Swiss real estate market

UBS Swiss Real Estate Bubble Index 3Q-2018

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- The *UBS Swiss Real Estate Bubble Index* has fallen to a value of 0.87 index points, out of the risk zone.
- Owner-occupied housing prices and mortgage volumes increased only moderately in the third quarter.
- Overall, the signs of a real estate bubble in the Swiss market for owner-occupied homes have declined significantly since 2015.

The *UBS Swiss Real Estate Bubble Index* has fallen to a value of 0.87 index points. The risk of a real estate bubble in the market for owner-occupied homes declined further in the third quarter 2018, with the index slipping out of the risk zone for the first time since mid-2012.

Economic boom dampens market risks

Both price behavior and the growth of mortgage volumes in the market for owner-occupied homes showed signs of speeding up slightly in the last quarter. Nevertheless, growth rates remained low, lagging economic development. The sub-indicators "price-income ratio" and the "ratio of the outstanding mortgage volume to cumulated disposable household income" fell, which led to the decrease in the Real Estate Bubble Index.

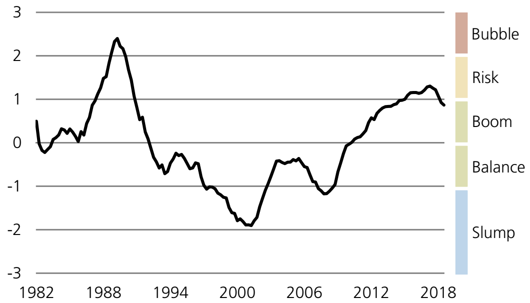
Barely a sign of a real estate bubble in sight

The market fared in the past quarter as it has the last three years. In spite of negative interest rates and above-average economic growth, the prices of owner-occupied homes have gone up only 0.8% annually since 2015. They have been unable to keep pace with that of household incomes, which have increased 1% per year over the same period.

Until 2017, mortgage debt was rising faster than household incomes, but this is no longer the case. Only the price-rent ratio has climbed almost continuously since 2015, which usually indicates a booming market for owner-occupied homes but in this case was the result of falling market rents. On balance, the Swiss market is now displaying few signs of a real estate bubble for owner-occupied homes.

The risk of a change in interest rates, however, remains great. So the high prices for owner-occupied homes and the continually increasing gap between purchase prices and rents could mean significant losses in value if interest rates were to rise.

UBS Swiss Real Estate Bubble Index



Source: UBS

	Index		Index
2015-Q1	1.00	2017-Q1	1.28
2015-Q2	1.09	2017-Q2	1.30
2015-Q3	1.15	2017-Q3	1.26
2015-Q4	1.16	2017-Q4	1.22
2016-Q1	1.16	2018-Q1	1.07
2016-Q2	1.14	2018-Q2	0.92
2016-Q3	1.16	2018-Q3	0.87
2016-Q4	1.21		

Source: UBS. The index values may be slightly adjusted each quarter as a result of data revisions and varying weights of the sub-indices.

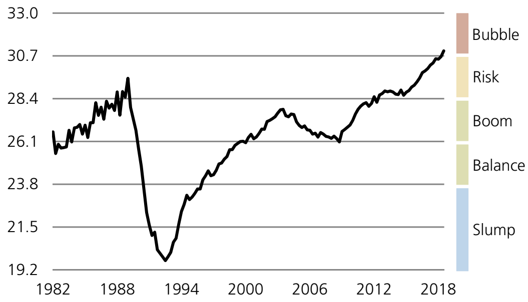
Methodology: The UBS Swiss Real Estate Bubble Index comprises six sub-indices. The index is calculated as the average of trend-adjusted and standardized indicators, weighted using a principal component analysis. The index level shows the deviation in standard deviations from the average, normalized to zero. The index value is categorized into one of five levels based on the current value: downward trend (below -1), balance (between -1 and 0), boom (between 0 and 1), risk (between 1 and 2) and bubble (above 2).

Sub-indices of the *UBS Swiss Real Estate Bubble Index*

Owner-occupied housing prices relative to annual rent

- An above-average price-to-rent ratio indicates a high dependency on sustained low interest rates or implies expectations of future price increases.
- The long-term average is 26.1 annual rents. In March 1989, the indicator peaked at 29.3.
- In the third quarter 2018, 31 annual rents were needed to acquire a comparable own home. The increase is attributable to rents falling 0.6% quarter over quarter while the prices of owner-occupied homes went up only 0.4%.

Owner-occupied housing prices relative to annual rent
Value

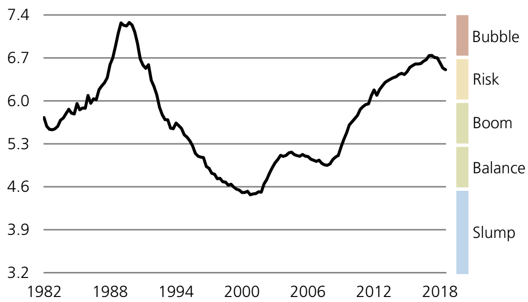


Source: SNB; UBS

Owner-occupied housing prices relative to household income

- The indicator shows whether the price behavior of the owner-occupied housing market is supported by changes in household income. A decoupling of prices from average household income can be interpreted as a sign of interest rate risks.
- In terms of a long-term average, it takes 5.7 annual incomes to purchase an owner-occupied home in the medium price segment.
- In the medium price segment, 6.5 annual household incomes were still required to purchase an own home. The indicator was slightly down from the previous quarter due to higher household incomes.

Owner-occupied housing prices relative to household income
Value

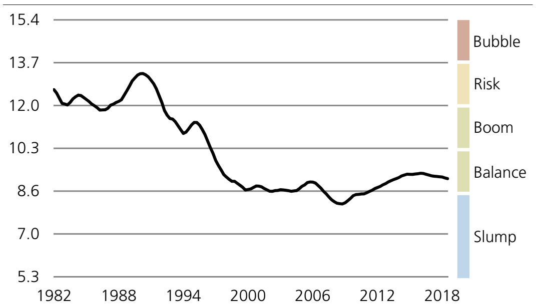


Source: SNB; FSO; UBS

Construction relative to gross domestic product (GDP)

- If the construction sector gains weight within the national economy, this can signal an overheating of the real estate market.
- The current values are well below the peak values of the 1980s.
- Nominal construction investment rose 2.6% year on year. The share of construction investments in GDP nevertheless declined slightly and stands at 9.1%.

Construction relative to gross domestic product
Share of total

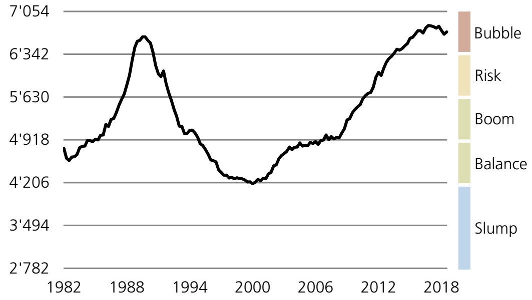


Source: SECO; FSO; UBS

Home prices relative to consumer prices

- In the long term, owner-occupied housing prices are likely to be oriented toward the development of 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.
- After adjustment for inflation, owner-occupied housing prices are now barely above the high of 1989.
- Inflation-adjusted owner-occupied home prices climbed 0.6% quarter over quarter. Prices offered for owner-occupied homes rose by 0.4% while the consumer price index fell by 0.2% percent.

Home prices relative to consumer prices
Real owner-occupied housing price behavior (CHF/m²)

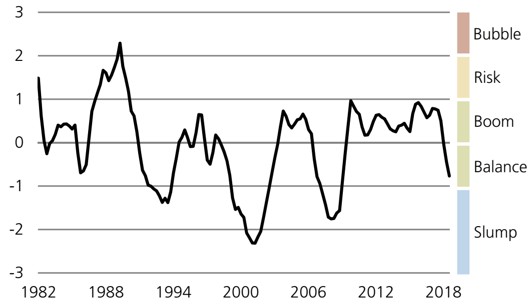


Source: SNB; FSO; UBS

Mortgage volume relative to disposable household income

- A sharp growth in mortgage debt is a clear indication of the owner-occupied housing market overheating. In the event of an increase in interest rates or a correction in owner-occupied housing prices, high household debt increases the negative consequences for the national economy.
- The volume of outstanding household mortgages grew by almost 2.7% compared to the previous year, with disposable household income rising much more.
- The slowdown in household debt growth has dampened the development of the Real Estate Bubble Index in the last few quarters.

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

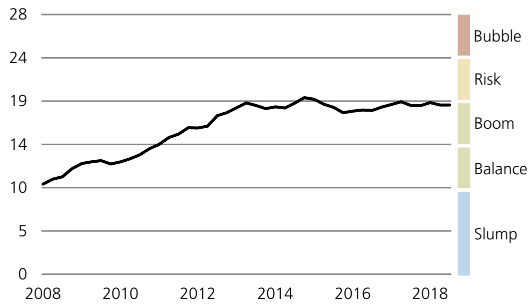


Source: SNB; FSO; UBS

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.
- The number of loan applications for non-owner-occupied real estate was stable. Buy-to-let remains a popular investment strategy, with a value of 18.6% for all credit applications.
- However, the current value remains below the record high in 2015.

Credit applications for residential real estate not intended for self-occupancy
Share of total



Source: UBS

Regional analysis

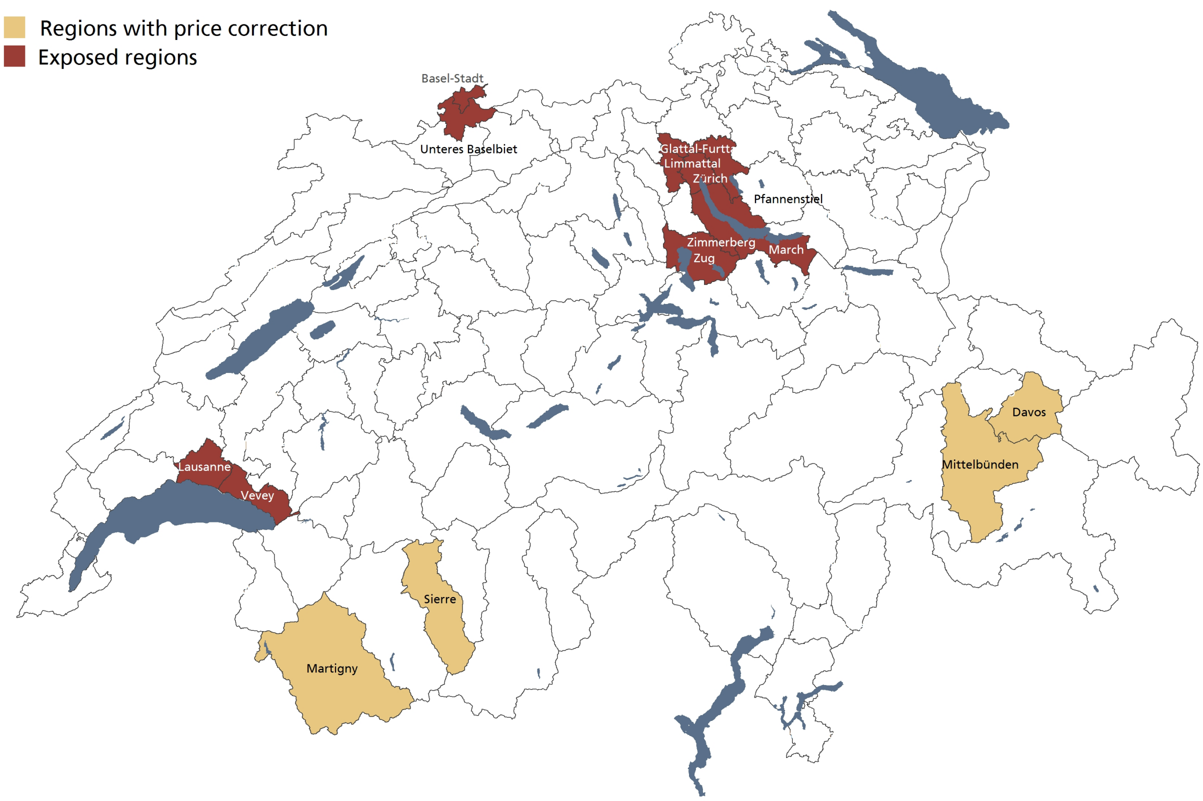
The risk map has changed to reflect the fall in the real estate bubble index. The region of Nidwalden is no longer among the risk regions. With annual prices rising at a 3.5% clip since 2015, owner-occupied homes in the Unteres Baselbiet area have increased in value twice as fast as the average across all the regions. The region has recently been added to the list of risk areas.

Methodology

The regional risk map shows those regions posing the greatest macroeconomic risks in the event of a Swiss-wide correction. The analysis is based on the population size, the price level and the price behavior for owner-occupied homes. The selection of risk regions is linked to the UBS Swiss Real Estate Bubble Index. Vacancy or liquidity risks are not taken into account.

Regional risk map – third quarter of 2018

Risk regions for the Swiss residential property market and regions with a price correction of more than 5% since 2015



Source: UBS

Appendix

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