling lockdowns, more and more developers ran into liquidity problems and debt repayment distress. All of this affected construction activity, while many construction projects could not be finished. With prepayments being typical in China's mortgage lending practices, this resulted in a mortgage boycott in mid-2022.
- All of this went hand in hand with a sharp drop in consumer confidence, slowing land sales, a correction in house prices and a slump in property investment and housing sales. As housing-related activity in the broadest definition is – to varying degrees – linked with sectors covering around 25% of GDP, the property slump became a serious drag to Chinese growth. Hence, the goal of stabilising the sector has moved up Beijing's priority list over the past half year. The policy response was initially cautious, as the government still wants to keep overall leverage under control and is wary to create moral hazard. That said, measures have been stepped up over time: the PBoC cut mortgage benchmark rates more than other policy rates, fiscal funds have been allocated to support healthy property developers and local governments have been granted more room to support real estate at the local level.
- Going forward, we expect further targeted policy measures to stabilise the property sector, although the stabilisation efforts will likely be hindered to the extent that 'Covid-Zero' will remain in place. We do not see a rapid turn on this front, although authorities may adopt a more pragmatic approach in the course of 2023 – particularly if progress is made with vaccinating the elderly (see the China Spotlight for more background).
- Meanwhile, this property crisis has not only constrained China's rebound from the lockdown slump that occurred in March/April, but has also led – ceteris paribus – to downward pressure in many (particularly non-energy) commodity markets in the course of this year. Although some commodity exporters will have been hurt by this, it has also helped to dampen some of the cost-push price factors driving global inflation – to some extent 'a silver lining' of China's property crisis.

China's property downturn



Source: ABN AMRO Group Economics, Bloomberg, Refinitiv

Eurozone: Inflation is probably peaking

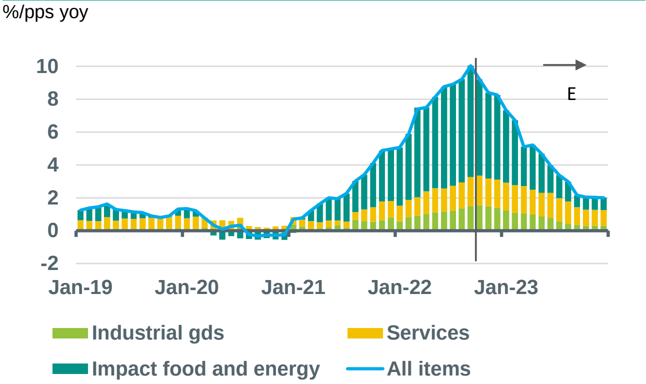
Aline Schuiling – Senior Economist | aline.schuiling@nl.abnamro.com

- **Eurozone inflation almost reached double digit numbers in September, but is likely to be peaking and should decline in the coming months**
- **The ECB has stepped up the pace of rate hikes. We expect another 75bp hike in October, followed by a 50bp step in December**

Eurozone inflation increased to a new record high in September, climbing to 9.9% yoy, up from 9.1% in August. Core inflation rose by 0.5 percentage points (pps) to 4.8%. The breakdown of the main components shows that energy and food price inflation increased the most between August and September (energy by 2.1pps to 40.7% and food by 1.2pps to 13.6%). The contribution of the two individual components to total inflation remained also the highest (4.3pps for energy and 2.3pps for food in September). Still, seasonally adjusted data from the ECB revealed that services price inflation staged its highest monthly increase (+0.9% mom in September) since the start of the series in 1996. This jump in services inflation was concentrated in transport services, which jumped higher due to the abolition of the temporary ultra-cheap public transportation tickets in Germany that were introduced in June and lasted until end-August. That said, services inflation is also being lifted by pass-through of past rises in food and energy price inflation into goods and services (e.g. transport by air is around 30% more expensive than a year ago, and by sea 11% higher; restaurants and hotels are about 8.5% more expensive). This pass-through of food and energy prices to industrial goods and services tends to be sluggish and will continue for a while after food and energy price inflation has peaked and starts falling. Nevertheless, the recent drop in food and energy commodity prices (including the drop in natural gas prices) should result in a noticeable decline in headline inflation in the coming months.

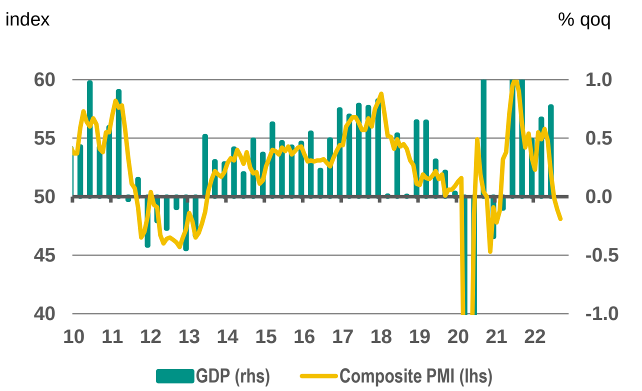
Besides the pass-through of high food and energy price inflation into core inflation, we do not expect a significant rise in longer-term underlying inflationary pressures, as the eurozone economy has moved into recession and labour market conditions should deteriorate towards the end of the year. Besides the hit to household disposable income and corporate profitability from high energy bills, the economy will be hit by tightening financial conditions and a slowdown in world trade on the back of aggressive central bank rate hikes. Looking ahead, we expect GDP to contract modestly in 2022Q3 and more sharply in 2022Q4 and 2023Q1.

EZ inflation and contribution of main components



Source: Refinitiv, ABN AMRO Group Economics

EZ economy has entered a recession



Source: Refinitiv, ABN AMRO Group Economics

The ECB raised its key policy rates by 75bp at its September meeting. We expect another 75bp hike in October, which is already fully priced in by financial markets. Subsequently, we expect a 50bp step in December. The policy rate then settles at 2% through 2023, as the economic slowdown and decline in inflation should convince the central bank that rates can stay on hold after the aggressive hikes of 2022. However, based on communication by ECB officials, the risks look skewed towards some further modest rate hikes in the first months of next year.

The Netherlands: Minor 2023 growth upgrade due to gas price cap

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- **2023 growth upgraded from 0.5% to 0.7% due to the Prinsjesdag-package and the gas price cap**
- **Weak activity data and lower demand fit our view of significantly lower growth in the coming quarters**

As signalled since the start of this year, we expect the Dutch economy to slow by the end of 2022, ultimately leading to a small contraction in Q4. Supportive of this view, we saw the first cracks appearing at the end of Q3 in the form of slower economic activity and faltering demand. The slowdown is being driven by a more rapid deterioration in the external environment compared to the domestic economy, where demand is also slowing but less profoundly. For the first time in two years the headline NEVI manufacturing PMI points towards a contraction in business activity. So far, the ability of industry to keep production broadly stable, while sharply reducing gas consumption, has been remarkable. However, weaker demand is now weighing on the outlook. Headwinds in part coming from the energy crisis may have already tipped the eurozone into a recession in Q3, which is visible in demand for Dutch goods. New (export) orders contracted sharply, and this drove the headline deterioration of the PMI. Two bright spots included: 1) current orderbooks still suggesting an increase in backlogs, which buffers the slowdown, and 2) the share of firms reporting shortages of materials which limit production is decreasing on the back of globally easing supply bottlenecks.

On the domestic front, with each passing month, more households are exposed to higher energy prices which is weighing on private consumption. Our anonymised transaction data shows a slowdown in private spending over Q3, with consumption outright contracting year-over-year in September. This picture is echoed by declines in retail and – to a lesser extent – services confidence indices. Details of the government's energy price ceiling have come out. It is estimated to cost another EUR20 bn on top of the earlier announced package of EUR17 bn. The generic support coming from the price ceiling as well as the fact that the package is redistributive, means that purchasing power for the lowest income households will actually *improve* over 2022-3. As such, we expect a smaller overall hit to consumption next year than we did previously. On the back of these measure we have lifted our growth forecasts for 2023 by 0.2pp: from 0.5% to 0.7%. For 2022 we continue to expect 4.6% growth.

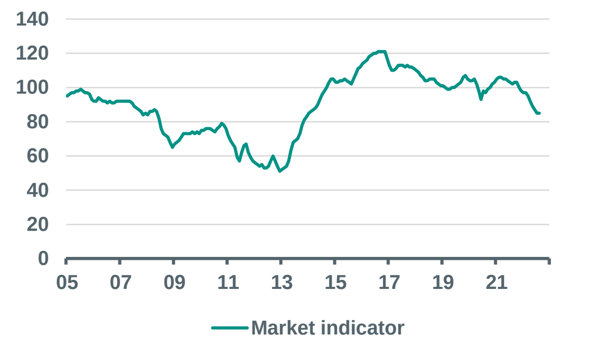
New export orders signal deterioration of demand

Nevi PMI, index (50 = neutral mark)

Source: Refinitiv, ABN AMRO Group Economics

Less confidence in the housing market

Index (100 = neutral)



Source: Vereniging Eigen Huis, ABN AMRO Group Economics

Energy is not the only headwind that the economy is facing. Higher interest rates are also lead to a much needed cooling in the Dutch housing market. After double-digit price rises in the past two years, recent figures show declining prices in Q3. We expect this correction to continue in the coming quarters, which means that we have adjusted our yearly house price forecasts to +14% in 2022 and -2.5% in 2023 (previously +15% and +2.5% respectively). In the past, house price corrections have constrained consumption due to the decreased wealth effect, as households are forced to deleverage instead of consume. Our current take is that this outlook means house prices will be less supportive of consumption going forward; the negative effects on consumption are present only for the small share that faces negative equity problems. The strong price rises in recent years limits the share of households that are likely to face these problems. Recent buyers – often first time buyers with high LTV-ratios – will bear the brunt, but their share from a macroeconomic perspective is limited. The downside hit to consumption would naturally be bigger should the drop in house prices turn out to be larger.

US: Pipeline pressures are cooling, but inflation itself is still hot

Bill Diviney – Senior Economist | bill.diviney@nl.abnamro.com

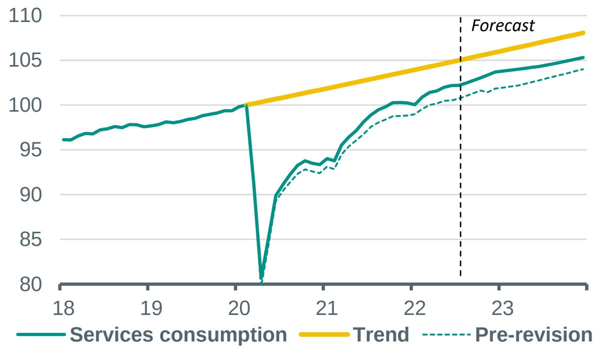
- **GDP revisions show that the Covid recession was shallower, and the recovery stronger than initially estimated. This suggests less room for further recovery than we thought**
- **Labour market data points to softening demand. Other pipeline inflationary pressures are also easing. However, core inflation is likely to remain alarmingly high for the next few months**
- **The Fed will continue raising rates aggressively, with near-term rate risks tilted to the upside**

The Bureau of Economic Analysis made significant revisions to GDP data on 29 September, which showed that the Covid recession was shallower – and the recovery stronger – than initially thought: 2020 GDP growth was revised up to -2.8% from -3.4%, and 2021 to 5.9% from 5.7%. In particular, services consumption is now estimated to have a significantly smaller gap with trend of 2.7pp as of August, compared to 4.2pp previously. While positive news from a backward-looking perspective, there is one important negative implication for the future: the room for growth in the services sector now looks a lot less than it used to. As a result, while the revisions would ordinarily have led us to raise our GDP forecast, we keep our 2022 growth forecast unchanged at 1.7%, and downgrade our 2023 expectation to 0.7% from 1.0% previously. In quarterly terms, the data flow suggests Q3 GDP rebounded from the contractions seen in the first half of the year – we expect growth of 1.8% annualised compared with the Atlanta Fed *GDPNow* tracker estimate of 2.9%. We then look for a renewed decline in output in Q4 as falling goods consumption offsets an increasingly tepid services recovery. All in all, we continue to expect a mild recession next year, with an expected 1.5pp rise in the unemployment rate likely to meet the NBER definition of a downturn.

As well as showing stronger services consumption, the GDP revisions also suggest durable goods consumption was running even hotter than thought – at around 16% above trend in 2021 compared with 14% previously. This helps to further explain the surge in goods inflation in 2021. By the same turn, the significant cooling in goods consumption in 2022 is now helping to drive down goods inflation, which has increasingly taken a back seat to firming services inflation over the past few months. Declines in wholesale used car prices, the strong dollar, and an easing in a range of supply-side bottlenecks is likely to lead to a further normalisation in goods inflation over the coming months – and perhaps even outright goods *deflation*. Outside of goods, other pipeline inflationary pressures are also easing. In particular, the labour market now looks to be cooling, with job vacancies falling by a massive 1.1mn in August – the biggest decline in a single month outside of the depths of the pandemic in April 2020. While jobs growth remains solid for the time being, we expect rising unemployment combined with falling job vacancies to drive a sharp decline in the job vacancy ratio over the coming year.

Post-lockdown recovery stronger than initially thought

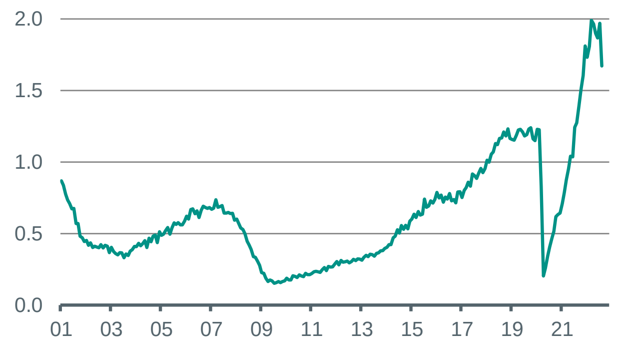
Index; Feb 2020 = 100



Source: Refinitiv, ABN AMRO Group Economics

Labour demand looks to be softening

Job vacancies per unemployed person



Source: Refinitiv, ABN AMRO Group Economics

Despite the broad easing in pipeline inflationary pressure, inflation itself has continued to surprise to the upside, with services price growth hitting a new 40 year high in September. Core inflation is expected to remain alarmingly high over the coming months, with shelter inflation likely to accelerate further in the near term. While our base case is for headline inflation to fall sharply in early 2023, red-hot services inflation suggests upside risks to our near term forecast for Fed rate hikes. We think the Fed will be confident it has done enough to tighten monetary policy by the end of the year, when the fed funds rate is expected to reach 4.25-4.50%. But it will very much depend on the data.

UK: Political chaos to the rescue

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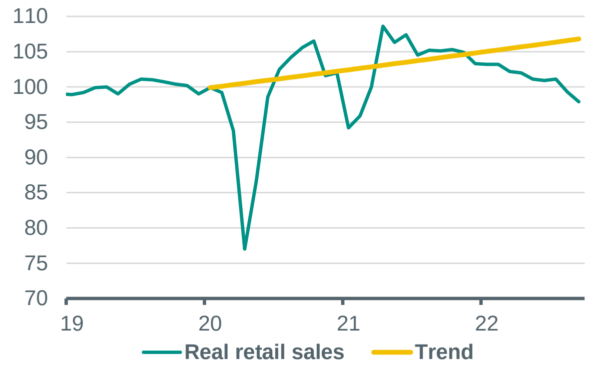
- **Despite the political chaos, the news flow has been largely positive from a policy point of view**
- **Most mini-budget measures have been scrapped, with the incoming PM likely to be fiscally hawkish**
- **The outlook for the economy is still bleak, but a crisis at least looks to have been averted**

What started as a financial and economic crisis with the announcement of the infamous 'mini budget' on 23 September, has since morphed into a political crisis – one that could ultimately trigger a historic split in the UK's oldest ruling Conservative party. Following a brief leadership campaign, former chancellor Rishi Sunak has been chosen as the successor to the disastrous Liz Truss premiership. However, the damage the chaos of the past month has done to the Conservatives has been catastrophic – the latest People Polling survey put the party on 14%, its lowest rating in UK polling history. In the past, popularity of the party has prevented divisions from driving a split. With that popularity gone, there is little keeping the various factions together. A split could mean early elections in the UK (the next election is at the ruling party's discretion, but must take place by January 2025). This would probably deliver a Labour government with a massive majority.

The silver lining to the political chaos is that the worst of the crisis in financial markets – and therefore the risks to the economy – now looks to be behind us. The new government is likely to be as focused on fiscal discipline as the present Chancellor Jeremy Hunt, if not more so. No government will want to risk a rerun of the financial market turmoil following the mini-budget, as the disastrous economic impact of another surge in mortgage rates would be political suicide. This is not to say, however, that things will be easy. The new government will have tough choices to make over tax and spend plans given the higher risk premium on UK government bonds – which has put a large hole in UK government finances. We estimate that, after accounting for the policy U-turns of the past few weeks, the government needs to find another GBP20bn in tax rises or spending cuts. We think this will take the form of a temporary link of working age benefits to wage growth rather than inflation – meaning a real-terms cut to benefits – alongside a curtailment in public investment. Such measures will be controversial, and mean an even bigger hit to people's real incomes, implying a deeper recession than we expect. We will therefore be updating our forecasts when there is greater clarity over the new government's fiscal plans. The updated plans were due to be announced on 31 October, but the formation of the new government has delayed this to 17 November.

The consumption picture looks dreadful

Index, 2019 = 100



Source: Refinitiv, ABN AMRO Group Economics

Consumer confidence has fallen to an all-time low

GfK consumer confidence index

Source: Refinitiv, ABN AMRO Group Economics

While the policy environment is in turmoil, the economy has continued to weaken. Retail sales fell sharply again in September, with sales now running 9% below the pre-pandemic trend. This shortfall is much bigger than that seen in the second national Covid lockdown of early 2021 (3%). Consumer confidence also fell to a new all-time (40 year) low of -49, as the surge in mortgage rates following the mini-budget further dampened income expectations. Combined with the tightening in fiscal policy now on the horizon, the Bank of England is now unlikely to follow through on market expectations for Bank Rate to rise to over 5% next year. Indeed, following the policy U-turns, market expectations have already been dialled back by around 60bp, with Bank Rate previously expected to peak at close to 6% by September 2023. We expect this repricing to continue, as more MPC members join Ben Broadbent in his attempts last week to steer a pullback in expectations. In the near-term we expect the MPC to hike rates aggressively, with a 75bp hike expected on 3 November, and Bank Rate to peak at 4% in early 2023. However, the risks to this view – previously to the upside – have become markedly more balanced.

China: Not out of the woods yet, despite sharp Q3 rebound

Arjen van Dijkhuizen – Senior Economist | arjen.van.dijkhuizen@nl.abnamro.com

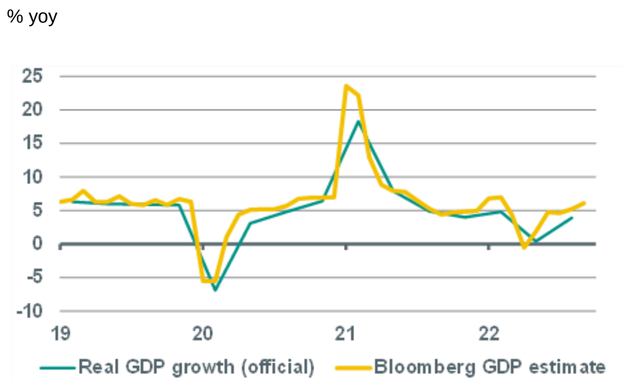
- **Real GDP shows a sharp rebound from lockdown slump in Q2, in line with our expectations**
- **September data show this recovery is supply-driven, with 'Zero-Covid' constraining consumption**
- **With headwinds remaining, we cut our growth forecasts for 2022 and 2023 to 3.5% and 5.2%**

On Monday 24 October, China published its Q3 GDP data and September activity data, almost one week later than initially scheduled. Although the publication delay added to market concerns, GDP data came in stronger than expected. Meanwhile, the September activity data make clear that the economic rebound from the slump in Q2 is still driven by the supply side, while headwinds from strict Covid-19 policy, the property downturn and a slowdown in global growth remain. Meanwhile, moves on FX and equity markets suggest investors do not judge the outcome of the CCP summit (also see Spotlight) as particularly market friendly.

Sharp GDP rebound in Q3 does not mean the Chinese economy is out of the woods yet

Real GDP growth accelerated to 3.9% yoy in Q3 (Q2-22: +0.4%), which was better than market expectations (3.3%) but closer to our own forecast of 3.6%. Quarterly growth came in at 3.9% qoq, while the contraction in Q2 was revised slightly, to -2.7% qoq (from -2.6%). The sharp rebound in GDP growth did not come as a surprise to us, as this mainly reflects payback from the slump in Q2 (with its nadir in April), when the Omicron wave caused broad lockdowns including in megacities such as Shanghai, Beijing and Shenzhen. Moreover, the rebound also reflects the impact of support measures in the form of piecemeal monetary easing, targeted fiscal support and a relaxation of macroprudential measures including for real estate. Bloomberg's monthly GDP estimate rose to 6.1% yoy, the highest reading since February. Meanwhile, despite the better than expected Q3 GDP numbers, the CNY (versus USD) and the Chinese stock market traded lower initially, suggesting that financial markets do not judge the outcome of the CCP summit as very market friendly. As we do not expect a quick turnaround in Covid-19 policy following the summit, and with the property sector still in the doldrums and global growth coming down sharply, we have lowered our growth forecasts for 2022 (to 3.5%, from 3.7%) and 2023 (to 5.2% from, 5.6%).

Real GDP shows sharp rebound from Q2 lockdown slump



Source: Bloomberg

'Covid-Zero' keeps constraining consumption

Source: Bloomberg

September data show rebound is driven by supply side, as 'Zero-Covid' keeps constraining consumption

The September activity data once more illustrates that the Q3 rebound from the Q2 slump is driven by the supply side, as Beijing prioritised normalising production and transport over supporting consumption. Industrial production came in much stronger than market expectations, at 6.3% yoy (August: 4.2%, consensus: 4.8%). Fixed investment growth accelerated slightly, to 5.9% yoy ytd (Jan-August: 5.8%, consensus: 6.0%). This acceleration was driven by infrastructure investment, while the property investment slump deepened even further. Retail sales growth slowed significantly compared to last month and came in weaker than expected, at 2.5% yoy (August: 5.4%, consensus: 3.0%), with residential property sales still down almost 30% yoy. All this confirms that pandemic flare-ups and strict Covid-19 policy continue to leave their mark on consumption. While foreign trade data point to a further slowing of export growth in line with the cooling of global demand, import growth is even weaker reflecting the state of domestic demand. Meanwhile, the unemployment rate picked up again, to 5.5% (August: 5.3%, consensus: 5.2%), with youth unemployment still at a very high 17.9%.

Spotlight: No quick turn in 'Zero-Covid' as Xi's third term arrives

Arjen van Dijkhuizen – Senior Economist | arjen.van.dijkhuizen@nl.abnamro.com

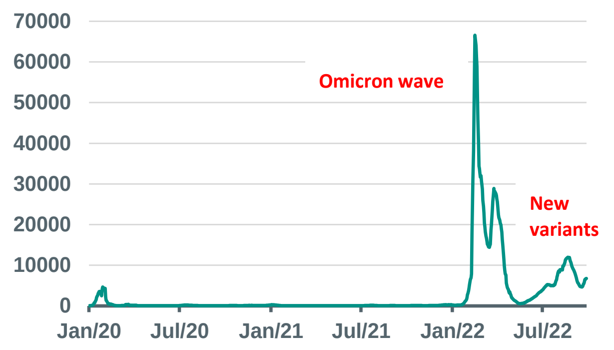
- **CCP summit: Ongoing focus on state-led development, national security/tech self-sufficiency**
- **Covid-19 policy: No quick turn, more pragmatism depends on progress with vaccinating elderly**
- **Headwinds from Covid-19 policy, real estate, slowing global growth, and US-China tensions remain**

As expected, the 20th National Congress of the CCP held in Beijing last week resulted in a third term for Xi Jinping as the party's General Secretary, paving the way for a third presidential term. Impressions from the summit broadly point to a continuation of policies that were set in motion under Xi, with his allies being appointed to the high-level Politburo Standing Committee. This means an ongoing focus on state-led development towards national security/tech self-sufficiency in a more hostile world. One of the key questions – both from a macroeconomic and investment point of view – is to what extent Beijing will stick to its strict Covid-19 policies as Xi's third term arrives.

Covid-19 policy: No quick turn expected; move to more pragmatism depends on progress with vaccinating elderly
Whereas most other key economies have moved towards living with Covid-19 as an endemic disease, China has maintained its strict 'Zero-Covid' policy, although it has evolved over time to 'mass testing and mini lockdowns under dynamic clearing'. Adherence to this policy is continues to hit consumption and confidence, aggravating the property downturn and hurting the ambition to boost consumption as a growth driver. At the same time, there have been more signs of public discontent over the policy. Nevertheless, Xi defended this vigilance at the CCP summit, pointing to the relatively low numbers of infections (despite renewed flare-ups) and deaths. With Covid-19 policy having become highly politicised, we deem a rapid move to *laissez-faire* unlikely. As the eldest, most vulnerable part of the population is still relatively undervaccinated, and herd immunity is far away, such a shift would lead to a sharp rise of the death toll and hospital capacity issues. The overall vaccination rate has gradually moved up to 90% in the course of this year, but only 67% of the 60+ population has received a booster. All of this does not preclude a cautious move towards a more pragmatic approach at a later stage, particularly after the National People's Congress in March 2023, when all major policy committees will have reconvened. Initial signals of such a future shift are the reports on a potential further easing of restrictions for inbound travellers, the channelling of more resources into healthcare, and the cautious move towards introducing mRNA vaccines. A recent study by China's Centre for Disease Control and Prevention also advocated a more pragmatic approach in Covid-19 policies.

Despite flare-ups, new cases down and still relatively low

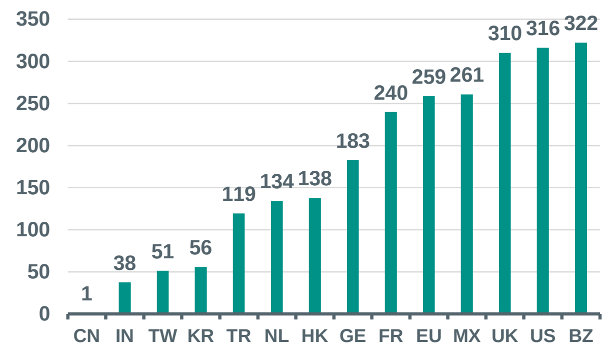
Confirmed Covid-19 cases, daily average, 7-day moving average



Source: ABN AMRO Group Economics, Bloomberg

Xi brands China as 'world champion' in pandemic control

Covid-19 deaths per 100.000 inhabitants



Source: ABN AMRO Group Economics, Bloomberg

Headwinds to remain significant
All told, a key takeaway from the CCP summit is that a major shift in Covid-19 policy should not be expected in the near term, and that it remains to be seen how much room there will be for more pragmatism next year. All of this could also hinder the recovery of the property sector. Coupled with the impact from the global growth slowdown and the flaring up of US-China tech tensions – following the recent US move to restrict the sale of advanced semiconductors and related machines to China – headwinds to the Chinese economy remain significant.

Key views on a page

The energy crisis in Europe is tipping the eurozone and UK economies into recession. Consumption growth is being weighed by the biggest fall in real incomes in decades, while industry is being hampered by sky-high energy prices and worries over potential shortages as we move into the winter months. Housing markets are also correcting on the back of surging mortgage rates. Governments are stepping in more aggressively to help households and businesses, but high inflation means that central banks may need to tighten monetary policy even further to offset this. Upside inflation risks mean the Fed and ECB are in any case likely to continue raising rates rapidly at coming meetings. Europe will also continue to feel the global spill-over effects of much tighter US monetary policy, pushing bond yields higher, equity markets lower, and weighing on growth.

Macro	Central Banks & Markets
Eurozone – The economy has moved into recession. We have pencilled in a modest contraction in GDP in Q3 and two more significant contractions in 2022Q4 and 2023Q1. We expect annual average growth to be 2.7% in 2022 and -0.9% in 2023. Inflation reached a new record high level of 9.9% in September. We expect it to have peaked and decline noticeably in coming months on the back of lower food and energy price inflation. We have lowered our forecast for inflation in 2022 to 8.0% (down from 8.3%) and in 2023 to 4.0% (down from 4.4%).	**ECB** – Following the 75bp rate hike at the September meeting, we expect another 75bp rate hike in October, followed by a final 50bp hike in December. This will take the deposit rate to 2%, where we expect it to peak. We have not pencilled in any rate hikes after that as the economy is expected to move into recession. This should do much of the heavy lifting in terms of fighting inflation. The risks to our forecast for ECB policy are skewed to more rate hikes in the 3-6 month horizon, given that the ECB's focus is on inflation rather than growth.
Netherlands – Since the start of this year we expect the Dutch economy to slow down at the end of 2022, ultimately leading to a small contraction at year's end. Supportive of this view we see the first cracks appear at the end of the third quarter in the form of slower economic activity and faltering demand. The generic support from the government's energy price ceiling, and the fact that the package is redistributive, means that we expect a smaller hit to consumption next year than anticipated earlier. On the back of this, we have lifted our growth forecasts for 2023 by 0.2 pp: from 0.5% to 0.7%.	**Fed** – Given persistently elevated inflation in the US, and upside risks to the outlook, we expect the Fed to hike rates a further 75bp in November, and 50bp in December, with the upper bound of the fed funds rate to peak at 4.5%. Subsequently, we expect the Fed to pause, assuming inflation is moving lower and the labour market deteriorates. Near-term risks are to the upside, both in the rate hike pace and in the peak rate. Further out, we continue to expect modest rate cuts in H2 23. In the background, the Fed continues to unwind its balance sheet at a $95bn monthly pace.
UK – Despite the political chaos, the news flow has been largely positive from a policy point of view, and a crisis looks to have been averted. Most mini-budget measures have been scrapped, and the new government is likely to be fiscally hawkish. The outlook for the economy is still bleak, however. Demand has continued to weaken on the back of record low consumer confidence, and fiscal policy now looks set to be tightened significantly, compounding the impact of monetary tightening. We continue to expect a recession over the coming 12 months.	**Bank of England** – The growing risk of a wage-price spiral in the UK led the MPC to hike rates by 50bp at the September meeting. We now expect a 75bp hike in November, with Bank Rate to peak at 4% by early 2023. Fiscal policy U-turns have significantly reduced the risk of more aggressive rate hikes, and the MPC is now unlikely to follow through on market pricing of Bank Rate rising to 5%. We expect a further unwind of rate hike expectations, as more MPC members attempt to steer a pullback in expectations given the very weak growth outlook.
US – GDP revisions show that the Covid recession was shallower, and the recovery stronger than initially estimated. This suggests less room for further recovery than we thought. Labour market data points to softening demand. Other pipeline inflationary pressures are also easing. However, core inflation is likely to remain alarmingly high for the next few months. We expect underlying demand to cool further into 2023, as the decline in real incomes and interest rate rises begin to bite. Soft demand is likely to push the unemployment rate higher, with the NBER likely to declare a recession next year.	**Bond yields** – We judge that the peak is in sight for German bunds (if not already reached), given the sustained rise in yields in recent weeks while economic indicators are already showing signs of contraction. On the US side, sticky inflation has led markets to price in further Fed rate hikes, with markets expecting the fed funds rate to peak at 5% by mid-2023. As such, we think there is still some room for Treasury yields to move slightly higher from here before retreating around the end of this year on the back of weaker growth indicators and cooling inflation.
China – The CCP's 20th National Congress resulted in a third term for Xi as party leader, paving the way for a third presidential term. We do not expect a sharp turn in Covid-19 policy soon, but Beijing may adopt a more pragmatic approach in the course of 2023. Coupled with drags from real estate, a global growth slowdown and the flaring up of US-China tech tensions, downside risks have risen. We cut our growth forecasts for 2022 (to 3.5%, from 3.7%) and 2023 (to 5.2%, from 5.6%), despite the expected supply-driven Q3 GDP rebound from the Q2 lockdown slump.	**FX** – An energy crisis and a recession in the eurozone combined with a more aggressive path of rate hikes in the US compared to the eurozone will probably keep the euro under pressure versus the US dollar this year. The recent wave of risk aversion pushed EUR/USD below parity due to safe haven demand for the dollar. When financial markets calm down somewhat again, lower safe haven demand for the dollar could result in a recovery of EUR/USD. Our forecasts for EUR/USD for end 2022 stands at 1.0.

Main economic/financial forecasts

GDP growth (% yoy)	2020	2021	2022e	2023e	Inflation (%)	2020	2021	2022e	2023e
United States	-2.8	5.9	1.7 ↓	0.7	United States	1.2	4.7	8.2 ↑	4.3
Eurozone	-6.3	5.3	2.7	-0.9	Eurozone	0.2	2.6 ↓	8.0 ↓	4.0
Japan	-4.6	1.7 ↑	1.6 ↓	1.3	Japan	0.0	-0.2 ↑	2.3	1.5
United Kingdom	-11.0	7.5	3.1	-0.8	United Kingdom	0.9	2.6	8.7 ↓	6.0
China	2.2	8.1 ↓	3.5 ↓	5.2	China	2.5	0.9	2.5	2.5
Netherlands	-3.9	4.9	4.6 ↑	0.7	Netherlands	1.1	2.8 ↑	11.9 ↓	4.3
Policy rate	**25-10-2022**	**+3M**	**2022e**	**2023e**	**10Y interest rate**	**25-10-2022**	**+3M**	**2022e**	**2023e**
Federal Reserve	3.25	4.50	4.50	3.50	US Treasury	4.11	3.40	3.40	2.60
European Central Bank	0.75	2.00	2.00	2.00	German Bund	2.17	1.55	1.55	1.35
Bank of Japan	-0.10	-0.10	-0.10	-0.10	Japanese gov. bonds	0.25	0.25	0.25	0.25
Bank of England	2.25	4.00	4.00	4.00	UK gilts	3.63	4.00	4.00	3.25
People's Bank of China	3.65	3.60	3.60	3.60					
Natural resources	**25-10-2022**	**+3M**	**2022e**	**2023e**	**Currencies**	**25-10-2022**	**+3M**	**2022e**	**2023e**
Brent - Oil USD/barrel	84.1 ↑	120 ↑	105 ↓	110	EUR/USD	1.00	1.00	1.00	1.10
WTI - Oil USD/barrel	76.7 ↑	115 ↑	100 ↓	105	USD/JPY	147.9 ↑	140 ↑	140 ↑	125
Henry Hub - Gas USD/mmB	6.90	6.0 ↑	7.3 ↑	6.5	GBP/USD	1.15	1.10	1.10	1.20
TTF - Gas EUR/MWh*	182.2	115	115	90	EUR/GBP	0.87	0.91	0.91	0.92
Gold - USD/oz	1,622	1,700	1,700	1,900	USD/CNY	7.27 ↑	7.00 ↑	7.00 ↑	6.60

Source: Refinitiv, Bloomberg, ABN AMRO Group Economics

* Brent, WTI, Henry Hub: active month contract; TTF: next calender year

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