

Swiss real estate market

UBS Swiss Real Estate Bubble Index: 2nd quarter 2012

- The *UBS Swiss Real Estate Bubble Index* now stands at 0.82 – marking its first decline since the end of 2008.
- All sub-indices were either stable or fell quarter-on-quarter in the second quarter of 2012.
- Demand is still strong, though, so we do not expect the Swiss real estate market to change direction in the quarters ahead.

The *UBS Swiss Real Estate Bubble Index* currently stands at 0.82. This represents a surprising decline of 0.13 index points compared to the previous quarter. Given Switzerland's historically favorable financing terms, high population growth and robust domestic economy, this decline should not mark the beginning of a turnaround in the Swiss real estate market.

A drop in asking prices combined with a rise in incomes and quarter-on-quarter stagnation in consumer prices have for the time being stopped the *UBS Swiss Real Estate Bubble Index* from continuing on its partially strong upward trajectory of recent quarters. The number of loan applications for non-owner-occupied properties has dipped slightly as well.

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 by UBS clients for residential property not intended for owner occupancy.

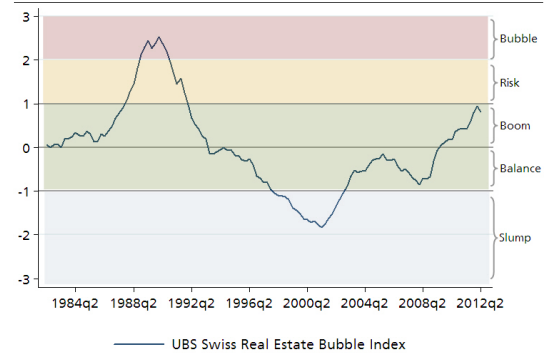
The *UBS Swiss Real Estate Bubble Index* is calculated as the average of trend-adjusted and standardized indicators weighted using a principal component analysis. The index level shows the deviation in standard deviations from the average, which is normalized to zero.

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).

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UBS Swiss Real Estate Bubble Index



Source: UBS

Peromance 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
2012	Quarter 1	0.95
	Quarter 2	0.82

Source: UBS

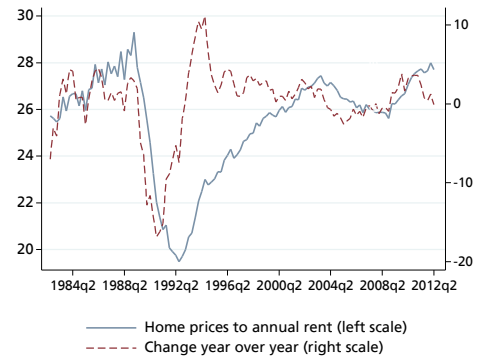
Sub-indices of the *UBS Swiss Real Estate Bubble Index*

Own home prices relative to annual rent

The ratio of purchase prices to rents decreased slightly in the second quarter of 2012. Owner-occupied homes are currently selling for around 27.7 annual rents, which translates into an implied gross yield of 3.6 percent. This is still well below the peak of 29.3 annual rents reached in March 1989 (which translates into an implied gross yield of 3.4 percent, but with distinctly higher interest rates).

Home prices relative to annual rent

Level and change year-over-year in percent



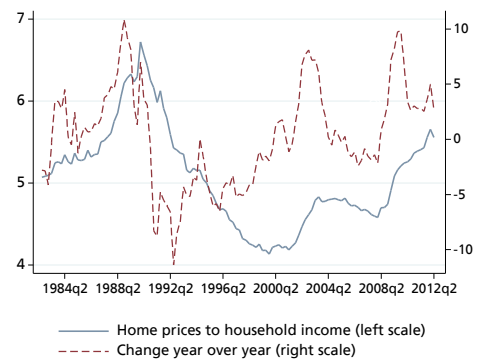
Sources: SNB; UBS

Home prices relative to household income

In the second quarter, it took an average of 5.55 annual incomes to purchase a home. This represents a slight decline over the previous quarter, when homes sold for 5.65 annual incomes. The fall was caused by slightly declining real estate prices and robust income growth.

Home prices relative to household income

Level and change year-over-year in percent



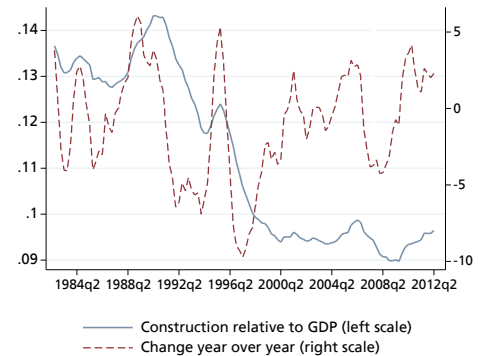
Sources: SNB; BFS; UBS

Construction relative to gross domestic product (GDP)

The construction industry is not showing any signs of a major boom and is practically unchanged, accounting for 9.6 percent of gross domestic product (averaged). This is different from the 1980s when the real estate market was driven by extremely vigorous construction activity.

Construction relative to gross domestic product

Level and change year-over-year in percent



Sources: seco; BFS; UBS

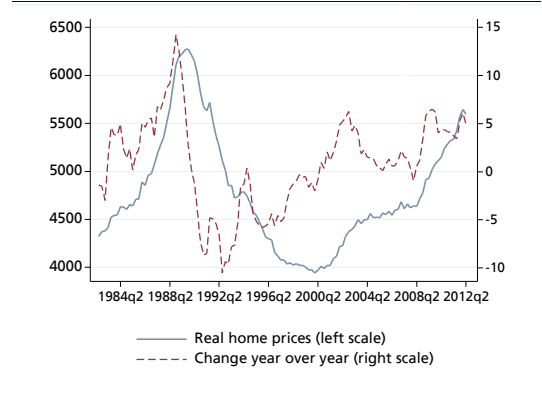
Swiss real estate market

Own home prices relative to consumer prices

Real prices of owner-occupied homes fell slightly in the second quarter of 2012. Consumer prices rebounded another 0.2 percent compared to the previous quarter, while home prices shed around 1 percent. This represents the first break in the real estate price trend since 2008.

Home prices relative to consumer prices

Real home prices (CHF/m²) and change year-over-year in percent

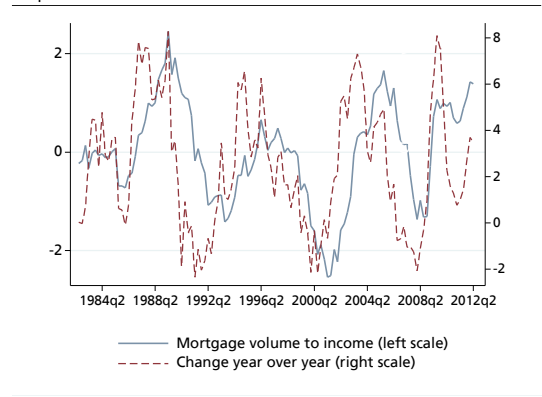


Mortgage volume relative to income

Mortgage volume grew slightly less in the second quarter of 2012 than in the previous quarter. However, the indicator remains more than one standard deviation above the long-term average, reflecting continued low interest rates. Household mortgage debt currently stands at 164 percent of disposable household income in Switzerland.

Mortgage volume relative to income

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

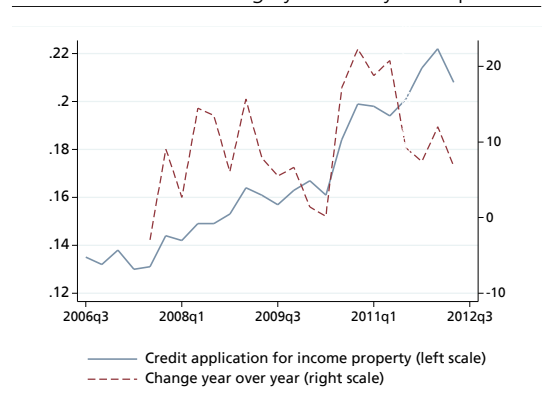


Credit applications for residential property not intended for owner occupancy (UBS clients)

The number of loan applications for non-owner-occupied properties dipped slightly in the second quarter of 2012. Currently, 21 percent of loan applications were intended for properties not directly used by their owners, compared to 22 percent in the previous quarter. The indicator, however, is still around 50 percent higher than in 2006.

Credit applications for residential property not intended for owner occupancy

Share of total and change year-over-year in percent



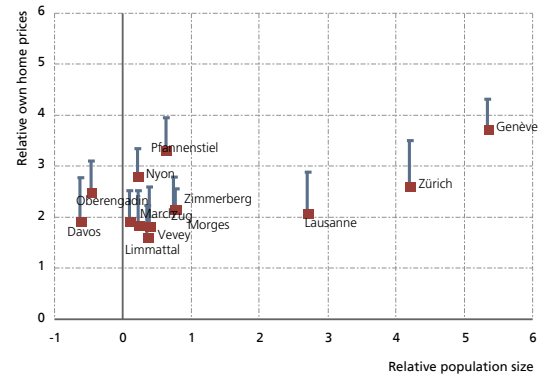
Regions with risk potential for the residential real estate market

The number of exposed regions declined in the second quarter 2012. Though the regions of Unteres Baselbiet and Saanen-Obersimmental are no longer considered exposed regions, they are still monitoring regions. This adjustment was made to reflect new price data and the decline in the *UBS Swiss Real Estate Bubble Index*. Furthermore, the regions of Zurich, Geneva and Lausanne remain Switzerland's riskiest due to their national importance. Other exposed regions 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 monitoring region category includes Basel-Stadt, Unteres Baselbiet, Saanen-Obersimmental, Knonaueramt and the Glattal-Furttal region.

Methodology

Our selection of exposed 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).

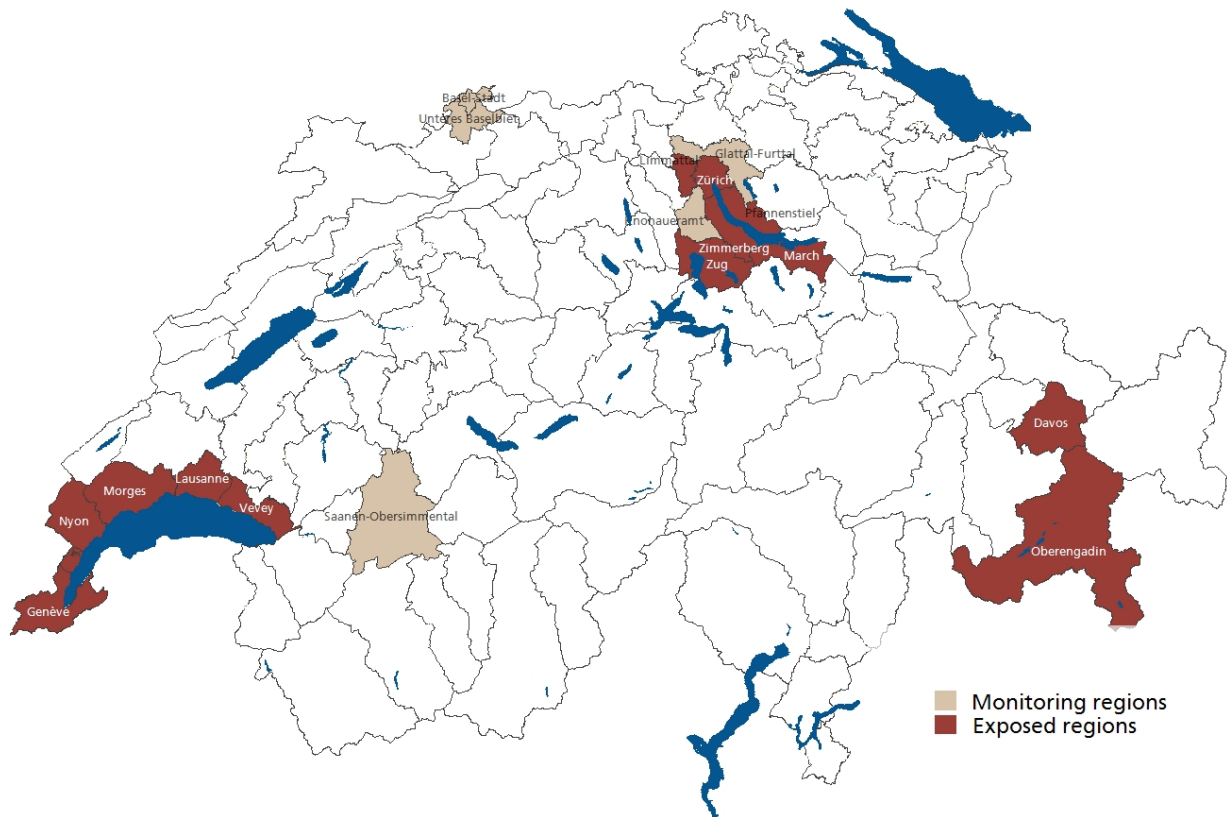
Exposed regions for the residential real estate market



Sources: Wüest & Partner; BFS; UBS
 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

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



Sources: Wüest & Partner; BFS; UBS

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 growth (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

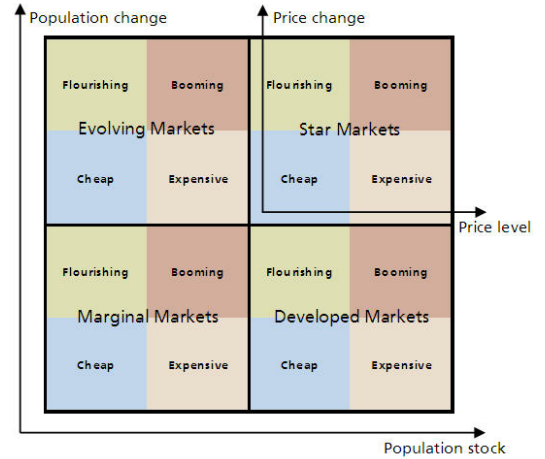
Secondly, the regions are assigned to one of four further categories (inner matrix), irrespective of their categorization described above, based on price levels and housing price increases:

- *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.

Relative market growth matrix

With population and prices as variables

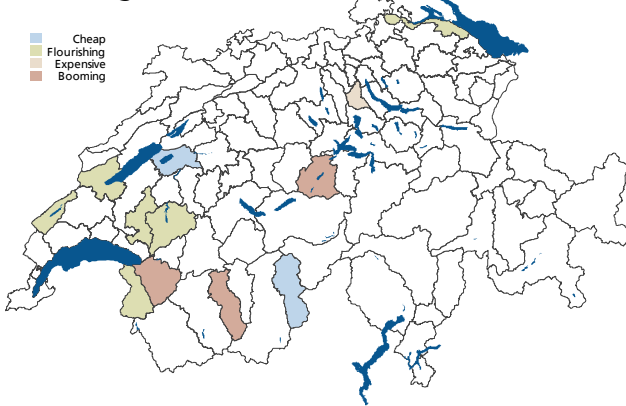


Source: UBS

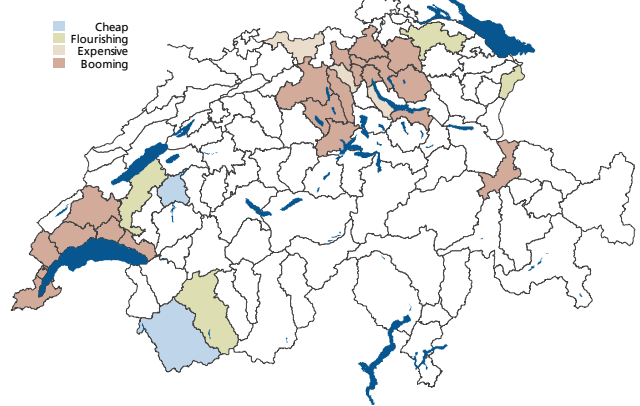
Example: The upper right quadrant – Star market, booming – contains all regions with both above-average population growth and price increases and that are among the most populated and expensive regions.

Categorization using the relative market growth matrix – overview

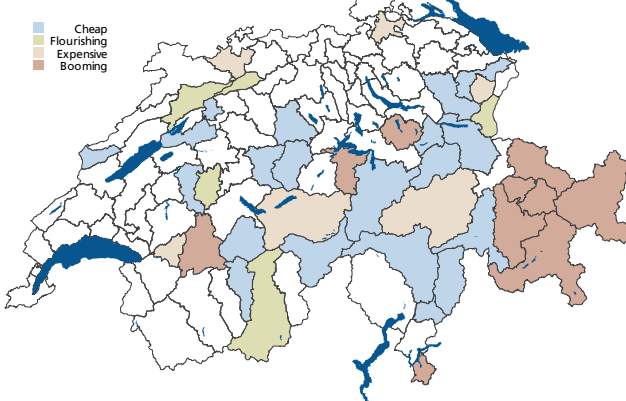
Evolving Markets



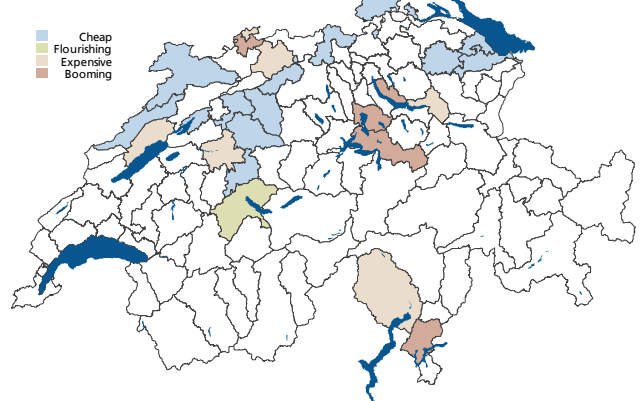
Star Markets



Marginal Markets



Developed Markets



Sources: Wüest & Partner; BFS; UBS

Appendix

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