

Swiss real estate market

UBS Swiss Real Estate Bubble Index 4Q 2015

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- The *UBS Swiss Real Estate Bubble Index* reached 1.41 index points in the fourth quarter of last year, from 1.34 in 3Q15.
- Mortgage debt growth surpassed that of income at a rate not seen since 2010.
- Davos and the Upper Engadine are no longer among the risk regions. In contrast, the number of monitored regions in Eastern Switzerland increased.

The *UBS Swiss Real Estate Bubble Index* ended last year in the risk zone at 1.41 index points. It rose 0.07 points from 3Q15 thanks to an increase in outstanding mortgage loans. Household mortgage debt was 3.2% higher than in 2014. Although debt growth slowed in the fourth quarter to its lowest rate since 2008, it was the highest relative to household income in the last five years. We estimate that the disposable income of all households declined last year by around 0.5%.

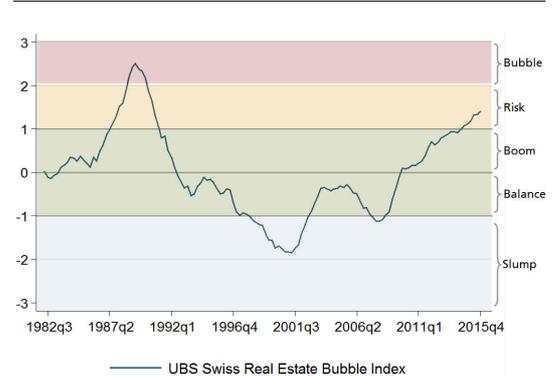
House prices also drove up the index. They rose 0.5% from the previous quarter and around 2% on the year. Adjusted for inflation, the rate of increase was only 1 percentage point above the average of the last two years, however.

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
2012	Quarter 1	0.71
	Quarter 2	0.64
	Quarter 3	0.70
	Quarter 4	0.79
2013	Quarter 1	0.84
	Quarter 2	0.87
	Quarter 3	0.93
	Quarter 4	0.93
2014	Quarter 1	0.92
	Quarter 2	0.98
	Quarter 3	1.07
	Quarter 4	1.11
2015	Quarter 1	1.19
	Quarter 2	1.32
	Quarter 3	1.34
	Quarter 4	1.41

Source: UBS

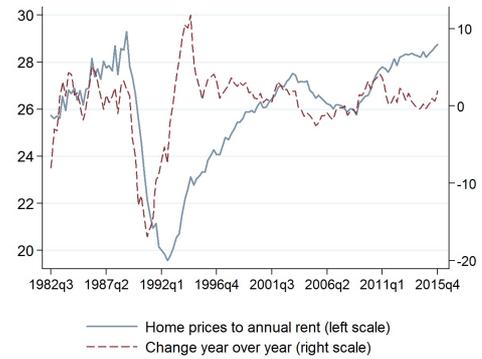
The index values may be slightly adjusted each quarter as a result of data revisions and varying weights of the sub-indices.

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

Owner-occupied house prices relative to annual rents

Rents are stagnant quarter on quarter (+0.1%). Since sales prices rose, the ratio between them and rent rose slightly in 4Q15 and is now at 28.7, significantly above the long-term ratio of 25.

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

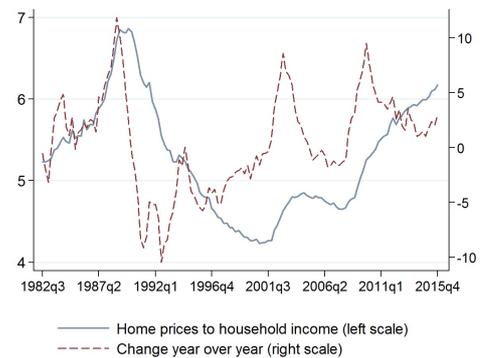


Source: SNB; UBS

Owner-occupied house prices relative to household income

Owner-occupied house prices rose in the fourth quarter while total household incomes shrank a nominal 0.5%, we estimate. For the year, income per household declined by 1.5%. About 6.2 annual household incomes are still needed to purchase a home in the medium price segment. The long-term average is 5.3.

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

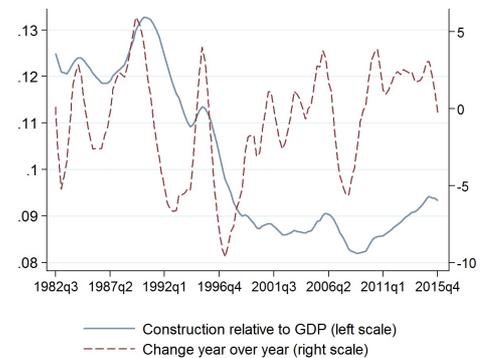


Source: SNB; FSO; UBS

Construction relative to gross domestic product (GDP)

Nominal construction investment shrank slightly in 4Q15 and by 2.3% year on year. Its share of GDP continued to fall and is now at 9.2%. The long-term average is 10.3%.

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



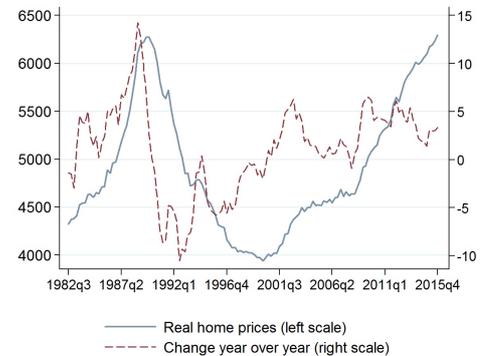
Source: seco; FSO; UBS

Owner-occupied home prices relative to consumer prices

Nominal property prices, as a mean value of prices for single-family homes and condominiums, gained 0.5% over the previous quarter. Year-on-year prices are almost 2% higher. Adjusted for inflation, the price increase was a relatively high 3.3%, the highest rate since the end of 2013.

Home prices relative to consumer prices

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



Source: SNB; FSO; UBS

Mortgage volume relative to disposable household income

Mortgage loan volume growth continued to slow in the last three months, with household debt rising 3.2%. But the indicator continued to rise in view of the declining nominal economic output.

Mortgage volume relative to income

Mortgage debt of private households relative to income and trend line



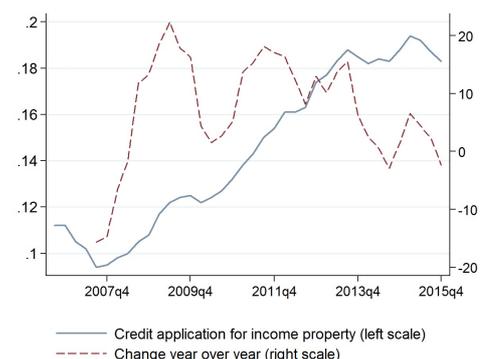
Source: SNB; FSO; UBS

UBS loan applications for real estate intended for leasing

The number of loan applications for non-owner-occupied properties dipped slightly to 18.3%. Investment demand for condominiums remains high due chiefly to negative interest rates, so there is no clear downward trend.

Credit applications for residential property not intended for self-occupancy

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



Source: UBS

Appendix

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