Swiss real estate market

UBS Swiss Real Estate Bubble Index - 2Q 2014

Matthias Holzhey, economist, UBS AG
matthias.holzhey@ubs.com

Claudio Saputelli, economist, UBS AG
claudio.saputelli@ubs.com

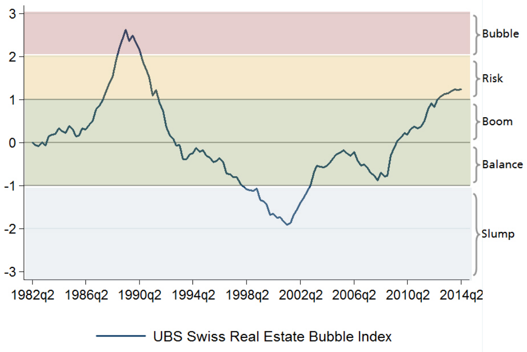
- The *UBS Swiss Real Estate Bubble Index* has risen to 1.24 from 1.22. The regional risk map remains unchanged.
- The risks for the Swiss economy have thus remained virtually constant at a high level for four quarters now.
- The trend towards tighter regulatory requirements for mortgage lending is constricting prices for residential real estate and stifling the outlook.

The *UBS Swiss Real Estate Bubble Index* was practically unchanged in the risk zone, at 1.24 in the second quarter of 2014. Compared to the previous quarter, the index rose slightly by 0.02 points. The risks on the real estate market have therefore not increased significantly for a full year. This is not self-evident, since the market for real estate has so far been outstanding in 2014. The tougher requirements that have so far been imposed on mortgage borrowers and the deposit they need can thus be regarded as a success story: prices for residential real estate rose by just 2% year-on-year despite a friendly macro environment.

Almost all sub-indices rose slightly in the second quarter of 2014. Home prices and outstanding mortgage volumes grew marginally faster than incomes compared to the historical trend. The number of credit applications for properties not intended for owner occupancy weakened. The number of risk regions remained unchanged.

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

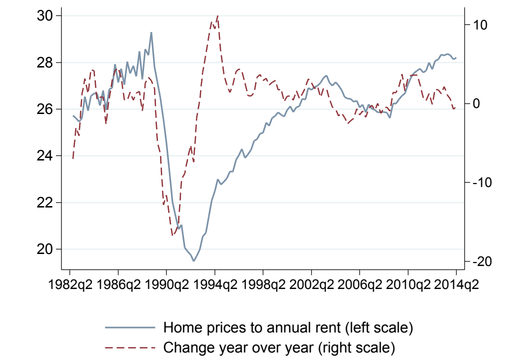
		Index
2011	Quarter 1	0.34
	Quarter 2	0.39
	Quarter 3	0.51
	Quarter 4	0.78
2012	Quarter 1	0.93
	Quarter 2	0.84
	Quarter 3	1.01
	Quarter 4	1.09
2013	Quarter 1	1.14
	Quarter 2	1.15
	Quarter 3	1.20
	Quarter 4	1.23
2014	Quarter 1	1.22
	Quarter 2	1.24

Source: UBS

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

Own home prices relative to annual rent
Purchase prices and rents were in step. The ratio of purchase price-to-rent rose only minimally in the second quarter of 2014 and currently stands at 28.1. This figure is well above the long-term average of about 25.

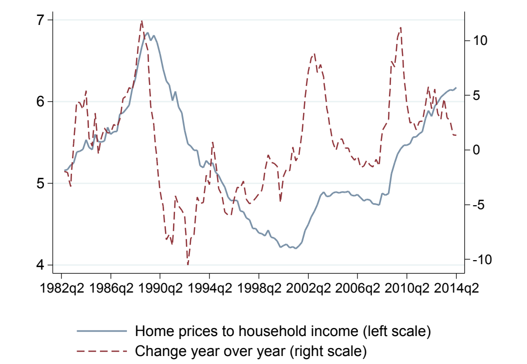
Home prices relative to annual rent
Level and change year-over-year in percent



Sources: SNB; UBS

Home prices relative to household income
Home prices rose more than per capita income in the second quarter of 2014. This means that about 6.2 annual household incomes are needed to purchase a home in the medium price segment. In the previous quarter, 6.1 annual household incomes were sufficient. The long-term average lies at 5.2 annual incomes.

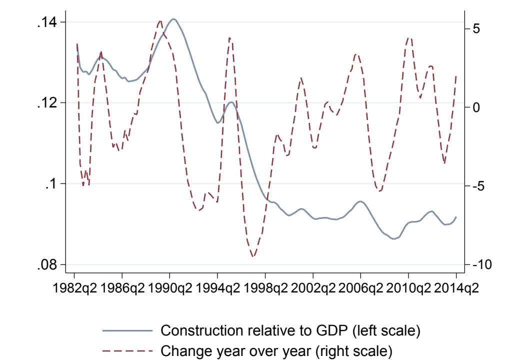
Home prices relative to household income
Level and change year-over-year in percent



Sources: SNB; BFS; UBS

Construction relative to gross domestic product (GDP)
The construction industry's contribution to gross domestic product rose further, to 9.2% from 9.1%. The long-term average value lies at 11%. The volume of construction in the second quarter of 2014 grew by nearly 10%, while gross domestic product was only up 1.8%. Given the high levels of construction, the importance of this sector is likely to rise further in the next few quarters.

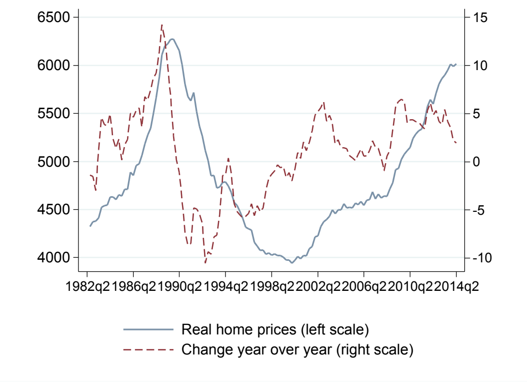
Construction relative to gross domestic product
Level and change year-over-year in percent



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, rose 0.4% compared to the previous quarter and barely 2% compared to the previous year. The indicator is still just under 5% below the price peak of the last real estate bubble.

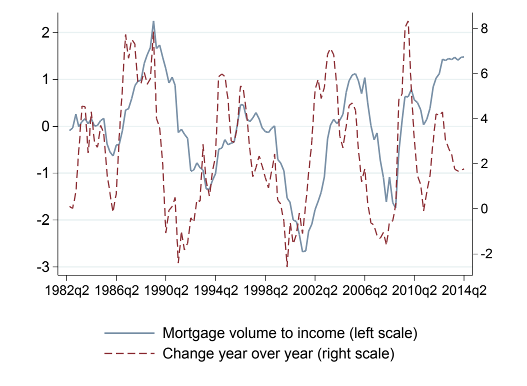
Home prices relative to consumer prices
Real home prices (CHF/m²) and change year-over-year in percent



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 3.5% rise in mortgage volume in the second quarter now lies below the average of previous years. The outstanding mortgage volumes thus grew only marginally faster than incomes compared to the historical trend.

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 loan applications for non-owner-occupied properties fell marginally compared to the previous quarter. The indicator has been stagnating at a high level for two years. In the second quarter of 2014, 22% of the credit applications were for properties not intended for self-occupancy.

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 unchanged. Sharp price increases for condominiums of over 4% have been recorded in southern and northwest Switzerland. In the Lake Geneva region and Zurich, on the other hand, prices remain under pressure, which given the high valuation does not indicate a positive shift.

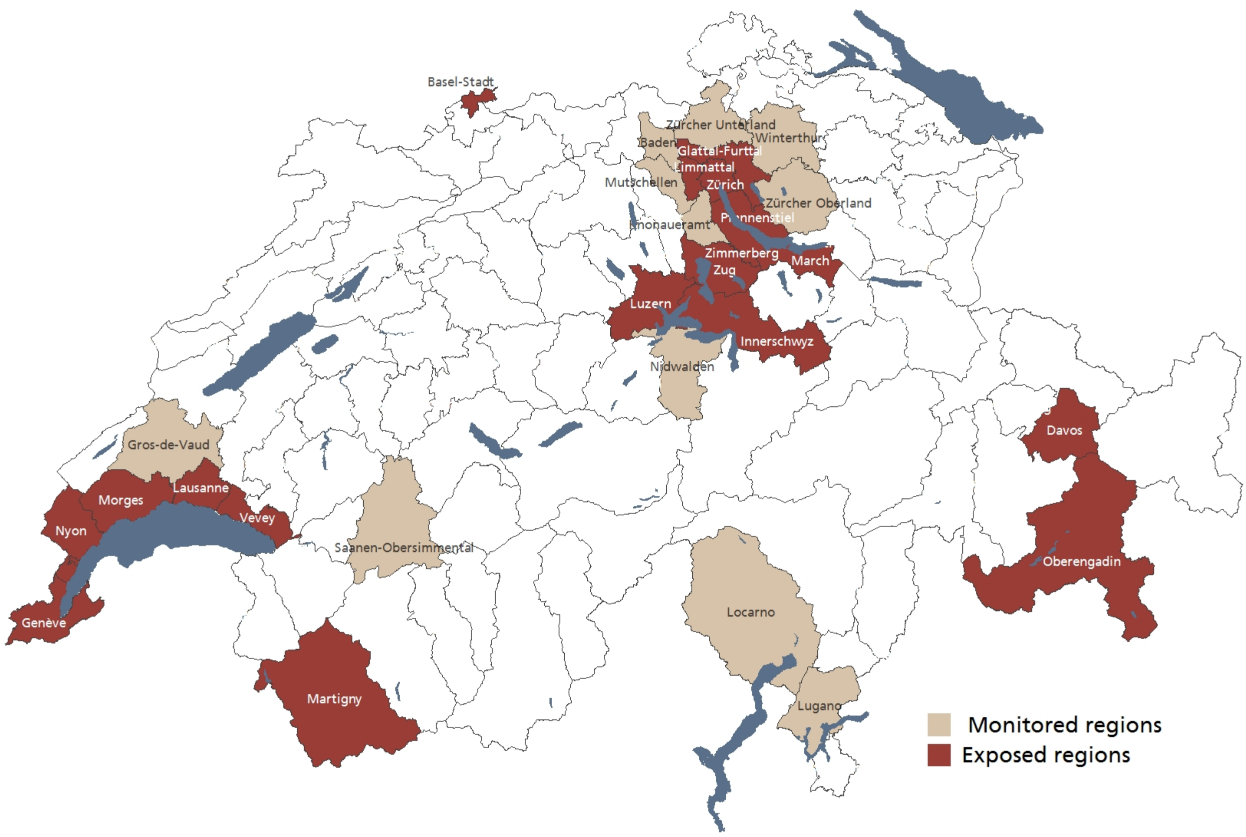
Methodology

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	

Regional risk map - 2Q 2014

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



Source: 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):

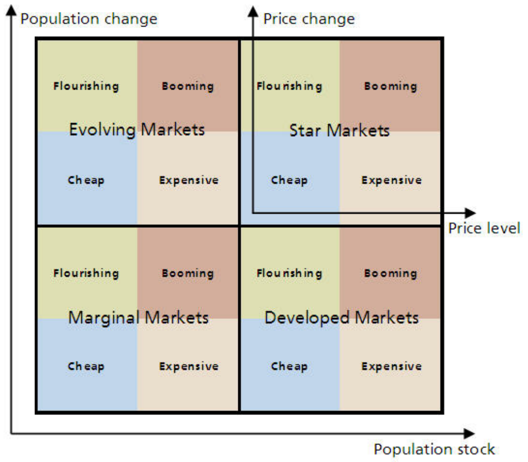
- *Star Markets* – densely-populated regions with high population growth
- *Developed Markets* – densely populated regions with low population growth
- *Evolving Markets* – small regions with high population growth
- *Marginal Markets* – small regions with low population growth

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

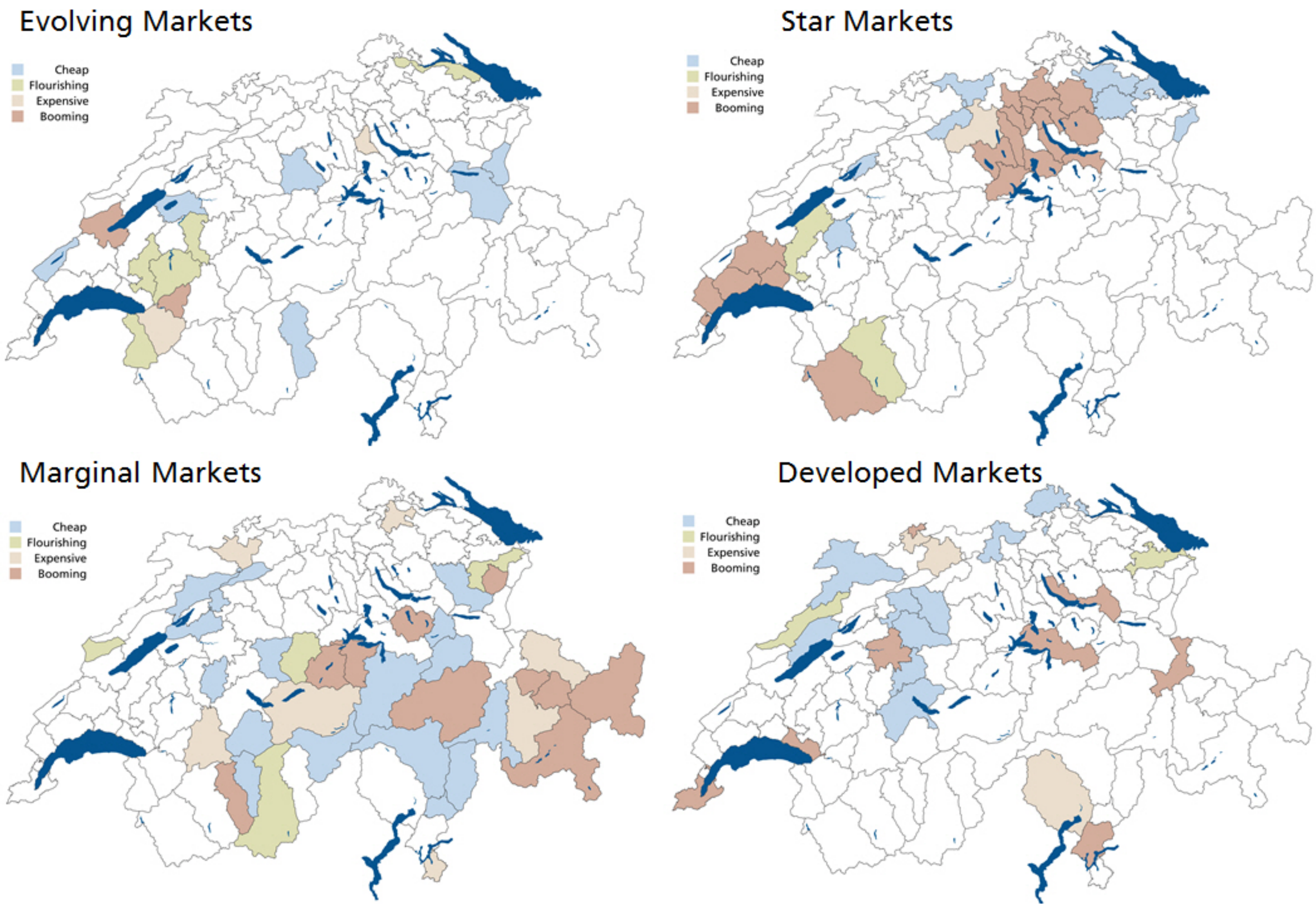
Thirdly, the relative market growth matrix is linked to the UBS Swiss Real Estate Bubble Index, rendering the selection criteria dependent on the current index level. The higher the index level, the less (relatively) restrictive the selection of regions is.

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)*



Appendix