Fitch Ratings

GLOBAL HOUSING AND MORTGAGE OUTLOOK 2024

DECEMBER 2023

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MARKET FORECASTS

		NOMINAL HOME PRICES [a]			LATE-STAGE MORTGAGE ARREARS [b]			MORTGAGE RATES [c]		
	Country	2023 estimate	2024 forecast	2025 forecast	2023 estimate	2024 forecast	2025 forecast	2023 estimate	2024 forecast	2025 forecast
North America	US	6%	0% to 3%	2% to 4%	1.4%	2% to 2.2%	1.9% to 2.1%	7.5%	6.5% to 7.5%	6% to 7%
	CAN	7%	3% to 5%	5% to 7%	0.2%	0.25% to 0.3%	0.2% to 0.25%	7.75%	6% to 7 %	5% to 6%
Europe	UK	-2%	-1% to 1%	2% to 4%	1%	1.25%	1.4%	5.2%	4.5%	4%
	GER	-5%	1% to 3%	2% to 4%	0.4%	0.5%	0.4%	4%	3.75%	3.5%
	NLD	2%	3% to 5%	4% to 6%	0.11%	0.1% to 0.15%	0.1% to 0.15%	4.75%	4.2% to 4.5%	3.75% to 4.25%
	FRA	-2%	-4% to -2%	-2% to 0%	1%	1% to 1.2%	1% to 1.3%	4.2%	3.5% to 4%	3.5% to 4%
	DEN	3.5%	1% to 3%	2% to 4%	0.17%	0.2%	0.15%	5.5%	4.5% to 5.5%	3.5% to 4%
	ESP	3%	0% to 2%	2% to 4%	3%	3% to 3.5%	2.75% to 3.25%	4.75%	4% to 4.5%	3.5% to 4.5%
	ITA	2.5%	0% to 2%	0.5% to 2.5%	0.3%	0.5% to 1%	0.5% to 1%	4.5%	4%	3.5%
Asia-Pacific	AUS	9%	4% to 6%	3% to 5%	0.55%	0.65%	0.55%	6.25%	5.65%	4.9%
	CHN	-3%	-7% to -5%	-5% to -3%	0.5%	0.5% to 0.55%	0.5% to 0.55%	4%	3.9%	3.9%
	JPN	0%	-2% to 0%	-4% to -2%	0.3%	0.3% to 0.4%	0.3% to 0.4%	1.6%	1.6% to 1.9%	1.9% to 2.5%
Latin America	BRA	5.5%	4% to 6%	4% to 6%	2%	1.75% to 2.25%	1.5% to 2%	10.5%	9% to 11%	8% to 9%
	MEX	9.3%	6% to 8%	5% to 7%	3%	2% to 4%	2% to 4%	11.5%	10% to 12%	10% to 12%
	COL	12%	5% to 7%	4% to 6%	3%	2.5% to 3.5%	2.5% to 3.5%	16%	10% to 12%	8% to 10%

Legend

a. Index of 70 largest cities in China.

b. Canada, France, Spain, UK, US: Market-wide 90+d. Germany, Japan, Netherlands: Fitch-rated RMBS 3+m in arrears excluding default. Australia: Fitch Ratings Dinkum Index – 90+d (Prime). China: 12-month rolling average of annualised gross loss % from Chinese RMBS transactions, loss definition varies between 90+d and 180+d. Brazil, Mexico: 90+d arrears on bank loans. Italy: NPL/exposures plus bad debts. Denmark: 3.5m+ arrears. Colombia: Banks Index 4m+ arrears.

c. Reference rates: US: 30-year fixed-rate mortgage. Canada: Five-year conventional mortgage lending rate. UK: Five-year & 75% LTV. Germany: 10-year fixed term. Netherlands: 10-year & 90% LTV. Denmark: Long mortgage bonds rate. Spain: Mortgages linked to 12M Euribor. Australia: New variable housing loans (75%/25% owner-occupied/investments). China and Brazil: Lending rate for individual housing loans. Japan: 35-year fixed rate. Mexico: Lending rate excluding insurance fees. Other countries' rates on new mortgages: weighted average of all tenors, rates and LTVs.

Source: Fitch Ratings

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MACRO INDICATORS

		Sovereign Environment			Unemployment (%)				Real GDP Growth (%)				Short-Term Rates (%) [d]			
	Country	LT IDR 2023 [a]	BSI [b]	MPI [c] 2023 (2022)	2022	2023f	2024f	2025f	2022	2023f	2024f	2025f	2022	2023f	2024f	2025f
North America	US	AA+	a	2 (2)	3.6	3.6	4.6	4.8	1.9	2.4	1.2	1.4	4.50	5.50	4.75	3.50
North America	CAN	AA+	aa	2 (2)	5.3	5.4	6.4	6.1	3.8	1.1	0.5	1.7	4.25	5.00	4.00	3.00
Europe	UK	AA-	a	1 (1)	3.7	4.2	4.6	4.2	4.3	0.5	0.3	1.8	3.50	5.25	4.50	3.50
Europe	GER	AAA	a	3 (3)	3.1	3.0	3.1	3.0	1.8	-0.2	0.4	1.6	2.50	4.50	3.75	3.00
Europe	NLD	AAA	a	1 (1)	3.5	3.6	3.8	4.0	4.3	0.6	1.1	1.4	2.50	4.50	3.75	3.00
Europe	FRA	AA-	a	2 (2)	7.3	7.3	7.5	7.4	2.5	0.9	1.0	1.6	2.50	4.50	3.75	3.00
Europe	DEN	AAA	a	1 (1)	4.5	4.8	5.3	5.4	2.7	1.4	1.3	1.3	-0.02	3.50	3.81	2.90
Europe	ESP	A-	bbb	1 (1)	12.9	12.1	11.9	11.9	5.8	2.4	1.6	2.0	2.50	4.50	3.75	3.00
Europe	ITA	BBB	bbb	1 (1)	8.1	7.7	7.6	7.5	3.7	0.7	0.6	1.3	2.50	4.50	3.75	3.00
Asia-Pacific	AUS	AAA	a	2 (1)	3.7	3.7	4.2	4.5	3.9	1.8	1.5	2.2	3.10	4.35	3.75	3.00
Asia-Pacific	CHN	A+	bbb	1 (1)	5.5	5.2	5.3	5.1	3.0	5.3	4.6	4.6	2.75	2.50	2.35	2.35
Asia-Pacific	JPN	A	a	3 (3)	2.6	2.6	2.5	2.5	0.9	2.0	0.8	0.7	-0.10	-0.10	0.10	0.25
Latin America	BRA	BB	bb	1 (1)	9.3	8.5	8.5	8.5	3.0	3.0	1.5	2.1	13.75	11.75	9.00	8.50
Latin America	MEX	BBB-	bbb	1 (1)	3.3	3.5	3.5	3.5	3.9	3.4	2.4	2.2	10.50	11.25	9.25	7.50
Latin America	COL	BB+	bb	1 (1)	11.4	12.0	12.0	11.0	7.3	1.5	1.2	2.8	7.18	12.90	8.00	5.50

Legend

a. LT IDR: Long-Term Issuer Default Rating

b. As of end-June 2023. The Bank System Indicator (BSI) is a system weighted average of bank standalone strength as measured by banks' Viability Ratings.

c. As of end-July 2023; with the Macro-Prudential Indicator (MPI) Fitch systematically monitors risks on a scale from '1' (low) to '3' (high).

d. Short-term rates shown are end-of-period policy rates in the US, Canada, the eurozone, Australia, Japan, Brazil and Mexico, the one-year medium-term lending facility rate in China and annual average policy rates for the others.

Source: Fitch Ratings

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KEY GLOBAL TRENDS

OVERVIEW – HOME PRICE GROWTH TO SLOW AMID ELEVATED RATES

LEARN MORE

HOME PRICES TO INCREASE MODESTLY

LEARN MORE

LOW AFFORDABILITY MUTES HOME PRICE GROWTH

LEARN MORE

ARREARS TO INCREASE SLIGHTLY ACROSS MOST REGIONS

LEARN MORE

WHAT TO WATCH

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GLOBAL HIGHLIGHTS

HOME PRICE GROWTH TO SLOW AMID ELEVATED RATES

Fitch Ratings forecasts modest nominal home price growth in 2024 due to limited supply for most countries included in its Global Housing and Mortgage Outlook 2024, although growth will be slower than the robust pace set in 2023 given soft demand from elevated rates. As inflation subsides, demand may strengthen, particularly in a few countries with lower home price/income ratios. Three countries – China, France and Japan – will see home price declines in 2024 and 2025, while prices will be mostly flat in the UK.

For several countries, moderate home price growth followed price troughs in 2023. Better-than-expected economic conditions supported demand to some extent through much of 2023, although demand and home sales slowed with rising rates.

Mortgage rates will remain high in 2024 and 2025, which will continue to erode demand and discourage home sales, especially where many homeowners still benefit from low fixed-rates. High rates reduce affordability and borrowers may struggle to meet lenders' underwriting criteria for new mortgages.

We forecast an economic slowdown or limited growth in 2024 for the 15 countries highlighted in the report as central banks maintain efforts to control inflation. Unemployment should be stable for most countries. Arrears will also remain stable or increase slightly, with the preponderance of fixed-rate mortgages in many regions shielding borrowers from rate shocks. Stretched real incomes and greater indebtedness attributable to inflation and higher borrowing rates will squeeze weaker borrowers and result in worse loan performance for this segment.

US economic growth will slow sharply in 2024 with higher rates and a reduction in bank credit limiting spending and investment. Recent rapid monetary tightening and stagnant GDP growth in Europe are weighing on outlooks for investment, real estate and construction. China's 3Q GDP growth was strong but Fitch expects it to slow with fading consumption growth, despite government stimulus to mitigate the effects of the property market collapse.

There is still uncertainty over home prices as interest rates have not yet settled. The dramatic shift in mortgage rates from last year introduced new market dynamics that increased the likelihood of price volatility. Governments' ability to navigate fiscal and monetary policy challenges to prevent a deeper downturn and low consumer confidence are key to avoiding steep home price declines. Over the longer term, higher-for-longer rates could limit home price growth or cause home price declines as higher rates work their way through the economy.

> Fitch expects flat to moderate home price growth in 2024 in most countries driven by undersupply, with Mexico, Colombia, Brazil, Australia, Canada and the Netherlands likely to see the strongest growth.

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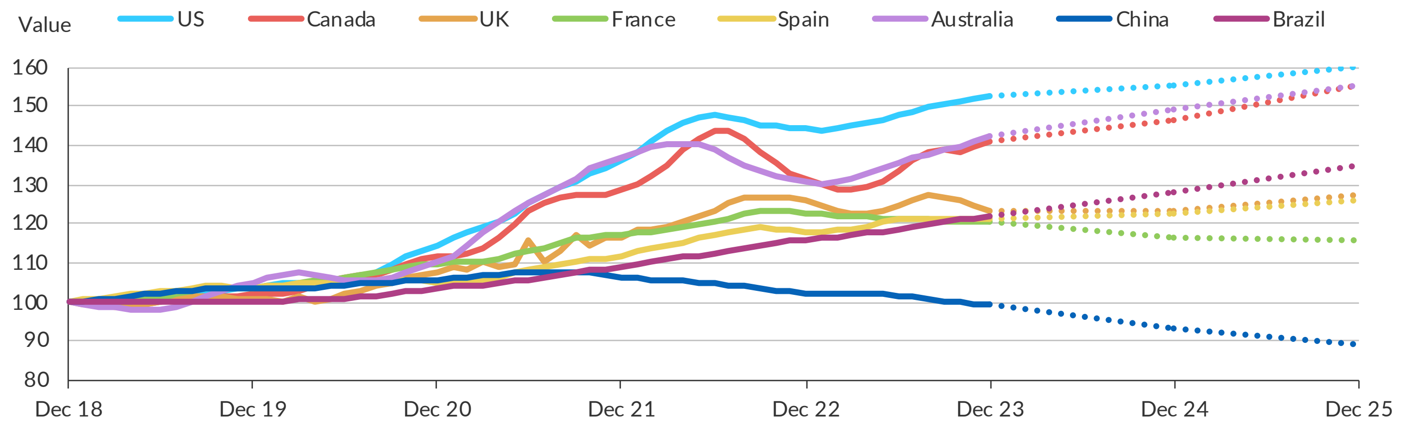
HOME PRICES TO INCREASE MODESTLY

Fitch forecasts flat to moderate nominal home price growth driven by undersupply in 2024 and 2025 in most countries, with Mexico, Colombia, Brazil, Australia, Canada and the Netherlands likely to see the strongest growth. In Australia and Canada, price increases are also attributable to higher demand from renewed immigration, but the growth in immigration is likely to be temporary. For Latin America, the inflation-lagged effect from backward indexation will also contribute to price rises.

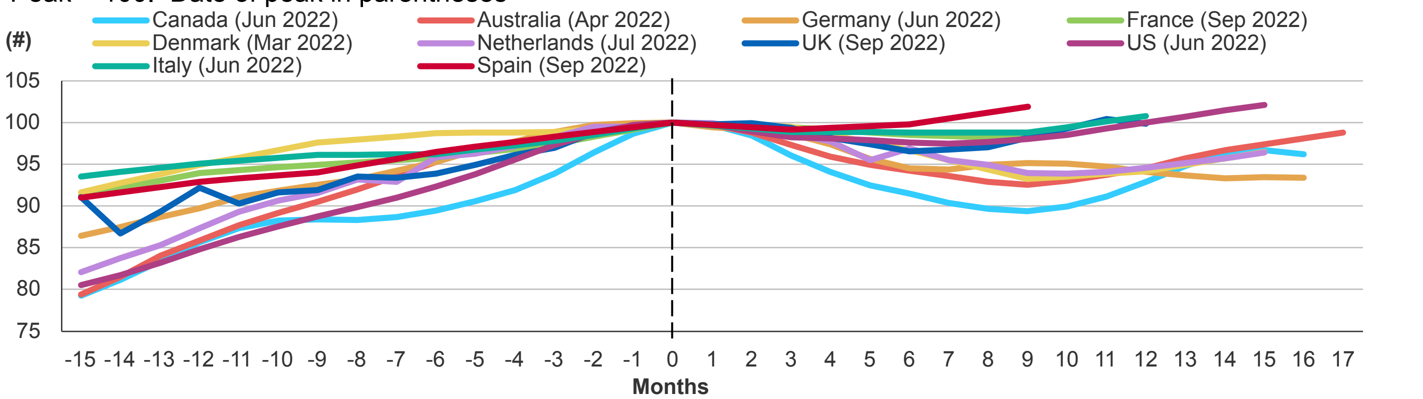
Home prices are expected to fall in China, France and Japan. Prices have already dropped 7% in China over the past two years because of excess inventory and low consumer confidence. China continues to attempt to counter deflationary conditions with market stimulus. In France, affordability constraints and strict underwriting conditions are expected to persist in the short to medium term.

Nominal Home Price Indices and Mid-Points of Forecast Ranges



Source: Fitch Ratings, Haver Analytics, Case-Shiller, TER/NBC, HMLR, INSEE, INE, CoreLogic AU, CNBC, FIPE

Home Price Evolution to and from Peak (T=0)
Peak = 100. Date of peak in parentheses

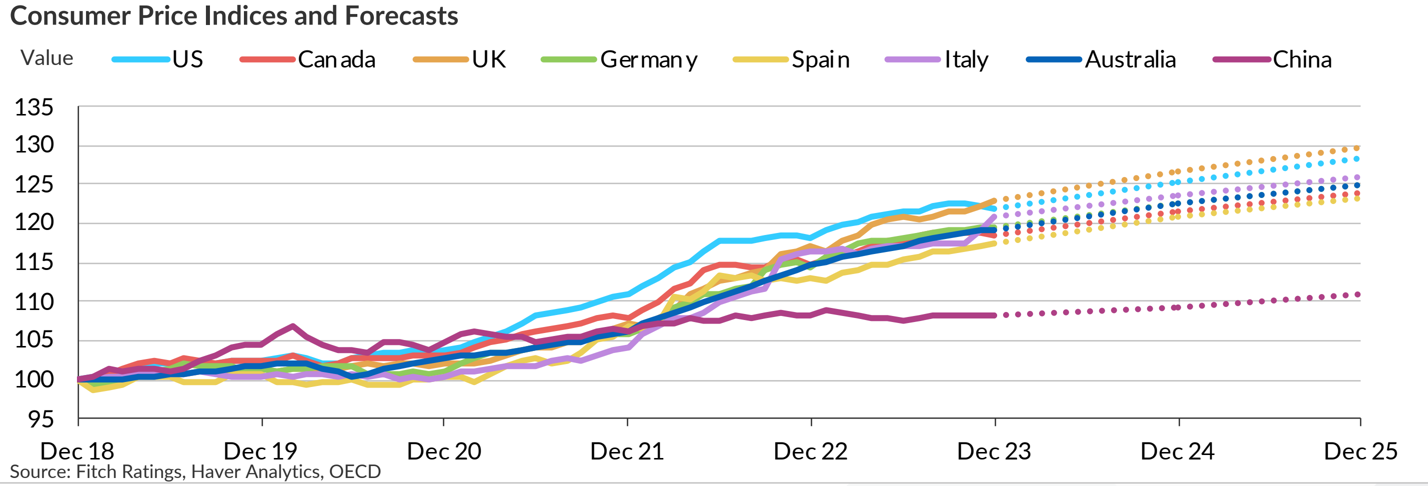


Source: Fitch Ratings, Haver Analytics, Case-Shiller, TER/NBC, HMLR, EAG, CBS, INSEE, DKstat, INE, ScenImm/ISTAT, CoreLogic AU, CNBC, MLIT, FIPE, SHF, DANE

CONSTRAINED SUPPLY, SOFT DEMAND

Home price growth is mainly a product of tight supply. Sales are declining with insufficient new construction and as homeowners with low fixed-rate mortgages choose to delay moves, if possible, if it means acquiring a higher-rate mortgage or accepting a discounted sale price. Price growth will be muted in 2024 and 2025 as demand remains soft due to still-high mortgage rates.

Fitch Ratings

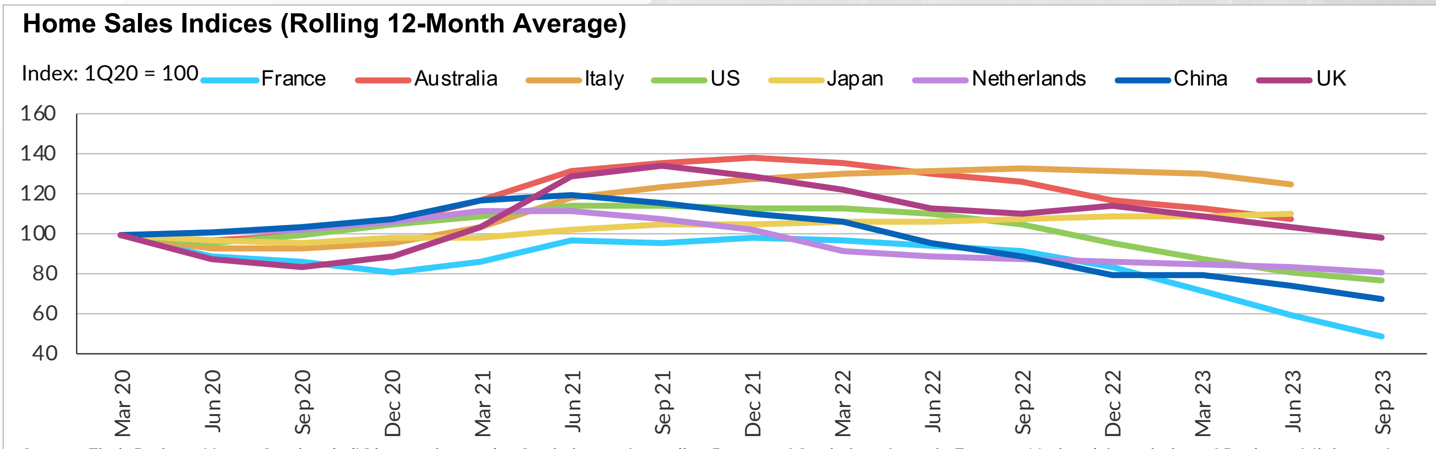


Source: Fitch Ratings, Haver Analytics, OECD

Strong labour markets and nominal wage growth keep demand from slumping in North America, Australia and parts of Europe. China is an outlier, where there is significant oversupply and weak demand, particularly in lower-tier cities. Demand cratered following a two-year price drop, and policy easing has yet to return housing market activity to pre-crisis levels.

Construction of new homes has been slow to ramp up in most countries, and higher construction costs contribute to price growth. High costs and long timeframes for building approval and construction in Canada and parts of Europe are constraining production. This has weighed on sector financials in Europe, contributing to building company insolvencies in Germany and the UK. In the US, new home production will continue to be limited by land and labour availability as well as difficulties for smaller private builders to access capital. New home construction has been falling in Australia and Japan as high inflation has resulted in increased building costs.

Home sales have broadly declined and will remain constrained in 2024 and beyond in a higher-for-longer rate environment. In markets where long-term fixed-rate mortgages are predominant, as high rates lead to a 'mortgage prisoner' problem. Homeowners are staying put as they are reluctant to relinquish their low-rate mortgages and take on a new mortgage with higher payments. Some markets (the UK and the Netherlands) permit porting an existing mortgage to new home, helping avoid being locked in to a mortgage, but there is still less incentive to move if buyers cannot find suitable affordable properties.



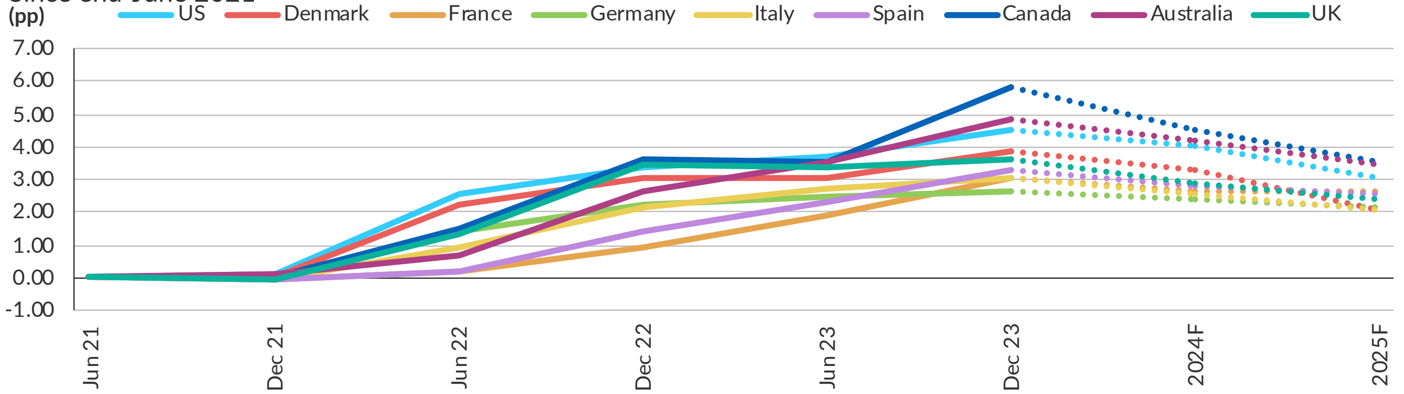
Source: Fitch Ratings, Haver, Service de l'Observation et des Statistiques, Australian Bureau of Statistics, Agenzia Entrate, National Association of Realtors; Ministry of Land, Infrastructure, Transport and Tourism, Centraal Bureau voor de Statistiek, China National Bureau of Statistics, HM Revenue & Customs

LOW AFFORDABILITY MUTES HOME PRICE GROWTH

The affordability of new mortgages has deteriorated significantly in most countries and this situation will not improve much in 2024 with mortgage rates remaining elevated. More first-time home buyers, whose savings may have been eroded (particularly where rents are increasing), may only qualify for a smaller mortgage than previously. Fitch expects inflation to ease in 2024, potentially improving affordability.

Fitch forecasts modest mortgage rate declines in Australia, Canada, the US and Europe. Mortgage rates will be stable to slightly lower in Latin America. We expect further policy rate cuts in China and an increase in rates in Japan with the softening of the Bank of Japan cap on the 10-year government bond yield.

Changes in New Mortgage Rates
Since end-June 2021



Source: Fitch Ratings, Haver, FHLMC, FiDe, BdF, BbK, ECB, BdE, BoC, RBA, BoE

High rents in some areas limit prospective homebuyers' ability to save for a downpayment, keeping them on the sidelines of the housing market. Rents are high in Australia, Canada and Europe, especially in the main cities. Rents are increasing in the US but at a slower pace than before. Housing policies that cap rents, making renting more attractive than buying, such as those in Germany, also dampen demand for purchases.

Government policies, such as purchaser subsidies or programmes to support first-time buyers (FTBs), help affordability and demand. Variable-rate and short-term fixed-rate products have become more popular in some European countries due to the high-rate environment. Longer mortgage terms (30- to 35-year fixed maturities) are being offered in Europe and Japan to people who do not meet affordability criteria under higher rates, although these products still only represent a small share of the market.

Affordability is also affected by bank underwriting policies. Riskier borrowers, including FTBs, may see less credit availability as they may not qualify for mortgages with higher rates.

Eurozone banks are not reducing overall credit supply to households as a result of sticky deposits, so will continue to offer credit without relaxing underwriting. Dutch and UK lenders must apply a stressed affordability calculation using higher interest rates for loans that have a reset period shorter than 10 and five years, respectively. In the US, proposed capital rules could tighten lending, although this is likely to shift mortgage production to non-bank lenders. Canada underwrites mortgages to a higher rate according to the B-20 rules, building in some conservatism to financing qualification. In Australia, lenders underwrite new loans with a buffer of 2pp-3pp above the prevailing rate to mitigate the risk of rising interest rates. Conservative underwriting in Latin America continues, with higher funding costs putting pressure on margins on loans and reducing credit availability.

ARREARS TO INCREASE SLIGHTLY ACROSS MOST REGIONS

Arrears will only marginally increase or remain stable in 2024, with some slight declines possible in 2025. This is largely due to resilient labour markets, savings buffers and incentives to stay with low-rate mortgages in long-term, fixed-rate markets. Real home price appreciation for seasoned loans combined with disciplined underwriting mitigate the risks of a jump in arrears and a severe correction.

Our arrears forecasts apply to all loans, although non-prime loans only comprise a small portion of the market. The exceptions are Australia, Germany and the Netherlands, where forecasts only address the performance of prime loans.

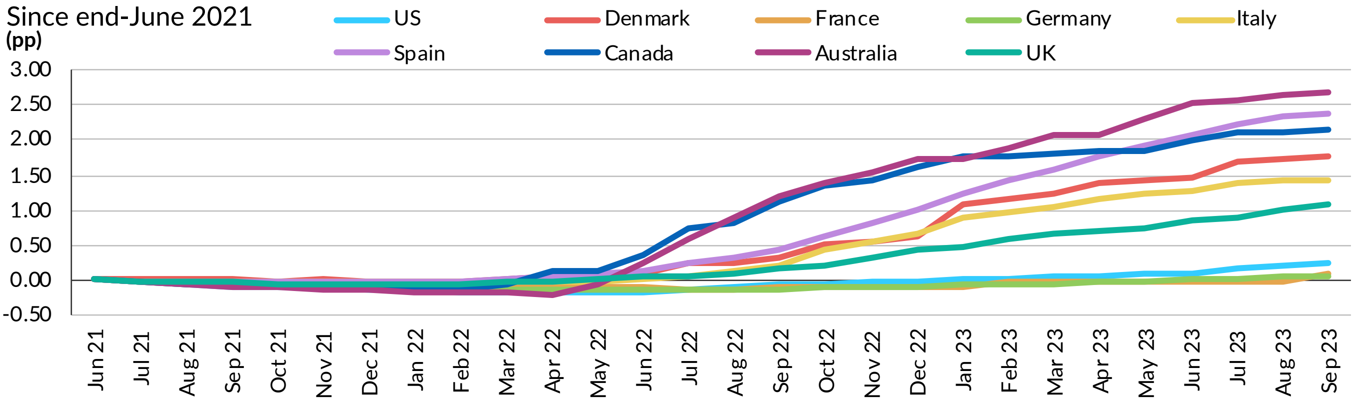
Borrower equity that has been building and lenders' willingness to offer modifications or forbearance will keep defaults low in all countries. Modifications are typically offered first if a mortgage is in trouble, with foreclosure a last resort.

In those countries where long-term, fixed-rate mortgages are prevalent with a limited number of borrowers with shorter-term or variable-rate mortgages rolling into higher rates, mortgage performance is broadly protected from payment shocks from rate adjustments.

We forecast a modest increase in arrears in countries where a sizeable portion of mortgages are floating rate (e.g. Australia, Denmark, Italy and Spain) or fixed for short periods (e.g. Canada and the UK), and mortgage payments are materially increasing as loans are renewed at higher rates. The average rate on total outstanding mortgages has jumped in these countries. Underwriting trends are broadly conservative, and an economic slowdown is not likely to lead to a large increase in defaults even with higher mortgage payments.

Changes in Outstanding Mortgage Rates

Since end-June 2021

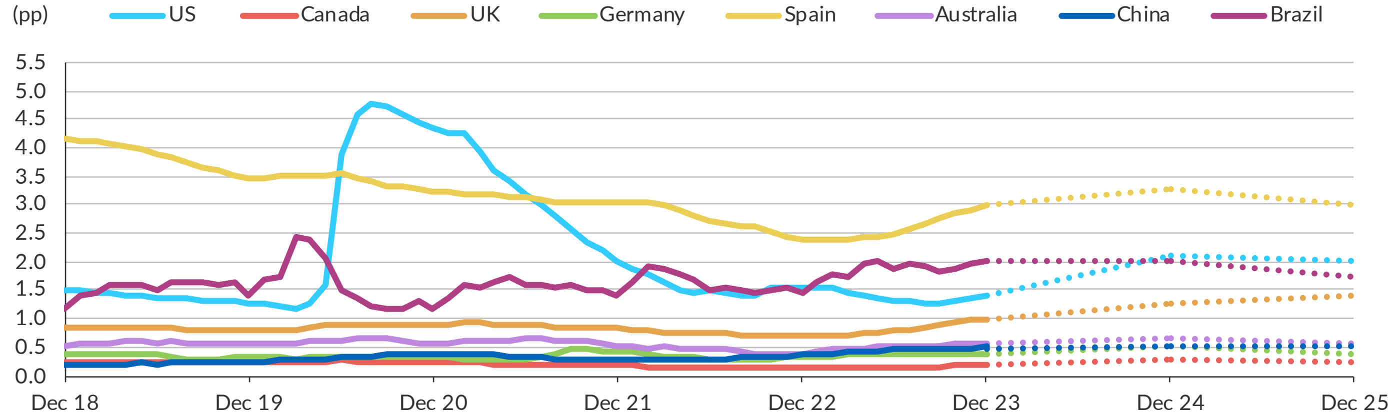


Source: Fitch Ratings, Haver, BEA, ECB, BoC, RBA, BoE

The rise in arrears will be most pronounced for weaker borrowers who are more vulnerable to higher rates. This is particularly the case for borrowers whose mortgage payments make up a large percentage of income, either due to rolling off low fixed rates into higher rates or because they took out loans under stretched underwriting terms and have limited ability to restructure their debt.

> "We forecast a modest increase in arrears in countries in countries where a sizable portion of mortgages are floating rate or fixed for short periods, and mortgages payments are materially increasing as loans are renewed at higher rates.

Late-Stage Mortgage Arrears (Definitions Vary)



Source: Fitch Ratings, Haver Analytics, BKFS, CBA, UKF, BdE, BCB

Unemployment levels, a key driver of delinquencies, will be stable or increase slightly in most places. The US economy will slow sharply in 2024 with slower wage growth, but 90+ day delinquency rates will increase only modestly from near all-time lows because of strong labour markets. We expect a mild increase in unemployment and arrears in Canada and stable unemployment and arrears in Mexico although a sharp US slowdown may spill over to Canada and, to a lesser extent, Mexico, in light of the lower level of household indebtedness in the latter.

Arrears will also be stable to slightly higher in Europe due to tight labor markets. Mortgage performance will continue to be resilient in Latin America with stable unemployment and wage growth.

Unemployment is expected to increase in Australia but will still be below the pre-Covid average, with 90+ day arrears up 10bps from the expected end-2023 level due to high inflation and interest rates. There will be a mild rise in arrears in Japan with weaker real household income, although stable employment will limit performance deterioration.

Property sector weakness will preclude any meaningful improvement in arrears in China, although the high household savings rate and disposable income will prevent a material deterioration. There will be slight decrease in default rates, but these will still be higher than the pre-pandemic average.

> Arrears will only marginally increase or remain stable in 2024, with some declines possible in 2025. This is largely due to resilient labour markets, savings buffers and incentives to stay with low-rate mortgages in long-term, fixed-rate markets.

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WHAT TO WATCH

DOWNSIDE RISKS TO PRICES AND PERFORMANCE

As we expect home prices and mortgage performance to remain resilient over the next two years, there is a greater chance of the outcomes being worse than our forecasts. With little relief for affordability given higher-for-longer rates, the greatest risk is a housing slump if demand collapses and pushes home prices lower. Greater mortgage indebtedness as a result of high rates may also bump up arrears to higher levels if home prices decline.

An economic downturn that is worse than Fitch expects, leading to higher unemployment, would cause a drop in demand and home prices, and an increase in arrears beyond our forecast, although this would also likely lead to rates falling more quickly. Credit tightening could be exacerbated if bank financials come under pressure or if banks reduce lending in an adverse credit environment. Geopolitical disputes that push oil prices higher, increasing energy costs, or that expand to a greater conflict, affecting the global economy, could pressure household budgets and reduce consumer confidence.

A jump in supply, for example from home movers or sales of foreclosed properties while demand remains subdued, would also put downward pressure on home prices.

CLIMATE AND POLICY RISKS

Climate risk becomes more tangible every year. This year was the hottest on record, with multiple natural disasters affecting different areas, and wildfires and storms causing billions of dollars in damage. In some cases, the effects on the housing market are temporary, as housing demand in certain areas has not abated and homes are rebuilt to code with insurance proceeds. However, home values will erode over time in areas more vulnerable to natural disasters, particularly with increases in insurance costs and the reduction or elimination of safety nets, such as government insurance.

Europe has more developed green housing rules than other parts of the world, but initiatives have been paused in some places (the UK), while accelerating in others (France, the Netherlands). Energy efficiency will still be a lesser influence on housing demand in 2024 than other factors, but this is likely to become more prominent in the medium term if energy prices remain elevated and regulations are enforced.

Recent elections, and those scheduled for 2024, could affect economic and housing policy decisions, with a variety of effects on home prices. Measures to counter inflation may dampen housing markets, while in other cases policy support for home buyers could boost market activity.

REBOUND IN DEMAND

Stronger-than-anticipated economic growth, with stable to improving unemployment, would support demand and boost home prices, although fiscal and monetary policy are likely to temper a surge in economic growth unless backed by improvements in productivity.

On the flip side, if central banks implement rate cuts earlier and more rapidly than expected, demand could swiftly rebound. In such a scenario, supply would also increase if 'mortgage prisoners' start moving again.

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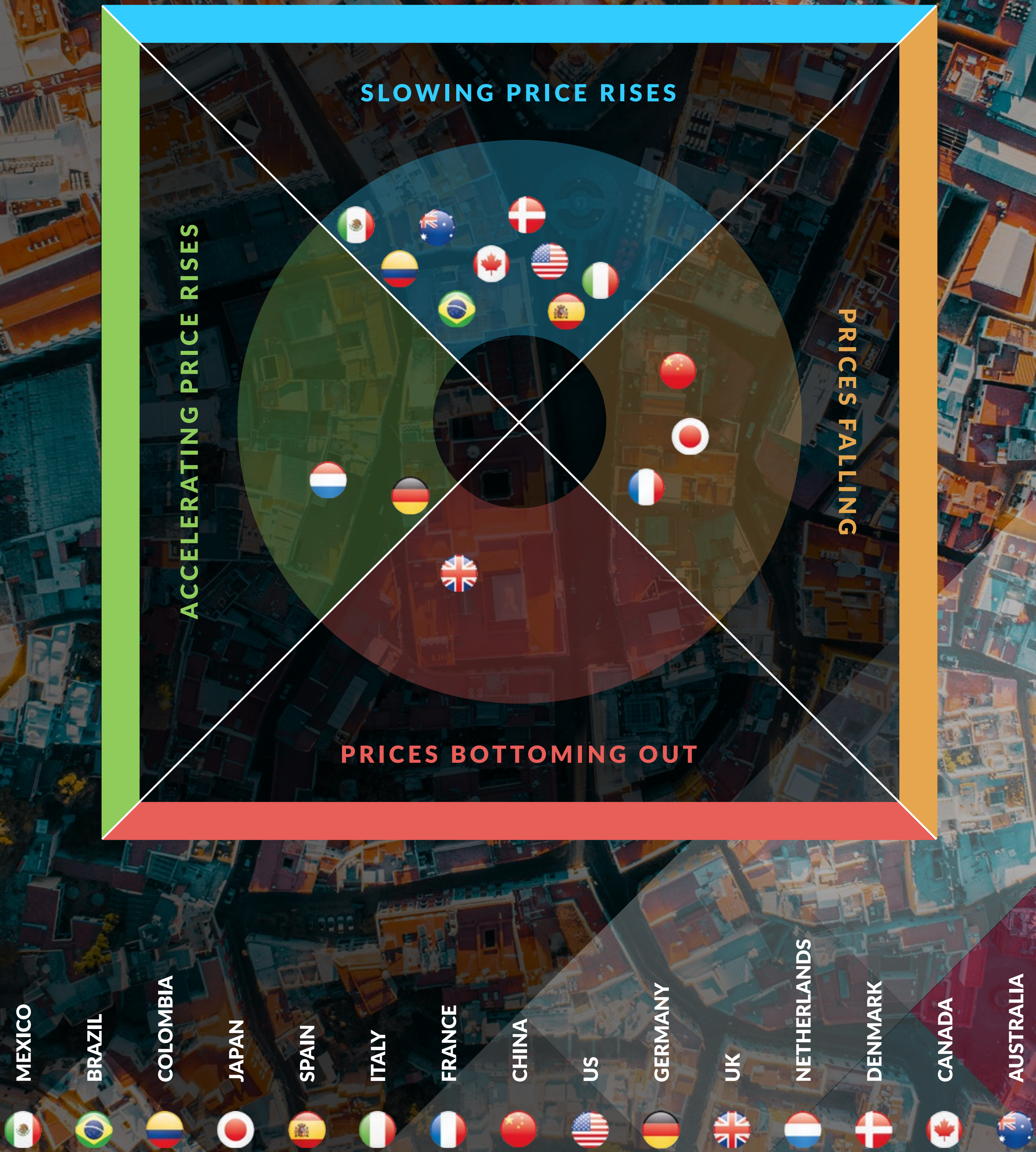
GLOBAL HOUSING AND MORTGAGE OUTLOOK 2024

POSITION IN HOME PRICE CYCLE



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UNITED STATES

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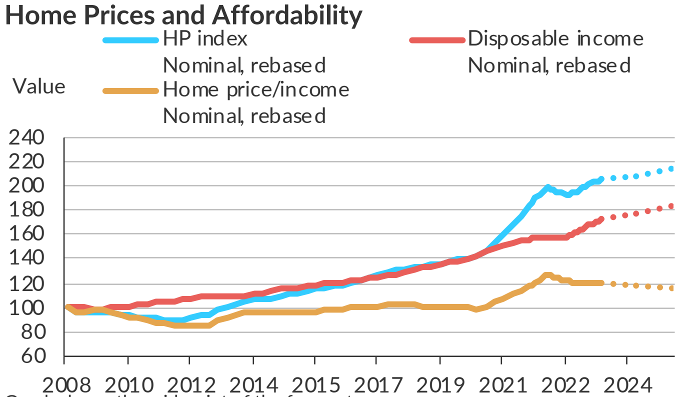
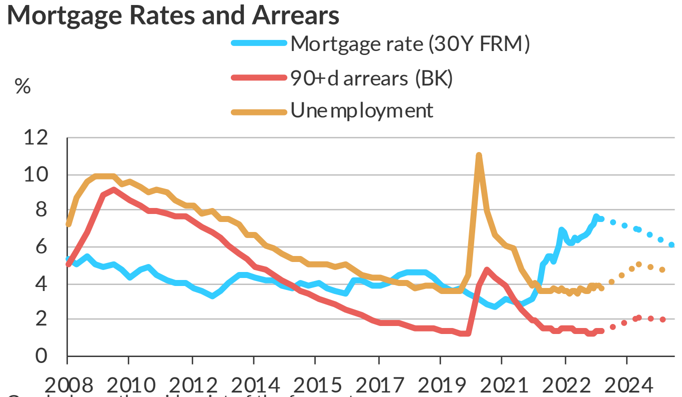
> We expect home prices to remain fairly flat as macroeconomic conditions exert a slight pressure on mortgage performance.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Commission/AMECO, S&P CoreLogic Case-Shiller Home Price Indices

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Black Knight, Inc., Federal Home Loan Mortgage Corporation, Bureau of Labor Statistics

HOME PRICE GROWTH TO REMAIN POSITIVE DUE TO CONSTRAINED SUPPLY

Fitch expects nominal home prices to rise by 0%-3% in 2024, compared with 6% expected in 2023. This will be the lowest yearly home price increase since 2019 as home prices continue to slow from the rapid gains in 2020. Growth is expected to remain in 2025 with home prices rising at a rate of 2%-4%.

Demand is likely to remain in line with 2023 but sales will be down by about half from 2021's levels. Weak demand and poor affordability would normally lead to a drop in home prices, but the limited inventory of existing homes and homebuilders' continued use of rate buydowns provides support for home prices.

There continues to be about three months of inventory, indicating an undersupplied market and reducing the odds of large-scale price cuts. New home construction has lagged demand since the early 2010s by the total aggregate estimate of 5.24 million units.

Existing homeowners' weighted average mortgage rate was 3.7% as of end-3Q23, compared with the rate for new loans of 7.3%. This difference of more than 350bp has made it uneconomical for potential sellers to list their home, due to the relative unaffordability of a new mortgage. This has further restricted supply.

ARREARS TO RISE MODESTLY FROM DECADES-LOW LEVELS

Fitch expects arrears in 2024 to rise to 2%-2.2% from their very low 2023 levels of 1.4% due to deteriorating economic conditions and rising unemployment, however performance remains strong relative to historical averages. Arrears should improve slightly in 2025.

The modest increase in mortgage arrears will be driven by the forecasted increase in unemployment. Most US borrowers are unlikely to be affected by the high-rate environment due to the prevalence of 30-year, fixed-rate loans (fewer than 10% of new purchase loans originated after 2009 were on variable rates). Borrowers that stretched payments in the hope of refinancing when rates decline may also increase arrears if mortgage rates remain elevated over the near term.

Downside risks include a larger-than-expected economic contraction and a related rise in unemployment. Arrears coming in lower would be caused by more resilient borrower behaviour driven by the substantial amount of borrower equity and a potential rise in the use of home equity investments (i.e. the sale of future appreciation in asset values for interest-free cash payment).

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CANADA

SUSAN HOSTERMAN
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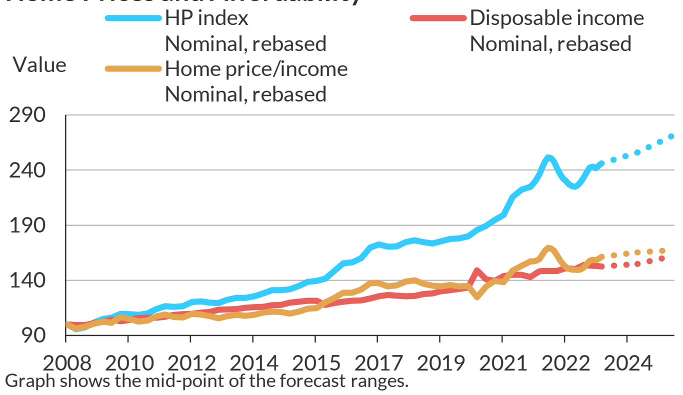
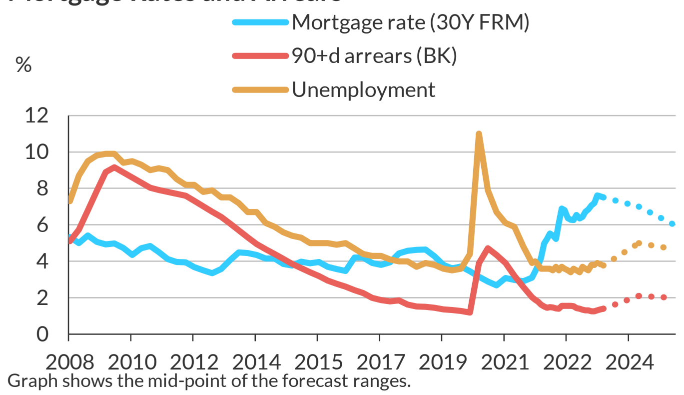
We forecast slowing home prices and increasing arrears for 2024, due to the softening of the economic outlook.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Statistics Canada, Teranet/National Bank of Canada

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Black Knight, Inc., Federal Home Loan Mortgage Corporation, Bureau of Labor Statistics

SUPPLY/DEMAND IMBALANCE IS SUPPORTING HOME PRICES

Fitch expects nominal home prices to increase by 3%-5% in 2024 followed by growth of 5%-7% in 2025. Home prices will grow at a slower pace than the 7% expected for 2023, reflecting a worse economic outlook for 1H24.

The persisting lack of supply and high demand for homes is supporting home prices. Lack of liquidations and low home turnover have kept supply down while demand for homes from new immigrants, investors, second home buyers, and FTBs is high despite affordability issues. Elevated rents, consistent wage growth and a lack of construction are also contributing factors.

The expected slowdown in home price growth is driven by a softening economic outlook and additional pressures on already stretched Canadian consumers. This will result in more voluntary sales (more supply) and reduce affordability even further (less demand) in 1H24. Home prices should pick up in 2H24 as the economy normalises, and mortgage and interest rates stabilise to more acceptable levels.

INCREASE IN AREARS DRIVEN BY PRESSURISED CONSUMER

We expect mortgage arrears to increase modestly from the record low delinquency rates in 2023 of 0.15%. For 2024, we predict delinquencies will rise to 0.25%-0.3% before declining in 2025 as the economy recovers.

The modest rise in arrears will be driven by high interest rates, a weakening economy, lack of affordability and softening home price. growth Significant equity that home owners have built over time, historically low unemployment and consistent wage growth from which consumers previously benefited will help to prevent a significant rise in delinquencies.

There is still sufficient pent-up demand to enable home owners to sell if they get into financial distress. Canada's target of increasing immigration is adding to the demand already there from people who have been waiting to get into the real estate market.

Additionally, banks are working to make repayments more affordable by re-amortising loans over a longer term and working with borrowers in distress to avoid foreclosure where other options are not available.

FitchRatings

UNITED KINGDOM

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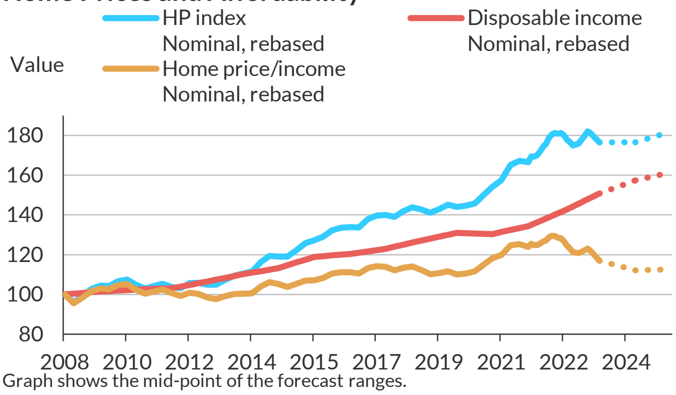
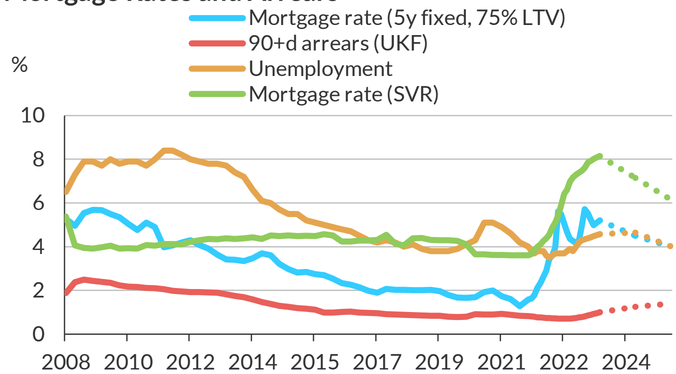
> We expect a 15% peak-to-trough contraction in real terms, with most of the adjustment coming through inflation.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Commission/AMECO, HM Land Registry

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Bank of England, UK Finance, Eurostat

NOMINAL PRICE STABILITY HIDES REAL REDUCTION

Fitch expects mostly stable nominal home prices in 2024 before growth of 2%-4% in 2025. This will follow an expected price reduction of 2% in 2023 leading to a nominal peak-to-trough decline of less than 5%. However, this stability hides a significant real term reduction of around 15% by end-2024 from the September 2022 nominal price peak, when deflated by CPI.

Sharp increases in mortgage rates (from about 2% in 2021 to near 6% in 2023) have driven the slowdown, with property sale volumes falling by about 20%, according to official data. The predominantly short-term fixed-rate periods mean that new borrowers have seen their rates rise quickly while existing borrowers have protection for up to five years contributing to a disconnect between buyer and seller valuations.

Wage growth of about 8% yoy in August 2023 has offset some deterioration in affordability. We anticipate interest rate reductions from 2H24 through 2025, which will improve affordability despite coinciding with a slowdown in wage growth. Higher loan/income multiples will support nominal price increases and stable prices in real terms from 1H25.

MORTGAGE REVERSIONS TO CAUSE ARREARS TO RISE

We expect late-stage arrears to increase to 1.0% by end 2023, 1.25% by end 2024 and 1.4% by end 2025.

UK mortgage products typically consist of a fixed rate for two to five years followed by a floating reversion rate. Borrowers that entered into a fixed period before 4Q22 are yet to be affected by the rise in mortgage rates. Fitch estimates that there are up to GBP165 billion residential loans due to reach their reversion date in 2024 and GBP100 billion in 2025. This compares with GBP217 billion in 2023 and total residential mortgages outstanding of around GBP1.3 trillion.

The payment shock for most borrowers with fixed periods of less than five years will be below the stress applied in the initial underwriting, although some borrowers will struggle to adjust, leading to arrears growth.

Households in the UK have not run down most savings accrued during the pandemic. Combined with labour market strength, this suggests muted arrears growth. An increase in unemployment beyond our expectations or a further rise in interest rates would lead to arrears growth beyond our forecast.

FitchRatings

GERMANY

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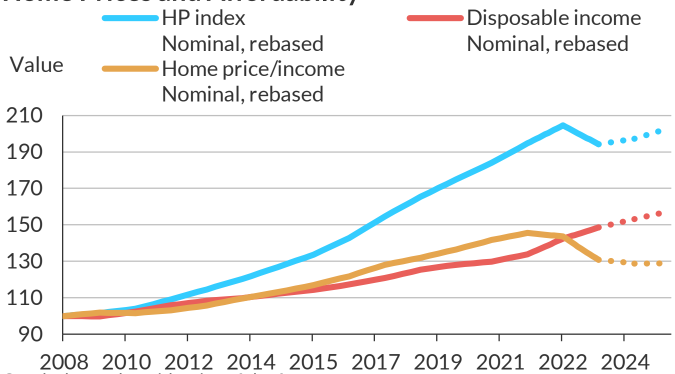
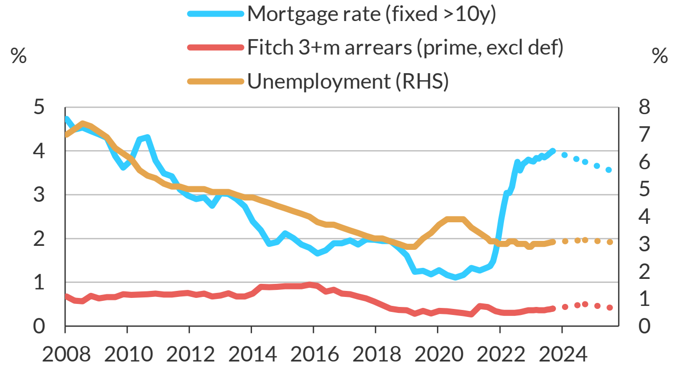
We forecast a return to moderately positive home price growth and a slight increase of mortgage loan arrears.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Commission/AMECO, BulwienGesa AG

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: FItch Ratings, Haver Analytics, Deutsche Bundesbank, Eurostat

MODERATE HOME PRICE INCREASES BUT AFFORDABILITY LIMITS DEMAND

Fitch expects nominal home prices to increase by 1%-3% in 2024 and 2%-4% in 2025, rebounding from a 5% reduction at end-2023 from the peak in 3Q22.

Tight supply and spillover effects from the rental market still driver our forecasts, while stretched affordability and buyers' concerns about mortgage serviceability are headwinds that prevent more dynamic price increases.

We expect lower building activity than in previous years, while population growth increases housing demand. The latter primarily affects the rental market, but will continue to have meaningful effects on home prices through rising rents and limited rental supply. Home prices remain high in historical terms, depressing affordability, but a rise in rents enhances the economics of a purchase even with mortgage rates of around 4%. Sufficient mortgage lending is available, even for borrowers with limited equity.

Additional political initiatives to limit rent increases represent an uncertainty to our forecasts as they could make renting more attractive, but the limited availability of rental properties could raise demand for purchases, even as government measures aim to boost affordability.

ARREARS WILL INCREASE MILDLY OWING TO SLUGGISH ECONOMIC RECOVERY

We forecast 2024 mortgage delinquency rates to increase to 0.5% from 0.4% in 2023 before reverting to slightly lower levels in 2025. Arrears performance in 2023 has been robust, but we anticipate the negative impact of a higher cost of living and a less vivid labour market will materialise after a time lag.

We expect positive real wage growth in 2024, as nominal wage increases will outpace inflation dynamics, supporting mortgage loan serviceability. Unemployment rates will stay close to their historical lows supportive of robust mortgage loan performance.

Rates are typically fixed for 10 or more years, so borrowers who financed at low rates will gradually have to refinance at higher rates over the coming years. For newly originated mortgages, the percentage of monthly payments of households' income increased to the upper twenties, according to the mortgage broker Interhyp. Both factors represent headwinds for mortgage loans.

A surge in foreclosure cases remains unlikely as long as home prices remain high and voluntary home sales without a loss remain possible.

NETHERLANDS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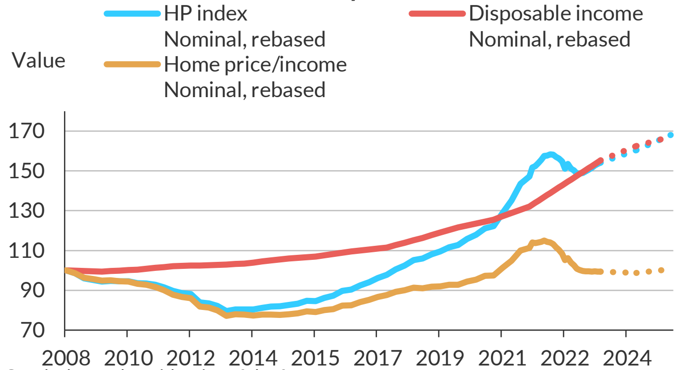
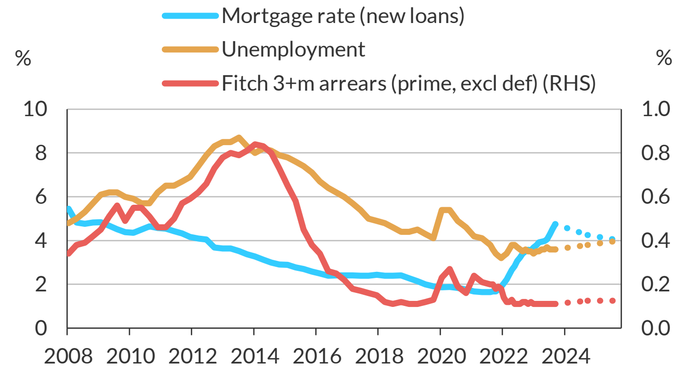
We expect moderate price increases against subdued volumes, given limited supply and affordability.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Commission/AMECO, Centraal Bureau voor de Statistiek

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Central Bank, Eurostat

HOME PRICES GROW AGAIN, BUT ARE CONSTRAINED BY LIMITED AFFORDABILITY

Fitch expects Dutch nominal home prices to increase by 3% to 5% in 2024 with slightly higher growth in 2025. Prices reached a trough in May 2023 after falling by 6% from their peak. Wage growth, limited supply and a stabilisation of mortgage rates (at a higher level) stopped prices from falling further.

The market still faces serious challenges. Sales volumes continue to be low. Monthly sales in 2023 are 23% below the average from 2017 to 2021, according to official data. FTBs have supported the market with their share of sales increasing to 39% (1Q22 to 2Q23) from 33% over 2017-2022. Public policy heavily supports FTBs, e.g. by the 0% transfer tax for those aged below 35, with 2% for other owner-occupied buyers and 10.4% for buy-to-let.

New building permits are trending below their long-term average, so we expect the housing shortage to continue. Affordability also remains a challenge for prospective FTBs; national home prices are now just 3.6% below their peak despite high interest rates. We therefore expect only a moderate upward trend in prices. The main risk is greater real wage deterioration.

ARREARS TO STAY LOW ON LOCKED-IN RATES AND DISCIPLINED UNDERWRITING

We expect late-stage arrears to remain 0.1%-0.15% in 2024 and 2025. Until interest rates started rising in 2022, 20- to 30-year fixed-rate periods represented more than 60% of mortgage origination, with 10 years dominating the rest. As a result, most of the current stock of mortgage loans is protected from interest rate increases for an extended period.

Most borrowers can absorb budget shocks due to the conservative calculations under the mortgage code of conduct and long fixed-rate periods.

The tight labour market and associated yoy wage growth of 6.5% are important counterbalances to recent inflation. These factors have kept arrears low despite inflation and higher interest rates, and Fitch expects this to continue.

Arrears may rise beyond expectations if the macroeconomic outlook worsens and unemployment rises substantially. In such a scenario, wage growth could lag well below inflation.

FitchRatings

FRANCE

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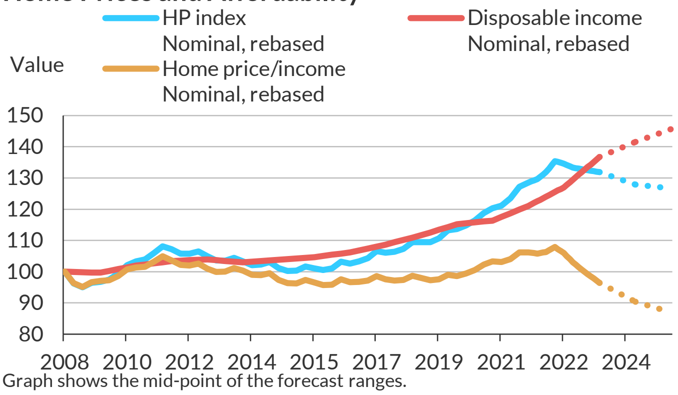
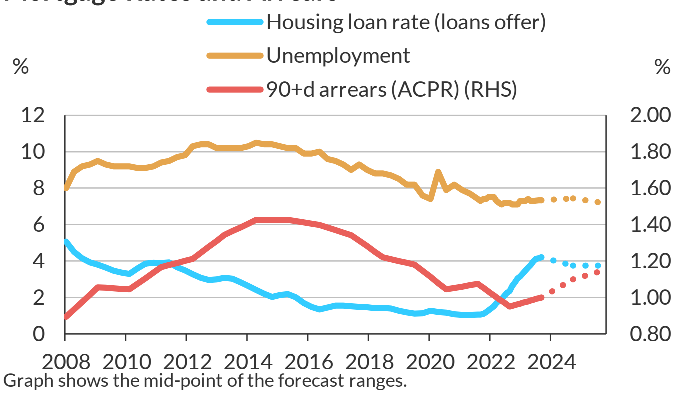
> We expect home prices to continue their gradual decrease and for late-stage mortgage arrears to slightly increase from a low absolute level.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Commission/AMECO, Institut National de la Statistique et des Etudes Economiques

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Credit Logement, Autorité de contrôle prudentiel et de résolution, Eurostat

AFFORDABILITY AND UNDERWRITING CONSTRAINTS DRIVE PRICES DOWNWARD

We expect nominal home prices to drop by 2%-4% in 2024, following an estimated 2% fall in 2023. A further decline of 0%-2% in 2025 will follow leading to a peak-to-trough decline of about 6% by mid-2025.

Households and especially FTBs will continue to struggle with both weaker affordability and strict underwriting limits set by the French authorities (amid still elevated home prices). However, the usury cap should no longer constrain credit in 2024, mainly because of the stabilisation of the ECB policy rate.

The number of loans originated is predicted to rise moderately by 5%-10% in 2024, following a decline by more than 40% in the 12 months to June 2023.

The overall price decrease should be limited, because of chronic housing undersupply. The government has announced several measures, including extended eligibility for interest-free (for those with incomes up to EUR4,500 a month from EUR2,500) and initiatives to support the construction sector.

Broader economic factors, prudent household behaviour, and growing emphasis on energy efficiency – which limits supply and raises construction costs – will set the direction of the market and could emphasise regional disparities.

LIMITED ARREARS GROWTH DUE TO STEADY JOB MARKET AND BINDING LENDING RULES

Fitch expects a mild increase in late-stage arrears for residential loans reaching 1%-1.2% in 2024 and 1%-1.3% in 2025 (from 1% expected at end-2023). The limited additional deterioration is mainly due to the regulator's binding underwriting rules and gradual phase-out of inflation support measures for households in place since 2022.

Residential loan performance is not exposed to rising interest rates as about 97% of outstanding loans have a fixed rate for life. Unemployment will therefore drive arrears and this is expected to be broadly stable over the next two years and below the average level of the past five years.

The phasing out of government support schemes throughout 2024 and 2025 to mitigate inflation (mainly by limiting energy cost increases) and still elevated inflation rates will continue to weigh on households' capacity to service debt.

A significant rise in unemployment would lead to worse loan performance, especially as high inflation continued. However, prudent origination resulting from the mandatory underwriting limits since early 2022 (initially introduced in late 2019) should contain arrears growth to low levels.

FitchRatings

DENMARK

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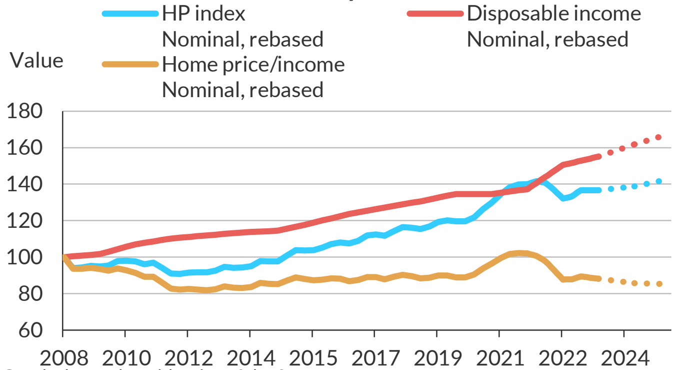
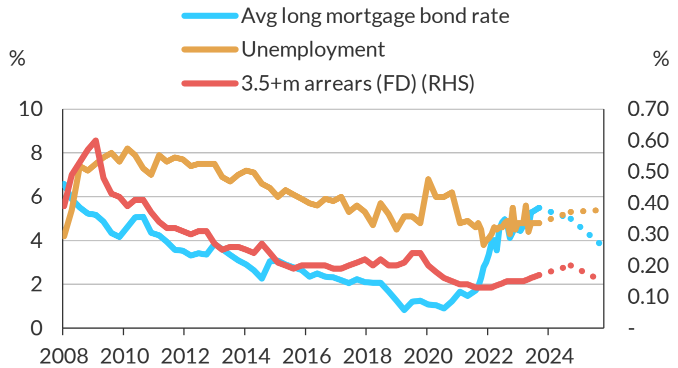
We expect moderate price increases against subdued volumes, given limited supply and affordability.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Commission/AMECO, Statistics Denmark

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Finance Denmark, Eurostat

INCREASE IN HOME PRICES DRIVEN BY WAGES AND IMPROVING AFFORDABILITY

Fitch forecasts nominal home price growth of 1%-3% in 2024 and 2%-4% in 2025 following the positive trend since the trough in February 2023 and 3.5% expected growth in 2023. This will be driven by low unemployment, higher wages (5.5%-6% increase in 2024, according to the Danish National Bank), while mortgage rates stabilise in 2024 and fall in 2025.

Higher nominal disposable income and lower inflation will enhance affordability and housing demand. Additionally, property supply lagging behind demand due to increasing construction costs supports the upward price trend for 2024 and 2025.

Mortgage rates have likely reached their peak, but will remain higher for longer, between 4.5% and 5.5% in 2024. We expect mortgage rates to decrease by about 1p.p. in 2025, supporting home price growth. Rates will remain higher than levels seen before 2022, which ultimately constrains demand and will limit property prices growth to the low single digits.

The introduction of the new property tax regime from January 2024 could also limit the growth in home prices, especially for flats in large urban areas.

UNEMPLOYMENT AND HIGH INTEREST RATES CAUSING MARGINAL ARREARS RISE

We expect mortgage arrears to increase marginally to 0.2% in 2024 from 0.17% in 2023. This will be driven by borrowers whose loans will reset at higher rates in 2024 in a context of marginally higher unemployment of 5.3% in 2024 (estimated 5.1% for 2023). Arrears should reduce in 2025 as interest rates decrease and unemployment stabilises.

About a quarter of borrowers saw their mortgage rates reset in 2023 and a similar number will reset in the coming years. The latter will be in a better position than the former as inflation slowly eases and wages increase. The remaining borrowers have rates that are fixed for the loan term.

Risks in mortgage performance are mitigated by a very strong aggregate household balance sheet (net financial wealth of 244% of GDP in 2Q23) and high domestic savings. Danish households' debt/income reduced substantially to 184.4% of disposable income in 2Q23 from 233.5% in 4Q21, driven by borrowers reducing their debt levels upon refinancing their fixed-rate loans to variable-rate loans.

The Danish welfare state and tax deductibility on interest payments will continue to provide a cushion to households.

SPAIN

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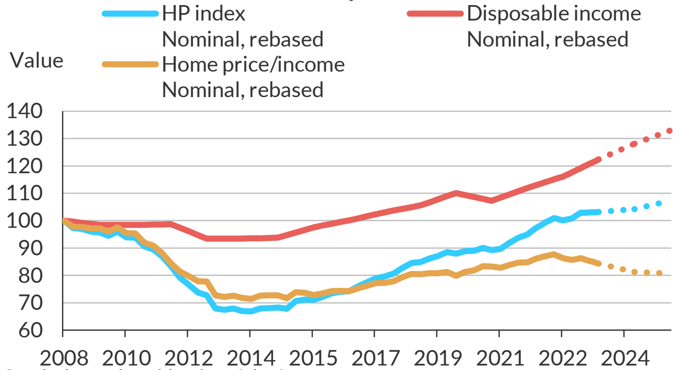
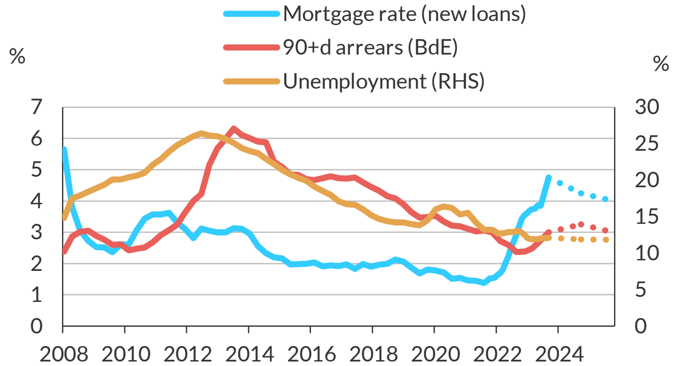
> We expect very little home price growth and mild mortgage performance deterioration in 2024-2025.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Commission/AMECO, Instituto Nacional de Estadistica

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Banco de Espana, Eurostat

HOME PRICES TO REMAIN SUBDUED

Fitch forecasts nominal home prices to grow below 2% in 2024, and to marginally increase by 2%-4% in 2025. This is broadly in line with the 3% growth we estimate for 2023.

The low growth rates reflect affordability challenges felt by prospective buyers due to increasing costs of living and higher financing costs. FTB struggles have intensified, as high rents constrain savings capacity. We expect mortgage rates to peak near 5% in 2023 or early 2024 and to start decreasing in 2H24 to around 4% in 2025.

The timid growth rate forecast also reflects persistent housing supply constraints, which are most pronounced in the main economic regions of Madrid and Catalonia. National construction levels are much lower than household formation, driven by immigration and the growing number of single-person households, a trend that should continue as real estate developments take a long time to execute.

Our forecast will be most influenced by macroeconomic trends. Material changes to monetary policy or labour market dynamics or any government intervention in the housing or mortgage markets would affect our home price growth forecasts.

ARREARS TO INCREASE AMID PAYMENT SHOCKS

We expect three-month-plus mortgage arrears to increase modestly to 3%-3.5% in 2024 before marginally decreasing to 2.75%-3.25% in 2025. The upsurge in arrears reflects the payment shock faced by borrowers when the predominantly floating rate mortgages reset annually to higher coupon rates. Until 2015, more than 90% of new mortgages were at floating rates. Since then, long-term fixed-rate mortgages have gained in popularity and represent half of new origination since 2021.

Fitch forecasts most cases of distress will be linked to floating-rate loans with little seasoning, loans with high loan/values or loans recently restructured, as these borrowers are facing steep instalment increases.

Mitigating factors preventing a material deterioration include the growing share of fixed rate loan origination and the ample seasoning of legacy loans. Increasing prepayments are also expected, as a means to reduce monthly instalments. Moreover, the stable labour market outlook will contain arrears; we forecast an unemployment rate just below 12% for 2024-2025, the lowest level for 15 years.

Our forecast would deteriorate if there were a sudden shock to the labour market. Job losses continue to be the main driver of loan impairments.

FitchRatings

ITALY

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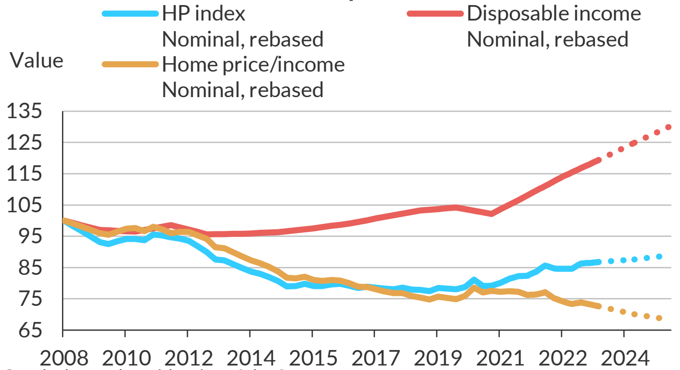
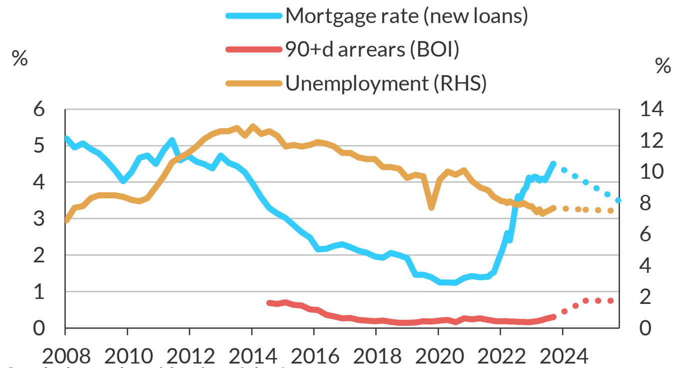
> We expect home prices to grow at a slower pace as imbalances between supply and demand narrow, and late-stage arrears increase moderately.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Commission/AMECO, Scenari Immobiliari/ National Institute of Statistics

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, European Central Bank, Eurostat, National Institute of Statistics

HOME PRICE GROWTH TO DECELERATE AS IMBALANCES NARROW

Fitch expects nominal home prices to grow by up to 2% in 2024 and between 0.5% and 2.5% in 2025, slowing from the 2.5% estimated for end-2023, as demand falls.

Our forecasts reflect the decreasing housing demand mostly due to affordability challenges arising from high cost of living and financing costs. We expect the floating rate for a typical mortgage loan to stabilise at 4% in 2024, after reaching 4.5% by end-2023, representing a notable increase from 2022.

Fitch anticipates a modest decline in home purchases, as the purchasing power of households diminish and consumer confidence remains low until rates reduces. The contraction of new origination will persist in 2024, with some stabilisation of lending volumes in 2025.

The majority of home transactions will continue to involve dated properties, marked by modest price growth. The supply of new and energy-efficient buildings is still limited and should not drive prices in the short term. Home prices are still affordable, but there are differences among regions and cities, with the northern regions and the wealthiest cities leading the home price growth.

SLIGHT RISE IN ARREARS FROM HISTORICAL LOWS

We expect late-stage mortgage arrears to increase between 0.5% and 1% in 2024, shifting forward last year's forecasts, before stabilising in 2025. This would be an increase from the record low of 0.2% in June 2023.

Slower-than-expected economic growth with long-lasting high mortgage rates and cost of living will put pressure on mortgage performance, especially on floating rate mortgages originated just before interest rates started rising. Nonetheless, the expected 2024 increase should be temporary with stabilisation in 2025, as the labour market in Italy is proving tight and Italy is one of the EU countries with the lowest private indebtedness.

Fitch believes performance deterioration will be mitigated by the shift from floating- to fixed-rate loans (at end-2022, 63% of the mortgage stock was fixed rate), Italian lenders' prudent underwriting standards and the forbearance measures to support borrowers in financial difficulties. The latter includes the Budget Law of 2023, which introduced the option for the borrowers to move to fixed rate from floating at no additional cost.

FitchRatings

AUSTRALIA

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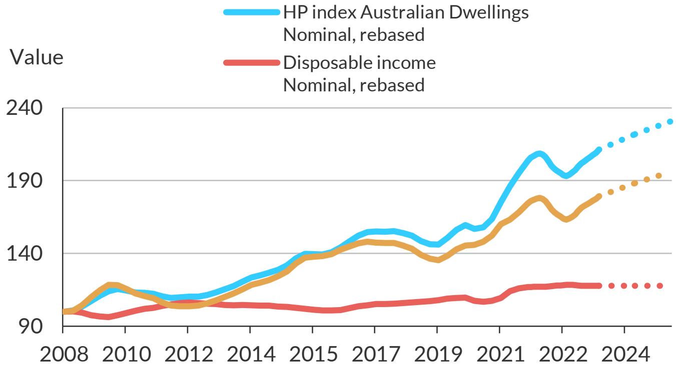
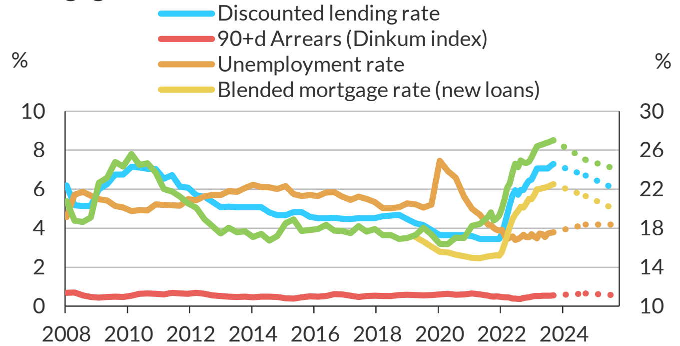
In 2024, we forecast home prices to rise by 4% to 6% due to tight supply and high immigration.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Australian Bureau of Statistics, CoreLogic

Mortgage Rates and Arrears



Graphs shows the mid-point of the forecast ranges.
'Discounted' rates are rates offered on standard variable rate housing loans.
Source: Fitch Ratings, Haver Analytics, Reserve Bank of Australia, Australian Bureau of Statistics

HOME PRICE RISES DRIVEN BY HIGH NET MIGRATION

We expect nominal home prices to grow by 4%-6% in 2024 following likely growth of 9% in 2023 from the trough in January 2023. More modest rises of 3%-5% will follow in 2025.

Housing demand is high due to strong net migration and changes in household formation. Conversely, supply is low, with Corelogic's total home listings in 3Q23 below the five-year average and the Australian Bureau of Statistic's annual dwelling completions declining after peaking in 2019.

According to official sources, Australia's annual population growth in 1Q23 was 2.2%, the highest since 4Q08, while average household size has trended lower since the pandemic, leading to increased demand for housing.

The low home listings seen in 2023 are expected to continue as homeowners are reluctant to sell due to fears of being unable to get a new mortgage assessed with high servicing buffers. New home construction has been decreasing as high inflation has resulted in increased building costs.

Affordability constraints due to high home prices relative to income are expected to slow price rises in 2025. High interest rates for longer than our expectations may lead to home price movement below our forecast.

LATE-STAGE ARREARS UP IN 2024 AS INTEREST RATES REMAIN HIGH

Fitch expects late-stage arrears to be up to 0.65% in 2024, an increase of 10bp from the expected end-2023 level. High inflation and interest rates will lead to late-stage arrears ending 2024 higher than the long-term average of 0.55%, but arrears are expected to return to the long-term average in 2025.

Arrears are expected to peak in mid-2024 when the central bank is expected to start decreasing the cash rate. Prior to the rate cuts Australia's predominantly variable rate borrowers will face pressure from continued inflation above the Reserve Bank of Australia target, reduced savings buffers and increased unemployment. Borrowers with low savings, those who have borrowed to their serviceability limit and those in the lowest income quartile are most vulnerable for mortgage arrears. In early 2025, we expect arrears to fall as cuts to the cash rate take effect reducing mortgage payments.

Fitch expects foreclosures to be limited due to historically low unemployment rates and lenders' willingness to support borrowers facing hardship.

An increase in interest rates and deterioration in the labour market beyond our expectations could lead to higher arrears than forecast.

FitchRatings

CHINA

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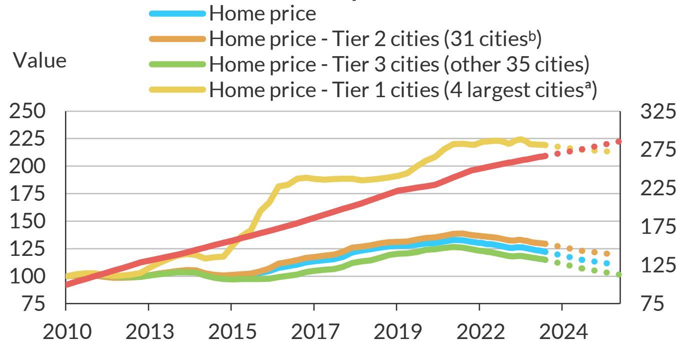
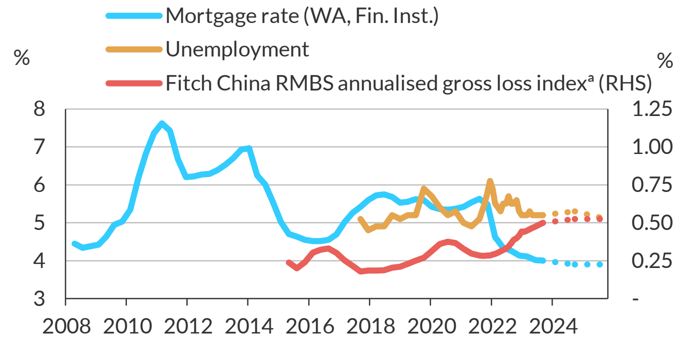
> We expect prices to decline further amid weak homebuyer sentiment and mortgage arrears to remain elevated as the economic recovery slows.

Home Prices and Affordability



[a] (Beijing, Shanghai, Shenzhen & Guangzhou), [b] (Capitals of provinces and autonomous regions), Home Price Index is calculated by NBS nominal home price index rebased as of end-2010.
Source: Fitch Ratings, NBS China (National Bureau of Statistics)

Mortgage Rates and Defaults



Graph shows the mid-point of the forecast ranges.
[a] 12-month rolling average of annualised gross loss %.
Source: Fitch Ratings, Haver Analytics, People's Bank of China, National Bureau of Statistics

HOME PRICE DECLINE EXPECTED TO LAST UNTIL 2025

Fitch forecasts China's home prices to drop by 5%-7% in 2024 and 3%-5% in 2025, compared to a likely 3% drop in 2023. Homebuyer confidence will remain lacklustre as the public's hope to see robust long-term return on home purchases diminishes and China's economic growth slows.

Investment demand has mostly vanished as prices dropped by 7% over the past two years after the central authority put polices in place against speculation. The genuine demand from FTBs or home upgraders is curtailed by the disappointing post-pandemic economic recovery.

The falls will be more severe in lower-tier cities, with over supply and decreasing populations. Prices in Tier 1, 2 and 3 cities have lost 2.7%, 6.9% and 8.8% respectively, since their peak and we anticipate high-tier prices to outperform low-tier prices by up to 10% in the coming years due to steadier growth and higher immigration.

A faster turnaround may occur if aggressive monetary easing occurs but a major recovery in demand is unlikely considering the government's goal to de-risk the housing sector. Policy easing including lowering mortgage rates, relaxing downpayment requirements and lifting purchase and sale restrictions has failed to revive the housing market.

MORTGAGE DEFAULTS TO STABILISE AT AN ELEVATED LEVEL

We expect the collateral default rate in RMBS to remain stable in 2024 and 2025 at around 0.5%, which is notably higher than the pre-pandemic average amid slower economic growth.

A considerable number of Chinese mortgage borrowers are still suffering the consequences of employment and income loss caused by the collapse of the property sector and slowdown in manufacturing. The slow recovery of household balance sheets of affected borrowers will dampen any improvement in mortgage performance.

On the other hand, further mortgage rate cuts expected in 2024, on top of the average 30bp cuts in 3Q23, will continue to support mortgage serviceability. Generally high household savings rate of over 40% of disposable income also provide buffer against performance volatility in the broader home loan market. With limited exposure to properties under construction, we consider the chance of RMBS performance suffering from a mortgage boycott as small.

The mortgage performance may improve if the economy grows more strongly than expected. Performance may further deteriorate if the labour market becomes much softer with significantly higher unemployment.

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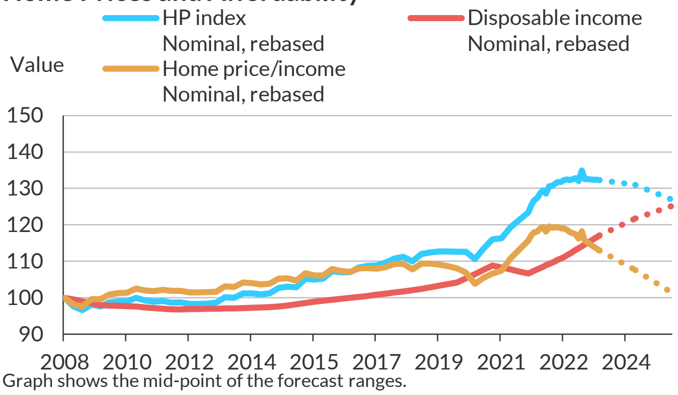
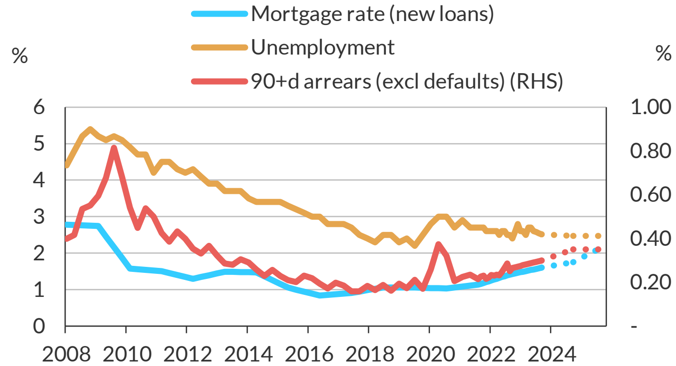
Home prices will start to correct following an expected rate rise while mortgage performance will remain stable due to strong employment.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Japan Housing Finance Agency, European Commission/AMECO

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Japan Housing Finance Agency, Eurostat

HOME PRICES TO FALL FROM A PEAK IN 2024 DUE TO RATE RISES

Fitch forecasts that nominal home prices will fall by up to 2% in 2024, followed by a decline of 2%-4% in 2025.

The correction reflects the increasing possibility for the Bank of Japan changing its policy rate of -0.1% to 0.1% in 2024 and 0.25% in 2025. The policy rate changes will lead to higher mortgage rates and result in a decline in demand for homes as purchasers' affordability and serviceability have already been stretched to the limit with high loan to value ratios under the low interest rate environment.

Home prices have been rising faster than incomes. In the past five years, home prices have increased 23.9% while household income has only gone up by 6.8%. The correction of home prices will narrow this gap.

The expected slowdown in inflation and Japanese Yen depreciation will stabilise construction costs, which will also put downward pressure on home prices. Given the property developers' market competition, Fitch considers that lower construction costs will lead to new housing supply at more reasonable prices.

BENIGN EMPLOYMENT EXPECTATIONS SUPPORT STABLE PERFORMANCE

We believe mortgage arrears will be largely stable in 2024 and 2025, ranging from 0.3% to 0.4%, reflecting benign employment conditions. We forecast the unemployment rate to remain at a low 2.5%.

A slight increase in arrears from 2023 reflects our expectation of deterioration in household finances due to higher inflation than wage growth, which puts pressure on borrowers' serviceability. Negative real wage growth has continued for a consecutive 19 months since April 2022.

The expected rate rise may have a negative impact on borrowers' serviceability and in turn arrears as borrowers in Japan are highly leveraged. In recently originated pools of Japan Housing Finance Agency's RMBS transactions, the average debt to income and loan to value ratios increased to around 26% and 92%, respectively, from around 20% and 75% before the global financial crisis.

However, Fitch does not expect a material increase of arrears as the debt service payments by mortgage loan borrowers are partially supported by the special tax deduction (income tax refund) up to the first 10 to 13 years of loan terms.

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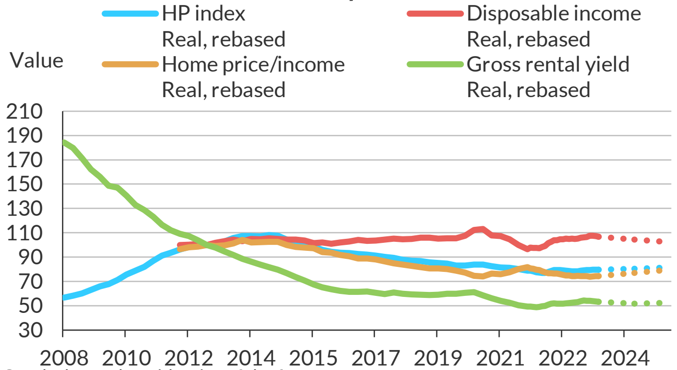
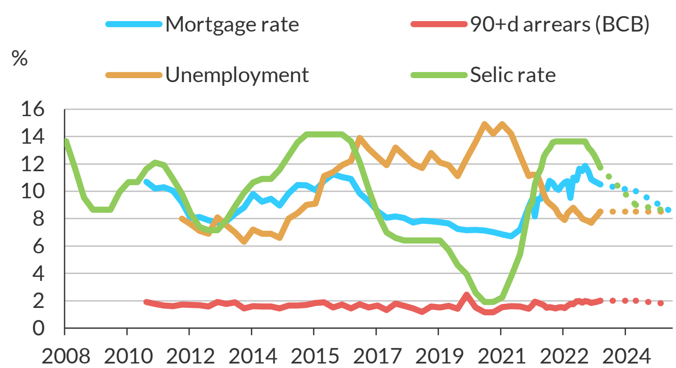
Prices should keep increasing due to short supply while arrears should improve in line with macroeconomic conditions.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Instituto Brasileiro de Geografia e Estatística, Fundação Instituto de Pesquisas Econômicas, OECD

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Banco Central do Brazil

LOW OFFER KEEPS PRICES HIGH

We forecast annual nominal home price growth of 4%-6% in both 2024 and 2025, consistent with our 5.5% estimate for 2023 as we do not expect supply to meet expected demand.

Fitch does not observe material changes in the market that could lead to a home price slowdown. Proposed changes to social housing programs to improve affordability through higher subsidies through increasing the home price and income caps, and the expected decrease in the short-term rate should increase credit availability over the next years, supporting a higher demand. Inventory has been decreasing, despite the perceived construction burst in big cities in recent years.

The expected convergence of inflation to the target band set by the central bank will allow it to keep decreasing the short-term rate, which will make credit cheaper. We expect these conditions to support the same growth levels in 2025.

If take-out levels decrease, as credit conditions at initial sale granted prior to delivery were substantially better than 2024 projections, new homes inventory could increase further, pushing prices down.

ARREARS EXPECTED TO IMPROVE

Fitch's forecast for arrears is 1.75%-2.25% for 2024 and 1.5%-2% for 2025, consistent with expected 2% arrears for end-2023. The deterioration observed in 2023 is expected to be reversed through 2Q24, getting to the lower range for 2025, as macroeconomic conditions are expected to improve gradually.

Loan characteristics such as fixed-rate, decreasing instalments (fixed amortisation) and guarantee type (fiduciary-lien) contribute to stability in arrears. Most loans are originated by large banks, who put in place adequate underwriting practices supports, observed low volatility in arrears.

We project a mortgage rate of 9%-11% in 2024, and 8%-9% for 2025, following the expected decrease of the short-term rate. However, Fitch does not expect this to materially improve obligors' ability to pay or to refinance at better terms given the costs involved to transfer debt to another institution.

The recent Supreme Court decision that foreclosures do not need approval from a court should streamline recoveries, supporting low arrears levels and better control on mortgage performance.

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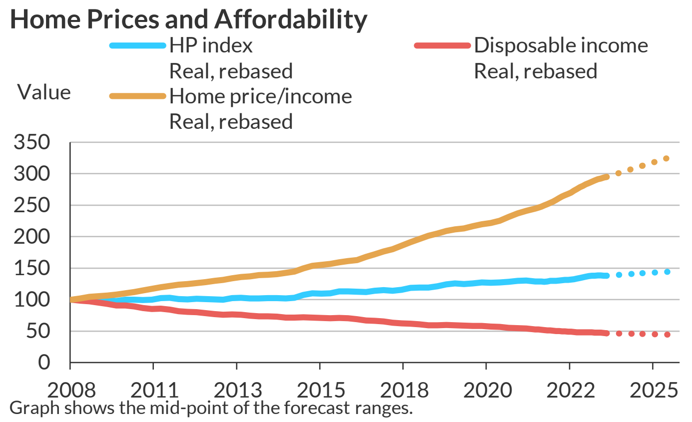
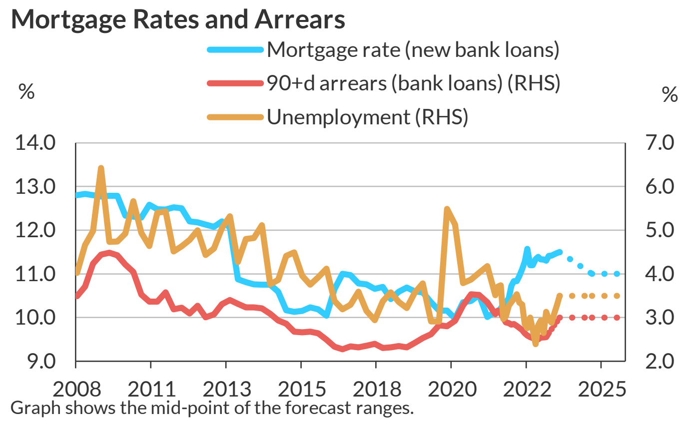
We believe home price growth will be limited as current high prices will limit demand.



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Instituto Nacional de Estadística Geografía e Informática, Sociedad Hipotecaria Federal, OECD



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Banco de México (BANXICO), Instituto Nacional de Estadística Geografía e Informática

AFFORDABILITY CONCERNS LIMIT DEMAND AND SLOW HOME PRICE GROWTH

Home price growth is expected to decelerate from our end-2023 forecast of 9.3% to 6%-8% in 2024. For 2025, we forecast a slower growth of 5%-7%, as prices adjust and inflation returns closer to the central bank's target. Fitch estimates home price growth to converge to historical long-term averages after the rapid growth over the past two years, following the inflation's downward trend and in response to a pressured household income with constrained affordability.

With a gradual decrease in policy interest rates forecast in 2024 as inflation reaches the central bank's target, we expect home price growth to be more moderate than 2022-2023. Pressured housing affordability driven by moderate disposable income growth, high mortgage rates and low originations continue to slow home price growth.

High mortgage rates constrained new originations in 2023. Fitch forecasts mortgage rates to fall slightly to between 10% and 12% for the next two years as inflationary pressures and monetary policy ease. Housing financing will remain slow, but will still be lead by Infonavit and Fovissste, the largest mortgage originators in the country focused on private and public employees, respectively.

ASSET PERFORMANCE PRESSURE TEMPERED BY STEADY LABOUR MARKET

We expect arrears for bank loans to face a limited deterioration to 3% by end-2023 before remaining mostly stable at 2%-4% in 2024 and 2025. The uncertainty around the general election, continued high interest rates prevailing and constrained household income, along with stable unemployment, drive Fitch's arrears forecasts.

The performance of bank mortgages reflects prudential underwriting for origination that focuses on middle- to high-income borrowers. Pressures on disposable income from inflation surges and monetary policy slowdowns after the general election could potentially lead to asset deterioration by late 2024 and 2025.

After reaching historical highs, arrears for Infonavit and Fovissste are set to stabilise in line with the expectations for the labour market given that both mortgage originators use a payroll deductible mechanism and grant mortgages to active employees. Fitch believes arrears containment measures will continue to focus on restructuring loans rather than on foreclosures.

A severe asset deterioration is not expected, but Fitch does not disregard uncertainty in monetary policy that could delay decreases in mortgage interest rates that would pressure asset performance.

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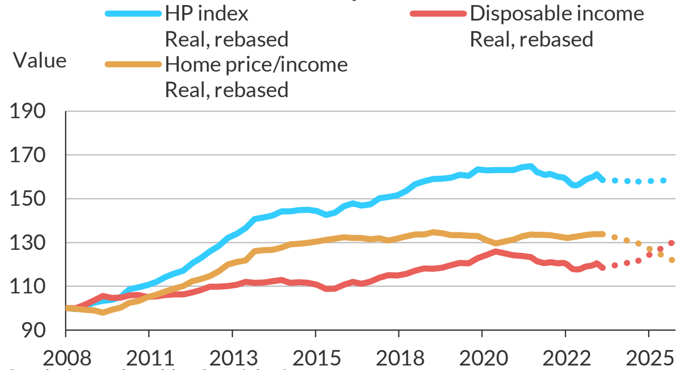
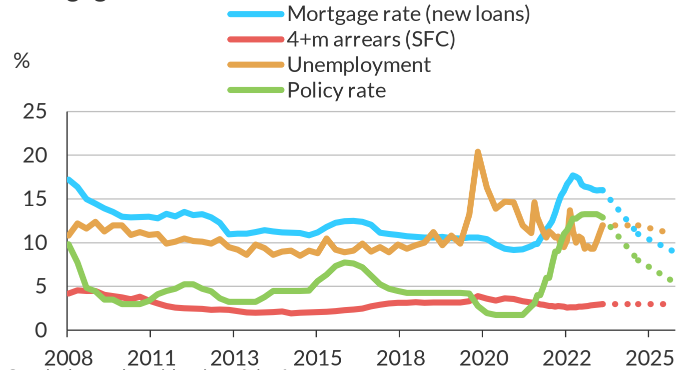
> We expect home prices to grow and a stable mortgage performance in 2024 amid more favourable macroeconomic conditions.

Home Prices and Affordability



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Banco de la República, Departamento Administrativo Nacional de Estadísticas, OECD

Mortgage Rates and Arrears



Graph shows the mid-point of the forecast ranges.
Source: Fitch Ratings, Haver Analytics, Superintendencia Financiera, Banco de la República

HOME PRICES TO CONTINUE GROWING, BUT AT A SLOWER PACE

Fitch forecasts home price growth of 5%-7% in 2024 and 4%-6% in 2025, representing a deceleration from the estimated 12% in 2023. The lower, but still positive, trend is supported by easing inflation and an expected return of the supply and demand for mortgages, after a challenging 2023 due to weak macroeconomic conditions.

Home price growth will remain positive with housing demand increasing due to better credit conditions amid persistent housing shortages. In 2023, a large number of construction projects had to be rescheduled due to the lack of favourable credit conditions as well as high costs of labour and imported supplies. Demand could be tempered if employment and GDP growth levels remain low in 2024 and 2025.

Our forecast could be lowered if there are higher-than-expected levels of unemployment, signs of recession or salaries increasing beyond inflation, as these factors affect price stability and consumer confidence.

STABLE MORTGAGE PERFORMANCE AS CREDIT CONDITIONS SLOWLY IMPROVE

We expect mortgage arrears to carry on deteriorating to reach 3% by end-2023. Arrears should remain between 2.5% and 3.5% in 2024 and 2025 due to slight improvements in credit conditions, which will support borrowers' willingness to take on debt and financial institutions' risk appetite.

The deterioration in arrears should be limited as Colombia's mortgage portfolio is originated under conservative underwriting rules and with fixed interest rates. Fitch expects some growth of mortgage origination in 2024 and for a further recovery in 2025 diluting the marginal deterioration, as the lower interest rates start to be reflected in mortgage rates.

In addition, the government subsidy programme, and its expansion to a larger population, which could increase origination, supports portfolios' performance as subsidies could be retired if debtors become delinquent. Fitch does not expect significant increases in foreclosures as the market favours renegotiations before forced sales.

Our forecast could change if interest rates are not reduced as expected, affecting credit market conditions.

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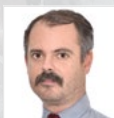
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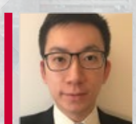
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