

# Swiss real estate market

### UBS Swiss Real Estate Bubble Index 1Q 2019

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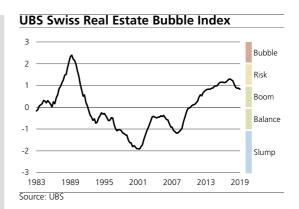
- The UBS Swiss Real Estate Bubble Index has fallen slightly to 0.83 index points. Advertised home prices declined further in Q1 2019. The price/income ratio decreased for the eighth quarter in a row. Demand for buy-to-let condominiums sagged as well. However, mortgage origination showed signs of a modest acceleration.
- In Q1 2019, it took 31 annual rents to purchase a comparable owner-occupied home. At the same time, falling rents and rising vacancies have made buy-to-let investments less attractive. As a result, demand for buy-to-let properties dropped to its lowest level since 2012.
- The regional risk map indicates the biggest imbalances in the Zurich area and Central Switzerland. However, imbalances are also elevated in Lausanne, Lugano and the Basel region.

#### **Basic concept**

The term "bubble" describes significant and persistent asset mispricing. Bubbles can only be identified after they have burst. But property market excesses show patterns in historical data. Typical signs include a decoupling of prices from local incomes and home rents, as well as distortions of the real economy, such as excessive lending and construction activity. The UBS Swiss Real Estate Bubble Index uses the presence of such patterns to measure the risk of a real estate bubble on the Swiss market for owner-occupied homes.

#### Index calculation

The UBS Swiss Real Estate Bubble Index comprises six sub-indexes. It 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).



Period	Index	Trend
Quarter 1	0.79	•
Quarter 2	0.82	•
Quarter 3	0.83	
Quarter 4	0.83	
Quarter 1	0.87	•
Quarter 2	0.89	•
Quarter 3	0.97	•
Quarter 4	0.97	
Quarter 1	0.99	•
Quarter 2	1.09	•
Quarter 3	1.15	•
Quarter 4	1.15	
Quarter 1	1.15	-
Quarter 2	1.13	
Quarter 3	1.15	•
Quarter 4	1.21	
Quarter 1	1.28	
Quarter 2	1.30	
Quarter 3	1.25	-
Quarter 4	1.21	
Quarter 1	1.06	•
Quarter 2	0.92	•
Quarter 3	0.87	•
Quarter 4	0.88	
Quarter 1	0.83	•
	Quarter 1 Quarter 2 Quarter 3 Quarter 4 Quarter 1 Quarter 2 Quarter 3 Quarter 4 Quarter 1 Quarter 2 Quarter 3 Quarter 3 Quarter 4 Quarter 1 Quarter 2 Quarter 3 Quarter 4 Quarter 1 Quarter 2 Quarter 3 Quarter 4 Quarter 1 Quarter 1 Quarter 2 Quarter 3 Quarter 1 Quarter 2 Quarter 3 Quarter 3 Quarter 3 Quarter 4 Quarter 3 Quarter 4 Quarter 3 Quarter 4 Quarter 1 Quarter 2 Quarter 3 Quarter 3 Quarter 3 Quarter 3 Quarter 4	Quarter 1       0.79         Quarter 2       0.82         Quarter 3       0.83         Quarter 4       0.83         Quarter 1       0.87         Quarter 2       0.89         Quarter 3       0.97         Quarter 1       0.99         Quarter 2       1.09         Quarter 3       1.15         Quarter 4       1.15         Quarter 1       1.15         Quarter 2       1.13         Quarter 3       1.15         Quarter 4       1.21         Quarter 1       1.28         Quarter 2       1.30         Quarter 3       1.25         Quarter 4       1.21         Quarter 1       1.06         Quarter 2       0.92         Quarter 3       0.87         Quarter 4       0.88

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

#### Sub-indexes of the UBS Swiss Real Estate Bubble Index

#### Home prices to annual rents

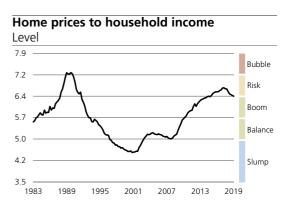
An above-average buy-to-rent ratio indicates a high dependency on sustained low interest rates or implies expectations of price increases.

#### Home prices to annual rents Level 34.1 Bubble 31.6 Risk 26.6 Balance 24.1 21.6 Slump 1983 1989 2019 1995 2001 2007 2013

Sources: SNB; UBS

#### Home prices to household income

The indicator shows whether the price behavior of the owneroccupied 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.

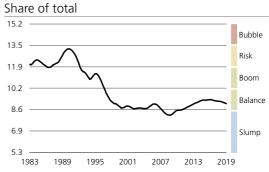


Sources: SNB; FSO; UBS

#### 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.

## Construction relative to gross domestic product



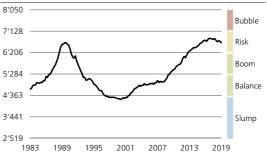
Sources: SECO; FSO; UBS

#### 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.

#### Home prices relative to consumer prices

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



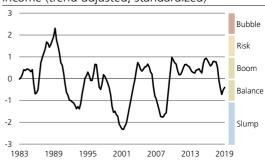
Sources: SNB; FSO; UBS

## 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.

#### Mortgage volume relative to income

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

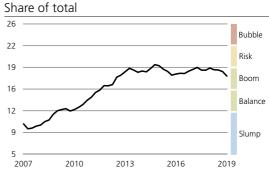


Sources: SNB; FSO; UBS

## 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.

## Credit applications for residential real estate not intended for self-occupancy

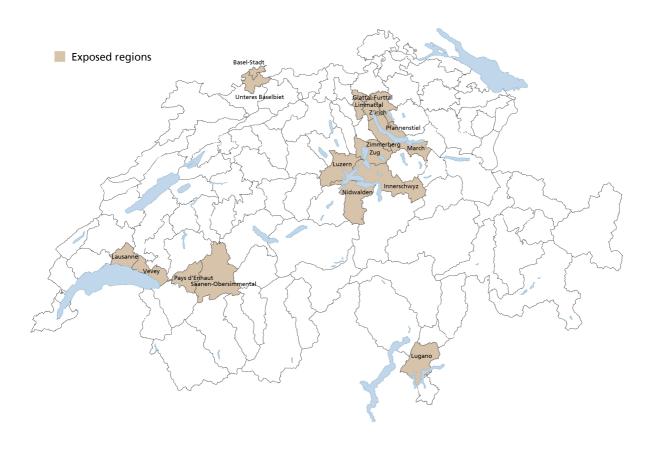


Source: UBS

### Regional risk map

The *regional risk map* reveals the regions in which the imbalances are most extreme. The analysis is based on the local price/income ratio, the local price/rent ratio and the long-term price behavior of homes. The selection of risk regions is linked to the *UBS Swiss Real Estate Bubble Index* and takes into account the size of the local second-home market. Due to adjustments made to the method, the risk map is only comparable to some extent with previous issues of the report.

#### Risk regions in the Swiss residential real estate market



Source: UBS

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