

The background of the slide is a photograph of several highly reflective, polished metal spheres resting on a surface of fine, light-brown sand. The spheres are arranged in a loose cluster, with some in sharp focus and others blurred in the foreground and background. Each sphere reflects the surrounding environment, including the sand and other spheres, creating a complex pattern of reflections. The lighting is warm and directional, coming from the upper left, which casts soft shadows and highlights the metallic sheen of the spheres.

UBS Global Real Estate Bubble Index

2025

Contents

UBS Global Real Estate Bubble Index

This report has been prepared by UBS Switzerland AG, UBS AG Singapore Branch, UBS AG Hong Kong Branch, UBS AG London Branch and UBS Financial Services Inc. (UBS FS).

Please see the important disclaimer at the end of the document. Past performance is not an indication of future returns.

Editor in Chief

Matthias Holzhey

Authors

Matthias Holzhey
Maciej Skoczek
Claudio Saputelli

Regional contributors

Wen Ching Lee (Singapore)
Eva Lee (Hong Kong)
Claudia Panzeri (Paris)
Ronaldo Patah (São Paulo)
Matteo Ramenghi (Milan)
Dean Turner (London)
Jonathan Woloshin (US cities)

Editorial deadline 22 September 2025

Design CIO Content Design

Cover photo Shutterstock

Language English

Contact ubs-cio-wm@ubs.com

Subscribe Electronic subscription is also available via Investment Views on the UBS e-banking platform.



- 3** Editorial >
- 4** Bubble risks >
- 7** Valuations >
- 10** City profiles >
- 22** Appendix >

Editorial

Dear Readers,

Exceptionally large government transfers boosted household incomes, contributing to the inflation surge three years ago. Subsequent monetary tightening cooled housing markets and deflated bubbles. Paradoxically, the continued and ultimately unsustainable rise in public debt is likely to give housing markets fresh tailwinds in the coming years.

With public debt nearing 100% of global GDP by decade's end (according to the IMF forecast), policymakers face three long-run paths to keep the debt dynamics under control: austerity, inflation, or financial repression. Austerity—raising taxes and cutting spending—is widely unpopular amid an aging population and growing polarization. Allowing inflation to rise is an easier path to nominal economic growth, which can help keep public debt under control. Financial repression—holding nominal borrowing costs down via regulation or central bank action—will likely be needed to manage debt service.

Real estate stands to benefit. Higher inflation erodes fixed-rate mortgage debt, aiding homeowners. Under financial repression, demand for assets with positive real returns, like property investments, rises. Housing markets in fiscally sound countries may also benefit, as capital inflows strengthen currencies and enable lower nominal interest rates without stoking inflation.

In the short run, affordability remains severely strained, holding housing markets back. In this issue of the *UBS Global Real Estate Bubble Index*, find out which cities face low downside risk, where corrections are likely, and where price increases are set to pick up again.

We wish you an engaging read.



Claudio Saputelli
Head Swiss & Global Real Estate
Chief Investment Office GWM



Matthias Holzhey
Senior Real Estate Economist
Chief Investment Office GWM

Bubble risks



Shifting risks

Miami shows the highest bubble risk among the cities in this study. High bubble risk also appears in Tokyo and Zurich. An elevated risk is evident in Los Angeles, Dubai, Amsterdam, and Geneva.

Risks are moderate in Singapore, Sydney, Vancouver, and Toronto. In Europe, Madrid, Frankfurt, and Munich fall into the moderate-risk group as well. According to the index, London, Paris, and Milan face low bubble risk. Outside Europe, Hong Kong, San Francisco, New York, and São Paulo are in the same category, with São Paulo showing the lowest risk among all cities analyzed.

Over the last four quarters, global housing markets continued to cool on average. Price-to-rent ratios declined across European and Asian cities, excluding Tokyo. Subdued mortgage lending reflects still-elevated financing costs in most regions. Even though mortgage rates have eased since 2023, they remain roughly twice the level seen from 2020 to 2022. New residential construction has trended lower, worsening housing shortages in growing urban areas. Overall, broad exuberance has faded, with average bubble risk in major cities falling for a third straight year.

Toronto and Hong Kong posted the largest declines in bubble-risk scores. And despite topping the index this year, imbalances in Miami and Tokyo eased from the prior edition. By contrast, Dubai and Madrid saw the biggest increases. Dubai's bubble risk has surged since 2022 amid an economic boom, leaving the market looking increasingly overheated.

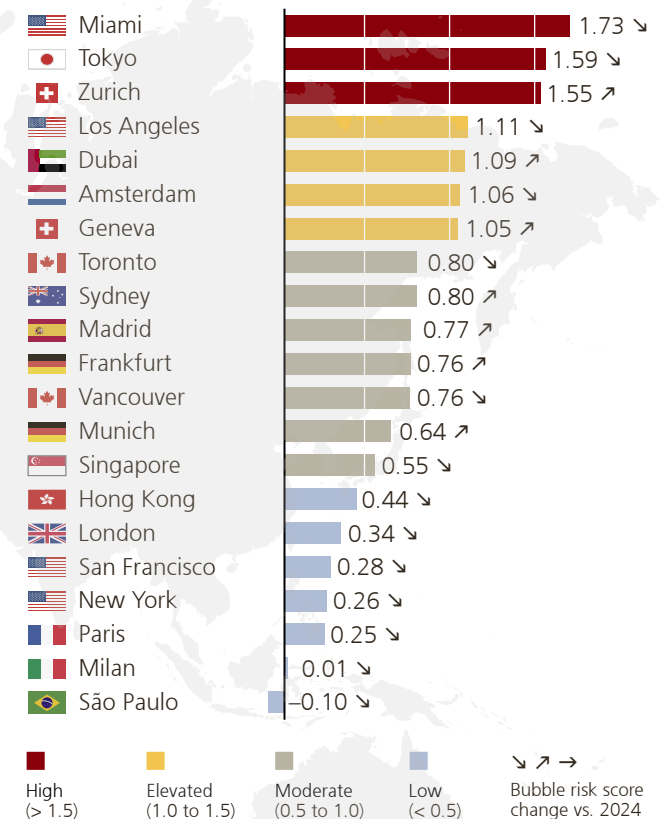
Cities with elevated or high bubble risk continued to decouple from fundamentals: over the last five years, inflation-adjusted home prices increased nearly 25% on average, while rents rose about 10% and incomes about 5%. By contrast, prices in cities with moderate or low risk fell roughly 5%, while rents and incomes were broadly flat. Historically, worsening affordability and widening gaps between prices and rents have served as forerunners of housing crises.

Identifying a bubble

Price bubbles are a recurring phenomenon in property markets. The term "bubble" refers to a substantial and sustained mispricing of an asset, the existence of which cannot be proved unless it bursts. But historical data reveals patterns of property market excesses. Typical signs include a decoupling of prices from local incomes and rents, and imbalances in the real economy, such as excessive lending and construction activity. The *UBS Global Real Estate Bubble Index* gauges the risk of a property bubble on the basis of such patterns. The index does not predict whether and when a correction will set in. A change in macroeconomic momentum, a shift in investor sentiment, or a major supply increase could trigger a decline in house prices.

UBS Global Real Estate Bubble Index

Bubble risk scores for selected housing markets, 2025



Source: UBS

For an explanation, see the section on Methodology & data pages 24 and 25.

Outlook hinges on inflation

Over the last four quarters, global home prices remained virtually unchanged in inflation-adjusted terms. Eurozone cities were largely flat, showing little to no growth. Price growth in all analyzed North American cities slowed down significantly, as poor affordability has taken its toll.

Some cities bucked the trend. Madrid recorded the strongest real price growth among all cities analyzed, with a 14% increase. Dubai also saw strong growth of about 11%, while Tokyo completed the top three with price growth of over 5%. A return to zero interest rates buoyed prices in Swiss cities Zurich and Geneva.

Over the last five years, Dubai and Miami were the front runners with average real price growth of roughly 50%. Tokyo and Zurich followed, with growth of 35% and nearly 25%, respectively. By contrast, former high-flyers, such as Hong Kong and Paris, saw their housing values decline by more than 20% over the same period. In London, Munich, and Frankfurt, prices fell by double-digit rates as well.

From 2010 to 2020, home prices in all selected urban centers rose faster than in their respective markets. But over the last five years, the trend reversed: Most city housing markets underperformed their national averages. Two forces have been at work: First, demand shifted to the suburbs following the pandemic and the rise of flexible work. Second, higher interest rates squeezed affordability in many cities, pushing more buyers toward cheaper suburbs and satellites.

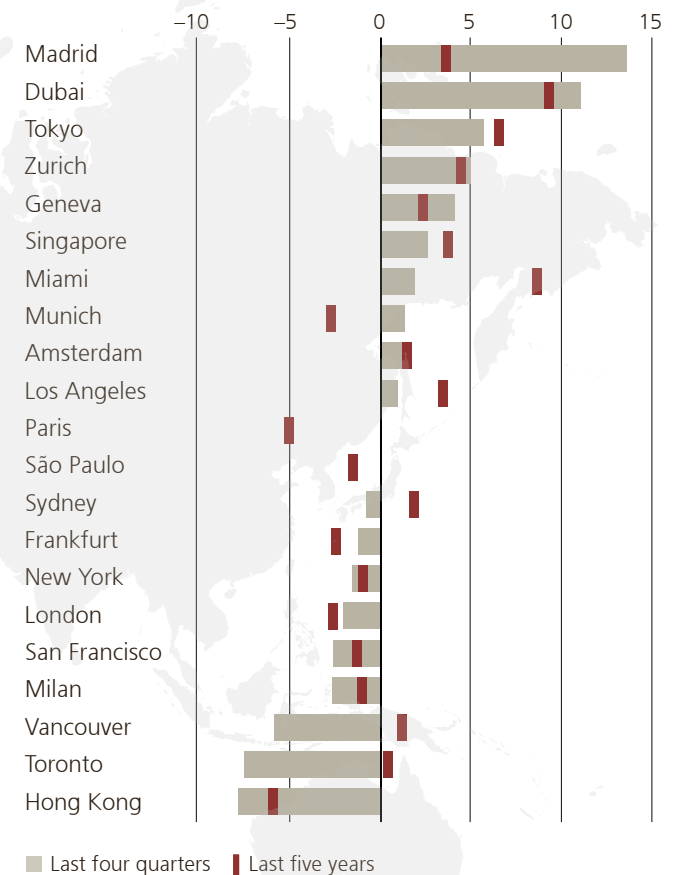
That pattern could reverse again as many countries, including much of Europe, face aging—and soon shrinking—populations. As rural areas lose residents and economic activity, urban centers may attract more growth, with Tokyo a leading example.

Overseas demand has also amplified housing booms, boosting urban outperformance. In recent years, Tokyo, Madrid, Miami, and Dubai drew strong foreign investor interest. By contrast, tougher rules—from new taxes to outright purchase bans—have dimmed the appeal of once sought-after markets such as Vancouver, Sydney, Paris, Singapore, and London.

From a macroeconomic perspective, the outlook for housing as an investment appears solid. Central banks are expected to lower policy rates by 2026, gradually reducing real financing costs. In an over-indebted world facing inflation and looming financial repression, housing can serve as a financial shelter. In most urban centers, limited supply also supports further price gains. However, this scenario depends on inflation staying contained and growth remaining resilient across major economies—both of which remain uncertain.

Home price growth

Inflation-adjusted year-over-year change, annualized in %



Source: See the section on Methodology & data on pages 24 and 25.

Valuations



Price-to-income

Buying a 60-square-meter (650-square-foot) apartment is beyond the budget of the average skilled service worker in most global cities. Hong Kong is the least affordable, requiring about 14 years of average income to purchase a 60-square-meter flat. Prices are decoupled from local incomes in Paris, London, and Tokyo, where price-to-income ratios exceed 10. Local wages are also insufficient to afford an apartment in Zurich, Sydney, Geneva, Munich, and São Paulo.

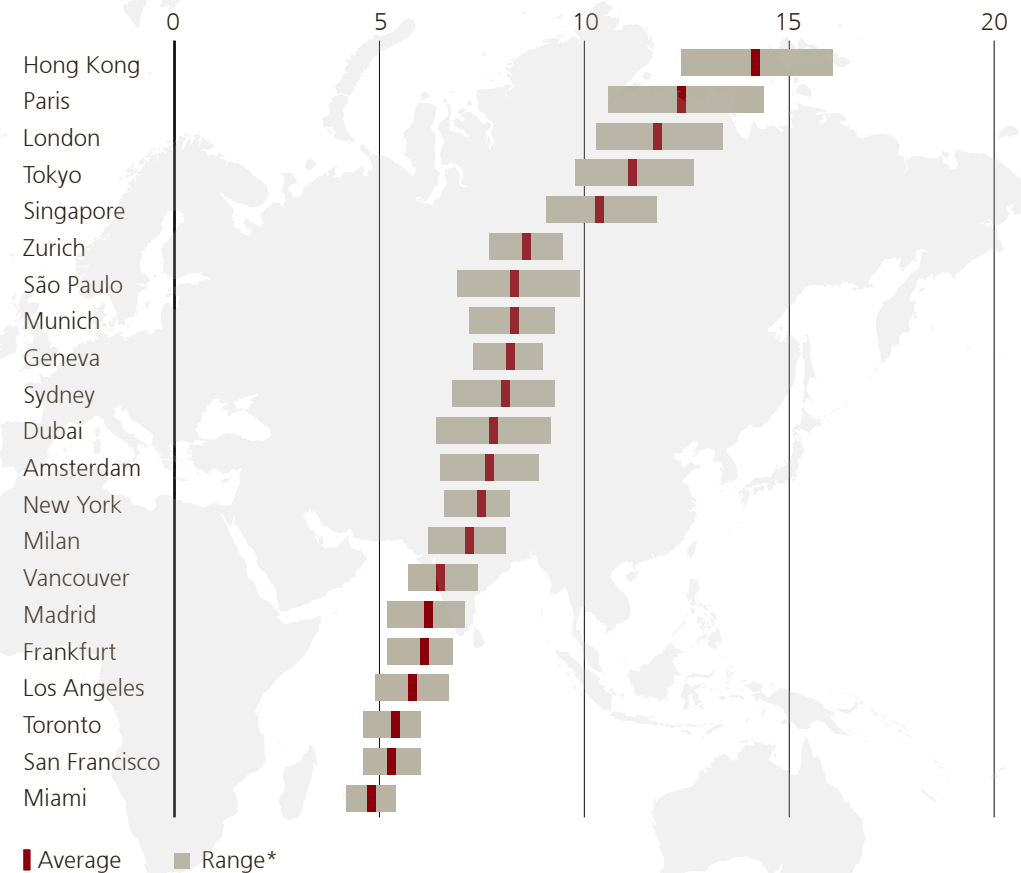
For homebuyers who meet regulatory lending requirements, affordability hinges on mortgage rates and amortization. When both are relatively high, the monthly burden can be heavy even in cities with low price-to-income multiples, such as many in the United States.

For a skilled service worker, the financially affordable living space is, on average, about 30% smaller than in 2021, before global interest rates rose. At prevailing interest rates, current price levels look difficult to sustain—especially in New York, Sydney, and London.

How many years of average income does it take to buy a 60 sqm apartment?



The number of years a skilled service worker needs to work to be able to buy a 60 sqm (650 sqft) apartment near the city center



Source: UBS. Remark: For an explanation, see the section on Methodology & data on pages 24 and 25. The data is not comparable with previous years due to a comprehensive data revision.

* Uncertainty range due to differing data quality.

Price-to-rent

Price-to-rent multiples show how many years of rental income it takes to buy an apartment. The multiples have fallen on average over the past three years, as rent growth has outpaced home prices in every European and Asia-Pacific city analyzed except Tokyo. Zurich now has the highest price-to-rent ratio, followed by Munich and Geneva. Frankfurt, Tokyo, and Hong Kong also post multiples at or near 30.

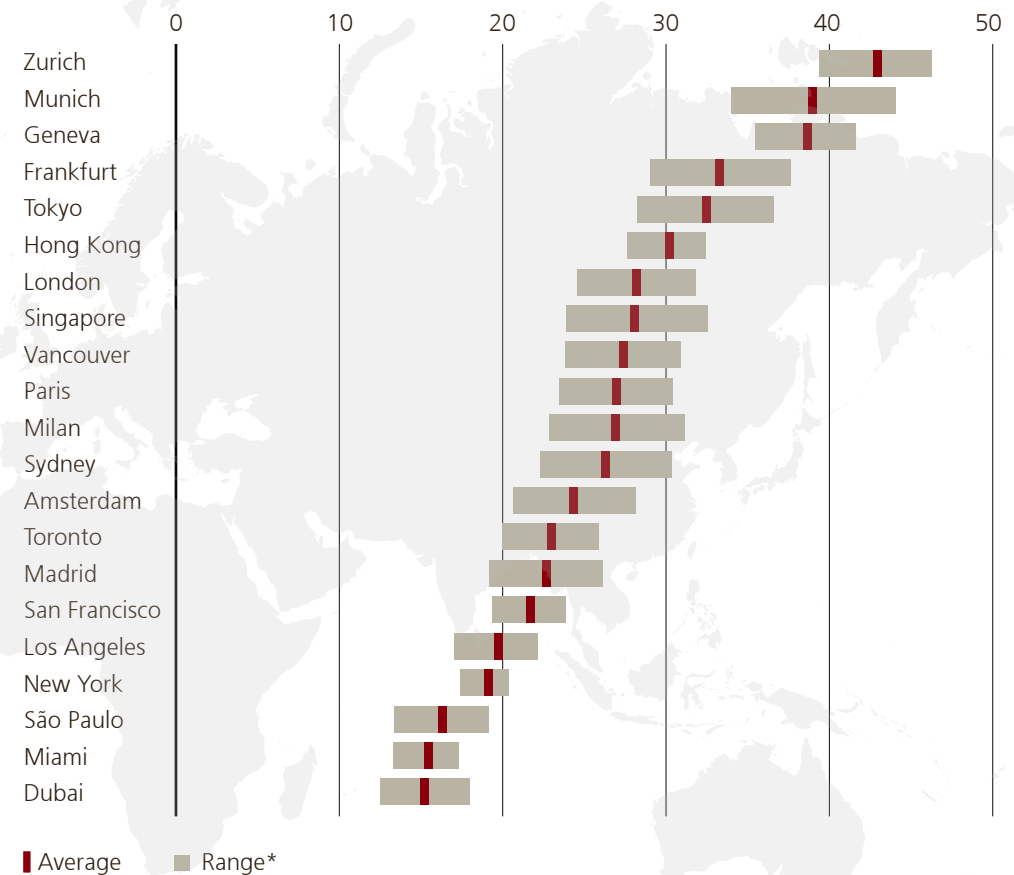
Such elevated levels reflect the expectations of outsized home-price gains following a prolonged period of low interest rates, as well as speculative demand. Investors anticipate being compensated for very low rental yields with capital gains. If these expectations deteriorate, homeowners in markets with high price-to-rent multiples are likely to suffer significant capital losses.

Conversely, Dubai, São Paulo, and the US cities analyzed in the study exhibit some of the lowest price-to-rent multiples among the markets analyzed. The reasons include relatively lightly regulated rental markets, above-average interest rates, and—especially in Dubai and São Paulo—higher risk premia.

How many years of rent does it take to buy an apartment of the same size?



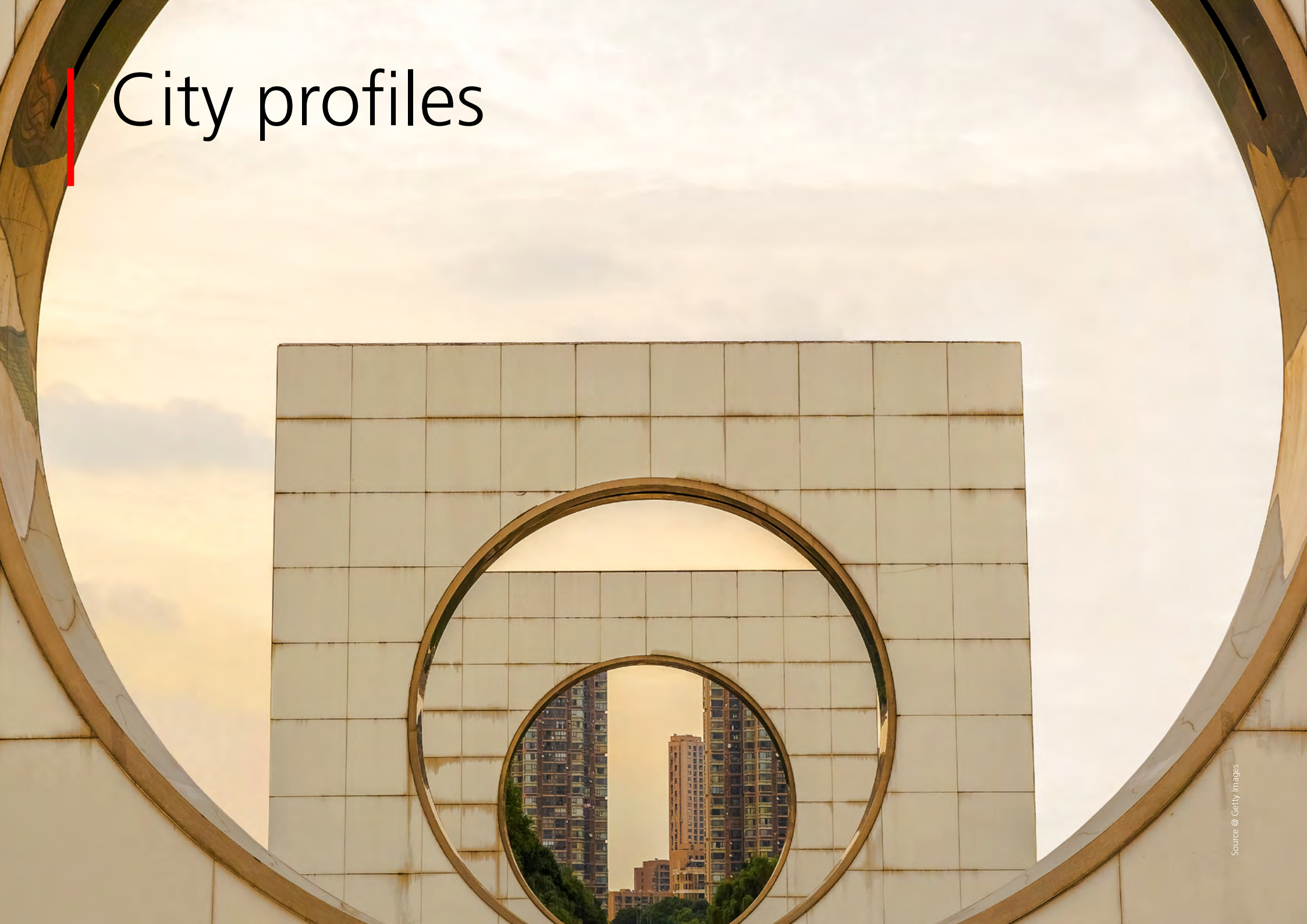
The number of years an apartment of the same size needs to be rented out to pay for the flat



Source: UBS. Remark: For an explanation, see the section on Methodology & data on pages 24 and 25. The data is not comparable with previous years due to a comprehensive data revision.

* Uncertainty range due to differing data quality.

City profiles





Miami

Prices at the peak

Over the past 15 years, Miami has posted the strongest inflation-adjusted housing appreciation among all cities in the study. However, the boom has cooled over the last four quarters, with home price growth slowing markedly. Despite affordability for buyers being at near record lows, owner-occupied prices have continued to diverge from rents. The current price-to-rent ratio has surpassed even the extremes of the 2006 property bubble, signaling a high bubble risk, according to the *UBS Global Real Estate Bubble Index*.

Recently, housing inventory has rebounded to near pre-pandemic levels, as slightly lower mortgage rates and significant levels of embedded equity have prompted some homeowners to list their properties. Additionally,

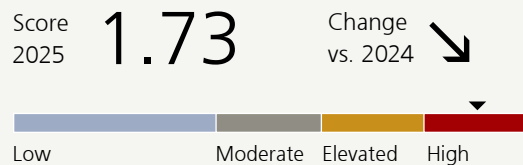
regulatory changes have forced many long-time owners of older condos to address decades of deferred maintenance, resulting in substantial costs. Together with higher insurance premiums driven by increased environmental risks, this has further contributed to selling pressure.

While price growth is expected to turn negative in the coming quarters, a sharp correction appears unlikely at this stage. Miami's coastal appeal and favorable tax environment continue to attract newcomers from the US West and Northeast, with real estate prices still well below those in New York and Los Angeles. International demand—particularly from Latin America—remains robust, especially in the luxury oceanfront condo segment.



Key facts

UBS Global Real Estate Bubble Index



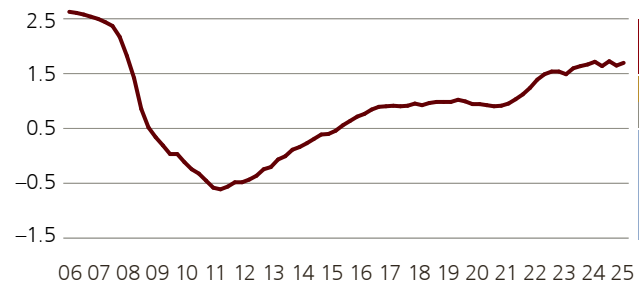
Real change as of 2Q25, year over year in %

Prices **+1.9** Rents **-1.9**

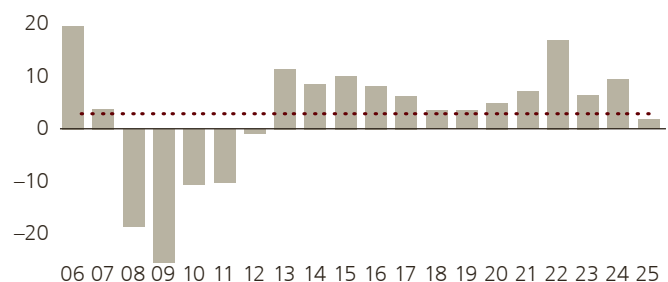
UBS Global Real Estate Bubble Index 2025

Key charts

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q
Dotted line: 20-year average



Source: UBS



Tokyo

Against the odds

Inflation-adjusted home prices are about 35% higher than five years ago, while real rents and incomes have risen only by low-to-mid single digits. Home prices continued to rise at an above-average pace over the last four quarters. The market remains firmly in high bubble-risk territory, according to the *UBS Global Real Estate Bubble Index*. However, bubble risk has moderated somewhat, as construction spending and growth of household leverage have both slowed recently.

Tokyo's population growth has rebounded from the pandemic slump, now increasingly driven by international migration. That shift is fueling strong demand for high-quality, accessible housing in desirable neighborhoods, pushing rents higher. It is also spurring more offshore demand for residen-

tial property as an investment, supported by a relatively weak yen and comparatively attractive yields.

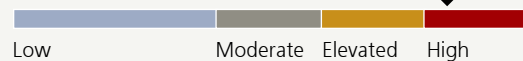
Homeownership is benefiting from persistent financial repression, with favorable financing conditions and strong investment demand. Further gains in female labor force participation are likely to support household purchasing power, thereby strengthening demand for high-quality condominiums. However, countervailing forces remain substantial: a shrinking working-age population and an abundance of vacant and stranded properties continue to weigh on the outlook. Home prices still outpace the national average, further eroding affordability. Foreign buyers may sustain demand in central districts, but political backlash against overseas investment is intensifying.



Key facts

UBS Global Real Estate Bubble Index

Score 2025 **1.59** Change vs. 2024

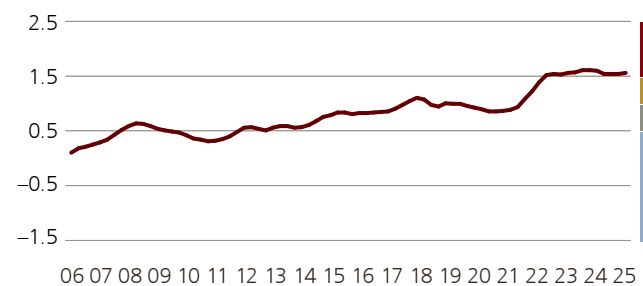


Real change as of 2Q25, year over year in %

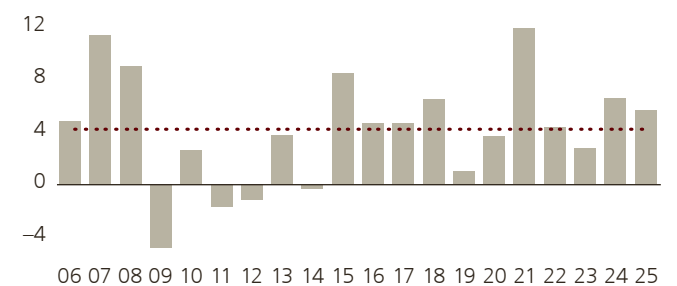
Prices **+5.7** Rents **+2.5**

Key charts

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q
Dotted line: 20-year average



Source: UBS



Zurich

Low risk, low reward



In early 2025, the Swiss National Bank's return to zero interest rates has reignited demand for home ownership—particularly in more affordable suburban municipalities. Recently, price growth has accelerated, and household mortgage volumes are on the rise. The risk of a real estate bubble has increased slightly over the last four quarters and remains high, according to the *UBS Global Real Estate Bubble Index*.

Home prices are now 60% higher than a decade ago, with property values rising at twice the pace of rents and five times faster than incomes. Zurich has the highest price-to-rent ratio among the cities in the study. The sustainability of this elevated price level hinges on two

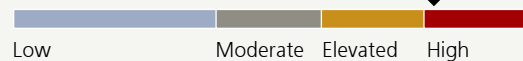
factors: low financing costs and robust local economic growth. Zurich continues to attract a steady flow of international firms—especially in information technology and artificial intelligence—that generate high local value added. In our view, a turning point in the housing market is not in sight.

Elevated price levels in the city continue to drive demand toward more affordable suburban municipalities. Moreover, possible rent controls are reducing the prospects for residential real estate investors. Overall, the potential for further price appreciation within the city looks limited, with investors scarcely compensated for long-term risks.

Key facts

UBS Global Real Estate Bubble Index

Score 2025 **1.55** Change vs. 2024

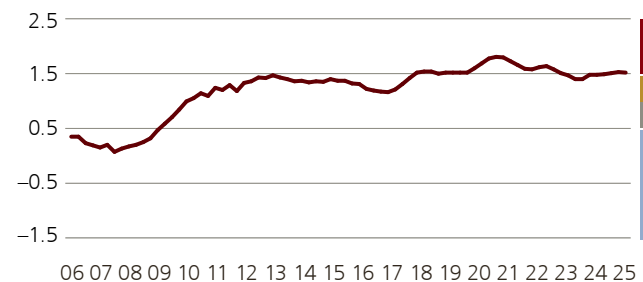


Real change as of 2Q25, year over year in %

Prices **+5.0** Rents **+2.9**

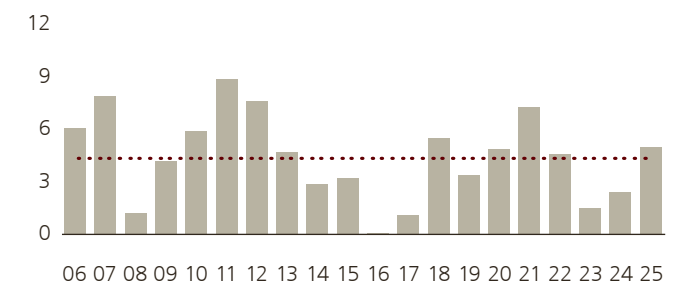
Key charts

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q

Dotted line: 20-year average



Source: UBS



Dubai

Heating up

After rising 11% over the last four quarters, inflation-adjusted home prices in Dubai have returned to their 2014 peak. Housing bubble risk has surged for a second consecutive year and is now at elevated levels, up from last year's moderate reading, according to the *UBS Global Real Estate Bubble Index*.

Dubai's population has grown by nearly 15% since 2020, tightening available supply and pushing rents higher. Over the past five years, rent increases surpassed home price gains. More recently, however, home prices have started to outpace rent growth as investment demand strengthens.

That said, rental yields remain high, and prices are still comparatively affordable—often well below those in other major global cities. Hence, optimistic investors see catch-

up potential and prospects for strong future returns. However, pricing power is weak in some segments. Incomes are not keeping pace with home prices, and affordability has deteriorated as interest rates remain elevated.

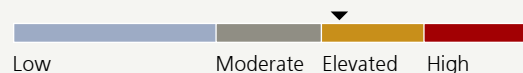
The market remains volatile, with exposure to oil prices and periodic oversupply. Building permits suggest new construction could reach levels last seen in 2017, which amplified the housing downturn. Competition for offshore real estate investment with Abu Dhabi and Riyadh is intensifying, especially as Saudi Arabia opens designated zones to foreign buyers starting in 2026. While Dubai's government expects a continued rapid economic expansion, it is uncertain whether household incomes will rise enough to support further price increases.



Key facts

UBS Global Real Estate Bubble Index

Score 2025 **1.09** Change vs. 2024



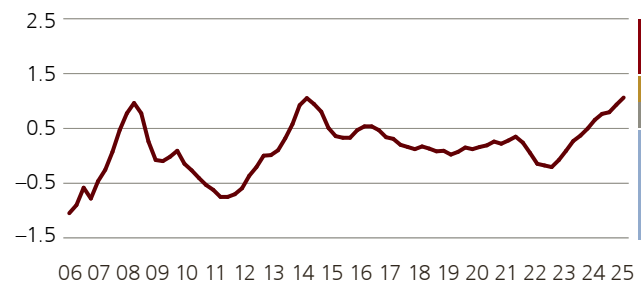
Real change as of 2Q25, year over year in %

Prices **+11.1** Rents **+4.7**

UBS Global Real Estate Bubble Index 2025

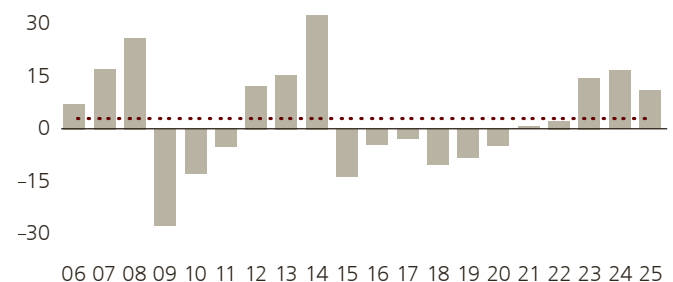
Key charts

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q

Dotted line: 20-year average



Source: UBS



Frankfurt

Waiting for lower interest rates

Apartment prices stabilized after a multi-year downturn. On an inflation-adjusted basis, prices are about 20% below the mid-2022 peak. Even after the correction, real prices are still more than 40% higher than a decade ago. However, market imbalances have eased, and bubble risk has declined from high to moderate, according to the *UBS Global Real Estate Bubble Index*.

The Frankfurt economic region has outperformed the broader German economy, which has been in recession since 2022. Solid growth in the financial sector continues to support local housing demand. Rents have kept pace with inflation in recent years and are expected to rise

further in the coming quarters. A collapse in building permits points to a much thinner supply of new housing this year and next, which will likely worsen the overall shortage.

Affordability remains historically low. Recent ECB rate cuts have not significantly lowered long-term mortgage rates yet, and leverage continues to weigh on returns for residential real estate. Nevertheless, Frankfurt's outlook remains positive, with tight supply supporting both prices and rents. A drop in long-term rates would likely spark a pickup in demand for both owner-occupied and buy-to-let purchases.



Key facts

UBS Global Real Estate Bubble Index

Score 2025 **0.76** Change vs. 2024



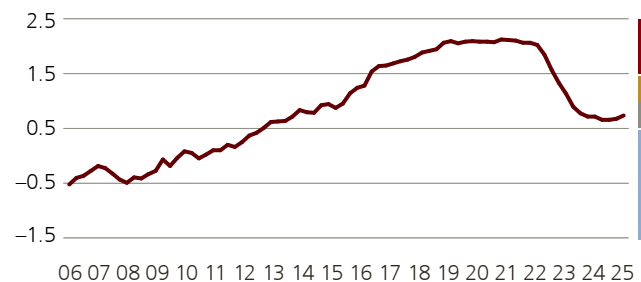
Real change as of 2Q25, year over year in %

Prices **-1.2** Rents **+4.0**

UBS Global Real Estate Bubble Index 2025

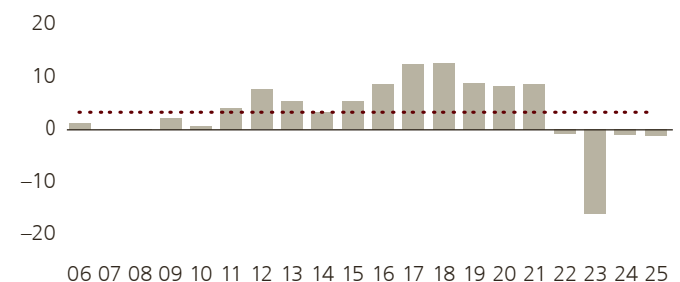
Key charts

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q

Dotted line: 20-year average



Source: UBS



London

Taxation as a headwind

London home prices are lagging inflation. Real values slipped 2% in the past year and are roughly 20% below their 2016 peak, when the *UBS Global Real Estate Bubble Index* signaled high bubble risk. The risk score has since eased to low, retreating further over the last four quarters. Despite lower prices, affordability has not improved meaningfully and remains poor.

Housing starts remain at record lows, pressured by strict planning rules, elevated borrowing costs, and subdued demand. As projects stall, the housing shortage shows little sign of easing, keeping upward pressure on rents, which are still rising—though at a slower pace than in

previous years. Without a clear catalyst to unlock supply, affordability is likely to remain strained.

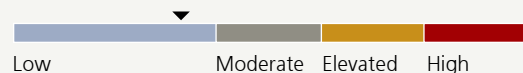
Overseas demand for London property is recovering, with a weak pound and the city's global status continuing to draw foreign capital. Even so, prime buyers remain cautious, as surcharges and less favorable tax treatment for nonresidents continue to weigh on demand. Bank of England rate cuts have yet to jump-start the broader housing market, and the high likelihood of rising property taxes is dampening interest. Still, additional rate cuts amid weak economic growth, combined with looser mortgage-lending rules, could lift buyer appetite.



Key facts

UBS Global Real Estate Bubble Index

Score 2025 **0.34** Change vs. 2024 ↘



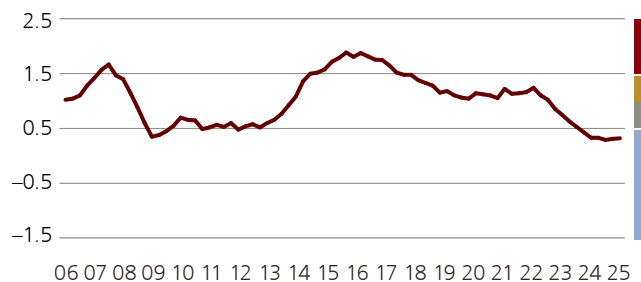
Real change as of 2Q25, year over year in %

Prices **-2.1** Rents **+2.7**

UBS Global Real Estate Bubble Index 2025

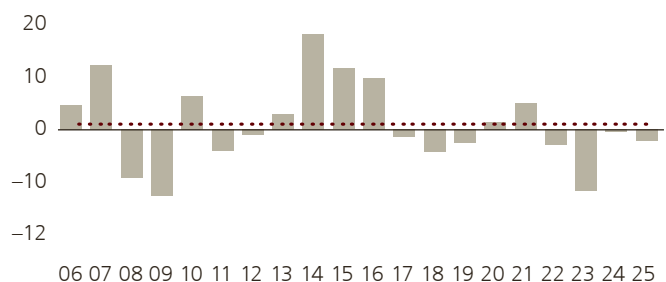
Key charts

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q

Dotted line: 20-year average



Source: UBS

Los Angeles

Score +1.11

Real home prices have been trending higher, driven by a strong luxury segment and tight supply for single-family houses. However, rents have not kept up with inflation due to suboptimal regulatory policies and ongoing quality-of-life challenges. In addition, absorption of new supply has been weak, and vacancies are on the rise. Los Angeles is among the least affordable cities in the US, contributing to a shrinking population. Prices are likely to trend downward if mortgage rates do not drop.

Amsterdam

Score +1.06

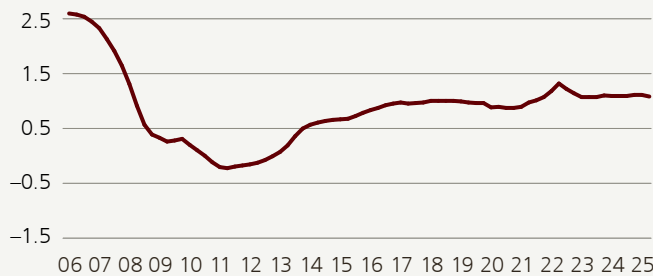
Real estate investors have sold properties en masse as stricter rental rules, higher transfer taxes, and outright bans on buy-to-let have eroded profitability. As a result, the supply of lower-quality units on the market is elevated. Despite strong income growth and immigration, inflation-adjusted prices have risen only modestly, with elevated mortgage rates curbing demand. Construction is already insufficient and is set to fall further under the new rules, creating medium-term upward pressure on home prices.

Geneva

Score +1.05

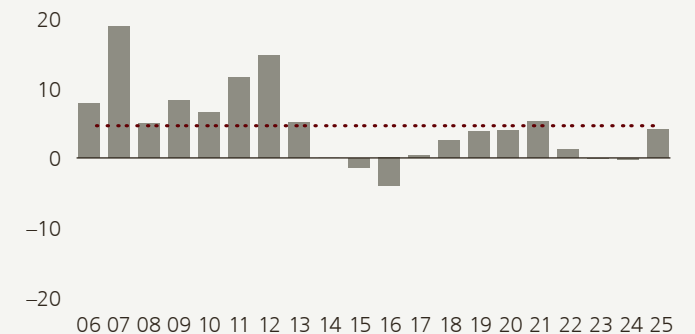
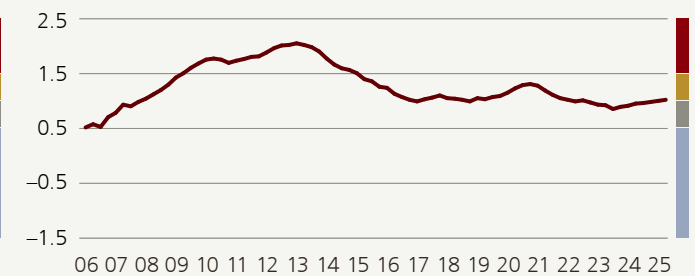
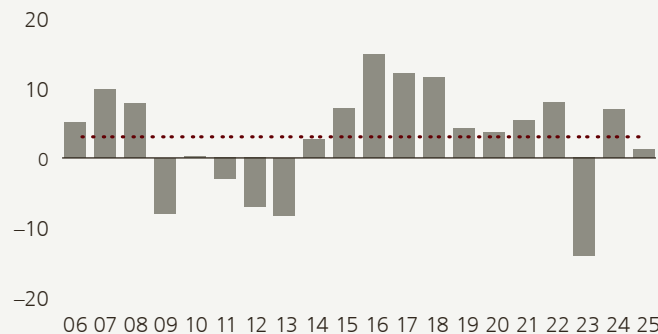
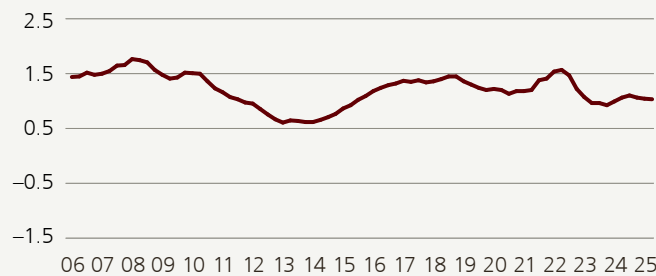
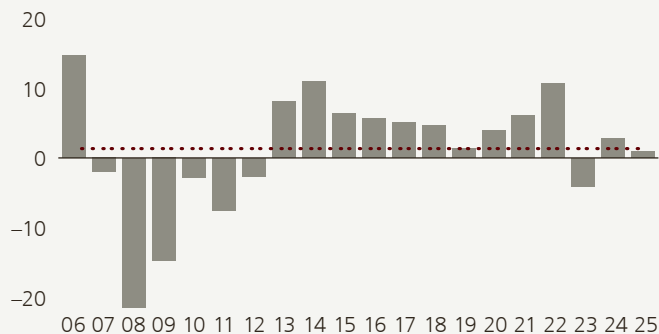
Housing demand is anchored by high incomes, international organizations, and international migration. Since 2023, strong inflows have revived population growth, partly as available housing in cheaper neighboring areas has become scarce. Real home prices have risen 4% since mid-2024, matching the national pace for the first time since 2021. Attractive financing, fewer listings, and a manageable project pipeline support current prices. New supply remains low and is largely concentrated in major development zones.

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q

Dotted line: 20-year average



Toronto

Score +0.80

A multi-year housing boom ended in 2022 as a foreign-buyer ban, vacant home tax, tighter short-term rental rules, and higher borrowing costs took hold. Real prices have returned to five-year levels, trailing national gains and local income growth. Population growth is driving firm rental demand, but first-time buyer affordability remains severely strained. Elevated and rising listings, muted sales, and softer job security amid US trade tensions are expected to weigh on prices in the coming quarters.

Sydney

Score +0.80

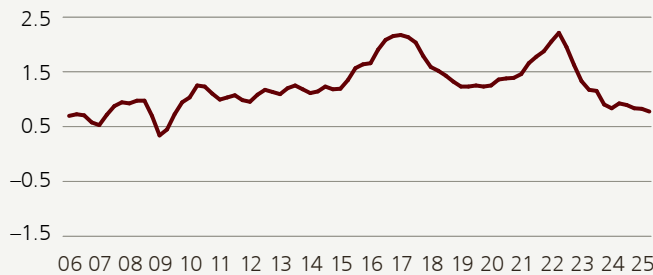
Home prices have largely tracked elevated inflation since 2022. Recent rate cuts have revived buyer confidence, lifting demand in premium suburbs. However, borrowing costs remain high, keeping ownership out of reach for most: the user cost of a 60 sqm (650 sqft) apartment near the city center now exceeds 60% of household income. Strong in-migration in recent years has kept the rental market tight. A new planning law to boost lower-cost construction and a temporary ban on foreign purchases may offer only limited relief.

Madrid

Score +0.77

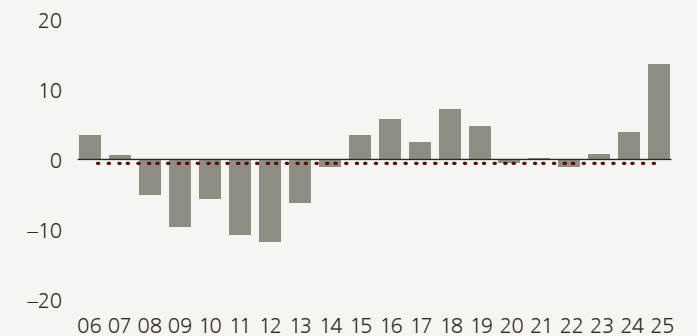
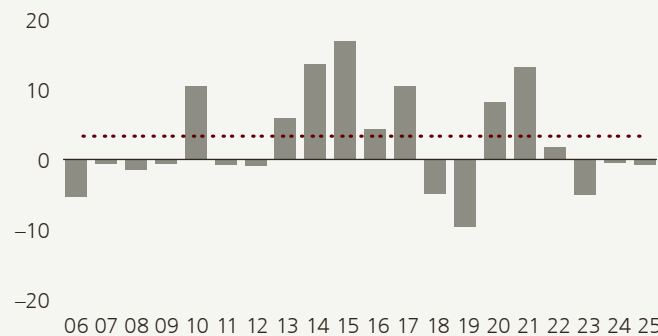
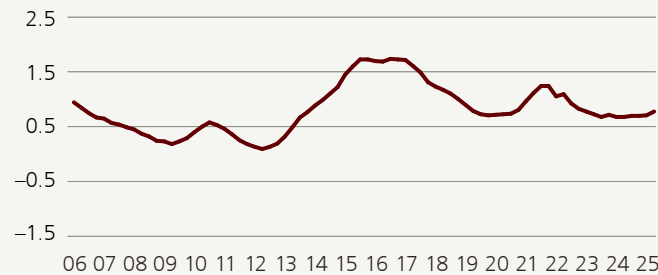
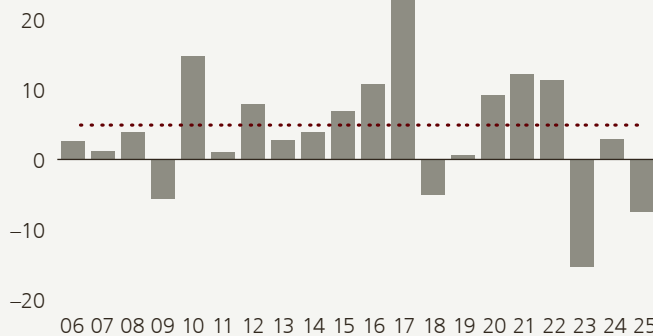
Inflation-adjusted rents rose about 10% over the past year amid strong household formation and limited new construction. Home prices climbed even faster—nearly 15% in real terms—bolstered by foreign investor demand. To address worsening affordability, Spain scrapped the real estate option in its golden visa program and is tightening rent controls. Falling mortgage rates should support local demand, but price growth is likely to slow in the coming quarters.

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q

Dotted line: 20-year average



Vancouver

Score +0.76

Since mid-2022, inflation-adjusted home prices have fallen more than 10% even as incomes and rents edged higher. Active listings hit a 10-year high in mid-2025, adding near-term pressure on prices. High mortgage rates and strict stress tests are keeping many would-be buyers in the rental market. Regulatory headwinds—such as a foreign-buyer ban and a speculation tax and vacancy tax—are weighing on new developments. Tighter rent caps and a new home-flipping tax have further discouraged investor activity.

Munich

Score +0.64

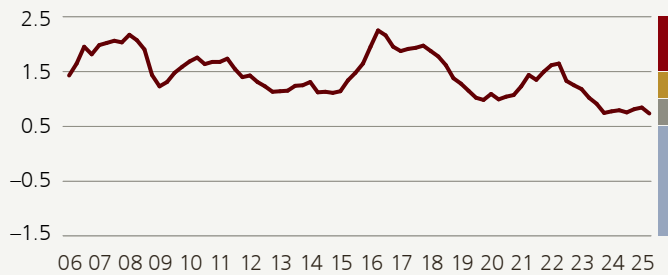
Real home prices fell about 20% from 2022 to 2024, easing bubble risks. Over the past four quarters, they have stabilized and edged up roughly 1%. The region remains Germany's growth engine and continues to attract new residents, despite heavy reliance on US exports and a nationwide recession. The vacancy rate is among the lowest in the country, as new supply lags demand, keeping rents on an upward path. Elevated financing costs and low rental yields dim the odds of a strong near-term price rebound.

Singapore

Score +0.55

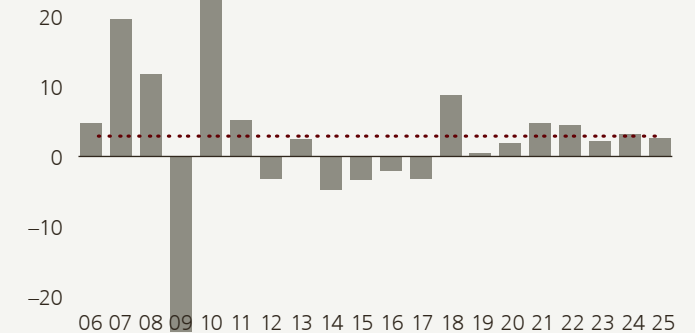
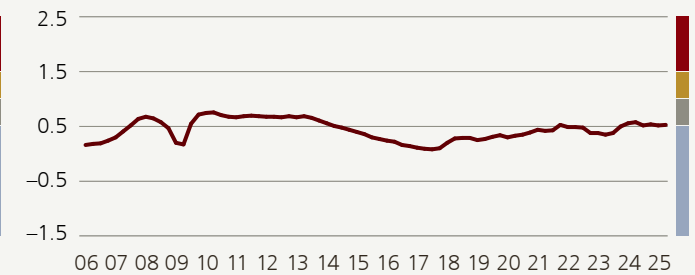
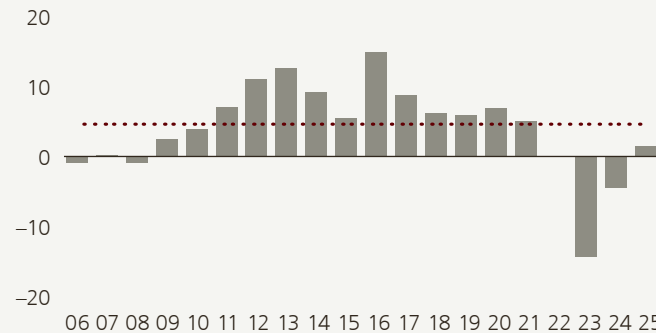
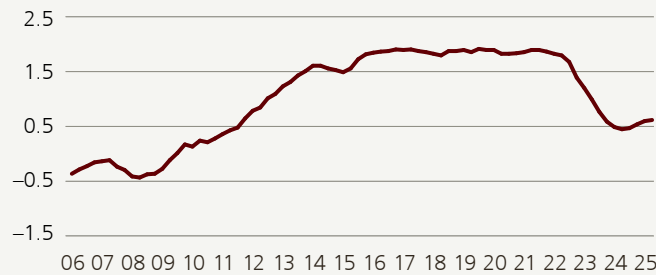
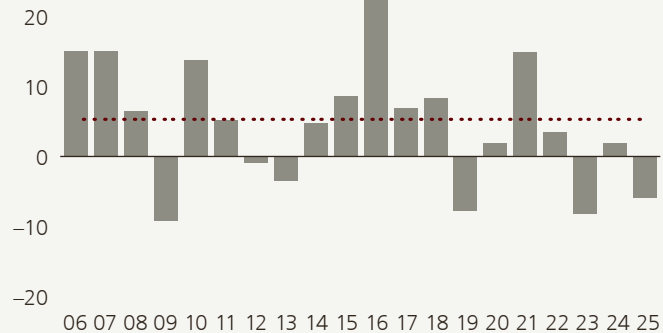
Real home prices have risen about 3% a year since 2021, while rents have climbed roughly twice as fast. Fundamentals are solid: The population grew about 10% over the period, and vacancies fell amid construction delays. Authorities curbed speculative buying and foreign demand through additional buyer stamp duties, keeping bubble risk moderate to low. Transaction volumes should pick up as mortgage rates decline and new supply comes online, but price gains should stay modest and track economic fundamentals over the long term.

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q

Dotted line: 20-year average



Source: UBS

Hong Kong

Score +0.44

Sales activity has picked up, supported by changes to mortgage insurance, property stamp duty easing, lower rates and most importantly lower home prices. Real home prices started to stabilize after falling nearly 28% below 2021 levels—matching those last seen in 2011 in inflation-adjusted terms. While financing costs are expected to ease further—following the trend of US rates, prices are likely to be flat to slightly negative as high inventories weigh on the outlook. The lower prices have improved the relative affordability compared to the last peak.

San Francisco

Score +0.28

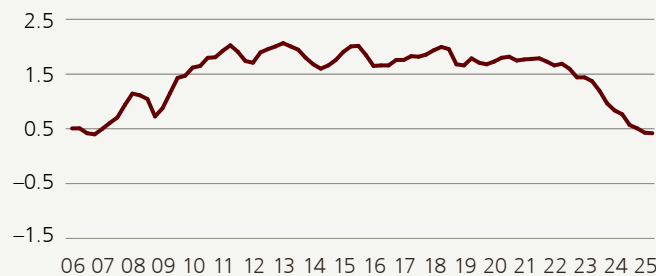
Home prices are still lagging inflation. On an inflation-adjusted basis, they are about 10% below their 2022 peak. Affordability remains a major hurdle, even though incomes have outpaced home prices over the past seven years. Meanwhile, rental growth is accelerating as return-to-office mandates and strong AI hiring draw higher-income tenants back to the city. These trends will likely increase demand for owner-occupied housing as well. Lower mortgage rates would boost prices, even though for-sale inventory has risen sharply in recent quarters.

New York

Score +0.26

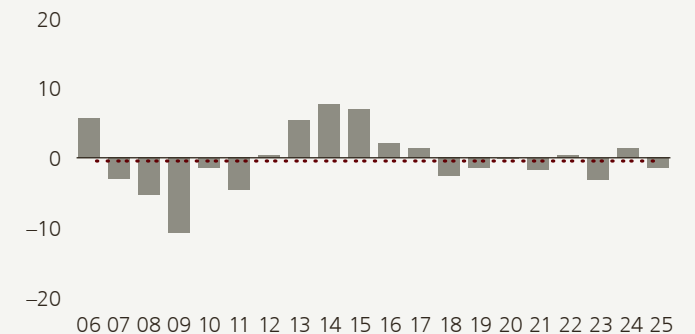
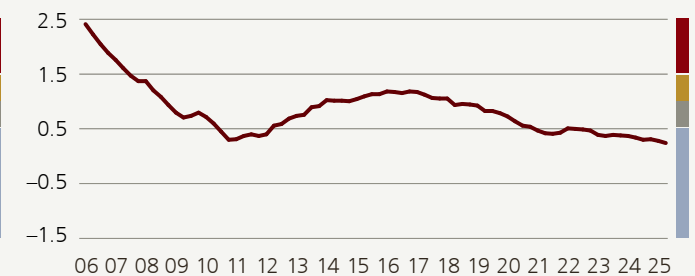
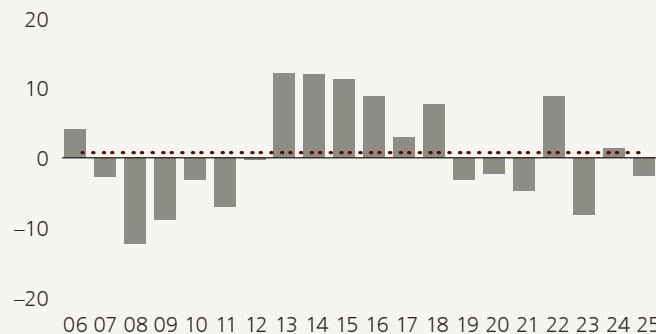
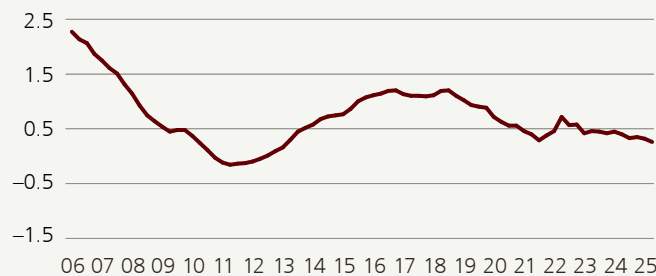
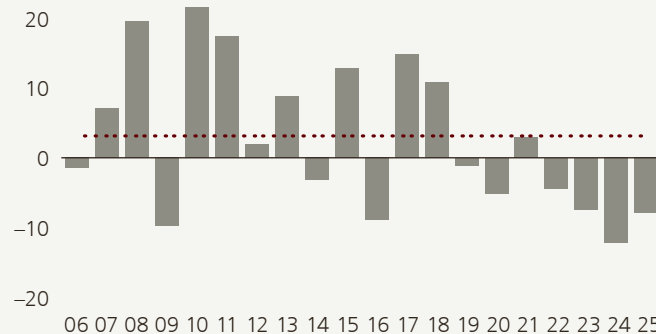
Return-to-office normalization and steady job growth, especially in higher-income segments, have been pulling more renters into the city, increasing competition for limited listings. Rental growth accelerated in the last four quarters amidst low vacancy rates. However, prices for condominiums did not benefit from rising demand and stagnated in inflation-adjusted terms. High-end properties, on the other hand, were in high demand following strong equity market gains.

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q

Dotted line: 20-year average



Source: UBS

Paris

Score +0.25

Home prices continue to lag changes in rents, incomes, and nationwide values. Since mid-2024, inflation-adjusted prices have stabilized roughly 25% below 2020 levels, deflating prior bubble risks. Affordability remains a major challenge, pushing more households to cheaper suburbs. Tighter energy standards are driving discounts on inefficient buildings while lifting quality—and rents—further straining budgets. Measures to increase supply, like stricter rules on short-term rentals, are likely to have only a limited impact.

Milan

Score +0.01

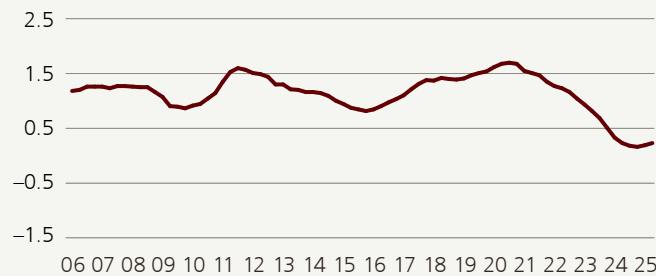
The city remains Italy's most expensive market, supported by a strong local economy, ongoing infrastructure investment, and rising foreign demand. However, despite a buoyant market image, real prices have declined since mid-2024, lagging both the national average and a rental market boosted by the upcoming Winter Olympics. Looking ahead, lower mortgage rates and renewed population growth may support demand. In the near term, supply constraints—driven by stricter legal procedures and reduced renovation incentives—may help underpin prices.

São Paulo

Score -0.10

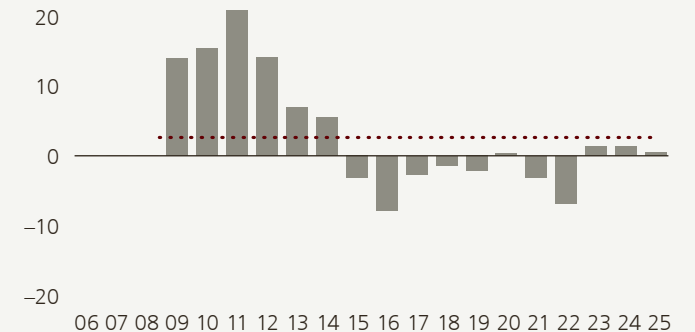
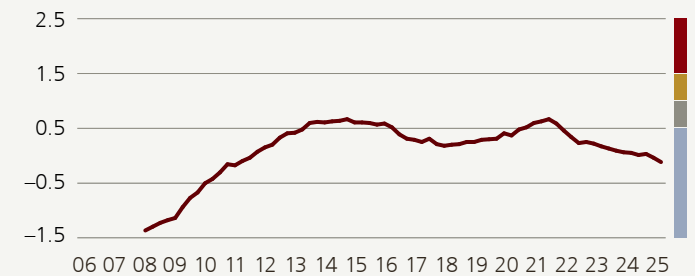
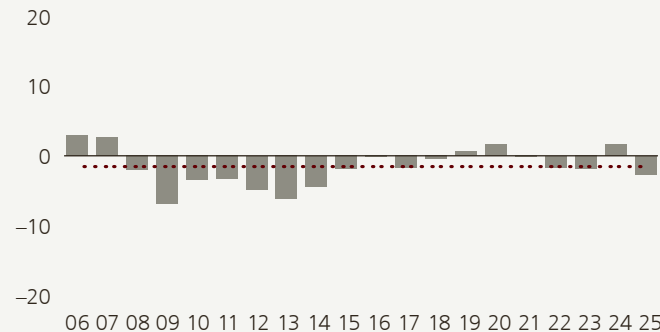
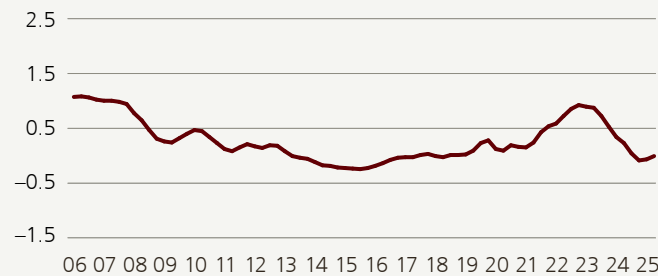
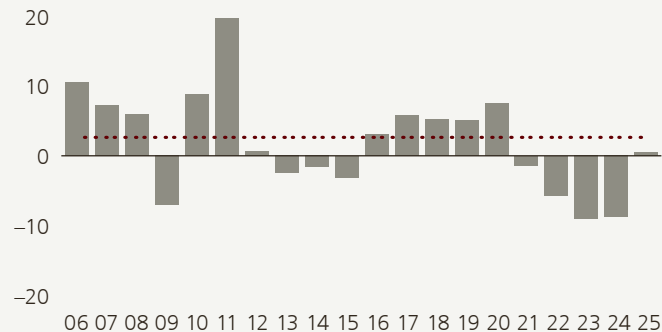
Real home prices fell about 25% from 2014 to 2022. Despite robust sales, prices have flatlined since 2022 as double-digit mortgage rates bite. Renting remains cheaper than buying. Real rents rose 5% in the past year and sit roughly 25% above 2022 levels, reflecting strong tenant demand and tight vacancy in well-located areas. Inflation has moderated, but Brazil's central bank has yet to signal any rate cuts. As long as high mortgage rates penalize leverage, strong price gains are unlikely.

Historical development of UBS Global Real Estate Bubble Index



Annual real home price growth rates, in % as of 2Q

Dotted line: 20-year average



| Appendix



Overview

Rank	City	UBS Global Real Estate Bubble Index							Real price change		Real rental change	
		Total	Subindexes						annualized, in %		annualized, in %	
		Score	Assessment	Price/Income	Price/Rent	City/Country ¹	Mortgage	Construction	last year	last 10 years	last year	last 10 years
1	Miami	1.73	●	●	●	●	●	●	1.9	6.8	-1.9	1.2
2	Tokyo	1.59	●	●	●	●	●	●	5.7	5.2	2.5	2.1
3	Zurich	1.55	●	●	●	●	●	●	5.0	3.6	2.9	2.1
4	Los Angeles	1.11	●	●	●	●	●	●	0.9	3.6	-2.8	-0.2
5	Dubai	1.09	●	●	●	●	●	●	11.1	1.2	4.7	0.2
6	Amsterdam	1.06	●	●	●	●	●	●	1.2	5.1	2.0	1.6
7	Geneva	1.05	●	●	●	●	●	●	4.1	1.6	2.4	0.1
8	Toronto	0.80	●	●	●	●	●	●	-7.5	4.0	-6.1	0.8
9	Sydney	0.80	●	●	●	●	●	●	-0.8	1.5	-0.3	1.6
10	Madrid	0.77	●	●	●	●	●	●	13.6	3.6	8.5	4.0
11	Frankfurt	0.76	●	●	●	●	●	●	-1.2	3.6	4.0	1.4
12	Vancouver	0.76	●	●	●	●	●	●	-5.9	3.4	-5.3	2.0
13	Munich	0.64	●	●	●	●	●	●	1.4	2.7	0.7	1.7
14	Singapore	0.55	●	●	●	●	●	●	2.6	2.3	1.2	2.0
15	Hong Kong	0.44	●	●	●	●	●	●	-7.9	-2.2	-0.2	-1.2
16	London	0.34	●	●	●	●	●	●	-2.1	-1.1	2.7	-1.1
17	San Francisco	0.28	●	●	●	●	●	●	-2.6	0.7	2.4	-2.1
18	New York	0.26	●	●	●	●	●	●	-1.5	-0.5	4.1	-0.8
19	Paris	0.25	●	●	●	●	●	●	0.1	0.0	0.9	-0.9
20	Milan	0.01	●	●	●	●	●	●	-2.7	-0.5	-0.5	-0.3
21	São Paulo	-0.10	●	●	●	●	●	●	0.0	-2.1	5.1	-0.3

● High (above 1.5 standard deviations) ● Elevated (between 1.0 and 1.5 standard deviations) ● Moderate (between 0.5 and 1.0 standard deviations) ● Low (below 0.5 standard deviations)

Source: UBS ; ¹ Inflation-adjusted price index for Dubai, Singapore, Hong Kong.

Methodology

The *UBS Global Real Estate Bubble Index* traces the fundamental valuation of owner-occupied housing markets and the valuation of cities in relation to their country and economic distortions (such as lending and building booms). Based on the valuation, the “bubble risk” is assessed: low (score below 0.5), moderate (0.5 to 1.0), elevated (1.0 to 1.5), and high (above 1.5). This classification is aligned with historical bubble episodes. The method cannot predict if or when a correction will happen. Hence, “bubble risk” refers to the prevalence of a risk of a large price correction.

The index score is a weighted average of the following five city sub-indices, standardized using expanding window procedure: price-to-income and price-to-rent ratios (fundamental valuation), change in mortgage-to-GDP ratio and change in construction-to-GDP ratio (economic distortion), and city-to-country price ratio. The city-to-country price ratio in Singapore, Hong Kong, and Dubai is replaced by an inflation-adjusted price index.

The sub-indices are constructed from specific city-level data, except for mortgage-to-GDP and construction-to-GDP ratios, which are calculated on the country level. In most cases, publicly available data is used, but in a few

cases, the data is supplemented by additional sources, including the results of the *UBS Prices and Earnings* survey. The index length varies by city depending on data availability. The longest data series starts in 1980 and the shortest in 2008. Data availability was also considered when deciding which cities to include in the index, along with the importance of the city for global financial markets and residential real estate investments. Please see the description of data sources on page 25.

Data for this edition were collected through 28 August 2025. Where information was unavailable, estimates were used. As a result of data updates and revisions, scores may differ from previous editions.

The weights of the sub-indices are determined using factor analysis, as recommended by the OECD Handbook on Constructing Composite Indicators (2008). Factor analysis weights the sub-indices to capture as much of the common underlying bubble risk information as possible. As the drivers of bubbles vary across cities, this method results in city-specific weights on sub-indices. To prevent overweighting country level variables and to increase the comparability of cities, the deviation from the average weight across all cities is limited. Weights adjusted this

way approximate the average factor analysis weight of single indices across the cities and complement the calculation.

Valuations benchmarks

The analysis is complemented by a city benchmarking using current price-to-income and price-to-rent ratios. The price-to-income ratio indicates how many years a skilled service worker needs to work to afford a 60-square-meter (650 square foot) flat near the city center. The price-to-rent ratio signals how expensive owner-occupied homes are relative to rental apartments. The higher the ratios, the more expensive buying becomes.

Earnings data are primarily taken from official statistical sources and supplemented by available surveys and expert judgement. Real estate prices and rents vary widely near the city center. Our estimates are cross-checked, validated using different sources, and updated and challenged on an annual basis. However, we also specify an uncertainty range due to the differing quality of data sources.

Data sources

		Price Index (City)	Rent Index (City)	Income Index (City)	Price Index (Country)	Mortgage, Construction, GDP, Inflation (Country)
Amsterdam	2025Q2	CBS, Maastricht University	NVM, UBS P&E	UBS P&E, CBS	CBS, FED Dallas	DNB, CBS, EUKLEMS, Bloomberg
Dubai	2025Q2	Reidin, BIS	Reidin, UBS P&E	UBS P&E, Morgan Stanley, Bloomberg	–	Central Bank UAE, Dubai Statistics Center, Morgan Stanley, Bloomberg
Frankfurt	2025Q2	Bulwiengesa, Kiel Institut für Weltwirtschaft	Bulwiengesa, OECD	Destatis, UBS P&E, OECD	FED Dallas	Deutsche Bundesbank, Destatis, EUKLEMS, Bloomberg
Geneva	2025Q2	Wüest Partner	Statistique Genève	FTA, FSO	Wüest Partner	SNB, SECO, FSO
Hong Kong	2025Q2	RVD	RVD	Census and Statistics Department Hong Kong, Bloomberg	–	Census and Statistics Department Hong Kong, HKMA, Macrobond, Bloomberg
London	2025Q2	Nationwide	ONS, UBS P&E	ONS	Nationwide	BoE, ONS, EUKLEMS, Bloomberg
Los Angeles	2025Q2	FHFA, S&P/Shiller	CBRE, FED St. Louis	BEA	FHFA	FED, BEA, Bloomberg
Madrid	2025Q2	BoS, Idealista	Ayuntamiento de Madrid, Idealista	INE	BoS	INE, BoS, EUKLEMS, Bloomberg
Miami	2025Q2	FHFA, S&P/Shiller	CBRE, FED St. Louis	BEA	FHFA	FED, BEA, Bloomberg
Milan	2025Q2	Nomisma	Nomisma, OECD	Dipartimento delle Finanze, UBS P&E	FED Dallas	Banca d'Italia, Hypostat, Istat, EUKLEMS, Macrobond, Bloomberg
Munich	2025Q2	Bulwiengesa	Bulwiengesa, OECD	Destatis, UBS P&E, OECD	FED Dallas	Deutsche Bundesbank, Destatis, EUKLEMS, Bloomberg
New York	2025Q2	FHFA, S&P/Shiller	CBRE, CoStar, FED St. Louis	BEA	FHFA	FED, BEA, Bloomberg
Paris	2025Q1	BIS, CGEDD, Insee	Insee	Insee, Bloomberg, UBS P&E	FED Dallas	BdF, Insee, EUKLEMS, Macrobond, Bloomberg
San Francisco	2025Q2	FHFA, S&P/Shiller	CBRE, FED St. Louis	BEA	FHFA	FED, BEA, Bloomberg
São Paulo	2025Q2	Fipe	Fipe	Fundação Seade	Fipe	Banco do Brasil, IBGE, Bloomberg
Singapore	2025Q2	Government of Singapore	Government of Singapore, UBS P&E	Government of Singapore	–	Government of Singapore, Bloomberg
Sydney	2025Q2	REIA, ABS	REIA, NSW Government, UBS P&E	ABS, UBS P&E	FED Dallas	ABS, RBA, Bloomberg
Tokyo	2025Q2	The Real Estate Transaction Promotion Center, Haver Analytics, Tokyo Kantei	Miki Syoji, Official Statistics of Japan Tokyo Kantei	INDB, Tokyo Metropolitan Government, UBS P&E	FED Dallas	ESRI, EUKLEMS, Bloomberg
Toronto	2025Q2	Sauder School of Business UBC, Bloomberg	Canadian Housing Observer, Sauder School of Business UBC, UBS	Statistics Canada	FED Dallas	Statistics Canada, BoC, Bloomberg
Vancouver	2025Q2	Sauder School of Business UBC, Bloomberg	Canadian Housing Observer, Sauder School of Business UBC, UBS	Statistics Canada, Government of British Columbia	FED Dallas	Statistics Canada, BoC, Bloomberg
Zurich	2025Q2	Wüest Partner	Statistik Stadt Zürich	FTA, FSO	Wüest Partner	SNB, SECO, FSO

Disclaimer

UBS Chief Investment Office's ("CIO") investment views are prepared and published by the Global Wealth Management business of UBS Switzerland AG (regulated by FINMA in Switzerland) or its affiliates ("UBS"), part of UBS Group AG ("UBS Group"). UBS Group includes former Credit Suisse AG, its subsidiaries, branches and affiliates. Additional disclaimer relevant to Credit Suisse Wealth Management follows at the end of this section.

The investment views have been prepared in accordance with legal requirements designed to promote the **independence of investment research**.

Generic investment research – Risk information:

This publication is **for your information only** and is not intended as an offer, or a solicitation of an offer, to buy or sell any investment or other specific product. The analysis contained herein does not constitute a personal recommendation or take into account the particular investment objectives, investment strategies, financial situation and needs of any specific recipient. It is based on numerous assumptions. Different assumptions could result in materially different results. Certain services and products are subject to legal restrictions and cannot be offered worldwide on an unrestricted basis and/or may not be eligible for sale to all investors. All information and opinions expressed in this document were obtained from sources believed to be reliable and in good faith, but no representation or warranty, express or implied, is made as to its accuracy or completeness (other than disclosures relating to UBS). All information and opinions as well as any forecasts, estimates and market prices indicated are current as of the date of this report, and are subject to change without notice. Opinions expressed herein may differ or be contrary to those expressed by other business areas or divisions of UBS as a result of using different assumptions and/or criteria. UBS may utilise artificial intelligence tools ("AI Tools") in the preparation of this document. Notwithstanding any such use of AI Tools, this document has undergone human review.

In no circumstances may this document or any of the information (including any forecast, value, index or other calculated amount ("Values")) be used for any of the following purposes (i) valuation or accounting purposes; (ii) to determine the amounts due or payable, the price or the value of any financial instrument or financial contract; or (iii) to measure the performance of any financial instrument including, without limitation, for the purpose of tracking the return or performance of any Value or of defining the asset allocation of portfolio or of computing performance fees. By receiving this document and the information you will be deemed to represent and warrant to UBS that you will not use this document or otherwise rely on any of the information for any of the above purposes. UBS and any of its directors or employees may be entitled at any time to hold long or short positions in investment instruments referred to herein, carry out transactions involving relevant investment instruments in the capacity of principal or agent, or provide any other services or have officers, who serve as directors, either to/for the issuer, the investment instrument itself or to/for any company commercially or financially affiliated to such issuers. At any time, investment decisions (including whether to buy, sell or hold securities) made by UBS and its employees may differ from or be contrary to the opinions expressed in UBS research publications. Some investments may not be readily realizable since the market in the securities is illiquid and therefore valuing the investment and identifying the risk to which you are exposed may be difficult to quantify. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS, into other areas, units, divisions or affiliates of UBS. Futures and options trading is not suitable for every investor as there is a substantial risk of loss, and losses in excess of an initial investment may occur. Past performance of an investment is no guarantee for its future performance. Additional information will be made available upon request. Some investments may be subject to sudden and large falls in value and on realization you may receive back less than you invested or may be required to pay

more. Changes in foreign exchange rates may have an adverse effect on the price, value or income of an investment. The analyst(s) responsible for the preparation of this report may interact with trading desk personnel, sales personnel and other constituencies for the purpose of gathering, synthesizing and interpreting market information.

Different areas, groups, and personnel within UBS Group may produce and distribute separate research products **independently of each other**. For example, research publications from **CIO** are produced by UBS Global Wealth Management. **UBS Global Research** is produced by UBS Investment Bank. **Research methodologies and rating systems of each separate research organization may differ**, for example, in terms of investment recommendations, investment horizon, model assumptions, and valuation methods. As a consequence, except for certain economic forecasts (for which UBS CIO and UBS Global Research may collaborate), investment recommendations, ratings, price targets, and valuations provided by each of the separate research organizations may be different, or inconsistent. You should refer to each relevant research product for the details as to their methodologies and rating system. Not all clients may have access to all products from every organization. Each research product is subject to the policies and procedures of the organization that produces it.

The compensation of the analyst(s) who prepared this report is determined exclusively by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking, sales and trading or principal trading revenues, however, compensation may relate to the revenues of UBS Group as a whole, of which investment banking, sales and trading and principal trading are a part.

Tax treatment depends on the individual circumstances and may be subject to change in the future. UBS does not provide legal or tax advice and makes no representations as to the tax treat-

ment of assets or the investment returns thereon both in general or with reference to specific client's circumstances and needs. We are of necessity unable to take into account the particular investment objectives, financial situation and needs of our individual clients and we would recommend that you take financial and/or tax advice as to the implications (including tax) of investing in any of the products mentioned herein.

This material may not be reproduced or copies circulated without prior authority of UBS. Unless otherwise agreed in writing UBS expressly prohibits the distribution and transfer of this material to third parties for any reason. UBS accepts no liability whatsoever for any claims or lawsuits from any third parties arising from the use or distribution of this material. This report is for distribution only under such circumstances as may be permitted by applicable law. For information on the ways in which CIO manages conflicts and maintains independence of its investment views and publication offering, and research and rating methodologies, please visit www.ubs.com/research-methodology. Additional information on the relevant authors of this publication and other CIO publication(s) referenced in this report; and copies of any past reports on this topic; are available upon request from your client advisor.

Important Information About Sustainable Investing Strategies: Sustainable investing strategies aim to consider and incorporate environmental, social and governance (ESG) factors into investment process and portfolio construction. Strategies across geographies approach ESG analysis and incorporate the findings in a variety of ways. Incorporating ESG factors or Sustainable Investing considerations may inhibit UBS's ability to participate in or to advise on certain investment opportunities that otherwise would be consistent with the Client's investment objectives. The returns on a portfolio incorporating ESG factors

or Sustainable Investing considerations may be lower or higher than portfolios where ESG factors, exclusions, or other sustainability issues are not considered by UBS, and the investment opportunities available to such portfolios may differ.

External Asset Managers / External Financial Consultants: In case this research or publication is provided to an External Asset Manager or an External Financial Consultant, UBS expressly prohibits that it is redistributed by the External Asset Manager or the External Financial Consultant and is made available to their clients and/or third parties.

USA: Distributed to US persons only by UBS Financial Services Inc. or UBS Securities LLC, subsidiaries of UBS AG. UBS Switzerland AG, UBS Europe SE, UBS Bank, S.A., UBS Brasil Administradora de Valores Mobiliarios Ltda, UBS Asesores Mexico, S.A. de C.V., UBS SuMi TRUST Wealth Management Co., Ltd., UBS Wealth Management Israel Ltd and UBS Menkul Degerler AS are affiliates of UBS AG. **UBS Financial Services Inc. accepts responsibility for the content of a report prepared by a non-US affiliate when it distributes reports to US persons. All transactions by a US person in the securities mentioned in this report should be effected through a US-registered broker dealer affiliated with UBS, and not through a non-US affiliate. The contents of this report have not been and will not be approved by any securities or investment authority in the United States or elsewhere. UBS Financial Services Inc. is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule.**

For country information, please visit ubs.com/cio-country-disclaimer-gr or ask your client advisor for the full disclaimer.

Additional Disclaimer relevant to Credit Suisse Wealth Management

You receive this document in your capacity as a client of Credit Suisse Wealth Management. Your personal data will be processed in accordance with the Credit Suisse privacy statement accessible at your domicile through the official Credit Suisse website. In order to provide you with marketing materials concerning our products and services, UBS Group AG and its subsidiaries may process your basic personal data (i.e. contact details such as name, e-mail address) until you notify us that you no longer wish to receive them. You can optout from receiving these materials at any time by informing your Relationship Manager.

Except as otherwise specified herein and/or depending on the local Credit Suisse entity from which you are receiving this report, this report is distributed by UBS Switzerland AG, authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA).

Version A/2025. CIO82652744

© UBS 2025. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.

