UBS

Swiss real estate market

UBS Swiss Real Estate Bubble Index 1Q 2017

Chief Investment Office WM | 5 May 2017 | Translation:
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- The *UBS Swiss Real Estate Bubble Index* remained in the risk zone at 1.39 points in the first quarter of 2017 following a moderate increase.
- The increase in home prices outpaced the increase in rents and income.
- Demand for buy-to-let investments also rose, in spite of heightened market risks.

The *UBS Swiss Real Estate Bubble Index* remained in the risk zone in Q1 2017 at 1.39 index points. The index increased moderately over the slightly revised figure for the previous quarter. The rise was driven mainly by a slight acceleration in nominal price increases for owner-occupied homes amid stagnant rents and income. Demand for buy-to-let investments rose as well.

Buy-rent ratio deteriorates further

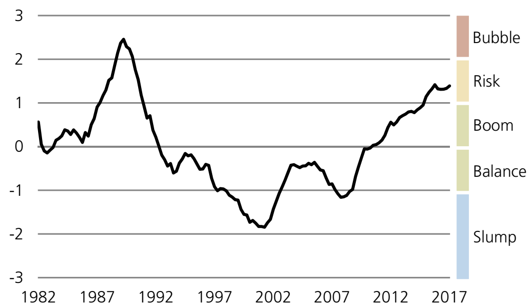
Stagnant rents caused the buy-rent ratio to deteriorate for the tenth time in a row in Q1 2017. At the same time, the percentage of loan applications received by UBS for properties not intended for personal use experienced another slight increase. This can be explained by the fact that buy-to-let investments can produce high returns on equity if they are highly leveraged.

Given the continued large number of building permits, it seems likely that construction activity will remain (too) strong in this current year. We estimate that the construction of new apartments will exceed the additional demand for apartments by approximately five to ten thousand units this year. This should keep rents on a downward trajectory, particularly for new apartments. In other words, life is about to get even more difficult for landlords. Investor demand for owner-occupied homes is primarily attributable to the entrenched expectation that interest rates will remain low. However, a rate increase would most likely bring strong demand for buy-to-let investments to an abrupt halt.

Reduction of imbalances on the horizon

The performance of the real estate bubble index was hampered somewhat by a higher inflation rate. The quarter-on-quarter increase of 0.6 percent in consumer prices was only a one-time effect, though. We expect the inflation rate to average just 0.4 percent for the whole year. Nevertheless, the imbalances in the owner-occupied housing market should abate somewhat by year-end. Current leading indicators point to an acceleration in economic growth while owner-occupied home prices are expected to flatten out by the end of the year.

UBS Swiss Real Estate Bubble Index



Source: UBS

	Index		Index
2014-Q1	0.78	2016-Q1	1.32
2014-Q2	0.84	2016-Q2	1.31
2014-Q3	0.89	2016-Q3	1.31
2014-Q4	0.95	2016-Q4	1.33
2015-Q1	1.14	2017-Q1	1.39
2015-Q2	1.24		
2015-Q3	1.32		
2015-Q4	1.42		

Source: UBS. Owing to data revisions and varying weightings of the sub-indices, slight adjustments can be made to the index values every quarter.

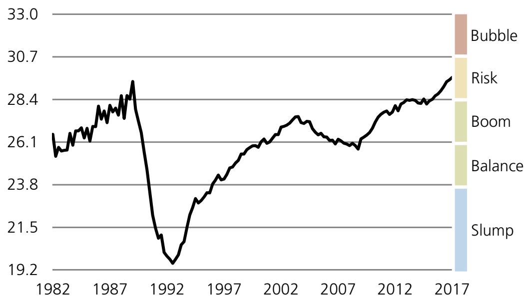
Methodology: The *UBS Swiss Real Estate Bubble Index* comprises six sub-indices. The index is calculated as the average of trend-adjusted and standardized indicators weighted using a principal component analysis. The index level shows the deviation in standard deviations from the average, which is normalized to zero. The index value is categorized into one of five levels: slump (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 home prices relative to annual rent payments

- An above-average buy-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 Q1 2017, it took 29.6 annual rents to purchase a comparable home – a new indicator high. The indicator thus increased a tenth quarter in a row.

Owner-occupied home prices relative to annual rent payments
Value

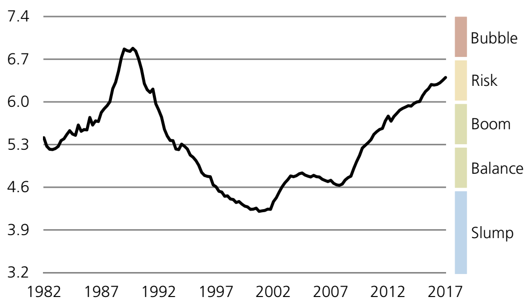


Sources: SNB; UBS

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 5.3 annual incomes to purchase an owner-occupied home in the medium price segment.
- In Q1 2017, it took around 6.4 annual household incomes to purchase an owner-occupied home in the medium price segment. Compared to the previous quarter, the index rose slightly.

Owner-occupied housing prices relative to household income
Value

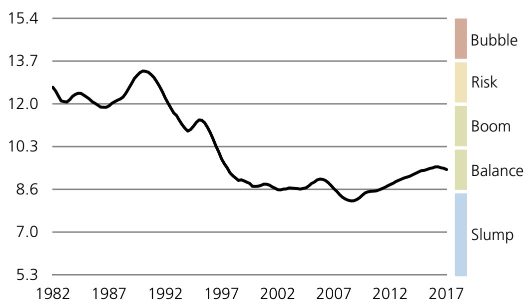


Sources: SNB; FSO; UBS

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 significantly below the peak values of the 1980s.
- Nominal construction activity fell in Q1 2017. Investment in the sector declined 1.3 percent compared to the previous year. The construction industry's contribution to the gross domestic product declined from 9.5 to 9.4 percent over the year.

Construction relative to gross domestic product
Share of total

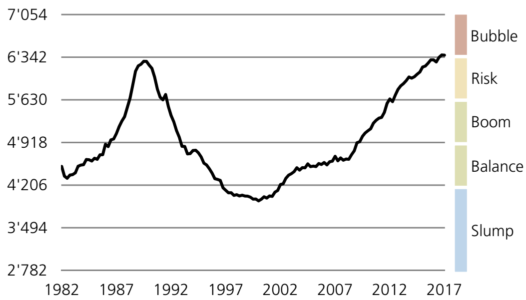


Sources: SECO; FSO; UBS

Owner-occupied home prices relative to consumer prices

- In the long term, owner-occupied housing prices are likely to be oriented towards 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.
- The inflation rate stood at 0.6 percent in the first quarter of 2017. As a result, home prices declined marginally, when adjusted for inflation. Year-on-year, however, a nominal rise of 1.2 percent was recorded.

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

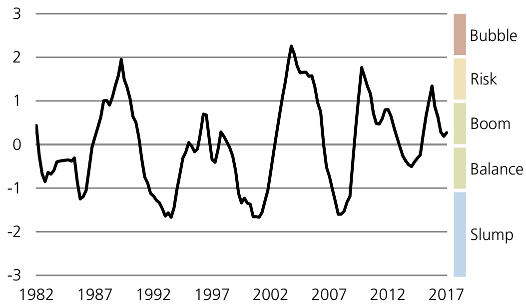


Sources: SNB; FSO; UBS

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 rose by 2.6 percent compared to the previous year. The downward trend in household debt growth thus continued in Q1 2017.
- The sharp slowdown in household debt growth dampened the development 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)

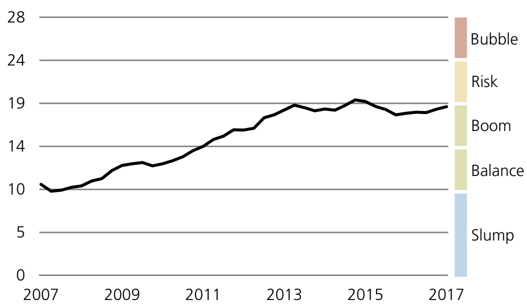


Sources: SNB; FSO; UBS

UBS loan applications for real estate intended for leasing

- High demand for residential property for the purpose of leasing (buy-to-let) indicates speculative demand.
- However, the current value remains below the record high in 2015.
- The number of loan applications for non-owner-occupied properties rose in the first quarter of 2017. Buy-to-let nevertheless remains a popular investment strategy, accounting for 18.5 percent of all loan applications.

Credit applications for residential property not intended for owner occupancy
Share of total



Source: UBS

Regional analysis

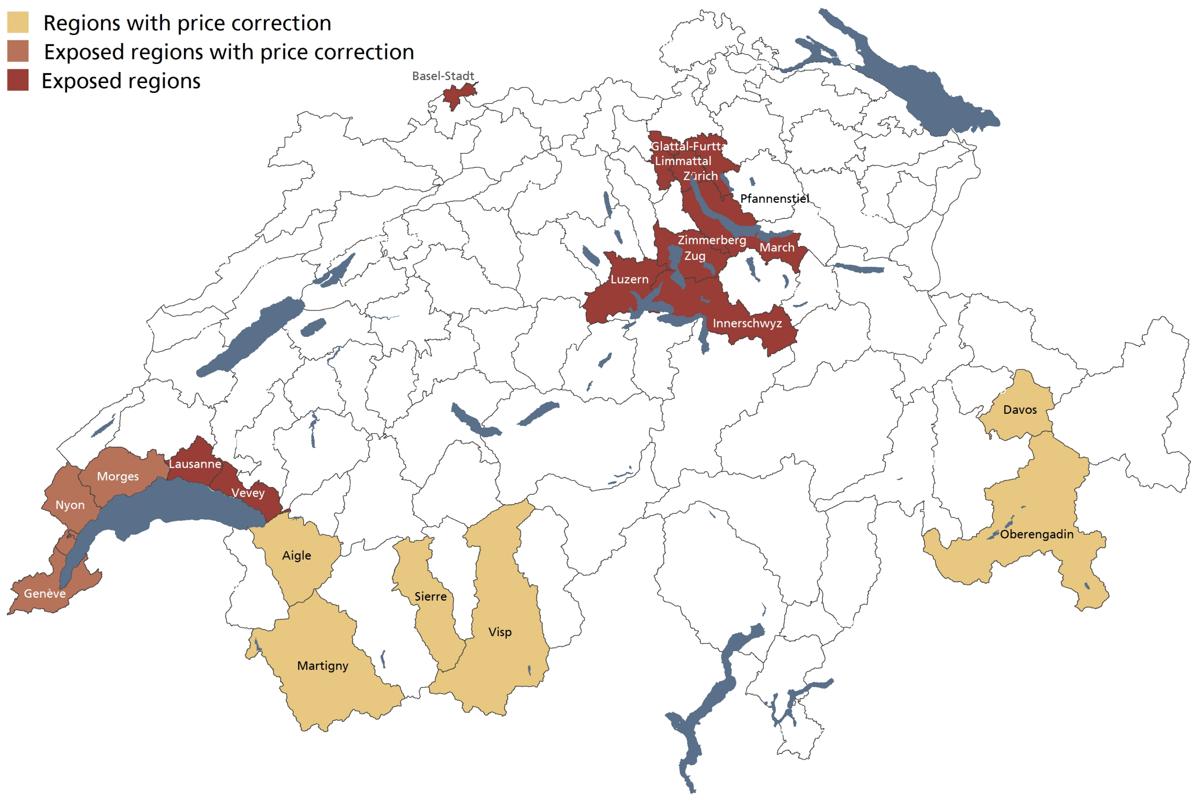
The Geneva, Nyon and Morges regions are in a correction phase. Local owner-occupied housing markets have already cooled in these regions. In the past three years, price corrections in Valais, Bernese Oberland and parts of Grisons mean that there are no longer tourist regions on the risk map. The regional risk focus is gradually shifting from Lake Geneva to the regions of Zurich and Central Switzerland.

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 – 1Q 2017

Risk regions for the Swiss residential property market and regions with a price correction of more than 5 percent since 2013



Source: UBS

Appendix

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