Swiss real estate market

UBS Swiss Real Estate Bubble Index 2Q 2017

Chief Investment Office WM I **8 August 2017** I Translation:
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- The *UBS Swiss Real Estate Bubble Index* remained unchanged in the second quarter compared to the previous one.
- Improving economic conditions and the slight fall in inflation-adjusted prices for owner-occupied homes helped stabilize imbalances.
- Geneva and Nyon no longer count as exposed regions.

At 1.38 points, the *UBS Swiss Real Estate Bubble Index* was in the risk zone in the second quarter of 2017. The index thus remained unchanged compared to the value of the previous quarter. The imbalances on the owner-occupied housing market have not increased any further for several quarters.

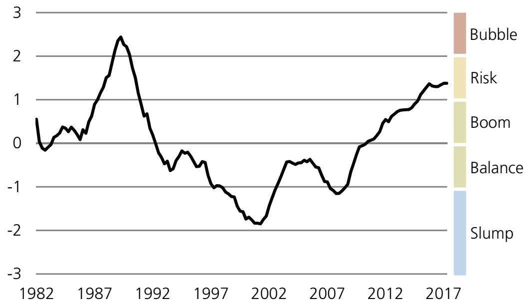
The Real Estate Bubble Index was propped up by the buy-rent price indicator, which reached another high in the second quarter of 2017. Investment demand for residential real estate also remained high. However, a dampening effect was created by the relatively moderate growth in outstanding household mortgages against the backdrop of slightly brighter economic conditions. In a quarter-on-quarter comparison, a slight drop in inflation-adjusted prices of owner-occupied homes was also observed for the second time in row.

Increasing imbalance between the rental and owner-occupied housing markets

Since 2014, the purchase prices for residential property have increased at a greater rate than market rents. This gap between the owner-occupied housing and the residential rental market expanded further in the second quarter of 2017. However, this was due less to a boom on the owner-occupied housing market and more to a continuing decline in rents. Market rents for new rentals and continued rentals are now below the level at the start of 2014.

From a macroeconomic perspective, the past quarter was characterized by improving economic data and the weakening Swiss franc trend. However, construction investments were unable to keep pace with the faster economic development. The construction industry's share of overall economic performance was therefore slightly down. Nevertheless, building permits do not indicate a future decline in residential construction activity. For the year as a whole, the UBS Chief Investment Office Wealth Management still expects new construction activity to be excessive compared to demand, amounting to around 50,000 residential units. This means that rents should continue to fall.

UBS Swiss Real Estate Bubble Index



Source: UBS

	Index		Index
2014-Q1	0.77	2016-Q1	1.32
2014-Q2	0.82	2016-Q2	1.30
2014-Q3	0.91	2016-Q3	1.30
2014-Q4	0.97	2016-Q4	1.34
2015-Q1	1.11	2017-Q1	1.38
2015-Q2	1.20	2017-Q2	1.38
2015-Q3	1.28		
2015-Q4	1.37		

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

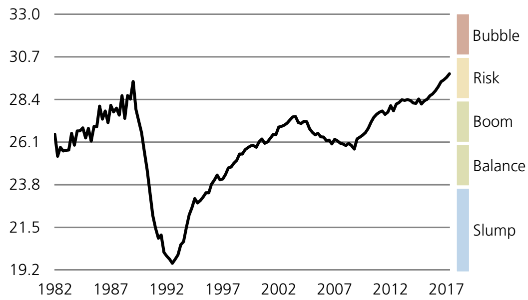
Methodology: The *UBS Swiss Real Estate Bubble Index* comprises six sub-indices. The index is calculated as the average of trend-adjusted and standardized indicators weighted using a principal component analysis. The index level shows the deviation in standard deviations from the average, which is normalized 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 the second quarter of 2017, it took 29.8 annual rents to purchase a comparable home. The indicator thus increased for the eleventh quarter in a row.

Owner-occupied home prices relative to annual rent payments
Value

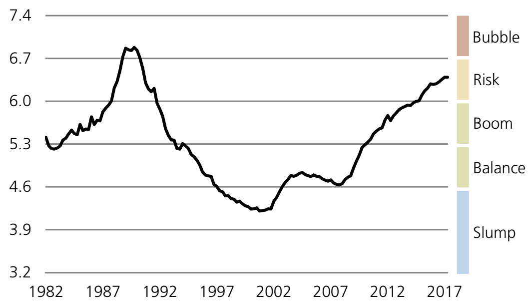


Sources: SNB; UBS

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 the second quarter of 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 remained unchanged.

Owner-occupied housing prices relative to household income
Value

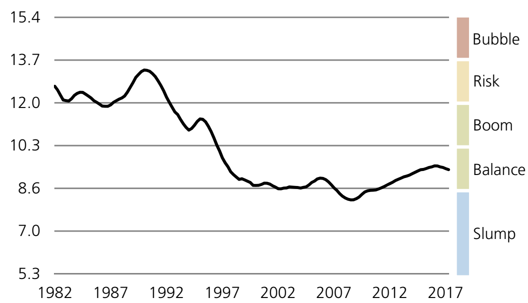


Sources: SNB; FSO; UBS

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 investment increased slightly in the second quarter of 2017. However, investment in the sector declined 0.3% compared to the previous year. The construction industry's contribution to gross domestic product declined to 9.3% from 9.5 over the year.

Construction relative to gross domestic product
Share of total

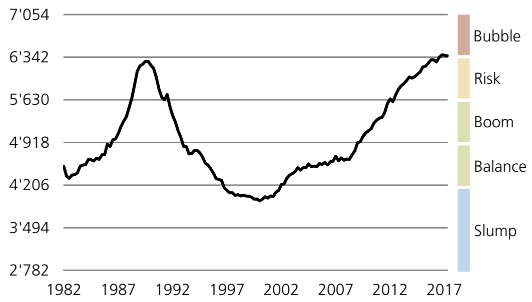


Sources: SECO; FSO; UBS

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.
- Consumer prices increased by 0.2% in the second quarter of 2017. As a result, home prices (which increased only by 0.1%) declined marginally, when adjusted for inflation.

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

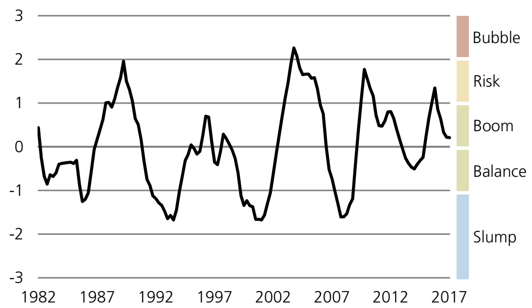


Sources: SNB; FSO; UBS

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 nearly 2.7% compared to the previous year. The downward trend in household debt growth thus seems to have come to an end for now.
- 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)

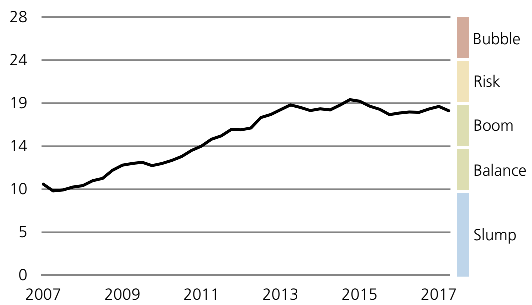


Sources: SNB; FSO; UBS

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 slightly in the second quarter of 2017. Buy-to-let nevertheless remains a popular investment strategy, accounting for 18.9% of all loan applications.

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



Source: UBS

Regional analysis

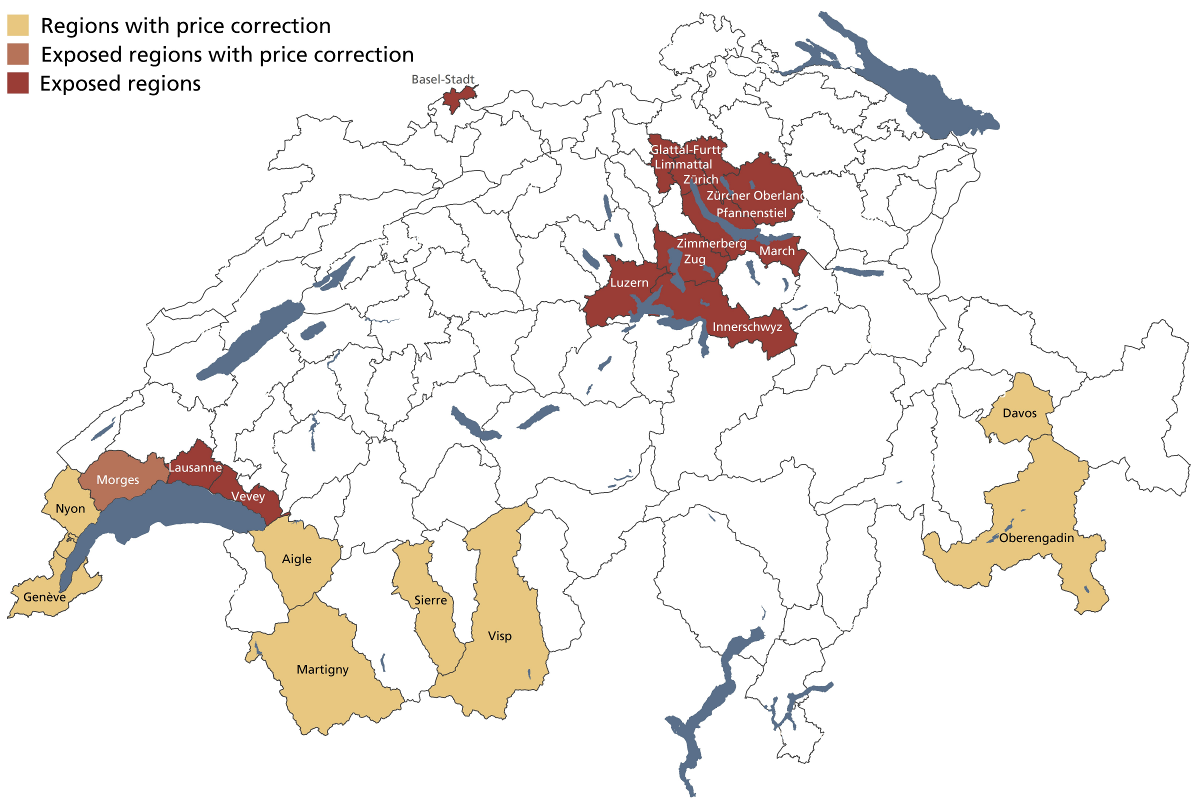
The economic regions of Geneva and Nyon no longer count as risk regions following a price correction of around 10% in the last three years. On a 10-year average too, the rate of price increases now lies beneath the median value of all Swiss economic regions. Zurich Oberland, on the other hand, is now a risk region (again). This confirms the trend for the concentration of risks on the owner-occupied housing market in 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 – 2Q 2017

Risk regions for the Swiss residential property market and regions with a price correction of more than 5 percent since 2014



Source: UBS

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