

UBS Swiss Real Estate Bubble Index 3Q 2021

UBS Swiss real estate bubble index

Authors: Matthias Holzhey, Economist, UBS Switzerland AG; Maciej Skoczek, CFA, CAIA, Economist, UBS Switzerland AG; Katharina Hofer, Economist, UBS Switzerland AG; Claudio Saputelli, Economist, UBS Switzerland AG

- The *UBS Swiss Real Estate Bubble Index* measures the risk of a real estate bubble in the Swiss residential housing market.
- The index recorded a sharp decline to 1.34 points in the third quarter of 2021. This was driven by a surge in economic output in the first half of 2021 and should therefore be put into perspective.
- According to our forecast, the index is likely to rise again in the next quarter and the imbalances are likely to be larger than before the pandemic.



Source: Mauro Mellone, UBS

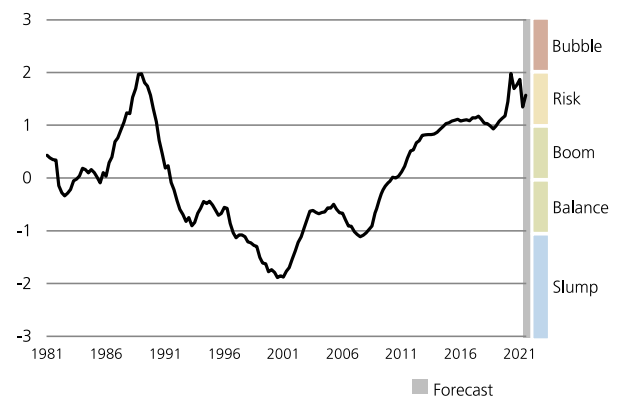
The *UBS Swiss Real Estate Bubble Index* declined sharply from 1.87 to 1.34 points in Q3 2021, remaining in the risk zone. The dip in the index was driven by the strong economic recovery in the first half of 2021 and therefore needs to be put into perspective. The highly volatile economic performance in recent quarters led to extreme fluctuations in the model-based estimate of real estate bubble risk.

Affordability of residential property declines

The medium-term increase in imbalances is due to sharp price increases. In the third quarter of 2021, owner-occupied housing prices increased by nearly 6 percent compared to the previous year, the largest increase since 2013. Since the momentum of household income failed to keep pace with prices, the affordability of residential property deteriorated.

This is causing household debt to rise. Thus, the volume of outstanding mortgages held by private households is currently more than 3 percent higher than a year ago. This increase may seem low given the current strong economic climate, but it is clearly above the average of the last five years. A sustained acceleration would have to be interpreted as a clear warning signal.

UBS Swiss Real Estate Bubble Index



Source: UBS

Index calculation: The UBS Swiss Real Estate Bubble Index comprises six sub-indices. It is calculated as the weighted average of standardized indicators, using primary component analysis, and shows the deviation in standard deviations from the average, which is standardized to zero. The index uses the following classification: Slump (below -1), Balance (from -1 to less than 0), Boom (from 0 to less than 1), Risk (from 1 to less than 2) and Bubble (2 and upwards).

While owner-occupied housing prices rose sharply, market rents fell by 2.7 percent in the third quarter of 2021 compared to the previous year. The average price-to-rent ratio climbed above 34, indicating a very high dependency of owner-occupied housing prices on low interest rates. Despite low returns on buy-to-let investments, demand for buy-to-let loans increased slightly last quarter, contributing to the increase in market imbalances.

Sharply rising interest rates could end the boom

The high demand for owner-occupied homes is supported to a large extent by historically low mortgage rates. On average, home buyers benefit from around 10 to 15 percent lower occupancy costs compared with tenants of a comparable dwelling. However, an increase in interest rates on 10-year fixed-rate mortgages from the current level of around 1.2 percent to 1.6 percent would be enough to cause the cost advantage to disappear and demand for owner-occupied homes to fall.

Given the decline in inflation over the next few quarters, the risk of sharply rising interest rates is currently manageable. This should keep the momentum of owner-occupied housing prices elevated for the time being. We expect the *UBS Swiss Real Estate Bubble Index* to rise to 1.57 points in the fourth quarter of 2021. The risks on the residential housing market will therefore be significantly higher than before the pandemic. This forecast of the index level was introduced due to the current volatility of the data (see comment below).

Comment: Business restrictions due to COVID-19 continue to cause considerable volatility in economic performance. This leads to major fluctuations in our model-based assessment of the real estate bubble risk for the Swiss residential housing market. Due to this volatility, we also present, for the time being, the expected trend in the UBS Swiss Real Estate Bubble Index until the end of the year based on our forecasts for the performance of the economy and the real estate market.

UBS Swiss Real Estate Bubble Index

Year	Period	Index	Trend
2016	Quarter 1	1.11	■
	Quarter 2	1.08	■
	Quarter 3	1.10	■
	Quarter 4	1.10	■
2017	Quarter 1	1.08	■
	Quarter 2	1.14	■
	Quarter 3	1.14	■
	Quarter 4	1.17	■
2018	Quarter 1	1.11	■
	Quarter 2	1.04	■
	Quarter 3	1.03	■
	Quarter 4	0.99	■
2019	Quarter 1	0.93	■
	Quarter 2	0.99	■
	Quarter 3	1.08	■
	Quarter 4	1.13	■
2020	Quarter 1	1.17	■
	Quarter 2	1.45	■
	Quarter 3	1.98	■
	Quarter 4	1.69	■
2021	Quarter 1	1.76	■
	Quarter 2	1.87	■
	Quarter 3	1.34	■
	Quarter 4	1.57	■

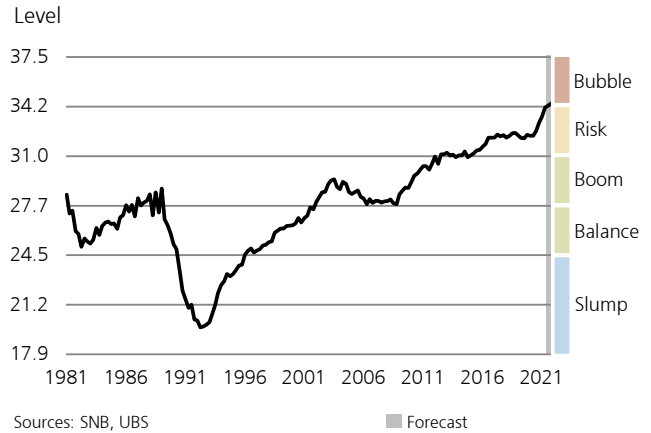
- Increase compared to the previous quarter
- Decrease compared to the previous quarter
- Unchanged
- Forecast

Source: UBS

Sub-indexes of the UBS Swiss Real Estate Bubble Index

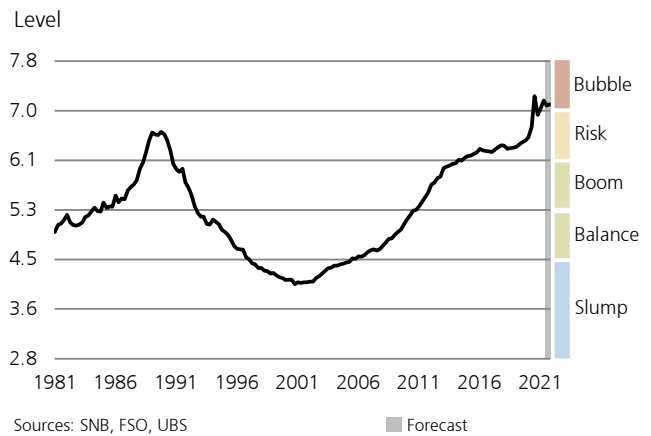
Home prices to annual rents

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



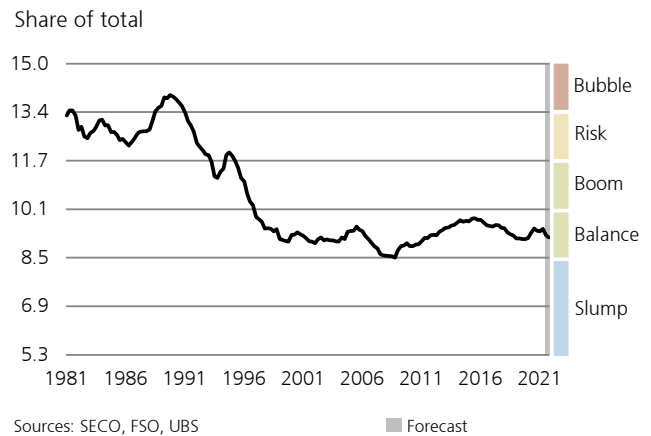
Home prices to household income

The indicator shows whether the price behavior of the owner-occupied housing market is supported by a change in household income. A decoupling of prices from average household income can be interpreted as a sign of interest rate risks.



Construction relative to gross domestic product (GDP)

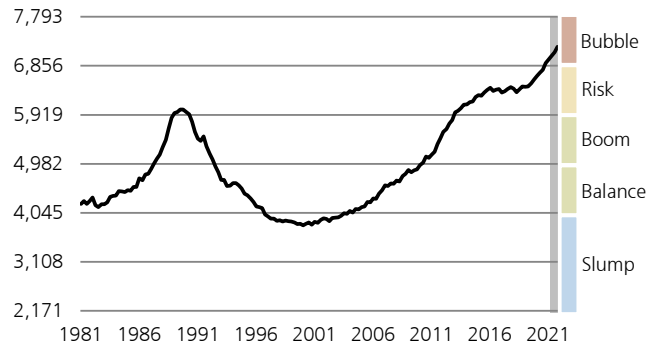
The construction sector gaining weighting within the national economy can signal an overheating of the real estate market.



Home prices relative to consumer prices

Over the long term, owner-occupied housing prices are likely to relate to construction costs and general inflation. A sharp and lasting increase in inflation-adjusted owner-occupied housing prices is thus a warning signal for a possible correction.

Real owner-occupied housing price index (CHF/m²)



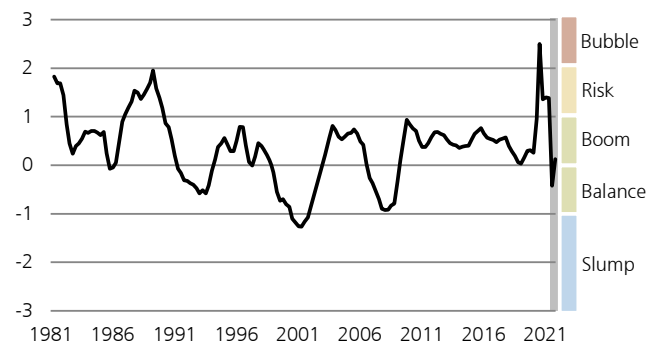
Sources: SNB, FSO, UBS

■ Forecast

Mortgage volume relative to disposable income of private households

Any sharp growth in mortgage debt is a clear indication of the owner-occupied housing market overheating. If interest rates rise or owner-occupied housing prices correct, high household debt increases the negative consequences for the national economy.

Mortgages of private households relative to income (trend-adjusted, standardized)



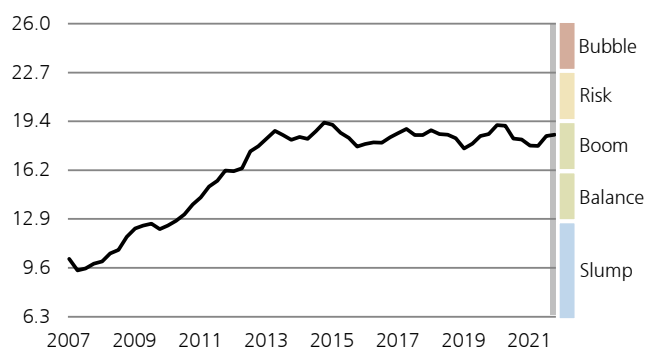
Sources: SNB, FSO, UBS

■ Forecast

Credit applications for residential real estate not intended for self-occupancy (UBS clients)

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

Share of total



Source: UBS

■ Forecast

Regional risk map

The regional risk map shows the regions with the most pronounced risks in the housing market. Regional risks are divided into fundamental risks (owner-occupied housing prices are decoupled from household income and rental price levels), overheating risk (significant excess demand causes prices to overshoot) and liquidity risk (high supply with low demand makes sales difficult). Currently, the fundamental and overheating risks are highest in the major centers of Zurich, Basel, Geneva and Lausanne. Liquidity risks exist in parts of Valais, Ticino and the canton of Neuchâtel.

Risk regions in the Swiss residential real estate market



- Fundamental risk
- Overheating risk
- Liquidity risk

Source: UBS

Appendix

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