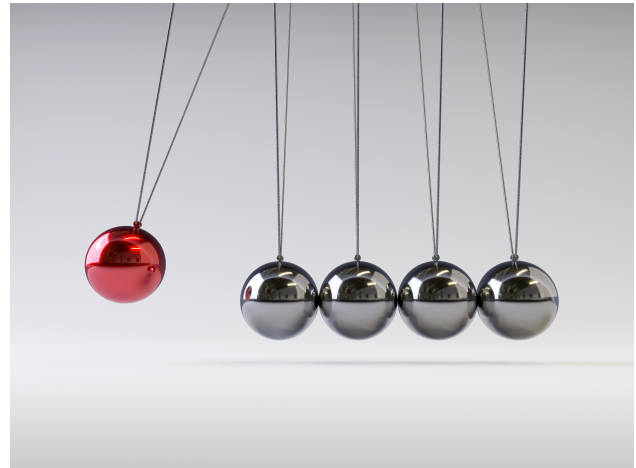


UBS Swiss Real Estate Bubble Index

UBS Swiss real estate bubble index

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- The *UBS Swiss Real Estate Bubble Index* rose from 1.38 to 1.47 in the first quarter of 2022. The market for owner-occupied homes is thus overvalued compared to its own history.
- A continued divergence of home prices from both rents and household incomes drove the index increase. Another contributing factor was the increased share of loan applications for buy-to-let properties.
- The figure for the previous quarter was revised downward based on updated data on household incomes. Income growth currently exceeds the growth in household mortgages, which moderated the index increase.



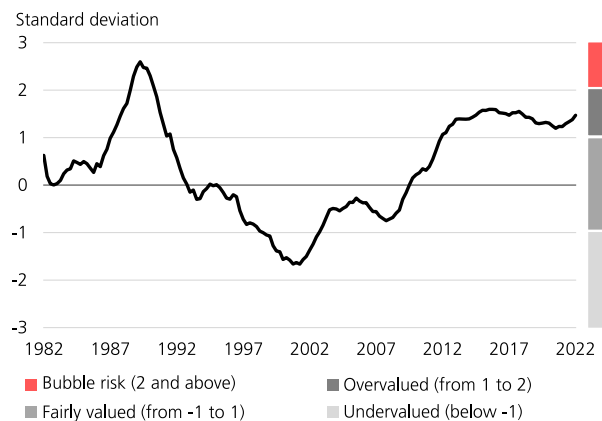
Source: Shutterstock

Development of market drivers: Home prices rose by 1.5 percent in the first quarter of 2022. The number of loan applications for buy-to-let properties also increased significantly compared to the previous quarter. In addition, the volume of outstanding mortgages held by private households rose by 3.2 percent, a relatively sharp increase compared to the previous year. By contrast, however, income per household increased by more than 2 percent year on year, and asking rents posted a quarterly rise again for the first time since 2017.

Statement of risk: The *UBS Swiss Real Estate Bubble Index* remains significantly lower than during the real estate bubble at the beginning of the 1990s: Above-average household income growth has tempered the rise in the real estate bubble index over the past few quarters. Nevertheless, the current index level indicates an overvaluation of the local housing market and implies increased correction potential in the event of a prolonged economic crisis or a rise in interest rates for an extended period of time.

UBS Swiss Real Estate Bubble Index

1 quarter 2022



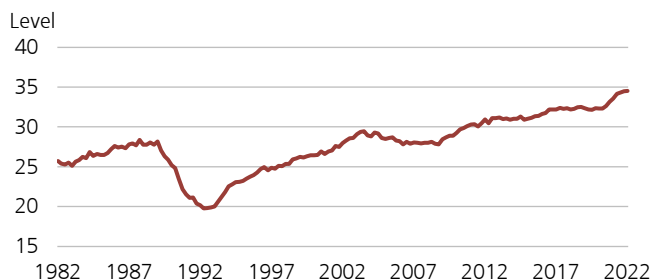
Source: UBS

However, a price correction is unlikely in the next twelve months. Higher long-term interest rates are nevertheless making buy-to-let investments less attractive and have inverted the cost advantage that owner-occupied homes previously had over rental apartments.

Sub-indexes

Home prices relative to annual rents

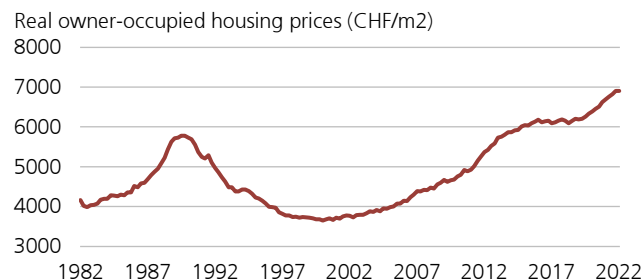
An above-average buy-to-rent ratio indicates a high dependency on sustained low interest rates or implies expectations of future price increases.



Sources: Wüest Partner, IAZI, FPRE, FSO, UBS

Home prices relative to consumer prices

If owner-occupied home prices rise faster than construction costs and general inflation for a long time, this can be a warning of a possible correction.



Sources: Wüest Partner, IAZI, FPRE, FSO, UBS

Home prices relative to household incomes

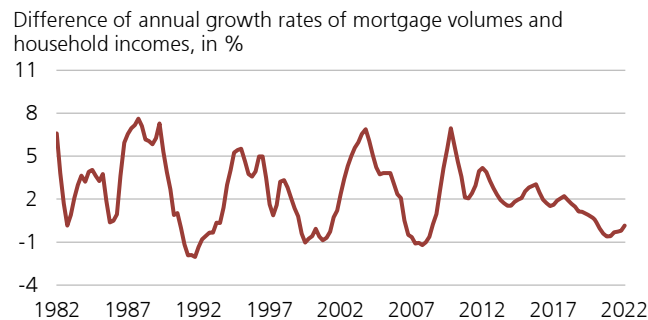
If the price development in the market for owner-occupied homes is not supported by a change in household incomes, this can be interpreted as a signal for interest rate risks.



Sources: Wüest Partner, IAZI, FPRE, FSO, UBS

Mortgage volumes relative to household incomes

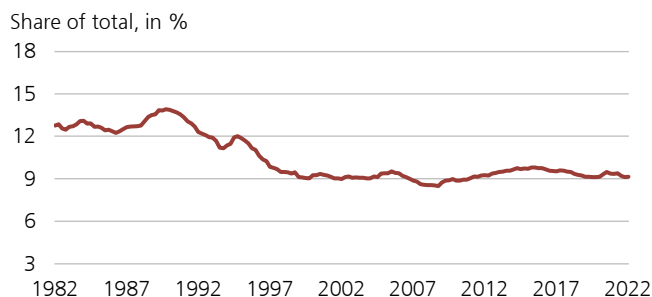
An acceleration in household debt that is not accompanied by income growth is a signal of an overheating of the real estate market.



Sources: SNB, FSO, UBS

Construction relative to gross domestic product (GDP)

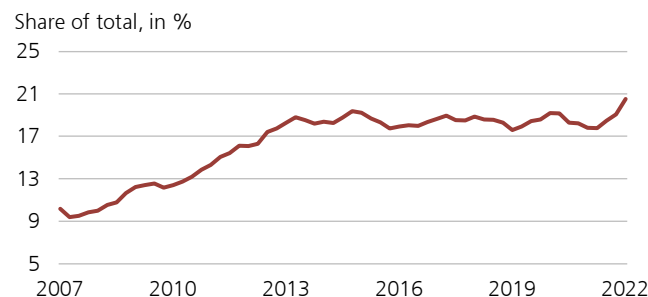
If the construction sector gains weight within the national economy, this can imply an overheating of the real estate market.



Sources: SECO, FSO, UBS

Credit applications for buy-to-let properties

High demand for residential property for the purpose of leasing (buy-to-let) indicates greater speculative demand.



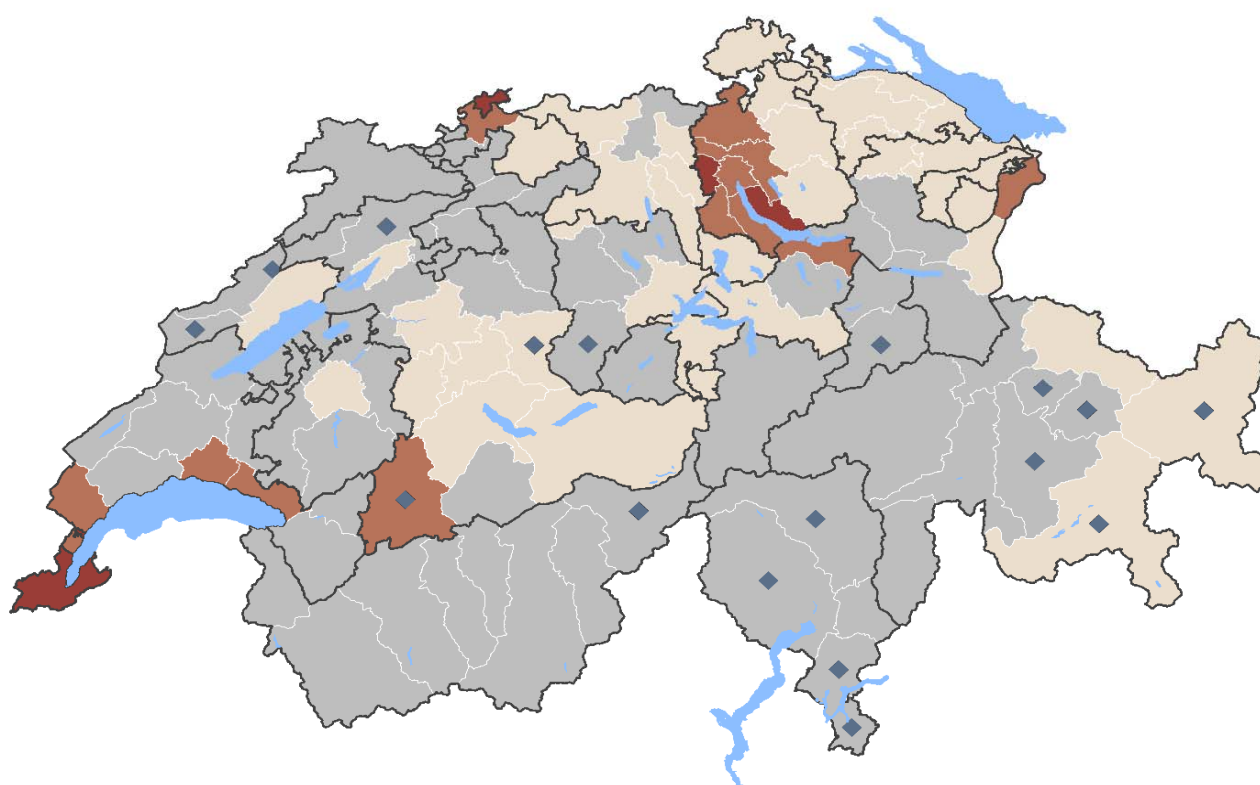
Sources: SNB, UBS

Regional risk map

The regional analysis is based on how the local price-to-rent ratio has changed over the past five years. Regions where this ratio experienced a disproportionately sharp rise have an increased correction risk. In addition, regions with falling population numbers (last three years) are highlighted.

Principles: The trend in rents shows the effective situation on the housing market. The price-to-rent ratio reflects the interest rate level and expectations about future increases in rental prices. If this ratio experiences a disproportionately sharp rise compared with the other regions, this may suggest that overheated speculation is driving prices in the local owner-occupied housing market. Independent of this, falling population numbers constitute an additional risk for real estate demand.

Regional risk map for 1 quarter 2022



Relative risk assessment:

- low
- slightly elevated
- elevated
- high

◆ Regions with falling population numbers

Sources: Wüest Partner, FSO, UBS.

Appendix

Index calculation

The UBS Swiss Real Estate Bubble Index represents the weighted average of six standardized sub-indexes using principal component analysis. The index shows the discrepancy, measured in standard deviations, from the mean normalized to zero. The index uses the following classification: Undervalued (below -1), fairly valued (from -1 to below 1), overvalued (from 1 to below 2) and bubble risk (2 and above).

Comment on the adjustment of the index history

Due to adjustments in its methodology and data, the history of the UBS Swiss Real Estate Bubble Index is no longer directly comparable with the numbers in publications prior to the fourth quarter of 2021.

First, the Swiss Federal Statistical Office published data on the development of household incomes during the pandemic, which are employed in calculating the index. As a result, pandemic-related fluctuations in economic output no longer affect the model-based estimate of real estate bubble risk for the Swiss market for owner-occupied homes. Moreover, household incomes increased much more than had been expected due to the slump in economic value added.

Second, the numbers are now only standardized (recursively) using the data available up to the relevant point in time. For example, the index value in the first quarter of 2015 is calculated using data from 1980 up to the first quarter of 2015. All index values up to and including 2010 are standardized (non-recursively) with data from 1980 to 2010 to ensure there are sufficient data points. That means that the published index values now reflect the imbalances from the perspective of the relevant quarter.

Deviations from the previously published index values can be explained by data revisions—in particular, household incomes according to the FSO—and the switch in price indexes from supply prices to the broader UBS Composite Index (average of all available price indexes) at the beginning of 2020.

UBS Swiss Real Estate Bubble Index

Data series since 2016

Period	Index	Trend*
2016-1	1.59	→
2016-2	1.53	↘
2016-3	1.52	↘
2016-4	1.50	↘
2017-1	1.47	↘
2017-2	1.53	↗
2017-3	1.52	↘
2017-4	1.55	↗
2018-1	1.50	↘
2018-2	1.43	↘
2018-3	1.43	→
2018-4	1.40	↘
2019-1	1.31	↘
2019-2	1.30	↘
2019-3	1.31	↗
2019-4	1.32	↗
2020-1	1.31	↘
2020-2	1.25	↘
2020-3	1.19	↘
2020-4	1.24	↗
2021-1	1.23	↘
2021-2	1.29	↗
2021-3	1.33	↗
2021-4	1.38	↗
2022-1	1.47	↗

Source: UBS. *Compared to the previous quarter

Appendix

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