

# Swiss real estate market

## UBS Swiss Real Estate Bubble Index 3Q 2016

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- The *UBS Swiss Real Estate Bubble Index* stayed in the risk zone in Q3 2016, unchanged at 1.35 index points.
- The buy-rent price ratio reached an all time high due to a further increase in the price of owner-occupied homes and lower rentals
- The moderate growth in mortgages and the slightly improved economy however prevented an increase in imbalances on the market for owner-occupied homes.

The *UBS Swiss Real Estate Bubble Index* stayed in the risk zone in the 3rd quarter of 2016 at 1.35 index points, unchanged compared to the slightly revised figure for the previous quarter. In contrast, the sub-indicators fluctuated. The buy-rent price ratio rose sharply whilst the slower growth in mortgage debt had a dampening effect.

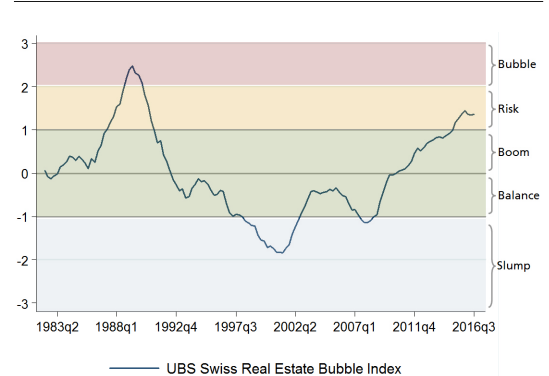
Compared to the previous year, the volume of outstanding household mortgages increased by an unchanged 2.7 percent and thus continued to grow at a below average pace. Income growth in the current year again performed better than in the previous year. The stronger economic development thus balanced out the nominal owner-occupied home prices. The trend to stabilization in owner-occupied home prices however appears to remain intact. After adjustment for inflation, price growth rates are below that of the previous year and we do not expect a further acceleration in the next few quarters.

### 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

### Index performance

		Index
2013	Quarter 1	0.74
	Quarter 2	0.77
	Quarter 3	0.82
	Quarter 4	0.84
2014	Quarter 1	0.81
	Quarter 2	0.87
	Quarter 3	0.92
	Quarter 4	0.99
2015	Quarter 1	1.18
	Quarter 2	1.28
	Quarter 3	1.35
	Quarter 4	1.45
2016	Quarter 1	1.36
	Quarter 2	1.35
	Quarter 3	1.35

Source: UBS

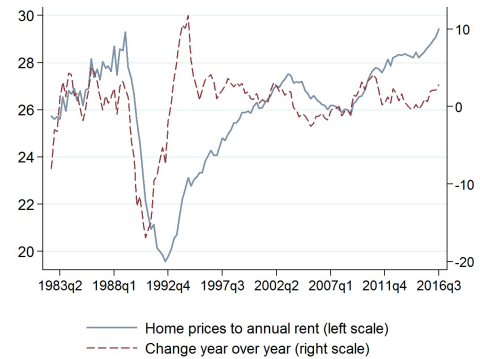
The index values may be slightly adjusted each quarter as a result of data revisions and varying weights of the sub-indices.

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

### Owner-occupied house prices relative to annual rents

Rentals declined for the third quarter in succession due to increased vacancy levels whilst the prices of owner-occupied homes continued to rise. Currently the multiple of annual rentals required to purchase a similar home is an average of 29.4. The indicator thus exceeded the previous high of 1989. The dependency of the market for owner-occupied homes on continuing low interest rates therefore increased.

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

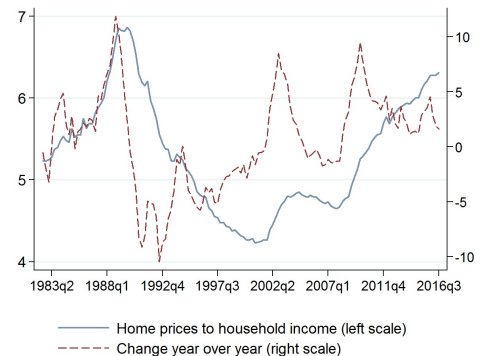


Source: SNB; UBS

### Owner-occupied house prices relative to household income

The nominal prices of owner-occupied homes increased 0.7 percent in the third quarter of 2016 whilst household income only increased minimally. The indicator thus increased slightly compared to the previous quarter. Approximately 6.3 annual household incomes are needed to purchase a home in the medium price segment. The long-term average is 5.3 annual incomes.

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

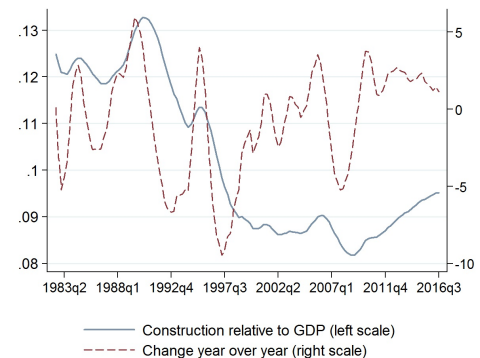


Source: SNB; FSO; UBS

### Construction relative to gross domestic product (GDP)

Nominal construction investment decreased slightly in Q3 2016. Investment in the sector declined 0.4 percent compared to the previous year. Since the low of 2009, the share of construction investment has increased from 8.1 to 9.5 percent of the gross domestic product. Although the figures remain significantly below the highs of the 1980s, they are however an indicator for the greater dependency of the domestic economy on the property market.

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



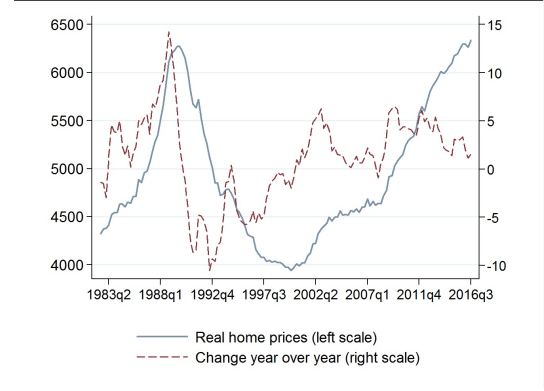
Source: seco; FSO; UBS

**Owner-occupied home prices relative to consumer prices**

Owner-occupied home prices increased 1.2 percent in real terms in the third quarter due to negative inflation. Year-on-year, however, a nominal rise of 1.5 percent was recorded. The trend to stabilization in owner-occupied home prices thus appears to remain intact. After adjustment for inflation, owner-occupied home prices are however around 1 percent above the high of 1989.

**Home prices relative to consumer prices**

Real home prices (CHF/m<sup>2</sup>) and change year-over-year in percent



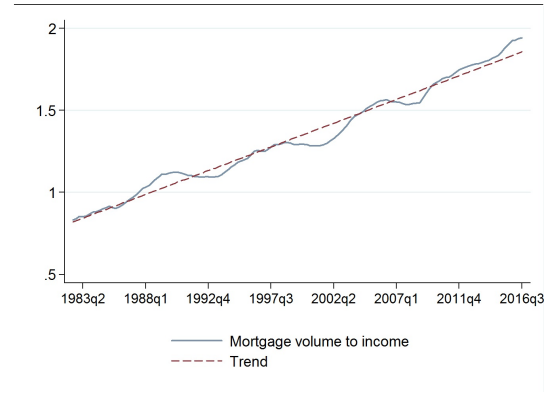
Source: SNB; FSO; UBS

**Mortgage volume relative to disposable household income**

Compared to the previous year, the volume of outstanding household mortgages increased by an unchanged 2.7 percent and thus continued to grow at a below average pace. Income growth in the current year again performed better than in the previous year. The sharp slowdown in the increase in household debt had a dampening effect on the development of the Real Estate Index.

**Mortgage volume relative to income**

Mortgage debt of private households relative to income and trend line



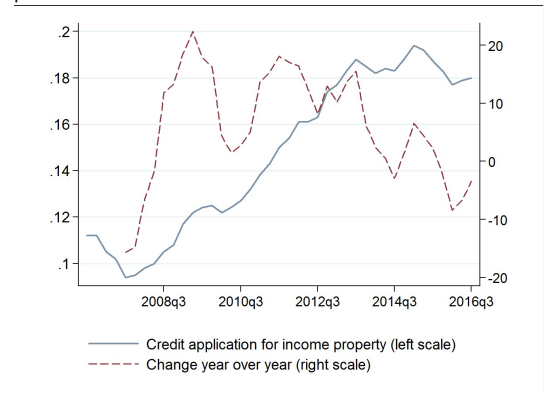
Source: SNB; FSO; UBS

**UBS loan applications for real estate intended for leasing**

The number of loan applications for non-owner-occupied properties remained practically constant in the third quarter of 2016. Buy-to-let nevertheless remains a popular investment strategy, accounting for 18 percent of all loan applications. The figure however remains substantially below the record high achieved in 2015. Lower rentals and higher vacancy levels have significantly increased the risk of buy-to-let investments.

**Credit applications for residential property not intended for self-occupancy**

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



Source: UBS

## Regions with risk potential for the residential real estate market

Zurich Unterland is now counted as monitoring region. Lugano has been downgraded from a risk region to a monitoring region. Locarno and Davos are no longer considered 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.

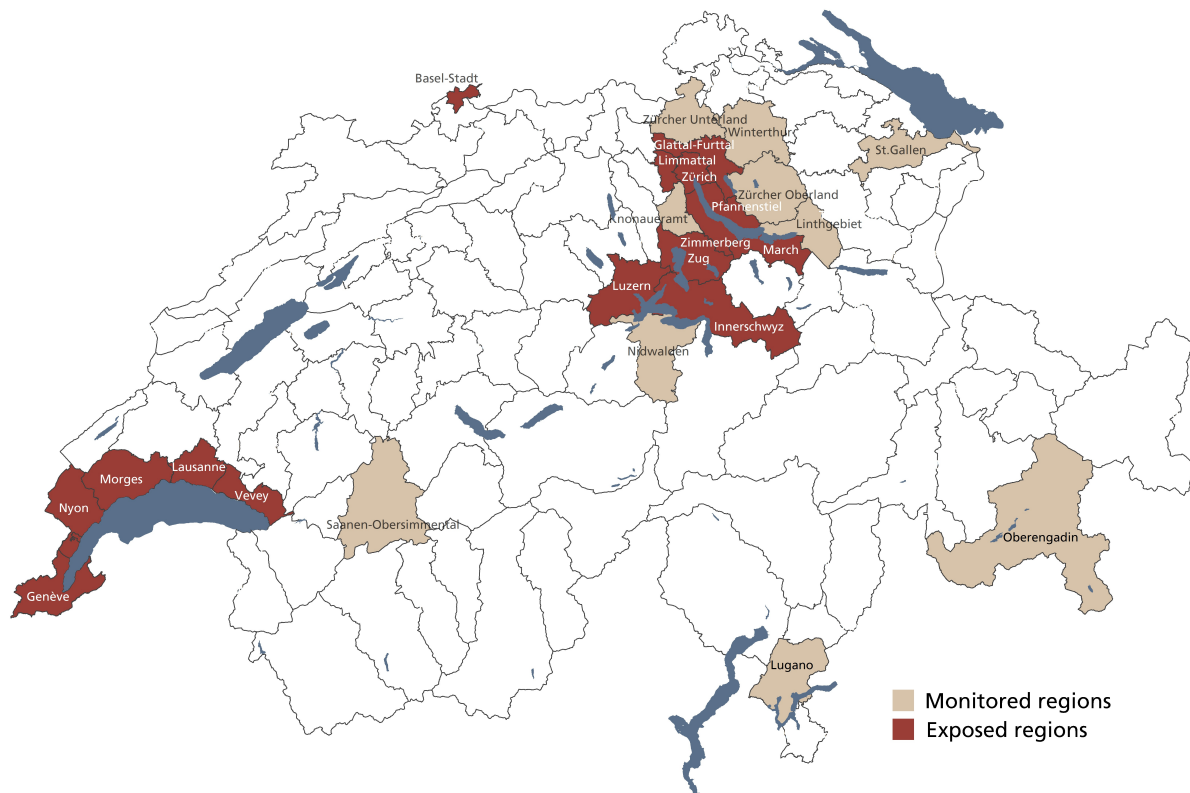
Exposed regions	Monitored regions
Zürich	Knonaueramt
Glattal-Furttal	Zürcher Oberland
Limmattal	Winterthur
Zimmerberg	Zürcher Unterland*
Pfannenstiel	Saanen-Obersimmental
Luzern	Nidwalden
Innerschwyz	St.Gallen
March	Linthgebiet
Zug	Oberengadin
Basel-Stadt	Lugano**
Lausanne	
Morges	
Nyon	
Vevey	
Genève	

\* added in Q3 2016

\*\* in the previous quarter classified as exposed region

### Regional risk map - 3Q 2016

Exposed and monitored regions for the Swiss residential real estate market



Source: UBS

## Appendix

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