

Swiss real estate market

UBS Swiss Real Estate Bubble Index: 3rd quarter 2012

- UBS Swiss Real Estate Bubble Index enters risk zone. Index rises from 0.82 to 1.02.
- All sub-indicators with the exception of the construction indicator exhibit strong increases.
- Basel-Landschaft and Saanen-Obersimmental reassigned as exposed regions, while central Swiss regions Nidwalden and Innerschwyz join the ranks of the monitoring regions.

The UBS Swiss Real Estate Bubble Index currently stands at 1.02 and has therefore entered the risk zone for the first time since the real estate bubble of the 1980s. This corresponds to a sharp rise of 0.20 index points on the previous quarter. As expected, the correction last quarter proved not to be a trend reversal; apart from the construction indicator, all the sub-indicators went up.

Key drivers were the consumer price index, which was down 0.2 percent in June this year, and stagnating income. The continued sharp increase in household mortgage debt also shows that the currently still extremely low financing costs are critically important for the development of the real estate market.

Declining consumer prices and stagnating incomes combined with unabated growth in mortgage debt are leading to unsustainable increases in house prices. The index increase reflects the continuing intensification of imbalances and risks on the Swiss housing market.

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.

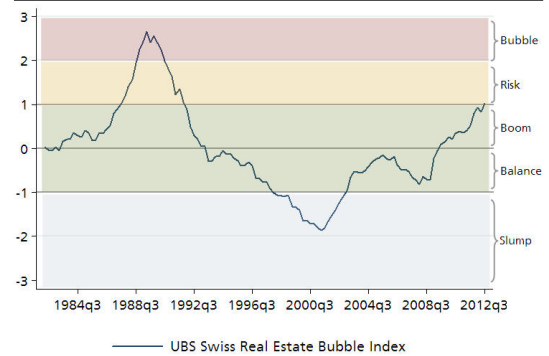
The UBS Swiss Real Estate Bubble Index is calculated as the average of trend-adjusted and standardized indicators weighted using a principal component analysis. The index level shows the deviation in standard deviations from the average, which is normalized to zero.

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

Performance of the UBS Swiss Real Estate Bubble Index

		Index
2009	Quarter 1	-0.24
	Quarter 2	-0.05
	Quarter 3	0.10
	Quarter 4	0.15
2010	Quarter 1	0.25
	Quarter 2	0.21
	Quarter 3	0.33
	Quarter 4	0.39
2011	Quarter 1	0.35
	Quarter 2	0.40
	Quarter 3	0.52
	Quarter 4	0.79
2012	Quarter 1	0.93
	Quarter 2	0.82
	Quarter 3	1.02

Source: UBS

As a result of a revision of the data the index values have been revised. As the weights of the sub-indices can vary, small adjustments may be seen each quarter.

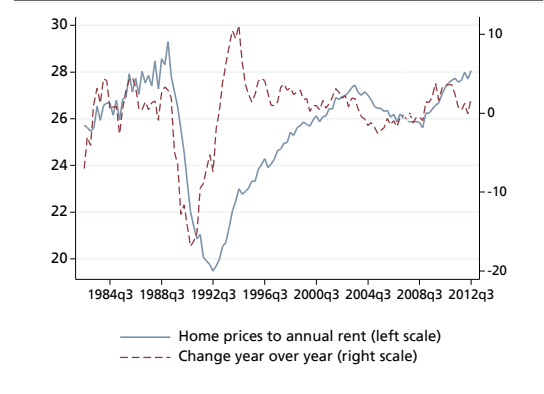
Sub-indices of the *UBS Swiss Real Estate Bubble Index*

Own home prices relative to annual rent

The ratio between purchase prices and rents was up again following a slight correction in the previous quarter and now stands at 28.1. The price of buying a home is therefore continuing to rise much more quickly than asking rents. If we compare this with existing leases, the trend is even more worrying: since 2000 the increase in the cost of existing leases has been less than half that of asking rents.

Home prices relative to annual rent

Level and change year-over-year in percent



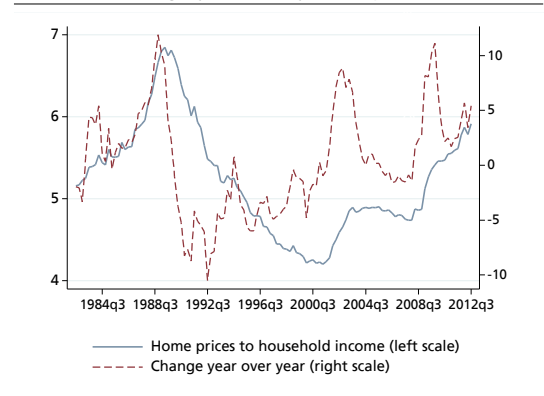
Sources: SNB; UBS

Home prices relative to household income

Currently, 5.9 times the annual household income is required to purchase an average home, compared with 5.8 last quarter. This figure is still well down from the peak of 6.8 times the annual income in 1990. The rise is due to the renewed increase in real estate prices in 3Q 2012 combined with stagnating income.

Home prices relative to household income

Level and change year-over-year in percent



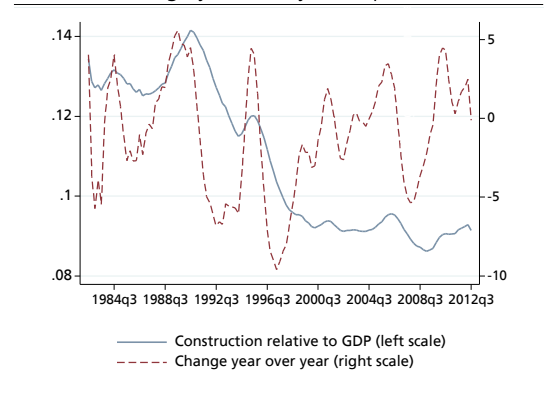
Sources: SNB; BFS; UBS

Construction relative to gross domestic product (GDP)

The construction industry is not growing more than the economy as a whole. The share of construction activity in GDP is still 9.1 percent and therefore well below the long-term average.

Construction relative to gross domestic product

Level and change year-over-year in percent



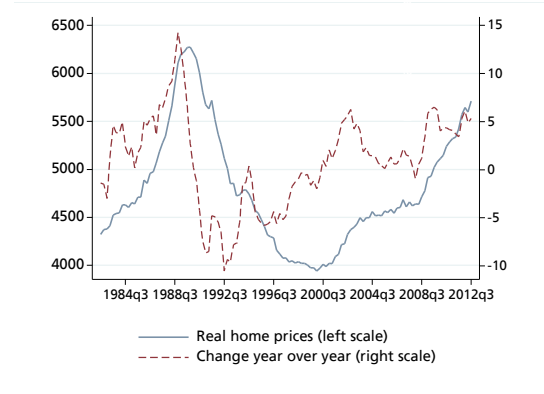
Sources: seco; BFS; UBS

Own home prices relative to consumer prices

The price of purchasing a home rose further with an increase of 1 percent in 3Q 2012, while consumer prices were around 0.2 percent lower than in June 2012. As the price of real estate in the long term should not grow considerably more than the general inflation rate, this indicates an increasing market imbalance.

Home prices relative to consumer prices

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

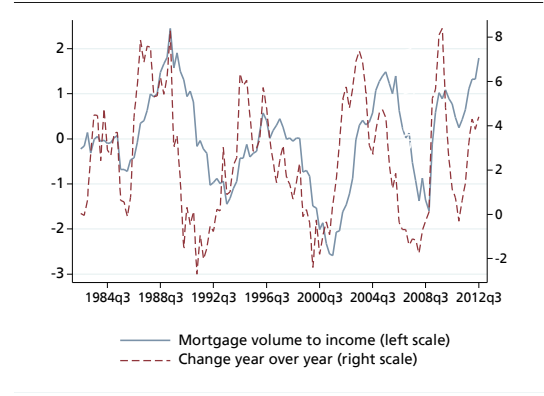


Mortgage volume relative to income

The indicator rose sharply in 3Q 2012 and now stands at 1.7 standard deviations above the long-term average. The decisive factor was the continued sharp rise in mortgage volume of over 5 percent. As incomes are also stagnating, the credit risks for the national economy are continuing to rise.

Mortgage volume relative to income

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

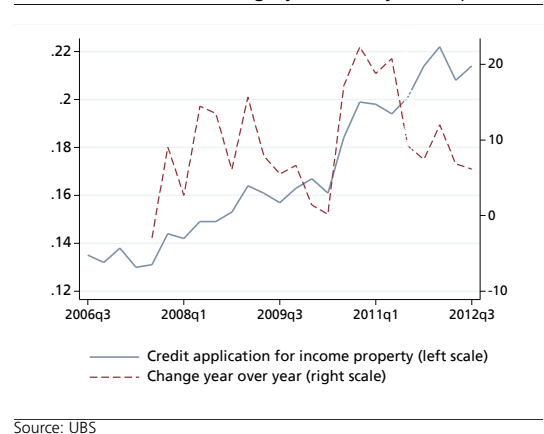


Credit applications for residential property not intended for owner occupancy (UBS clients)

The number of loan applications for non-owner-occupied properties rose again in the third quarter of 2012. Some 21.4 percent of loan applications were intended for properties not directly used by their owners, compared to 20.8 percent in the previous quarter. This was still slightly below the peak value in the first quarter of this year of 22.2 percent of loan applications.

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

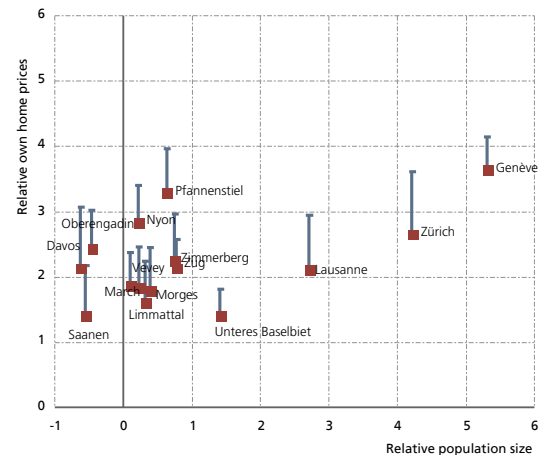
The number of exposed and monitoring regions grew in Q3 2012. Unteres Baselbiet and Saanen-Obersimmental have been reassigned as exposed regions. Nidwalden and Innerschwyz have also joined the ranks of the monitoring regions. Determining factors for the increase were new price and population data as well as the sharp rise in the UBS Swiss Real Estate Bubble Index.

Furthermore, the population mobility regions of Zurich, Geneva and Lausanne remain among Switzerland's riskiest due to their national importance. Other exposed regions include the large metropolitan areas of Zug, Pfannenstiel, Limmattal, Zimmerberg, March, Vevey, Morges and Nyon as well as the tourist regions of Davos and Oberengadin. Alongside Nidwalden and Innerschwyz, Basel-Stadt, Knonaueamt and the Glattal-Furtal region fall into the category of monitoring regions.

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).

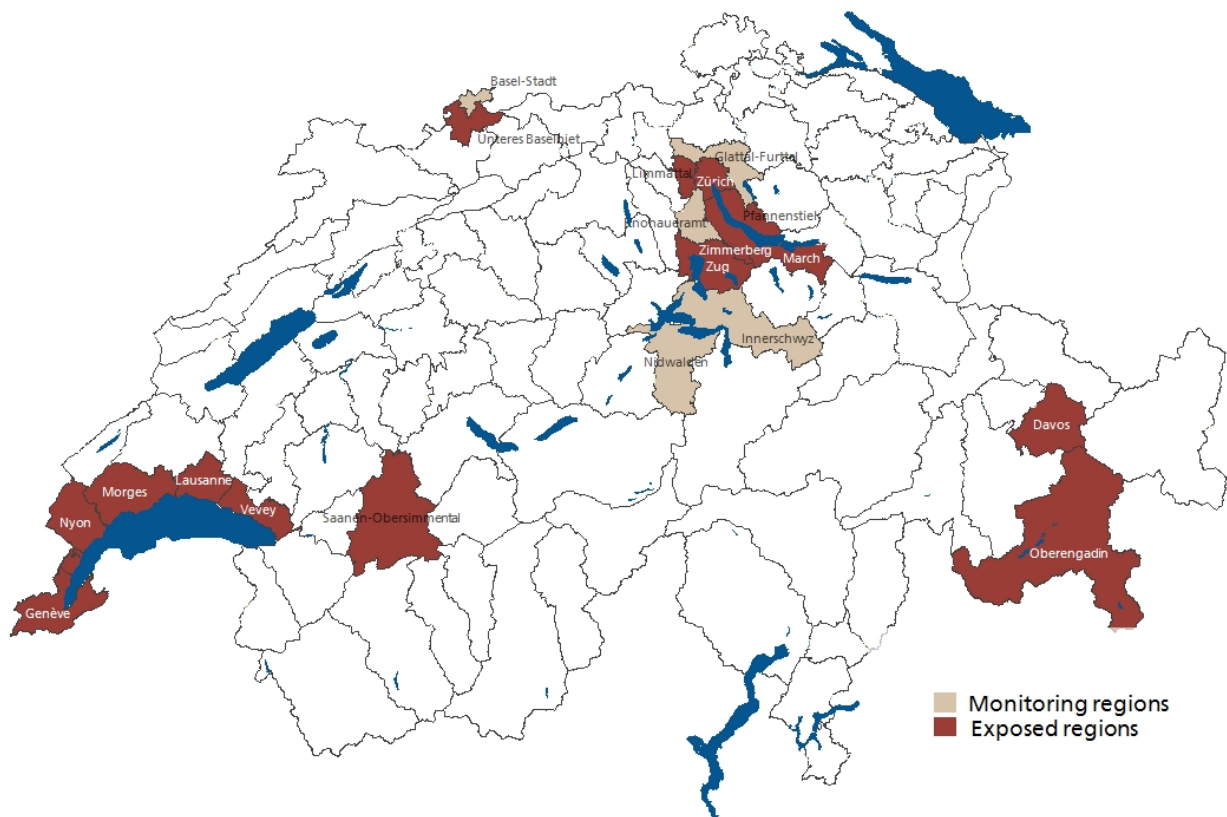
Exposed regions for the residential real estate market



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

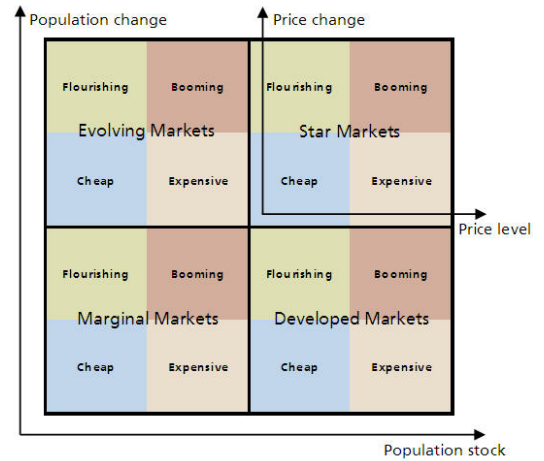
Secondly, the regions are assigned to one of four further categories (inner matrix), irrespective of their categorization described above, based on price levels and housing price increases:

- *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

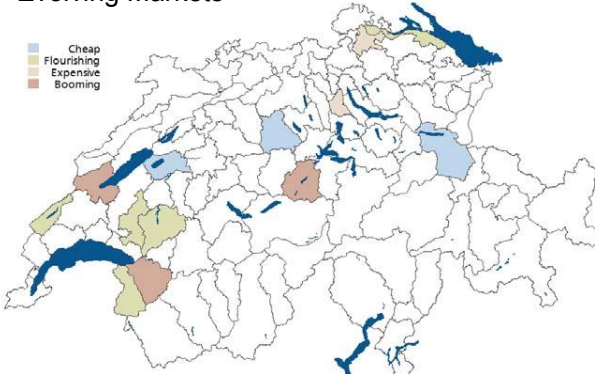


Source: UBS

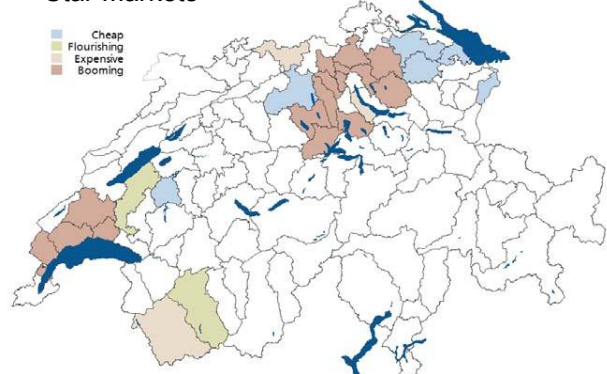
Example: The upper right quadrant – Star market, booming – contains all regions with both above-average population growth and price increases and that are among the most populated and expensive regions.

Categorization using the relative market growth matrix – overview

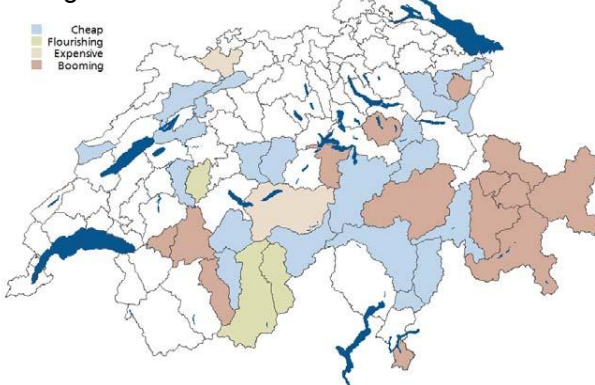
Evolving Markets



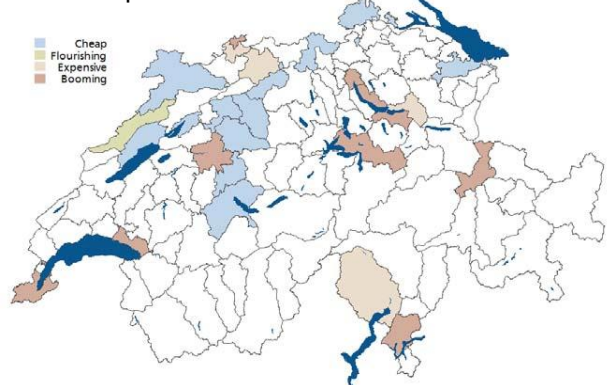
Star Markets



Marginal Markets



Developed Markets



Sources: Wüest & Partner; BFS; UBS

Appendix

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