Swiss real estate market

UBS Swiss Real Estate Bubble Index: 4th quarter 2011

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- The UBS Swiss Real Estate Bubble Index reached 0.80 in the fourth quarter of 2011, a considerable surge of 0.22 points.
- This strong quarter-on-quarter rise reflects increases, some of them considerable, in five of the six sub-indices.
- Basel-Stadt, Glattal-Furttal and Knonaueramt now also count as monitoring regions.

The UBS Swiss Real Estate Bubble Index currently stands at 0.80, an increase of 0.22 compared to the prior quarter. This level indicates a continued housing market boom in Switzerland. However, the index is also edging closer to the risk zone.

Five of the six sub-indices rose in the fourth quarter of 2011. The main drivers were a relatively strong surge in home prices, slight deflation and stagnant incomes. The impact of record-low interest rates is also hard to ignore. The fourth quarter saw above-average increases in household mortgage debt and the credit applications for residential property not intended for owner occupancy.

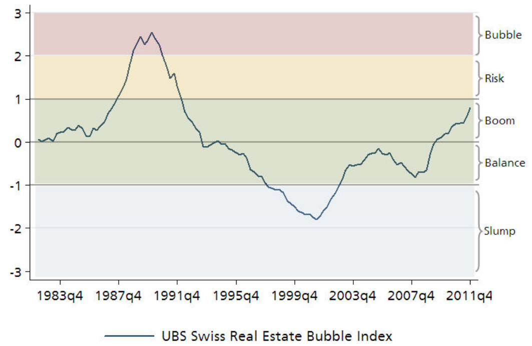
Methodology

The UBS Swiss Real Estate Bubble Index comprises six sub-indices that track: the relationship between purchase and rental prices, the relationship between house prices and household income, the relationship between house prices and inflation, the relationship between mortgage debt and income, the relationship between construction and gross domestic product (GDP) and the proportion of credit applications for residential property not intended for owner occupancy by UBS clients.

The UBS Swiss Real Estate Bubble 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).

UBS Swiss Real Estate Bubble Index



Source: UBS WMR

Development of the UBS Swiss Real Estate Bubble Index

		Index
2009	Quarter 1	-0.27
	Quarter 2	-0.05
	Quarter 3	0.08
	Quarter 4	0.15
2010	Quarter 1	0.22
	Quarter 2	0.19
	Quarter 3	0.38
	Quarter 4	0.47
2011	Quarter 1	0.47
	Quarter 2	0.45
	Quarter 3	0.58
	Quarter 4	0.80

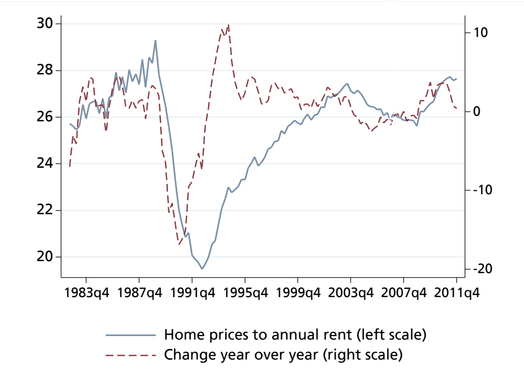
Source: UBS WMR

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

Own home prices relative to annual rent

In the fourth quarter of 2011, the number of annual rents required to purchase an owner-occupied house of the same size rose marginally to 27.6. Since the long-term average is only 25 annual rents, the indicator is pointing to a growing imbalance in the housing market.

Home prices relative to annual rent
Level and change year-over-year in percent

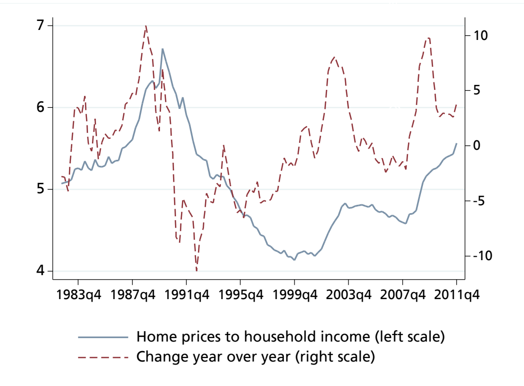


Sources: SNB; UBS WMR

Home prices relative to household income

This sub-index climbed steeply in the fourth quarter. Now, 5.6 average disposable household annual incomes (previous quarter: 5.4) are needed to purchase an owner-occupied house (median property). The rise was largely driven by an increase in condominium asking prices, while incomes stagnated further in the sluggish economy. The sub-index is, however, still well below the value recorded in 1990.

Home prices relative to household income
Level and change year-over-year in percent

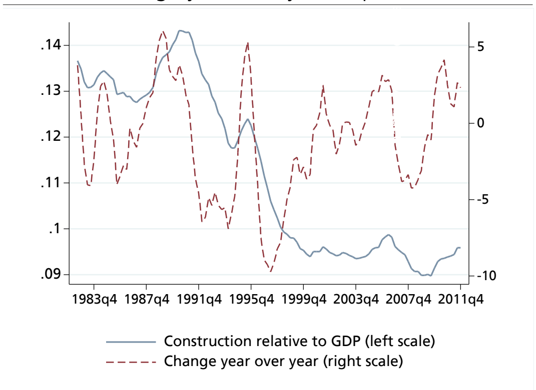


Sources: SNB; BFS; UBS WMR

Construction relative to gross domestic product (GDP)

Construction's contribution to GDP stayed steady at 9.6 percent. However, the data were not smoothed out and reveal a clear upward trend as the construction sector booms amid a softening economy. The indicator is still extremely low compared to the long-term trend, but we expect it to rise significantly this year, given construction companies' full order books.

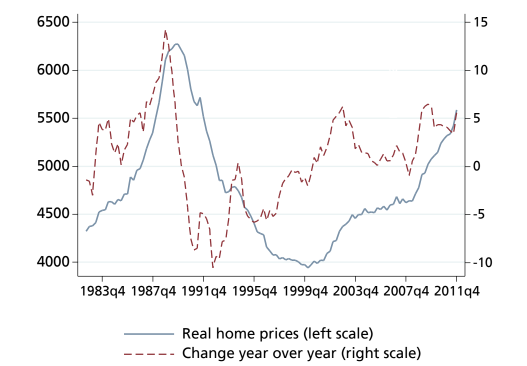
Construction relative to gross domestic product
Level and change year-over-year in percent



Sources: seco; BFS; UBS WMR

Own home prices relative to consumer prices
In the fourth quarter of 2011, the prices of owner-occupied houses increased 3.9 percent year-on-year in real terms. One of the main drivers was strong home price growth despite a slight decline in consumer prices. This indicator is lower than in the previous bubble, but higher than the long-term average. Since home prices generally do not outpace the general inflation rate over the long term, the indicator already shows that the real estate market is moderately overheated.

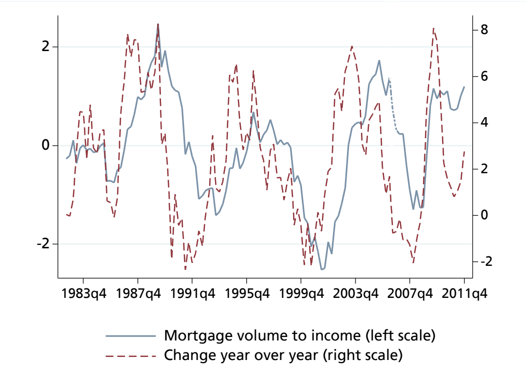
Home prices relative to consumer prices
Real home prices (CHF / m²) and change year-over-year in percent



Sources: SNB; BFS; UBS WMR

Mortgage volume relative to income
This indicator has risen strongly since the previous quarter and is once again more than one standard deviation above the long-term trend. Households have continued to acquire mortgage debt at a rapid pace and will probably not change their behavior in the current low-interest environment. However, the indicator is not showing the kind of high, persistent changes in indebtedness seen in 1989.

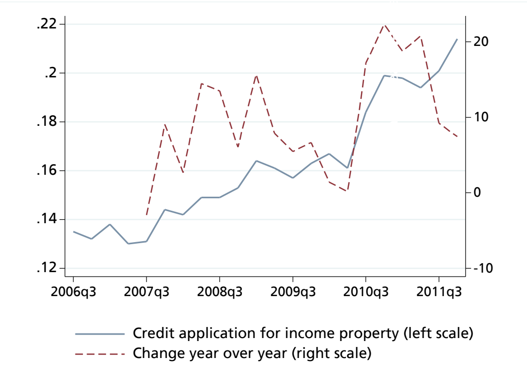
Mortgage volume relative to income
Mortgage debt of private households relative to income (detrended series) and change year-over-year in percent



Sources: SNB; BFS; UBS WMR

Credit applications for residential property not intended for owner occupancy (UBS clients)
Credit applications for residential property not intended for owner occupancy rose to 21.4 percent in the fourth quarter. This represents a considerable increase of 1.2 percentage points compared to the prior quarter. A rise in this measure reflects increasing interest in owning real estate as a financial investment or possible speculative purchases. Since the underlying data only go back to the third quarter of 2006, we cannot compare the current situation with the 1980s real estate bubble.

Credit applications for residential property not intended for owner occupancy
Share of total and change year-over-year in percent



Source: UBS WMR

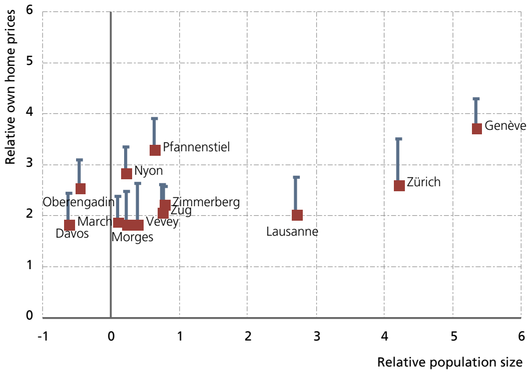
Regions with risk potential for the residential real estate market

There have been no changes in the group of risk regions with a high potential for regional home price corrections. The Zurich, Geneva and Lausanne economic regions remain Switzerland's most risky as a result of their national importance. Other regions considered risky include the large metropolitan areas of Zug, Pfannenstiel, Zimmerberg, March, Vevey, Morges and Nyon, as well as the tourist regions of Davos and Oberengadin. The group of monitoring regions has grown to include Basel-Stadt, Glattal-Furttal and Knonaueramt. This category still includes Limmattal, Unteres Baselbiet and Saanen-Obersimmental.

Methodology

Our selection of risk regions is tied to the level of the UBS Swiss Real Estate Bubble Index and is based on a multi-level selection process utilizing regional population and property price data (see appendix).

Risk regions for the residential real estate market

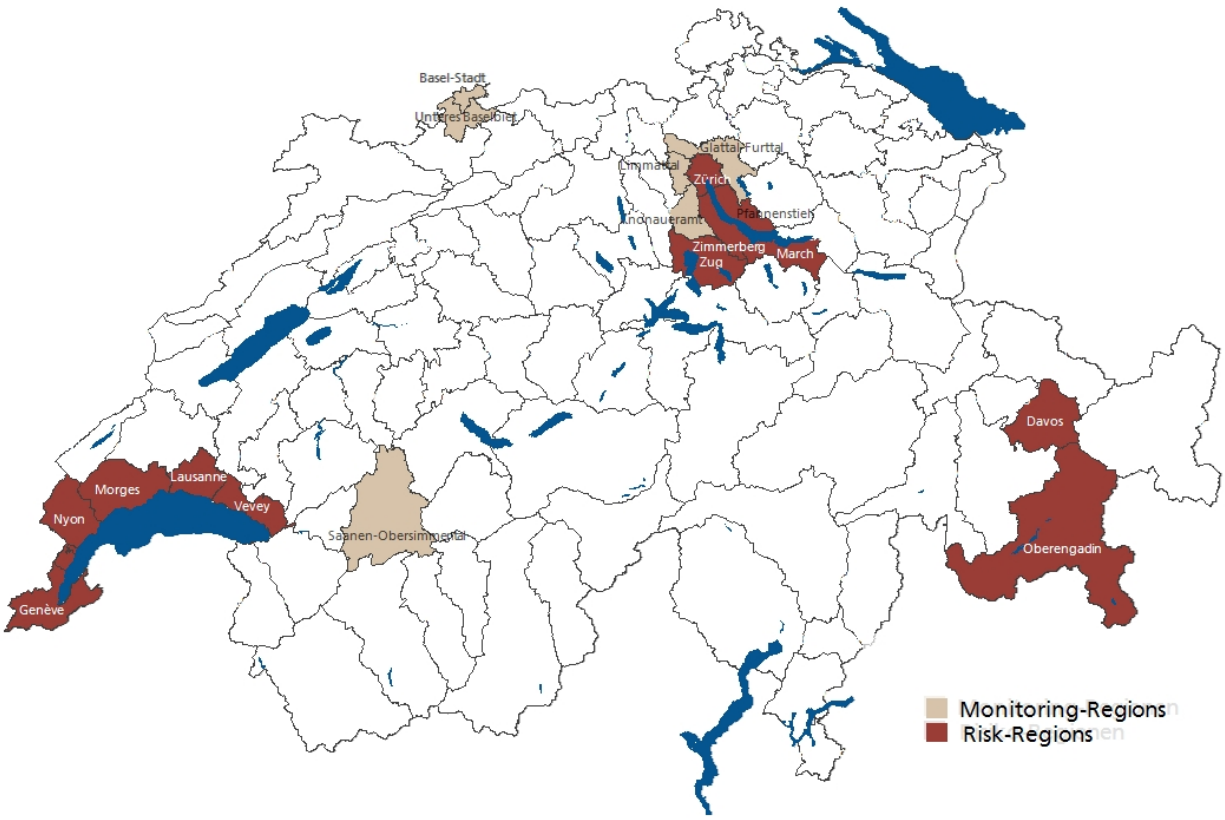


Sources: Wüest & Partner; BFS; UBS WMR
Number of standard deviations from the Swiss median value for population and own home prices. The further to the right and to the top a region is located, the greater the risks of a price correction.

Price rises over the last three years are additionally shown as a bar, with a span of 1 unit representing an annual 10 percent gain.

Regional risk map

Risk- and monitoring regions for the Swiss residential real estate market



Sources: Wüest & Partner; BFS; UBS WMR

Appendix: Regional analysis

We utilize an adjusted relative market growth matrix to measure regional risks and risk accruing to the Swiss economy in relation to the situation of the overall market.

First, every region is assigned to one of four categories on the basis of population and population development (outer matrix):

- *Star markets* – densely-populated regions with above-average population growth
- *Saturated markets* - densely-populated regions with below-average population growth
- *Growth markets* – small regions with above-average population growth
- *Niche markets* - small regions with below-average population growth

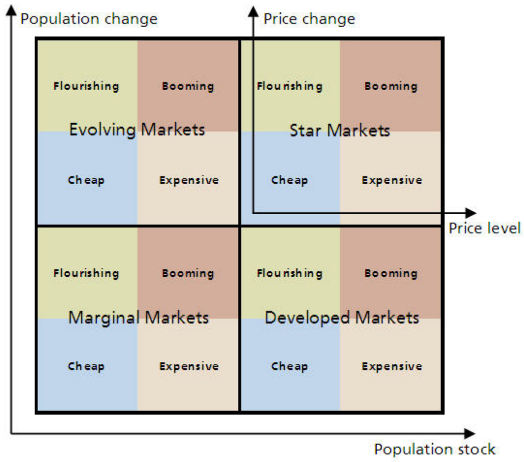
Secondly, the regions are assigned to one of four further categories (inner matrix), irrespective of their categorization described above, based on price levels and housing price increases:

- *Booming* – expensive regions with above-average price increases
- *Expensive* – expensive regions with below-average price increases
- *Flourishing* – cheap regions with above-average price increases
- *Cheap* – cheap regions with below-average price increases

Thirdly, the relative market growth matrix is linked to the UBS Swiss Real Estate Bubble Index, rendering the selection criteria dependent on the current index level. The higher the index level, the less (relatively) restrictive the selection of regions is.

Relativ market growth matrix

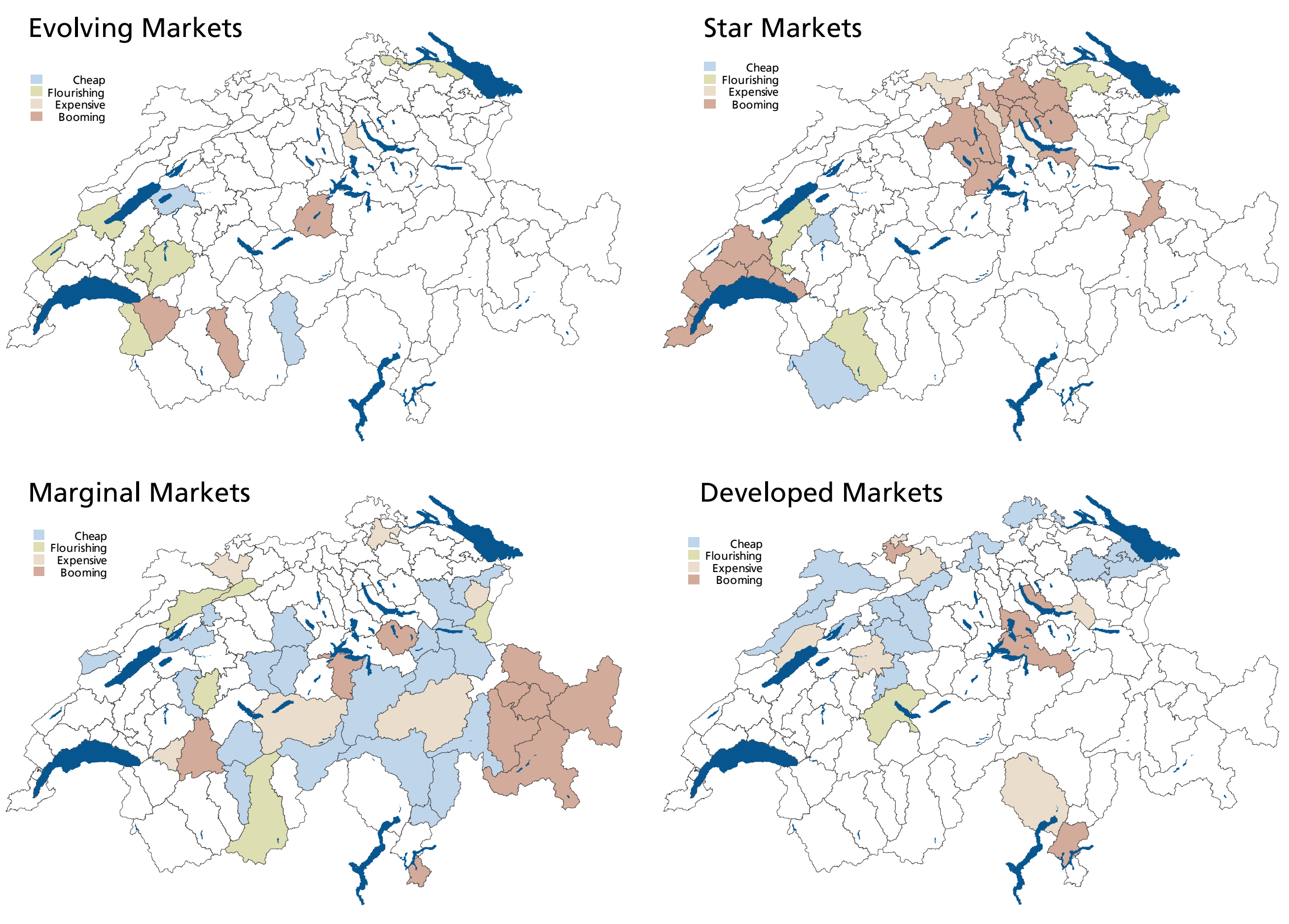
With population and prices as variables



Source: UBS WMR

Example: The upper right quadrant – Star market, booming – contains all regions with both above-average population growth and price increases and that are among the most populated and expensive regions.

Categorization using the relative market growth matrix – overview



Sources: Wüest & Partner; BFS; UBS WMR

Appendix

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