UBS

Chief Investment Office WM

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Swiss real estate market

UBS Swiss Real Estate Bubble Index - 1Q 2014

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- The *UBS Swiss Real Estate Bubble Index* fell from 1.23 to 1.22. Thanks to a slight fall in the prices of owner-occupied homes, the imbalances on the residential real estate market have not intensified further.
- Rent levels increased slightly more than purchase prices for the second quarter in succession. However, household debt has reached record levels, and residential real estate is still in demand as an investment.
- Basel City has recently been added to the list of risk areas. Gros-de-Vaud is now classified as a region being monitored.

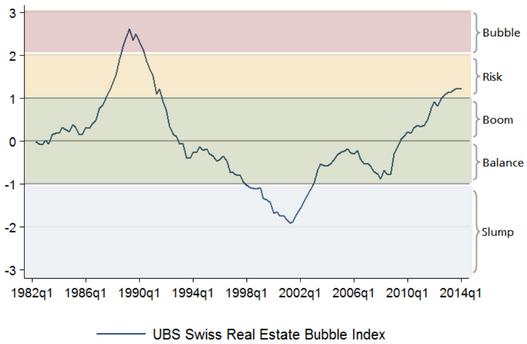
The *UBS Swiss Real Estate Bubble Index* remained practically unchanged, staying in the risk zone in the first quarter of 2014 at 1.22 points. The index fell minimally by 0.01 points from the previous quarter. The stagnation of the UBS *Swiss Real Estate Bubble Index* can be attributed to the slight overall decline in owner-occupied real estate prices. Given the real estate boom in effect since 1998, the prices of single-family homes in particular registered the largest quarterly fall in 17 years, with an annualized drop of 4%.

However, the correction potential of the residential real estate market and the risks for the Swiss economy remain high. For example, although the rise in mortgage volume has slowed somewhat, the level of debt is still growing too quickly, given the stagnating household income evident in the first quarter of 2014. The record number of credit applications for real estate not intended for personal use also continues to be grounds for caution. On the regional risk map, Basel City is now classified as a risk area and the Gros-de-Vaud region is now considered a part of the monitored regions.

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).

UBS Swiss Real Estate Bubble Index



Source: UBS

Performance of the UBS Swiss Real Estate Bubble Index

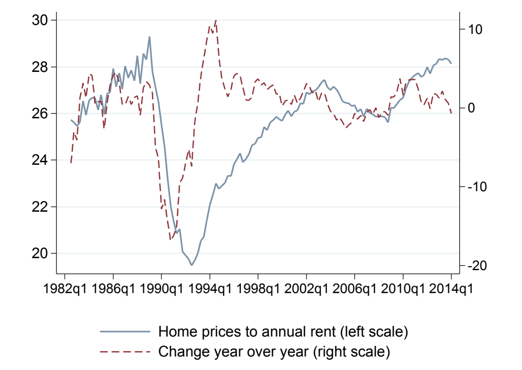
		Index
2011	Quarter 1	0.34
	Quarter 2	0.39
	Quarter 3	0.51
	Quarter 4	0.78
2012	Quarter 1	0.93
	Quarter 2	0.84
	Quarter 3	1.01
	Quarter 4	1.09
2013	Quarter 1	1.14
	Quarter 2	1.15
	Quarter 3	1.20
	Quarter 4	1.23
2014	Quarter 1	1.22

Source: UBS

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

Own home prices relative to annual rent
The ratio of purchase price to rent fell slightly in the first quarter of 2014. Rent levels rose slightly more than purchase prices for the second quarter in succession. Despite this marginal tendency toward cooling down, 28.1 annual rent payments are required to purchase a comparable home, which is still significantly above the long-term average of approximately 25 annual rent payments.

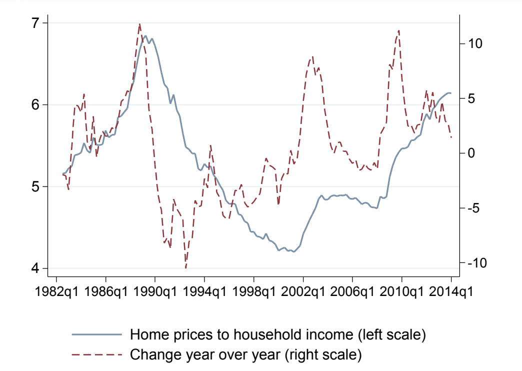
Home prices relative to annual rent
Level and change year-over-year in percent



Sources: SNB; UBS

Home prices relative to household income
Residential real estate prices fell slightly in the first quarter of 2014. As the income per household was also down slightly in the same period, the ratio of prices to income remained virtually unchanged. Approximately 6.1 annual household incomes are needed to purchase a home in the medium-price segment. The long-term average lies at 5.2 annual incomes.

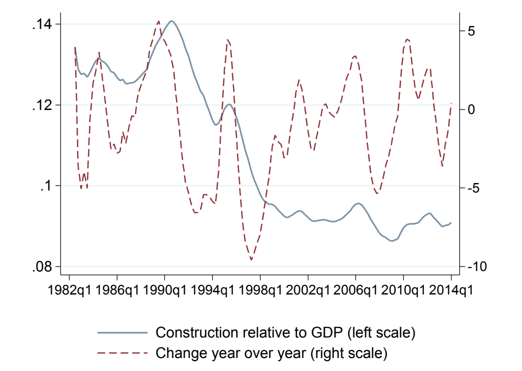
Home prices relative to household income
Level and change year-over-year in percent



Sources: SNB; BFS; UBS

Construction relative to gross domestic product (GDP)
The construction industry's contribution to gross domestic product rose slightly from 9.0% to 9.1%. The long-term average value lies at 11%. We expect another above-average rise in construction investment for the current year. The peak of 14.1% was recorded in the second quarter of 1990.

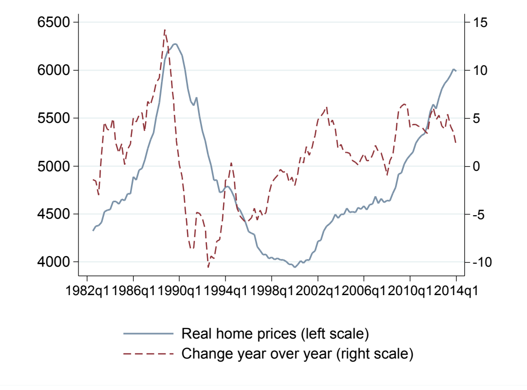
Construction relative to gross domestic product
Level and change year-over-year in percent



Sources: seco; BFS; UBS

Own home prices relative to consumer prices
Real home prices, as the average value of prices for single-family homes and condominiums, were down 0.3% compared to the previous quarter. We expect price increases of no more than 2% for the current year. The indicator is still just under 5% below the price peak of the last real estate bubble.

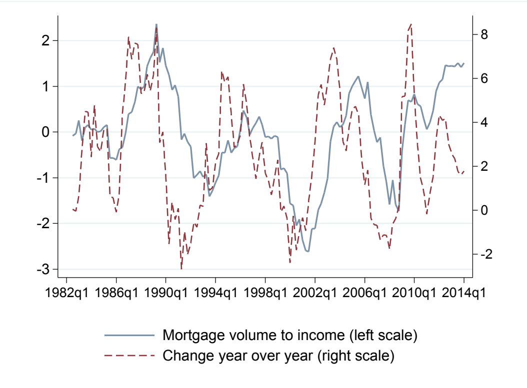
Home prices relative to consumer prices
Real home prices (CHF/m²) and change year-over-year in percent



Sources: SNB; BFS; UBS

Mortgage volume relative to income
Private household mortgage debt has risen sharply in recent years and is now about 110% of gross domestic product. The 3.6% rise in mortgage volume lies below the average of previous years. Given the weak income development, a reduced risk cannot be assumed.

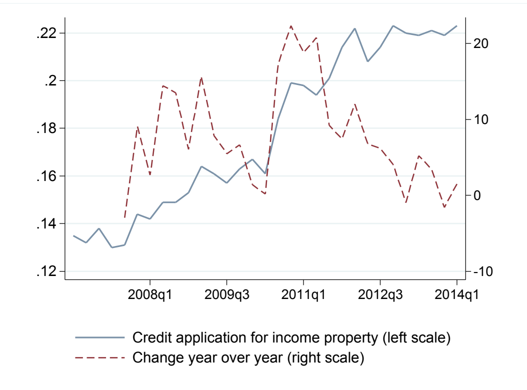
Mortgage volume relative to income
Mortgage debt of private households relative to income (detrended series) and change year-over-year in percent



Sources: SNB; BFS; UBS

Credit applications for residential property not intended for owner occupancy (UBS clients)
The number of credit applications for properties not intended for owner occupancy rose from the previous quarter. In the first quarter of 2014, 22.3% of the credit applications were for properties not intended for self-occupancy. The indicator is therefore on a par with the peak in the fourth quarter of 2012.

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



Source: UBS

Regions with risk potential for the residential real estate market

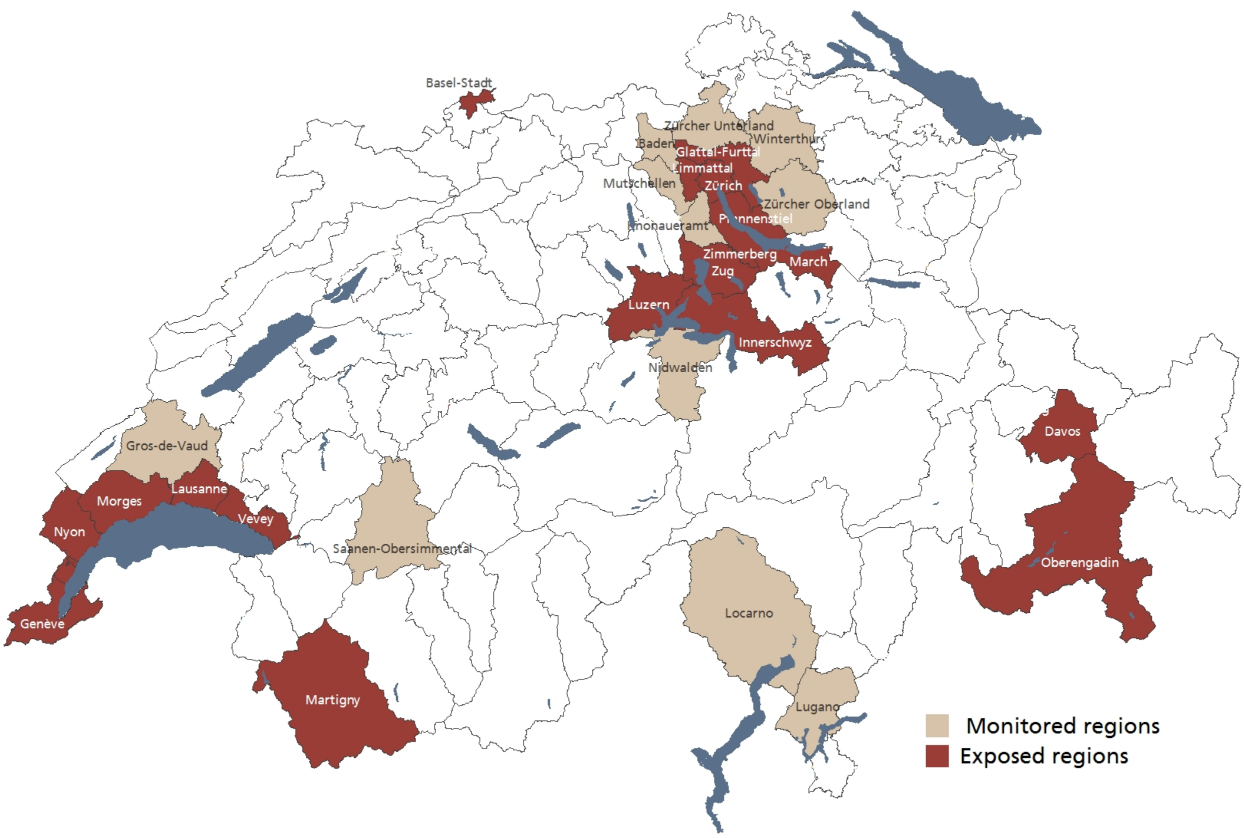
The regional risks remain largely unchanged. We have observed rising prices and an additional worsening of imbalances in the monitored regions of Lugano and Locarno in Ticino, and also in some parts of Central Switzerland and Thurgau. In the Lake Geneva region prices remained under pressure. However, due to the high valuation, correction potential continues to be high. On the regional risk map, Basel City is now classified as a risk area and the Gros-de-Vaud region is now considered a part of the monitored 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	Monitored regions
Zürich	Knonaueramt
Glattal-Furttal	Zürcher Oberland
Limmattal	Winterthur
Zimmerberg	Zürcher Unterland
Pfannenstiel	Saanen-Obersimmental
Luzern	Nidwalden
Innerschwyz	Baden
March	Mutschellen
Zug	Locarno
Basel-Stadt*	Lugano
Davos	Gros-de-Vaud*
Oberengadin	
Lausanne	
Morges	
Nyon	
Vevey	
Martigny	
Genève	

** added in the first quarter 2014*

Regional risk map - 1Q 2014
Exposed- and monitored 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):

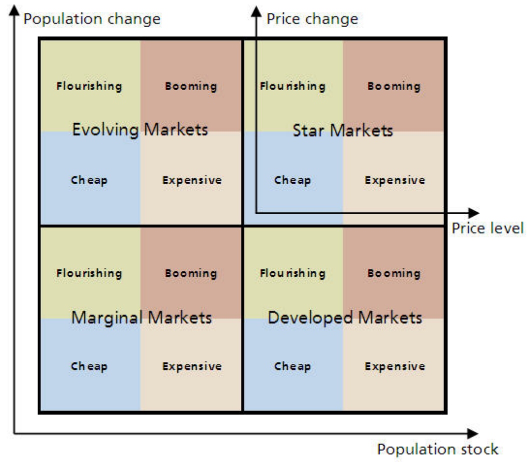
- *Star markets* – densely-populated regions with above-average population growth
- *Saturated markets* - densely populated regions with below-average population growth
- *Growth markets* – small regions with above-average population growth
- *Niche markets* - small regions with below-average population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

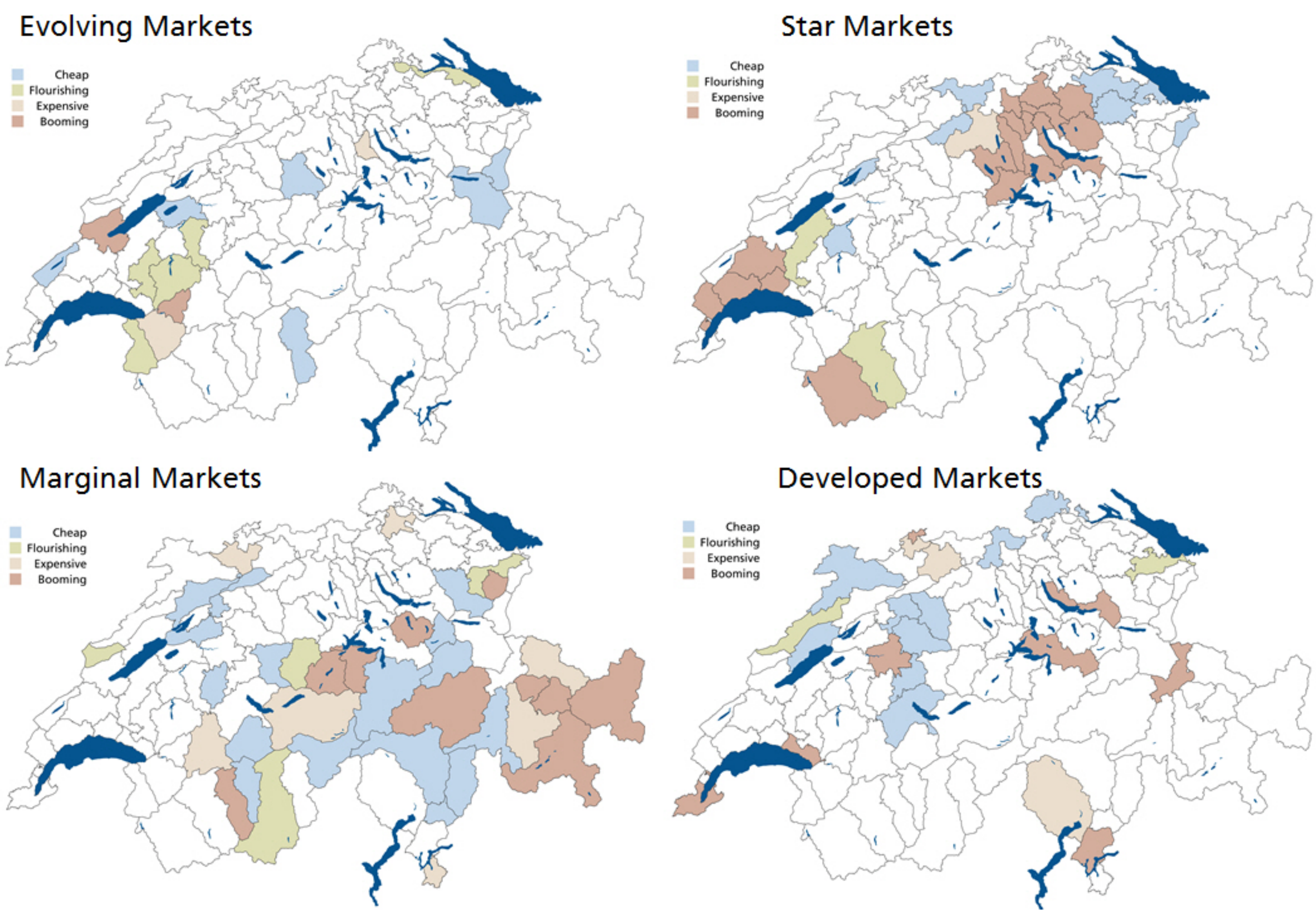
Thirdly, the relative market growth matrix is linked to the UBS Swiss Real Estate Bubble Index, rendering the selection criteria dependent on the current index level. The higher the index level, the less (relatively) restrictive the selection of regions is.

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 *(source: UBS)*



Sources: Wüest & Partner; BFS; UBS

Appendix