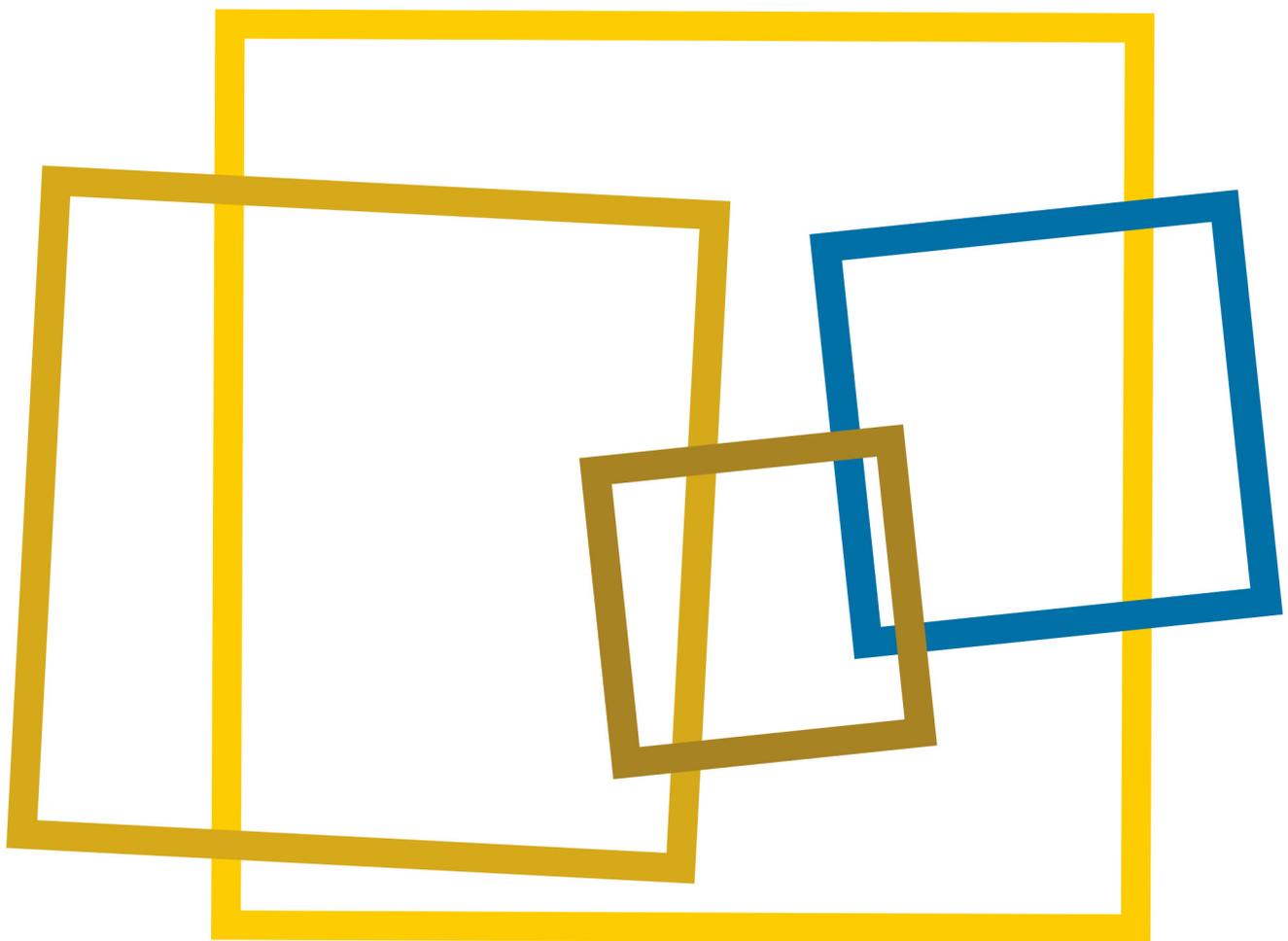


Swiss Real Estate Market 2016

March 2016

Banished from paradise



Rental apartments
**Supply galloping
ahead of demand**

Page 23

Office property
**Falling demand
exacerbating cut-
throat competition**

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Crowdfunding
**Will the crowd
revolutionize
investing?**

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Imprint

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Management summary

Banished from paradise

For more than ten years, Switzerland's real estate markets have enjoyed near-paradise conditions of continuously increasing prices and rents, booming demand and low vacancies in the wake of low interest rates. In recent years, however, there have been growing signs that a different era is gradually dawning. Though the future isn't all too bleak, but the fruits are no longer hanging so low and real estate investors will find it difficult to come by such easy returns. Last year's negative interest rates more or less lit the touch paper for the final phase. Going forward, hard work will once again be required in order to wing out the hoped-for returns from the real estate market.

Owner-occupied housing Page 7

Controlled slowing down

Low interest rates and a modest increase in real incomes constitute a fundamentally positive backdrop to the demand for owner-occupied housing in 2016. Demand will additionally be supported by the home-ownership aspirations of immigrants who have settled in Switzerland. On the other hand, (self-)regulatory measures and the associated greater financial requirements regarding the purchase of owner-occupied housing will exert a major dampening effect. For 2016 we expect an ongoing slowdown in the owner-occupied housing market – one that will likely be reflected in positive but weak price growth of less than 1% on a nationwide basis. Demand will increasingly be driven by middle-aged and older people, as our structural analysis shows. Due to regulatory factors, demand will also continue to shift toward the low and mid-priced segments. Thus the high-price segment will once again have a hard time in 2016. On the other hand, the price correction under way in French-speaking Switzerland is likely to continue to spread out from the Lake Geneva region; we do not expect the correction to become any sharper, however, because overall conditions are still too attractive. With project developers having rapidly reduced the pace of activity, we do not expect more extensive imbalances except in the high-price segment. Supply and demand are not far apart in many instances, and so vacancies are likely to rise only marginally in 2016 as in the previous year. The real stress test in the owner-occupied housing market will only come when interest rates start to pick up noticeably and/or the "pill generation" gradually resizes demand for home ownership from around 2018.

Special focus: Real estate crowdfunding Page 18

Alternative form of financing on the rise

The internet-based financing of real estate projects by a large number of people (crowdfunding) is now well-established in the US and growing at a rapid rate. The tallest skyscraper in Bogota, Columbia, has been built with the help of 3800 small investors, while in Switzerland, too, the first two attempts at real estate financing by the crowd have proved successful. We take a special look at this interesting development and highlight the opportunities and risks involved in this form of real estate investment and financing.

Rental apartments Page 23

Supply galloping ahead of demand

Residential investment properties offer fund investors a three percentage point higher distribution yield than the 10-year Swiss government bond. It is hardly surprising, therefore, that investment is being channeled into the construction of new rental apartments – irrespective of what happens on the demand side. Even the rise in vacancies is not currently discouraging investors from developing residential construction projects. Low interest rates and the resulting dearth of investment opportunities leave them little alternative. Given that economic migration is weakening noticeably, as we had expected, the investor market is at risk of becoming increasingly decoupled from the end-user market. Vacancies and time on market are increasing everywhere except in the major urban centers. We therefore believe the upward trend in rents will come to a virtual standstill in Switzerland in 2016. Total immigration is unlikely to fall in 2016, but only because a growing number of refugees will compensate for the falling number of economic migrants. The former also require somewhere to live, but above all need apartments at the lowest end of the price range – that is precisely the segment in which the overregulated residential market in the urban centers is unable to provide enough supply and the situation is therefore tight. In places where the market does work, on the other hand, the situation is eased.

Special focus: Digitalization of construction Page 32

Digital revolution spreads to construction sector

The construction process and work on building sites have seen very little significant change in recent decades. The digital revolution is set to hit construction as well over the next few years, however, resulting in a massive shake-up of existing processes and structures. Based on four theses, we look at what impact the transition to a digital construction industry will have.

Office property
Page 36

Falling demand exacerbating cut-throat competition

Despite continuing economic growth in recent years, the office market has maneuvered itself into a situation of oversupply. On the demand side, not only are important players such as the financial services industry having to contend with structural change but the entire service sector is also exposed to new challenges due to the digital revolution. The outsourcing of some administrative support functions to low-wage countries (offshoring) is easier these days. Due to the strong Swiss franc it is increasingly likely to set a precedent for medium-sized and small firms, thereby lowering the demand for property. However, digitalization also offers potential for new office jobs: Accordingly, investors badly hit by negative interest rates are not scaling back their overall investment activity any further and are instead switching regions in favor of markets with lower supply rates. As we expect a slowdown in employment growth in the office sectors, the planned expansion is too great to bring about a trend reversal in terms of vacancies. Quite the opposite: We expect the imbalance between supply and demand to increase further after having appeared to stabilize for a short while. This is likely to maintain the pressure on rents and intensify competition.

The five largest office property markets in detail
Page 43

Five largest office property markets – each have their own distinctive character

In our in-depth analysis of the five largest markets, which together account for 45% of all office property, we look at the various prevailing price levels and at how the volume of advertised office space is developing. Furthermore we highlight the impact of the Corporate Tax Reform III.

Retail property
Page 55

Shake-up has only just begun

As if the boom in e-commerce were not enough of a challenge, the situation for the retail sector has continued to deteriorate due to the strength of the Swiss franc and increased cross-border shopping. The fact that the planning of new retail space has been extremely weak for years shows the scale of uncertainty. Nevertheless, overall conditions for sales in the retail sector are likely to brighten slightly in 2016. We expect a return to mildly positive nominal growth in sales. Due to persistently robust population growth, the biggest boost to demand is likely to be seen in the food/near-food retail segments. The demand for floor space is nevertheless likely to remain weak given that e-commerce is continuing to grow at a dynamic rate. The fact that online trading is still in the early stages of development in Switzerland raises fears that this structural change has already begun. The marketing of properties away from the best locations has therefore become more difficult. This is evidenced by rising supply rates, increasingly frenzied marketing, reduced rents and other types of concessions given to tenants. Accordingly, we do not expect any change in the trend to rising vacancies over the next few years. With concessions often having to be granted on rental conditions, the pressure on rents is likely to continue.

Special focus:
Healthcare real estate
Page 64

Medical centers: Sharing economy in healthcare

Healthcare real estate is one of the few remaining growth areas from the perspective of real estate players. Having presented an in-depth analysis of hospitals and nursing homes in previous years, our focus this year is on medical centers.

Real estate as an investment
Page 67

In thrall to negative interest rates

Real estate remains the star performer of the investment markets, although growing challenges in end-user markets can no longer be overlooked. The more protracted the period of low interest rates, the more challenging the market environment becomes. Real estate prices are unlikely to be boosted by negative interest rates again to the same extent in 2016. From a fundamental perspective, therefore, there seem to be few positive growth drivers for indirect Swiss real estate investments; consequently, the potential returns are unlikely to match those seen in previous years. Even so, we do not expect the average agio on real estate funds to fall below 20% in 2016 given that low interest rates make the stable dividends of these investment vehicles immensely attractive. We believe investing in foreign real estate offers more potential, and for that reason offer useful guidance on the question of currency hedging.

Owner-occupied housing

Controlled slowing down

The market for owner-occupied residential property was for a long time considered problem child number one. There were reports in many places of imbalances and bubble tendencies. Since then the situation has calmed down and the warning voices are getting quieter, which is primarily down to (self-)regulation. However, the market is still not out of the woods. Sounding the all-clear at this stage would be presumptuous as long as the price level in the high-price regions fails to fall back to a more sustainable level. A major contribution to the gradual calming has come from supply that responded with only a brief delay to the decrease in demand and in doing so ensured that supply and demand largely remained in balance. There is therefore nothing to preclude a soft landing – that is to say almost nothing, as in the long term it will be less the alleged price bubble and more the demographic aging that exerts a burden on owner-occupied housing.

Demand: Driven by demographics – curbed by regulation

The owner-occupied housing market has been experiencing a boom in Switzerland for more than 15 years. According to our estimates, the number of home owners has increased by around 300'000 since the year 2000 – an upturn of more than 26%. Changes on this scale lead almost automatically to structural alterations in terms of the community of home owners and demand for residential property. The average age of a home owner is now 57, three years more than in 2000.

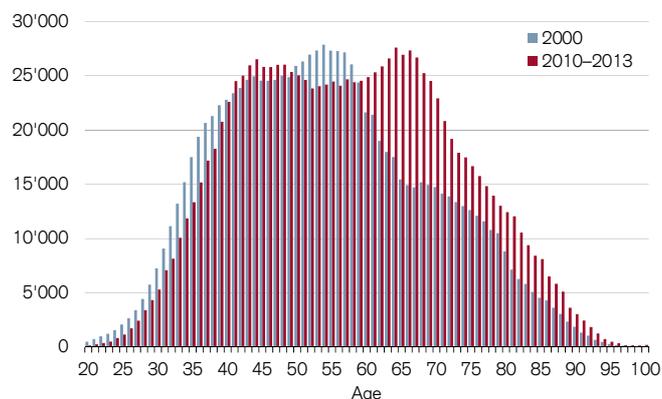
Boom in residential property has changed demand structure

Owners getting older

Social changes and demographic developments have strongly shaped the structure of the community of home owners in recent years. Home owners today are older than they were a few years ago (Figure 1). Back in 2000, most home owners could be found in the age group of 50 to 58-year-olds. Just like today, the baby boomer cohorts with their increased numbers shaped not only the population structure but also the structure of home owners. It also remains the case today that above-average numbers from among these cohorts live in their own four walls so that the largest number of home owners is to be found in the age group of 59 to 69-year-olds. For example, there is a 54% probability that somebody aged 69 will today be living in their own home (Figure 2).

Figure 1: Number of home owners by age

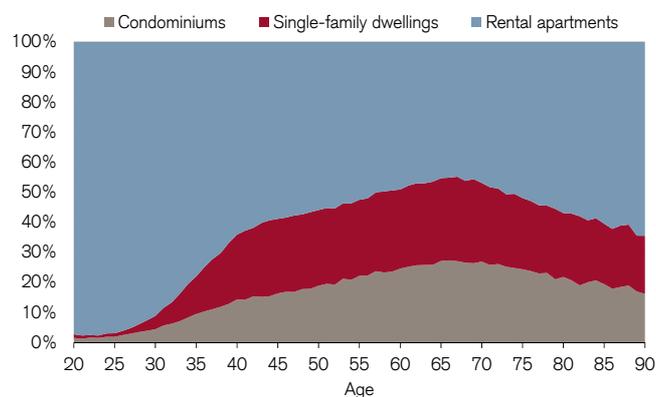
Number of ownership households by age of person questioned in the household



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 2: Housing type preference by age

Distribution of housing types by age



Source: Swiss Federal Statistical Office, Credit Suisse

Young people buying residential property later

The situation among the younger sections of the population is completely the opposite. Among those aged 40, only 36% are home owners, and the share among 35-year-olds lies at just 22% (Figures 1 and 2). Compared with previously, people are not buying their own home until they get older. There are several reasons for this. First of all, the sharp price increases since 2000 have significantly increased the requirements in terms of income and assets. This poses a major

hurdle particularly for young households. In addition, social trends specifically among young adults have resulted in a preference for rental apartments as the need for flexibility and mobility has risen strongly in both their professional and private lives. Moreover, the trend toward single-person households is continuing. Starting a family is something that today frequently takes place later. And finally the number of students is also continuing to rise so that more young adults start their professional lives later and are therefore also only able to start accumulating assets at a later stage.

Single-family dwellings popular among 33 to 59-year-olds

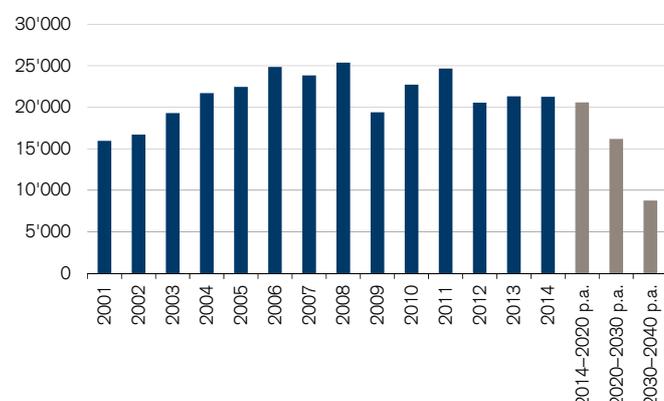
The different preferences of the age groups not only manifest themselves in terms of the decision on whether to buy or to rent but also in terms of the choice between single-family dwelling and condominium. Although the supply of condominiums has been greatly expanded in recent years thanks to the high level of construction activity, the single-family dwelling remains the most popular form of home ownership. In the age group of 33 to 59-year-olds the single-family dwelling is represented distinctively stronger than the condominium. However, it is not the case that the baby boomers who in earlier years lived in a single-family dwelling still live in it today. Starting from the age of 44 the preference for the single-family dwelling barely rises any further. Once the children have moved out, it becomes too large for many. As people get older, maintaining their own home increasingly becomes a burden. For this reason they sooner or later consider selling their single-family dwelling. However, the desire to live in their own four walls is still there, which is why they then frequently switch to a condominium. Every other owner who has reached their mid-sixties therefore lives in a condominium rather than a single-family dwelling (Figure 2).

Sudden drop in birthrates will cause demand for residential property to slump after 2020

Based on the age-related preferences for residential property described above, it is possible with the help of detailed population forecasts to estimate how demand for residential property will develop up until the year 2040. As the relevant cohorts have already been born and the only component of uncertainty lies in immigration that carries less weight numerically, future demand can be predicted relatively well. However, this estimate takes account of neither the price nor the interest rate levels. Property prices are currently exerting a dampening and mortgage interest rates a supporting effect on the demand for owner-occupied housing so that the structure that has grown over the years essentially offers a suitable guideline for the future preference for home ownership and for forecasting future demand. In the absence of any major change in these influencing factors of price and interest rate, demand for owner-occupied housing should for the time being remain at the level of just under 23'000 units seen over the last ten years or only drop slightly (Figure 3). However, demand will already fall below 20'000 units from 2018 and will not recover again. Owing to the aging population, a continuous reduction in additional demand is to be expected. Between 2020 and 2030 the number of new homeowners is set to decrease to 16'000 households and between 2030 and 2040 to just 9000 households.

Figure 3: Additional demand for residential property 2014–2040

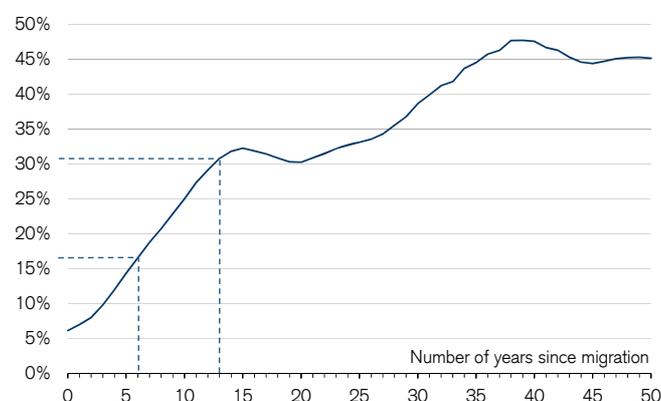
Based on Credit Suisse population forecast and structural ownership preferences



Source: Credit Suisse, Swiss Federal Statistical Office

Figure 4: Demand for residential property among immigrants

Share of immigrants with residential property by duration of stay (as per 2013)



Source: Swiss Federal Statistical Office, Credit Suisse

Consequences: Decline in sales in construction and pressure on sales prices

In the medium to long term the construction and real estate industry must therefore brace itself for considerably lower demand for owner-occupied housing. This effect is demographically induced and therefore has a relatively high probability of occurrence. The expected fall in orders in the new construction segment will only be compensated to a limited extent by the rising number of refurbishments and replacement constructions in the future and will therefore result in a loss of sales. This will also be a source of concern for homeowners who will have to consider how sales prices could respond if one day the additional demand for owner-occupied housing is only half what it is today.

Immigrants also acquiring residential property – but only after a delay

The more or less constant expected growth in homeowners in the next few years will also be a result of the high immigration since 2007. Of those persons who migrated to Switzerland in 2013, 94% have opted for a rental apartment and only 6% for residential property (Figure 4). Newly migrated persons largely move first of all to the urban centers where they often also work. As the time they spend in Switzerland increases, immigrants tend to enhance their personal housing situation. If the financial conditions are met, they prefer to acquire residential property. Figure 4 shows how the likelihood of purchasing housing increases with every year following the time of immigration. Somebody who immigrated to Switzerland in 2007 had a 17% probability of living in his or her own four walls in 2013. The same figure for those who migrated to Switzerland back in 2000 lies at 31%.

Sustained momentum for owner-occupied housing from immigration

How much the above effect will influence demand depends on several factors. As well as the development of prices and interest rates, the level of unemployment will also play a role. It has a decisive impact on the optimism of recent migrants regarding a regular employment income and therefore influences the decision to buy residential property. In addition, the immigration structure also has a decisive influence as purchasing power differs according to the country of origin of the immigrants. For example, the shift in immigration from the Germans to the Southern and more recently to the Eastern Europeans has resulted in lower purchasing power. The probability of the purchase of residential property by immigrants illustrated in Figure 4 will therefore tend to overestimate future demand. Nevertheless, the strong immigration of recent years will exert a positive impact on owner-occupied housing in the next few years.

Price level and financing hurdles curbing demand

Short-term demand caught up between low interest rates and affordability

The negative interest rates introduced by the Swiss National Bank at the beginning of 2015 have only had an insignificant impact on demand for owner-occupied housing. While mortgage interest rates have risen slightly due to higher hedging costs of the banks, they still remain at a very attractive level on a long-term comparison. This is barely set to change in the course of 2016. The desire of many households to acquire residential property in the current low interest environment is accordingly great. These plans are in many cases being thwarted by the high property prices and the tightened financing requirements brought about by regulation. Demand for owner-occupied housing is therefore increasingly losing momentum. Although there were some purchases triggered by the fear of negative interest rates, they were unable by far to offset the curbing effect of regulation.

Affordability no longer sustainably guaranteed for average households

Imputed affordability shows just how much the requirements have increased. For an average owner household in Switzerland, the imputed interest costs at an interest rate of 5% and a maintenance surplus of 1% amount to 38% of its net income. In accordance with sustainably imputed affordability, an average owner household is today therefore no longer able to afford a new property of medium standard because the golden rule of financing according to which no more than 33% of household income should be spent on housing would be infringed. This situation is primarily attributable to the high-price regions surrounding Lakes Zurich, Geneva and Zug (Figure 5). For example, imputed affordability in the Zimmerberg region lies at 57%. However, it is pleasing to note that the situation in some high-price regions has improved slightly or at least remained constant. By contrast, affordability outside the high-price regions has deteriorated further in many places due to a continued upsurge in prices, although it largely still remains close to the threshold value of 33%.

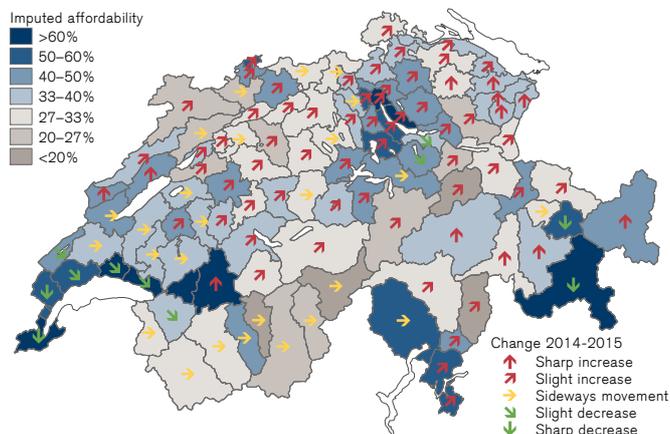
But there has not just been an increase in affordability risks

The structural change to household income is promoting the affordability of owner-occupied housing. In view of a rising labor participation rate among women, household income is increasingly becoming composed of two incomes from employment. The traditional role model according to which the man works full time and the woman does not work had already been reduced to just 28% of relationships between couples back in 2000 (Figure 6). Since then this model has further lost significance and only applies in 18% of cases. The most common models

today are those where both partners work full time or where the man works full time and the woman has a degree of employment of 50% to 89%. The household income of couples is today therefore much more broadly based and diversified, thereby reducing the affordability risks, for instance in the case of unemployment.

Figure 5: Imputed affordability

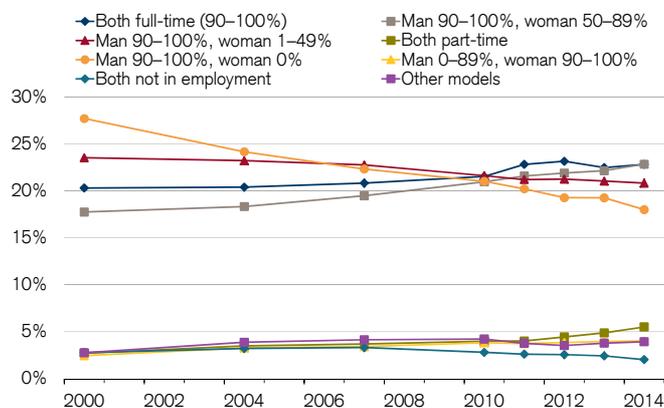
For an average household in % of income, subject to the following parameters: 5% interest, 1% maintenance, 80% loan to value ratio, repayment on 2/3 within 15 years



Source: Credit Suisse, Geostat

Figure 6: Employment level of couples

Share of couples



Source: Swiss Federal Statistical Office

Supply: Construction activity of new owner-occupied housing falling further

Normalization of production of owner-occupied housing

The difficulty for many households in owner-occupied housing is also leaving its mark on production. Of the about 46'000 newly completed residential units expected in the current year, 22'500 are set to comprise owner-occupied properties (Figure 7). This is 750 or 3.3% fewer than last year. Measured against the total net increase, the share of the owner-occupied housing segment has fallen to 49%. This is the lowest figure in both absolute and relative terms since measurements started back in 2001. With regard to existing property this corresponds to a perfectly respectable expansion of 1.1%. However, the expansion back in 2011 was 1.7%. It is therefore not the case that there is barely any more owner-occupied housing being constructed today; what we are instead seeing is an increasing normalization of what was once excessive growth in the owner-occupied housing segment.

Single-family dwellings continuing to lose importance in new construction

The expected decline in the construction of owner-occupied housing in 2016 is primarily the consequence of a reduced production of single-family dwellings. Because single-family dwellings take up a greater share of land, they are normally more expensive than condominiums. The tightened financing conditions are therefore exerting a greater dampening effect on the single-family dwelling segment. The construction of single-family dwellings is this year predicted to fall by another 7.9% so that some 7400 new properties should come onto the market. Measured against existing stock this corresponds to an expansion of just 0.5%. As well as the dampening effect of the tightened regulatory requirements, the demographic component will also be in play here. Now aged 57, the needs of the average homeowner are being met less and less by the single-family dwelling. A growing number of single-family dwelling owners intend to part from their properties. The high number of existing properties advertised is accordingly reducing the need for newly constructed units.

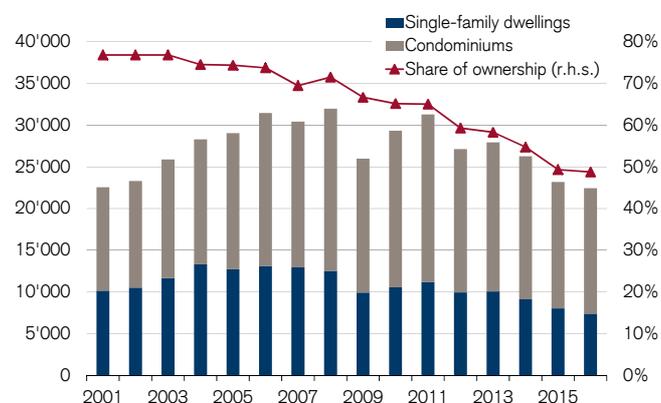
Production of condominiums should stabilize at a lower level

The promoters of condominiums have taken the increasingly challenging market environment into account in recent years and planned more cautiously. Instead of the about 20'000 condominiums seen at the peak of the ownership boom back in 2011, just 15'200 units were constructed last year. This reduction on the supply side was one of the reasons why despite significantly losing momentum due to the tightened regulatory requirements and lower demand, the upsurge in prices still remains positive. At 15'000 condominiums, the expected expansion in 2016 will only be marginally lower than in 2015 (-0.8%). The production of con-

dominiums should therefore stabilize at a level that still corresponds to a high planned expansion rate of 2.5% when measured against existing stock.

Figure 7: Net increase and share of residential property

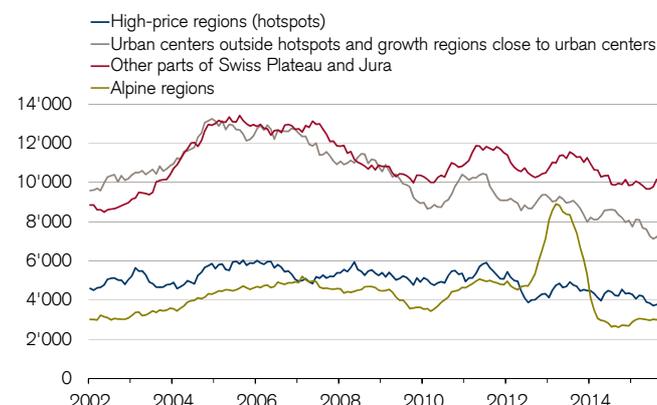
Net increase in residential units, 2014–2016: Credit Suisse estimate/forecast



Source: Credit Suisse, Baublatt, Swiss Federal Statistical Office

Figure 8: Residential property building permits

By geographical aggregates, number of residential units, moving 12-month total



Source: Baublatt, Credit Suisse

Lower production above all in the high-price regions

Because the demand for owner-occupied housing has for several years been showing signs of weakness particularly in the expensive regions, fewer properties are being planned in the high-price regions surrounding Lakes Geneva, Zurich and Zug. There were 3600 owner-occupied properties approved in the high-price regions in 2015 (Figure 8). This corresponds to a further reduction of 16%. Production in these regions has been reduced by a total of 39% since the summer of 2011. Meanwhile, the declines in the urban centers outside the high-price regions and the growth regions close to the urban centers (-3.7%) as well as the remaining parts of the Swiss Plateau and Jura (-3.5%) remained more modest.

Little optimism in the Alpine regions – despite higher legal security

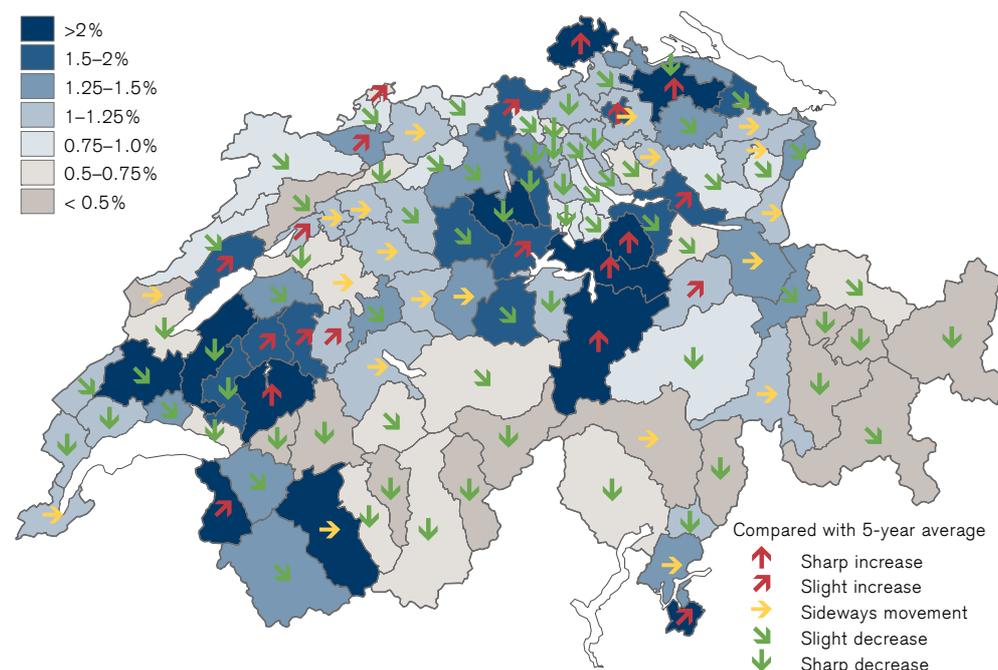
On the other hand, the construction of owner-occupied housing in the Alpine regions appears to have picked up. However, a closer analysis reveals that the upturn on the previous year is particularly attributable to valley municipalities such as Sierre and Sion that are not shaped by tourism. By contrast, the number of building permits in the municipalities affected by the legislation on second homes fell by another 4% despite the already record low level. The introduction of the legislation on second homes at the beginning of 2016 will enable the legal uncertainty of the past few years to be largely eliminated. At least Swiss citizens should therefore now become more interested in second homes again. Potential foreign buyers will continue to display little interest due to the strong franc. The question arises on top of this as to how high the demand for managed second homes will be at all. This is important in view of the fact that these properties will in future have to form the focus of second home construction activity. Owing to all these uncertainties, project developers are likely to remain very cautious. An increase in construction projects in the municipalities affected is therefore barely to be expected in 2016. The initial priority will be to reduce the surplus of second homes standing empty.

Momentum of construction activity varies regionally

How much the construction sector in the tourist regions is suffering from the acceptance of the second home initiative can be seen from Figure 9 that illustrates the planned construction activity for 2016 in the owner-occupied housing segment for the 110 Swiss economic regions. With the exception of the Domleschg/Hinterrhein and Canton Uri, there is no momentum to be found anywhere in the Alps. The increasing divide between high-price regions and their hinterlands is also clearly visible, particularly around Zurich and Zug. Meanwhile, residential property projects are being concentrated in Central Switzerland and in the cantons of Aargau, Thurgau and Schaffhausen. By contrast, construction activity in the Canton of Zurich is decreasing almost universally. The focus of construction activity in Western Switzerland lies in Canton Fribourg, the Vaud hinterland and Lower Valais.

Figure 9: Planned expansion of residential property

As % of stock of residential property and compared with the five-year average (arrows)



Source: Credit Suisse, Baublatt, Geostat

Market outcome: Continued market slowdown

Supply and demand are not far apart

Although the demand for owner-occupied housing has fallen since 2012 due to the tightened regulatory requirements, no major imbalance has so far formed between supply and demand. This is due to the prompt reaction on the supply side that – as explained above – cut back production. Nevertheless, the more challenging marketing situation has left its mark, such as in a rise in the supply rate of existing condominiums to 4.5% (Figure 10). There were over 23'000 condominiums advertised on the various online portals at the end of 2015. Shortly before the introduction of the self-regulation measures in the summer of 2012 there were fewer than 20'000 such units and the supply rate measured against existing stock came to just 3.6%.

Increasing time on market for condominiums and single-family dwellings

However, there is no rise in the number of advertised existing properties to be observed in the case of single-family dwellings. Although the supply rate went up temporarily, it is currently back at its long-term average of 2.0%. On the other hand, an increase in the time on market on online platforms suggests that the market situation for suppliers of owner-occupied housing has deteriorated (Figure 10). This applies to both single-family dwellings and condominiums. An average of 67 days on the market is currently to be expected for single-family dwellings; 73 days are required in the case of condominiums until the advertised properties are sold. Depending on the location and property, the individual number of days on market can deviate sharply from this mean. For example, time on market of the core 50% of all advertised condominiums ranges from 24 to 143 days. The other half need either more or less time. Time on market is increasing despite a general decrease in duration in both segments since the start of measurements. It is therefore sending out a relatively clear signal that the marketing of owner-occupied housing has become more challenging.

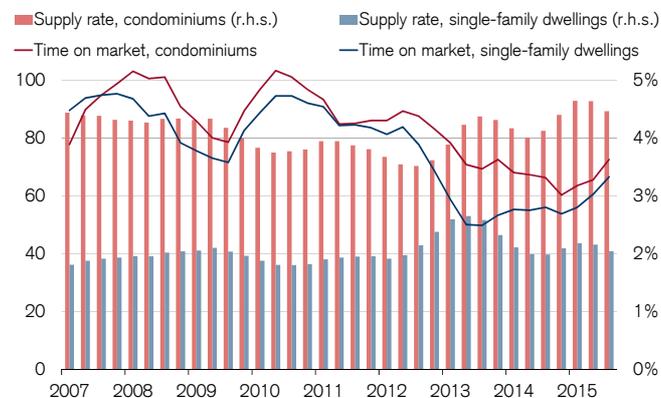
Zurich area with short time on market

There are some massive regional differences in marketing costs – measured by time on market (Figure 11). Although the owner-occupied housing market in the Greater Zurich area has faltered somewhat, properties here are still the fastest ones to find a buyer. For example, the median duration in the Oberland West region is 47 days before a condominium disappears from the market again. However, it is also the case in the Zurich area that the entire market is no longer performing equally well. Generally speaking, the higher the price, the longer the period on market. The average marketing period for condominiums starting from CHF 17'500/m² is currently 106 days. Regions with moderate owner-occupied property prices are able to benefit from the situation. Advertisements there attract a buyer more quickly, which results in shorter

time on market as is the case in the Zurich Weinland, the Willisau region and the Bernese Seeland, for instance. However, the situation is a different one again in places where there is too much construction activity.

Figure 10: Supply rate and time on market

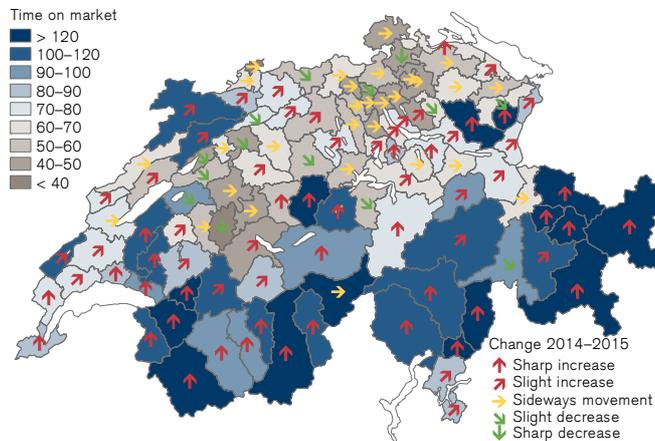
Of existing properties, supply rate in %; time on market, by number of days



Source: Meta-Sys AG, Credit Suisse

Figure 11: Time on market of condominiums (regional)

Of existing properties, in number of days



Source: Meta-Sys AG, Credit Suisse, Geostat

Sales problems in the tourist regions

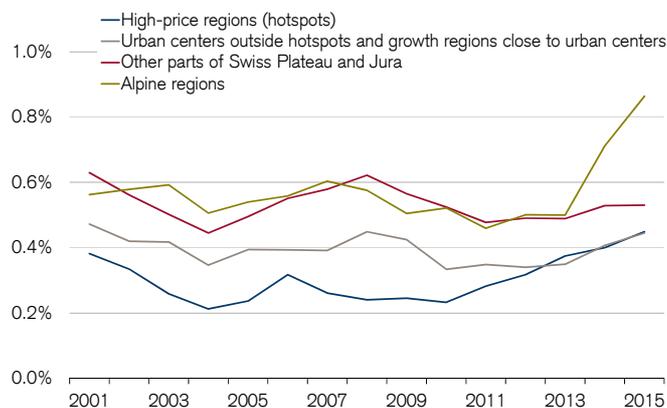
The increase in the time on market is signaling greater restraint on the demand side throughout practically all of Western Switzerland. In the Canton of Geneva the average time on market has risen to 82 days, which is well above the long-term average of 67 days. The situation for marketers in the tourist regions is even more challenging. The sale of second homes, even of existing properties without usage restrictions, is today taking considerably longer than was previously the case due to the uncertainty surrounding the second home initiative and the strong franc. The market for second homes is oversupplied as many landowners rushed to build over their land before the initiative was implemented without considering the sales prospects of the second homes constructed.

Moderate increase in vacancies with the exception of the Alpine regions

A glance at the vacancies serves to round off the picture of the current market situation. Despite higher figures across the board, vacancies have still not reached an alarming level. The share of vacant properties in the high-price regions is still below 0.5%, although it continues to rise (Figure 12). Vacancies remain virtually unchanged in the regions further away from the urban centers (other parts of the Swiss Plateau and the Jura) that have gained attractiveness due to better affordability. However, vacancies continue to rise in the Alpine regions (Figure 13). The oversupply of second homes is therefore only likely to decrease slightly.

Figure 12: Vacancies of residential property

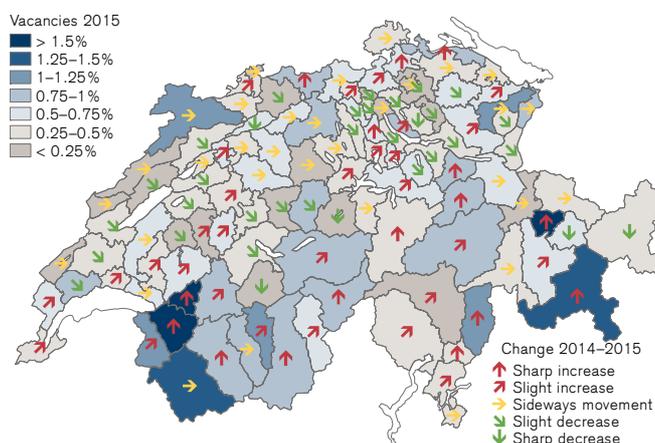
As % of stock of residential property



Source: Credit Suisse, Swiss Federal Statistical Office

Figure 13: Regional vacancies of residential property

As % of stock of residential property



Source: Credit Suisse, Swiss Federal Statistical Office, Geostat

2016: Renewed slight increase in vacancies

Thanks to the continued fall in construction activity, the reduced demand will also not trigger any upheaval on the owner-occupied housing market this year. Although we expect another slight increase in condominium and single-family dwellings vacancies in 2016, it should not exceed that of 2015. Demand for owner-occupied housing is likely to remain concentrated on regions with good accessibility with price levels still considered to be moderate. There is therefore barely any increase in vacancies to be expected here. By contrast, sales of residential property in the high-price regions and particularly in the high-price segment will remain sluggish.

Weak price growth of condominiums

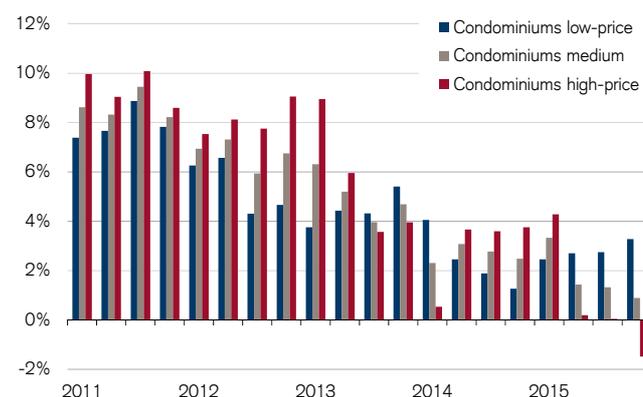
As hoped, the limited demand for owner-occupied housing has slowed down the rise in prices in recent years. Price growth fell again over the last year and now lies at 1.3%. The price momentum is therefore clearly below the average annual growth of 3.7% recorded since 2000 but varies according to segment and price category. The prices of condominiums in the medium price segment only rose by 0.9% (Figure 14). This is the lowest growth rate since 2003. In the high-price segment condominiums even recorded falling prices. On the other hand, the low-price segment in which affordability poses less of a problem saw price growth of 3.3%.

Higher price momentum of single-family dwellings

A different situation holds for single-family dwellings. Here the upturn for medium segment properties amounted to 1.5% and that for high-price properties 1.3% (Figure 15). Compared with the peak years of 2011 and 2013, momentum has therefore also fallen considerably. Because the single-family dwelling dominates in peri-urban and rural regions to which demand has shifted, there is not the same slowdown of prices to be observed here as for condominiums.

Figure 14: Price growth of condominiums

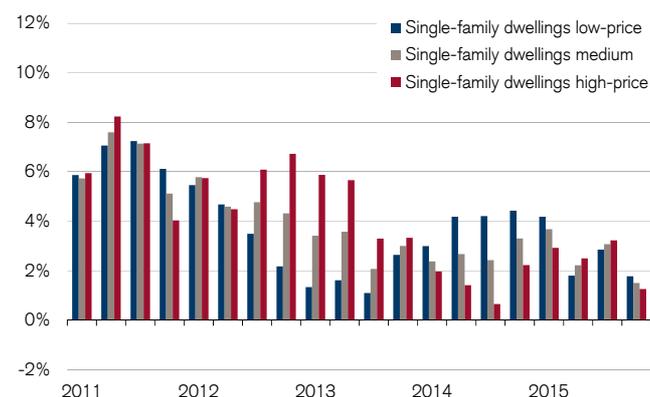
Annual growth



Source: Wüest & Partner, Credit Suisse

Figure 15: Price growth of single-family dwellings

Annual growth



Source: Wüest & Partner, Credit Suisse

Widespread price correction in many parts of Western Switzerland

With a few exceptions, falling prices have so far only been seen in Western Switzerland. Starting from the Lake Geneva region, where prices have been decreasing for several quarters, the negative price growth has spread to the adjacent parts of Western Switzerland. A downturn of more than 3% was observed in the Lake Geneva region last year (Figure 16). Much the same also applies to the regions affected in the Canton of Fribourg. The price falls in the Vaud hinterland, Chablais and Lower Valais are somewhat lower. The largest total fall in prices so far has been sustained by the Canton of Geneva with a drop of 7.5% since the second quarter of 2013. This is the only region in which we consider there to have been a price bubble since the fall of 2010. Large portions of air are currently escaping from this price bubble, which from a risk perspective is to be welcomed.

German-speaking Switzerland: Significant price increases especially outside the regions close to the urban centers

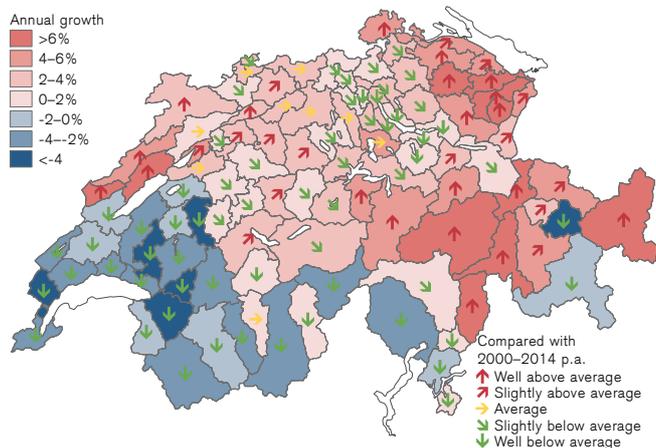
By contrast, the situation in the German-speaking part of Switzerland is quite different. Moreover, unlike in Western Switzerland, catch-up effects in peripheral regions and movements away from the Greater Zurich area are in some cases causing substantial price increases to continue being registered in the cantons of Zug, Schaffhausen, St. Gallen and Thurgau. Here growth is still above the long-term average and in many cases exceeds 4% (Figure 16). As construction activity remains high in many of these regions, a downturn in price momentum must also be expected here sooner or later.

2016: Continued flattening of price momentum

Thanks to the virtually neck-and-neck performance of supply and demand at present, there will hardly be any change to the prevailing price trend in 2016. In Switzerland we expect a further downturn in price momentum for 2016 and an average price rise of almost 1%. Only marginal growth will be recorded in the high-price regions and a continued drop in prices is likely in the Lake Geneva region. The highest growth in prices is once again expected outside the high-price regions in 2016.

Figure 16: Price growth of residential property (regional)

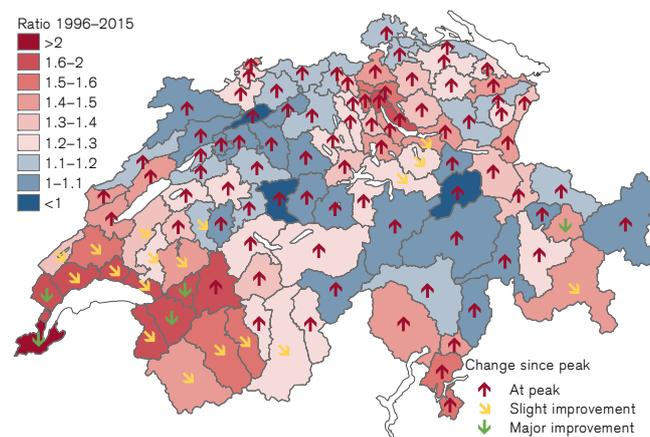
Annual growth of condominiums/single-family dwellings



Source: Wüest & Partner, Credit Suisse, Geostat

Figure 17: Regional valuation of property prices

Price performance of condominiums/single-family dwellings in relation to income



Source: Credit Suisse, Geostat

Imbalances remain high ...

The declining price momentum and in particular the price falls in the Lake Geneva area have reduced the risk of a future property price bubble. However, the imbalances still prevail in the high-price regions. The price level in these regions has disconnected itself too much from the development of income and we therefore continue to consider it unsustainable (Figure 17). Although the discrepancy between price and income level can be fundamentally justified at present due to the low interest rates and other influencing factors, this will not be the case after the end of the current interest rate cycle.

... but are decreasing above all in Western Switzerland

It is certainly too early to sound the all-clear. Nevertheless, it can be noted on the positive side that the imbalances have decreased in many parts of Western Switzerland. However, the market slowdown will have to continue for several more years before we can once again describe the price level in the individual regions as justified in the long term. Meanwhile, a different situation holds outside the high-price regions. Here there are only minor imbalances if at all. However, risks of overheating will likewise arise sooner or later if the price growth in these regions persists.

Little risk of a crash despite unsustainable price levels in many places

The checklist illustrated in Figure 18 has for years served us as a basis for assessing whether there is a widespread property price bubble and the threat of a real estate crash on the residential property market. As before, three reasons suggest that a crash is very unlikely. First of all, there is no excessive tendency toward indebtedness to be observed. The growth of the volume of mortgages has now fallen to below 3.3% and lies well below the historic average of 5.6%. Secondly, there is no threat of excessive production that could put the price level under too much pressure. And thirdly, credit checks in Switzerland are based on a stable three-pillar foundation that in recent years has undergone further targeted strengthening with the self-regulation measures.

Credit checks based on stable three-pillar foundation ...

The already familiar loan to value and affordability criteria were joined in the fall of 2014 by the universal applicability of the lowest value principle. This stipulates that lending institutions must always take the lower of purchase price and sustainable value determined by an appraiser as the market value of a property. This rule serves to counter price increases, as any difference between the higher purchase price and the lower appraisal value has to be funded entirely from up-front equity, thereby making the property less affordable for many groups of buyers. Because the lowest value principle, that among other things has already been in use for some time among major banks, now applies everywhere, this measure has also contributed to slowing down the market. Since its launch the most recently paid purchase prices have come back into line with the sustainable values.

... and internationally advanced

The Swiss three-pillar model can be considered very advanced when compared internationally. Although many other countries also have loan-to-value ratios that limit the amount of the loan in relation to the market value of the property (LTV), the affordability of the mortgage debt measured against income (LTI) is only reviewed in a few countries (e.g. Norway, Cyprus, Estonia, Hungary, Lithuania, Poland, Romania).¹ Whether the affordability can also be upheld in the event of adverse scenarios as determined by the imputed affordability in Switzerland is something that is tested in Ireland, Cyprus, Portugal, Romania, Slovakia and the UK. Some countries have an upper loan-to-value threshold in relation to annual income (Ireland, Poland, UK), which in turn does not exist in Switzerland. However, the lowest value principle in this form is barely to be found abroad.

Figure 18: Criteria of a property price bubble

As at Q4 2015

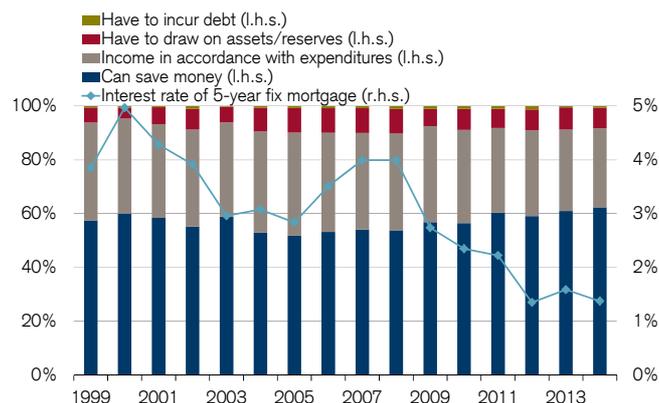
✓ Applies ~ Insufficiently pronounced ✗ Does not apply

- Excessive liquidity
- Excessive risk appetite
- Prolonged phase of rising property prices
- Property prices decoupled from income
- High level of speculative real estate transactions
- High/excessive growth in mortgage volumes due to margin pressure on mortgage lenders
- Insufficient credit checks for mortgage lending (due to false incentives)
- Excessive construction activity and supply surplus

Source: Credit Suisse

Figure 19: Income balance of owners

Income balance, shares in %; mortgage interest rate in %



Source: Swiss Household Panel, Credit Suisse

Owners are saving more today

A factor that can be considered to reduce risk is the fact that the low mortgage interest rates now prevailing for some years have enabled homeowners to increase their savings. In principle they should be able to do this as according to the affordability guidelines an interest rate of 4.5% to 5% must also be easily fundable for owner households. However, the question arises as to whether households actually set aside the interest costs saved or instead spend them on consumption. An analysis of the data from the Swiss Household Panel reveals some interesting insights in this regard (Figure 19). In 2008, the share of owners able to put money aside at the end of the year came to 54%. Since then the share has risen to 62%. While nothing can be said about the amount of the sums saved, it can be assumed that this will also be higher today. On top of this, households today take out fix mortgages in over four fifths of all cases. They are therefore considerably less affected by short-term interest rate risks than was the case in the 1990s when the purchase of owner-occupied property was still largely financed with variable mortgages.

¹ See European Systemic Risk Board (2015): "A review of macro-prudential policy in the EU one year after the introduction of the CRD/CRR".

Outlook for owner-occupied housing in 2016

Controlled slowing down

Low interest rates and a modest increase in real incomes constitute a fundamentally positive backdrop to the demand for owner-occupied housing in 2016. What's more, the high levels of immigration seen in recent years will likewise be supportive to demand after a slight time lag. On the other hand, (self-)regulatory measures and the associated greater financial requirements regarding the purchase of owner-occupied housing will continue to exert a major dampening effect. We expect an ongoing slowdown in the owner-occupied housing market that will likely be reflected in positive but weak price growth of less than 1% on a nationwide basis in 2016. Demand will continue to shift toward the low and mid-priced segments. The high-price segment will once again have a hard time in 2016, with persistent price falls expected. In geographical terms, prices are likely to rise in regions where prices have not yet reached excessive levels. On the other hand, the price correction under way in French-speaking Switzerland is likely to continue to spread out from the Lake Geneva region. We do not expect the correction to become any sharper, however, because overall conditions are too attractive on the whole. The lower additional demand and geographical shift in demand were largely anticipated by project developers, with the result that we have not seen the emergence of more extensive imbalances except in the high-price segment. Supply and demand are not far apart in many instances, and so vacancies are likely to rise only marginally in 2016 as in the previous year. All the same, what has been a seller's market is slowly changing into a buyer's market. This will be evidenced by a further rise in marketing expenses and a continued, slight increase in the supply rate. The current market cooling will need to persist for several years to come before the imbalances between real estate prices and incomes are reduced to a sustainable level. The period from around 2018 onward could prove to be a test case for the market if, for demographic reasons ("pill-gap"), the demand for owner-occupied housing were to soften at a faster rate.

Demand, supply and market outcome

Demand	Background	Outlook
<p><i>Level of mortgage rates:</i> Interest rates on Libor mortgages will remain at an all-time low in 2016 as a whole. On the other hand, fix mortgage interest rates will remain highly volatile as in the previous year and will largely be determined by the prevailing uncertainties. We generally expect a slight rise for mortgages with a medium or long term.</p> <p><i>Regulation:</i> The (self-)regulatory measures seen thus far will be reflected in subdued demand for owner-occupied housing once again in 2016. Given the cooling-off that has already occurred, further action is unlikely in relation to owner-occupied housing.</p> <p><i>Population trends:</i> The high levels of immigration seen in recent years are exerting a positive impact on the demand for owner-occupied housing after a slight time lag. Immigration is nonetheless likely to go on shedding momentum in 2016, above all in the case of affluent incomers. The demographic development of the demand for owner-occupied housing is likely to pose an ever-increasing burden in subsequent years.</p>	<p>→</p> <p>Libor mortgage →/↗</p> <p>Fix mortgage →/↗</p>	<p>→</p> <p>Libor mortgage →/↗</p> <p>Fix mortgage →/↗</p>
<p>Supply</p> <p><i>Net addition of owner-occupied housing:</i> With production of around 15'000 new condominiums and 7400 new single-family dwellings, construction activity in the owner-occupied housing segment is likely to reach a new low in 2016. An ongoing shift in construction activity can be seen away from the high-price regions toward regions where price levels are still sustainable.</p> <p><i>Medium-term expansion plans:</i> Current planning applications indicate that construction activity in the owner-occupied segment will decline again in 2017.</p>	<p>↘</p> <p>↘</p>	<p>↘</p> <p>↘</p>
<p>Market outcome</p> <p><i>Vacancies:</i> Vacancies for owner-occupied housing are likely to increase again slightly in 2016. Sales are likely to remain sluggish in the high-price regions in particular, but also in regions with poor accessibility.</p> <p><i>Prices:</i> Price momentum will likely continue to decline, although we still expect an average rise of just under 1% across all segments. Growth is once again likely to be highest outside the high-price regions. By contrast, a slight fall in prices has to be expected in the Lake Geneva region and in many parts of the high-price segment.</p> <p><i>Sustainability of prices:</i> The imbalances in the high-price regions around Lake Geneva have reduced slightly, though they remain at very high levels. Meanwhile, the imbalances around Zurich and outside the high-price regions have increased again slightly. Accordingly, it is still too early to sound the all-clear.</p>	<p>↗</p> <p>↗</p> <p>→</p>	<p>↗</p> <p>→</p> <p>→</p>

Source: Credit Suisse

Special focus: Real estate crowdfunding

Alternative form of financing on the rise

A 240-meter tall skyscraper, financed by several thousand small investors: What sounds like a considerable project has become reality thanks to real estate crowdfunding. The bulk of the BD Bacatá, the largest skyscraper in Columbia, was financed not by banks and institutional investors but by more than 3800 small-scale investors. Via a crowdfunding platform, which advertised the project to a large number of internet users, a total of USD 170 million was raised in order to realize this gigantic project. The BD Bacatá is the first skyscraper in the world to be paid for by means of crowdfunding and is just one of the many real estate projects around the globe that are now being financed in this way.

Crowdfunding is not a new phenomenon

Crowdfunding is not a new phenomenon, however. The pedestal of New York's Statue of Liberty, for example, was co-funded by a large number of donors. Although the donations were less than a dollar in some cases, this made it possible for a great mass of people to fund a project for which the government – in the wake of the 1873 stock-market crash – lacked the resources. The crowdfunding of real estate in particular emerged as a result of a financial bottleneck in 2008. At that time, the financial crisis was leading banks around the world to grant fewer and fewer loans. The movement didn't really get going until 2012, however, when the legal framework was created in the US with the JOBS Act. Since then, platforms have mushroomed like nobody's business.

Geographical spread

The US had approximately 152 real estate crowdfunding platforms at the end of 2015, making the country the world's undisputed number one. The volume transacted is also by far the highest at around USD 1 billion in 2014 alone, and is likely to have more than doubled in 2015. These days, however, real estate crowdfunding is by no means confined to the US. The UK has at least 16 platforms that are specialized in real estate. Seven platforms operate in Asia, the same number in Africa as well as Australia, and four in the Middle East. Real estate crowdfunding has also penetrated the German-speaking world. At least two platforms are currently active in Germany, and another one in Switzerland. In accordance with the small number of platforms, the volumes transacted in the latter countries are also much smaller than those in the US.

Distinction between crowdlending (debt) and crowdinvesting (equity)

Crowdfunding can essentially be divided into two categories that are relevant to real estate: Crowdlending and crowdinvesting. With crowdlending, investors provide debt – typically for the financing of a real estate project – and in return receive interest payments on a monthly or quarterly basis, or on redemption. That also includes subordinated loans (mezzanine capital) and mortgages, provided the loans are secured. Crowdinvesting is the provision of equity, mainly for the purchase of an investment property. The return consists of a regular rental income, or a dividend if the funding is organized in the form of a company.

Comparison of platform types in different countries

Figure 20 contains a summary of the most common characteristics for a sample of platforms, and illustrates that business models vary sharply from country to country. The focus in the US is on crowdlending. Investment opportunities are nevertheless usually confined to accredited investors, which by definition have either an income of at least USD 200'000 or assets of more than USD 1 billion. Due to the regulatory environment, it is not currently lucrative for platforms to offer properties to non-accredited investors as well. That could change, however, when Title III of the JOBS Act comes into force. This enables project developers to receive certain amounts per year and project from non-accredited investors too, without additional regulatory requirements. The total amount that can be collected in this way is, however, limited to USD 1 billion. Both crowdlending and crowdinvesting are widespread in the UK. The properties advertised are often single-family dwellings or apartments that were vacant and are now being renovated and re-let with financial support from the crowd. In Germany, the focus is on new construction projects for multi-family dwellings and commercial buildings. Project developers raise equity-type funds such as mezzanine capital as a supplement to bank financing. This enables several projects to be undertaken simultaneously, since less equity is needed for each project. In Switzerland's case only two properties have so far been successfully financed via a crowdfunding platform, making it difficult to reach meaningful conclusions. The two projects

involved a recently renovated multi-family dwelling and a new building. Investors become co-owners in the property and are consequently recorded in the land register. As in Switzerland, the focus in Sweden is likewise on crowdinvesting. However, investors in Sweden are only indirectly involved in the property through a company and do not usually have any say in decision-making.

Figure 20: Crowdfunding platforms specialized in real estate

Overview of key characteristics of a selection of real estate crowdfunding platforms in various countries

Country	Financing type	Ownership structure	Project type	Investor profile	Minimum investment	Term	Income
US	Debt, mezzanine and equity	Loans or shares in a special purpose company	New construction; commercial buildings	Usually limited to accredited investors	CHF 100–100'000	1 month–10 years	Quarterly or monthly interest payments
UK	Debt and equity	Loans or shares in a special purpose company	Conversion; single-family dwellings and apartments	In some cases limited to accredited investors	CHF 150–1500	1 month–5 years	Monthly interest payments (fixed or variable)
Germany	Mezzanine capital	Loans to project developers or company	New construction; multi-family dwellings and commercial buildings	No restrictions	CHF 270–540	1–5 years	Interest paid annually or on redemption
Switzerland	Equity	Co-ownership of property	Existing buildings; multi-family dwellings	No restrictions	CHF 25'000	5 years	Rental income
Sweden	Equity	(Preference) shares in a company	New construction; multi-family dwellings and commercial buildings	No restrictions	CHF 1750–5850	7 months–5 years	Dividends paid annually or on redemption

Source: Credit Suisse

How a transaction works

The platforms assume the role of an intermediary, bringing together project developers and investors. To this end, the property for which investors are sought is advertised on the platform. In return, the operator requires a percentage fee of the total amount raised. This is usually payable by the funding seeker and only charged once the funding phase has been successfully concluded. Besides the role of an intermediary, the activities of the platforms extend from the provision of objective information to extensive due diligence together with credit checks on the project developer and assessment of the real estate project. Some platforms pre-finance real estate projects in order to guarantee faster execution. For a specific period of time, potentially interested parties can evaluate the property based on the information provided before investing at the click of a mouse. The funds raised are temporarily held in a third-party fiduciary account before being transferred to the project developer once the funding phase is over. Technically speaking, the way it works is that for each real estate project a separate company is set up through which all property-related transactions are subsequently processed. Although there are platforms that fund projects entirely on a crowd basis, a bank is additionally involved in most cases. With crowdinvesting, banks often contribute all the debt financing in the form of a mortgage. In the prevailing environment of low interest rates, this is an opportunity to generate a higher return for investors. As soon as the funding has been secured, investors are kept informed of their project on an online basis at regular intervals. When the investment period ends, the property is sold and the capital, together with interest or dividends, finally repaid.

Crowdfunding versus direct purchase and indirect real estate investments

Before crowdfunding, it was already possible in principle for small investors to invest in the real estate market. With real estate investment funds and shares in real estate companies, a choice of investment types is available even for small investment amounts (Figure 21). One drawback of indirect real estate investments, however, is the investor's lack of decision-making power at company level. With indirect investments this competency is in the professional hands of portfolio managers, meaning the investor's identification with investment properties is lost. With the purchase of a real estate investment fund or shares in a real estate company, the only choice is the segment in which the company is specialized. As crowdfunding is still not very widespread, the options are currently limited to the few offerings of individual platforms. However, this could change soon.

Lack of decision-making power with indirect real estate investments

Crowdlending already possible with tiny amounts

Indirect real estate investments cannot, therefore, compete with the emotional investment feeling of a direct investment. To be a real estate owner and be able to say with pride that you funded a portion of a prestigious property is a common investor wish. But for many investors it is a wish that is out of reach due to the substantial minimum capital required. Crowdfunding aims to change that. Thanks to pooling, the direct real estate investment is also affordable for small investors with smaller sums to invest and therefore much more easily diversified. A distinction needs to be drawn here, however: While investments of a few hundred Swiss francs are in some cases possible with crowdlending, the minimum amount in the case of crowdinvesting is usually considerably higher. In Switzerland, for example, this amount is CHF 25'000. Creating an individual real estate portfolio with an appropriate degree of diversification becomes more difficult the greater this minimum amount is.

Figure 21: Investor dimensions

Comparison of different investment opportunities in real estate from an investor's viewpoint

	Crowdinvesting	Crowdlending	Real estate investment funds	Real estate companies	Direct real estate purchase
Decision-making power	+	+	-	-	+
Transparency	(+)	(+)	(-)	(-)	+
Minimum investment	(+)	+	+	+	-
Diversification	(+)	+	+	+	-
Say in decision-making	(+)	-	-	-	+
Liquidity	(+)	(+)	+	+	-
Investment security	+	-	+	+	+
Reputation of provider	(-)	(-)	+	+	-
Search costs	+	+	+	+	-
Transaction costs	+	+	+	+	-
Market access	+	+	+	+	-

Legend: +: positive, (+): fairly positive, (-): fairly negative, -: negative

Source: Credit Suisse

No say in decisions with crowdlending

Unlike in the case of a direct purchase, crowdlending investors have no say in decisions because they only contribute debt finance. With crowdinvesting, a say in decision-making is only possible if the property is owned by the crowd. By definition, preference shares do not confer any decision-making rights as with this model the owner only has a share in the assets. That may be an advantage where an investor wishes to have as little as possible to do with their investment – or a disadvantage because the investor has no say in which direction the property or project is to be developed.

High returns, but high risks too

Crowdfunding also makes it possible to invest in projects that have so far only been accessible via private equity networks. It often involves assets that cannot be sold quickly, with crowdlending enabling the disadvantage of illiquidity to be mitigated by what is usually a short term (generally no longer than 12 months). Thus it is also possible for small investors to pocket the illiquidity premium, which is very attractive amid the current low level of interest rates. Returns of up to 20% p.a. are promised depending on country and property. However, the risks involved are correspondingly high given that the new construction projects into which much of the investment is channeled are by nature associated with a degree of planning uncertainty. The project developer's equity is often reduced to a minimum. Where additional costs arise that cannot be funded by the project developer and consequently force it to file for bankruptcy, a total loss of the capital cannot be ruled out – particularly with crowdlending. There is a risk of the same scenario if the newly built units cannot be sold at the budgeted price. That may be the case where planning has been poor or demand is falling owing to a deteriorating market situation. Analysis of one of the most successful crowdfunding platforms in the US shows that the bulk of the real estate projects offered pursue opportunistic strategies that are associated with relatively major risks.

Reputation of platform plays a major role

The reputation of the provider is another major factor for the attractiveness of a real estate investment. Real estate investment funds for example are regulated and subject to oversight by the Swiss Financial Market Supervisory Authority (FINMA). It ensures that the investor receives a minimum amount of information and that the investment is suitable for their needs. In the German-speaking countries in particular, crowdfunding is surrounded by legal uncertainty in this

regard. A good many platforms have successfully funded – not to mention repaid – only a few projects thus far and consequently have not yet been able to establish a good reputation. Accordingly, a high level of caution still exists. Platforms in the rest of the world too still have to prove that their business models can withstand a real estate crisis. Real estate crowdfunding has emerged at a time of rising property prices, and platforms do not yet have any experience of crisis. The current market situation plays a major role, particular in relation to high-risk project funding where the results are vitally dependent on the selling price of the units.

Macroeconomic aspects

Broader circle of investors and reduced search costs

From the perspective of the economy as a whole, crowdfunding broadens the circle of potential investors. Real estate is no longer offered to an exclusive circle of wealthy investors but to a multitude of different investors. If real estate crowdfunding can successfully establish itself, this means the real estate market will have more financial resources at its disposal than previously. Added to that, the cost to investors of searching for a suitable property is significantly reduced. The internet plays a key role in this. Whereas a direct purchase necessitates the tedious process of information-gathering and various real estate projects can be difficult to compare with one another, with crowdfunding the information can be downloaded straight from the platform.

Risk of adverse selection ...

However, the risks to investors should not be overlooked either. Real estate projects that do not receive any bank finance are forced to look around for alternative forms of funding. Consequently, there is a risk that high-risk projects will be offered on such platforms. Some platforms actually explicitly mention the fact that they fund projects that do not meet the banks' strict criteria but do on the other hand promise high returns. For projects with low risk, finance raised via crowdfunding could therefore be less favorable than finance raised via traditional methods because investors are aware of the adverse selection and demand higher returns.

... and moral hazard both for platforms ...

With crowdlending in particular, there is a risk of false incentives given the way most crowdfunding platforms are set up at the current time. For example, the platform requires a percentage fee of the capital raised, to be collected immediately after the funding phase. Thus the income is already flowing before the project has been successfully completed. Other than to protect their own reputation, the platforms could therefore have little incentive to scrutinize real estate projects and the returns they promise. Added to that, the platforms do not participate in projects themselves; consequently, there is no additional risk for them. Project pre-financing, as seen on platforms in the US and UK, helps counter this incentive problem and is preferable from an investor perspective.

... and for project developers themselves

It is not only the platform but also the project developer itself that could have a false incentive. With the crowd being used in Germany in particular to meet the equity ratio required by the banks and at the same time reduce own funds in the project to a minimum, investors are exposing themselves to considerable risk. As the project developer has a small equity share of only 3%, as in some cases, it does not take much for the crowd to suffer losses. The project developer's minimal equity share could – as is also the case with the platform – mean that the project is planned and implemented less carefully. Finally, with such a high level of debt financing there is not a lot at stake for the project developer itself at the end of the day.

Close scrutiny of real estate projects is vital

It is therefore essential for projects offered on platforms to be closely scrutinized, so as to minimize the risk of a loss. Screening by the platform is not a substitute for a more detailed analysis by the investor itself. As lay persons, (small) investors face the problem of being unable to accurately assess complicated structures themselves. The success of a project not only depends on the current market situation. For example, the project developer's experience in constructing new buildings is also crucial. Furthermore, it is important to examine the market value and returns on projects. As a rule, the greater the sum involved the greater the amount of care required when examining the investment opportunity itself.

High-risk projects obtain comparably cheap funding

Finally, the question also arises as to whether the relationship between the return and the risk is appropriate. Given very low interest rates and the lack of attractive investment opportunities, crowdfunding could be used to fund very high-risk projects comparatively cheaply. This is partly because a good many investors wrongly assume that investment in real estate is safe, especially because a tangible asset – the property itself – is behind it. The platforms themselves do little to draw attention to the risks. In this regard it is important to draw a distinction between crowd-investing and crowdlending. Whereas with crowdinvesting the shareholder's claim against the

company is often secured, with crowdlending that is rarely the case. From a risk perspective, therefore, crowdlending should really be compared to business financing rather than a real estate investment.

Legal and regulatory framework

US opening up crowd-funding to small investors

In view of the risk and complexity of new construction projects, it is also important to consider whether crowdfunding is in fact desirable for small investors. Often they do not have the necessary knowledge of the real estate sector to be able to gauge the risk. This is especially the case for the financing of projects where success depends on numerous factors. Information and disclosure obligations are therefore essential in order to protect the small investor. Proportionality should always be taken into account in regulations, however. The potential for losses is limited in the case of minimum investments of only a few hundred Swiss francs. In the past, high regulatory hurdles made it unprofitable for platforms in the US to make investing accessible to small investors too. They therefore concentrated on accredited investors, to the exclusion of small investors. Title III of the JOBS Act, which comes into force in 2016, is set to change this: It provides that investors with an annual income of less than USD 100'000 can invest a maximum of USD 2000 or 5% of their income or assets in crowdfunding. This has laid the foundations for crowdfunding to be opened up to small investors in the US.

Lack of regulatory framework in Switzerland

Unlike in the US, crowdfunding is not yet regulated in Switzerland. The absence of specific legal standards therefore means that general legal provisions apply, thus involving uncertainty. This is primarily because in economic terms crowdfunding is currently of too little significance in Switzerland for it to be worthwhile for politicians and lawyers to tackle the subject. Thus far FINMA has merely published a fact sheet on the subject and in individual cases checks the platforms for legal compliance. If a platform operates mainly in the financial sector, receives public deposits on a commercial basis or publicly recommends doing so, it has a duty to obtain authorization under the Banking Act. That is the case, for example, if the crowd's funds are temporarily held in accounts belonging to platform operators for a specific period. However, if the platform operates purely as an intermediary and the funds flow directly from the crowd to the funding seeker, the platform does not normally require FINMA authorization. In view of the lack of specific standards in this case (as is the case with corporate financing), however, the question of banking approval does arise for the funding seeker. Because the investment opportunity is advertised on the internet and therefore accessible to the public at large, this constitutes a public offer with the result that in principle there is a prospectus requirement. Following the increased emergence of crowdfunding platforms in Switzerland, the legislature will therefore be forced to draw up special rules.

Measured regulation is essential

With appropriate overall legal and regulatory conditions, crowdfunding is a model that can in principle also be used in Switzerland. Here the regulator needs to ensure appropriate protection for small investors, though without making crowdfunding unprofitable for platforms due to the regulatory costs incurred. The first two and thus far only properties in Switzerland to be successfully financed using crowdfunding constitute the basis for coming projects. In light of developments abroad and the exponential growth in crowdfunding, the expectation is that additional players will move into the Swiss market and successfully fund their own projects.

Rental apartments

Supply galloping ahead of demand

Fund investors can currently achieve a dividend yield that is three percentage points higher with investment properties than with ten-year Swiss sovereign bonds. It therefore comes as no surprise that widespread investments in the construction of new rental apartments are taking place – regardless of what is happening on the demand side. Rising vacancy rates are currently also not deterring investors from developing housing projects as the low interest environment is not leaving them any alternative. It is therefore important to keep track of what is happening on the demand side of the rental market for housing. We have accordingly carried out a detailed analysis of the drivers of demand as they ultimately define which direction the rental market for housing is set to take in the next few quarters.

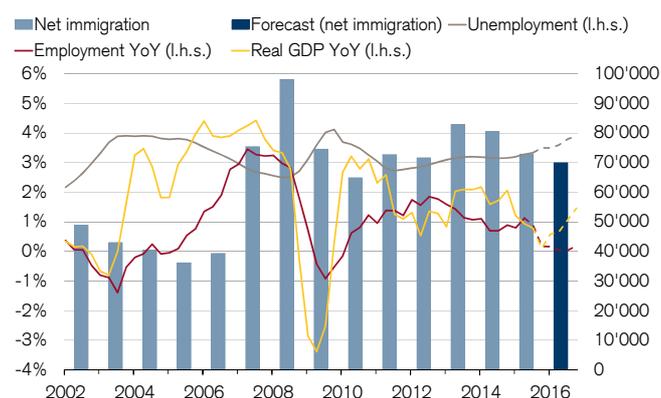
Demand: More robust the lower the price segment

2016: Renewed downturn in immigration

Immigration still remains the core driver of demand for rental apartments. In recent years, net immigration, which averaged 78'000 persons between 2007 and 2014, has ensured high housing absorption particularly in the urban centers and their environs. Immigration weakened further in 2015 after a slight decrease in the balance of migration (–2.9%) was already recorded at the end of 2014 (Figure 22). At an estimated 73'000 immigrants (including Swiss citizens), immigration fell more sharply in 2015 (–9.5%). The surprisingly robust employment growth despite the franc shock (+1.1% in the first half of 2015) prevented an even greater downturn. In view of the setback in the economy due to the strong franc over the past year, we expect a stagnation of employment and a rise in the unemployment rate in 2016. There will accordingly be a lack of key growth momentum for immigration in 2016 so that we therefore anticipate a further decrease in net immigration to a level of around 70'000 persons. Lower forecasts are not plausible not least due to the rising number of persons granted refugee status.

Figure 22: Net immigration and economic situation

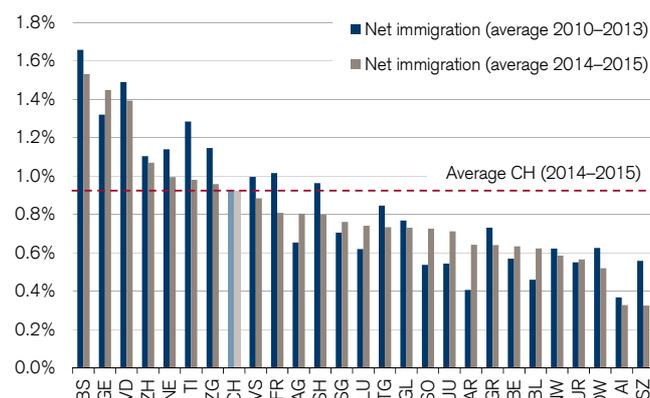
R.h.s.: Net immigration of permanent resident population (excluding register corrections, including net outward migration of Swiss citizens) and forecast net immigration



Source: State Secretariat for Migration, Swiss Federal Statistical Office, State Secretariat for Economic Affairs, Credit Suisse

Figure 23: International net immigration by canton

Permanent resident foreign population, including changes of status and register corrections (November 2015), as % of permanent resident population



Source: State Secretariat for Migration, Credit Suisse

Trend to a more balanced distribution of immigration across the cantons

The cantons benefit to different degrees from the influx from abroad (Figure 23). In the cantons of central Switzerland and in Appenzell Innerrhoden, annual net immigration in 2014/2015 accounted for less than 0.6% of foreign population, while nationally the share came to 0.9%. The urban cantons of the City of Basel (1.5%), Geneva (1.4%), Vaud (1.4%) and Zurich (1.1%) exert the strongest appeal to new residents from abroad. Compared with the period from 2010 to 2013, these traditionally strong immigration cantons (with the exception of Geneva) have on

balance recently recorded somewhat fewer immigrants, while cantons such as Aargau, Jura, Solothurn, Appenzell Ausserrhoden and Basel-Landschaft have made gains. This will be explained on the one hand by the higher rents in the urban centers and on the other hand by changes in the structure of immigrants. The latter in turn depends on the sectors in which immigrants find work. At 47%, employment remains the most important reason for immigration although it has fallen by 2.3 percentage points compared with the previous year. More immigrants found work over the past two years above all in the planning, consulting and IT sector (totaling 23%) and in education (7%). Immigrants are helping to mitigate the partial shortage of skilled labor in these sectors. By contrast, they were less in demand in the construction and financial services industry.

Fewer Europeans, more Asians

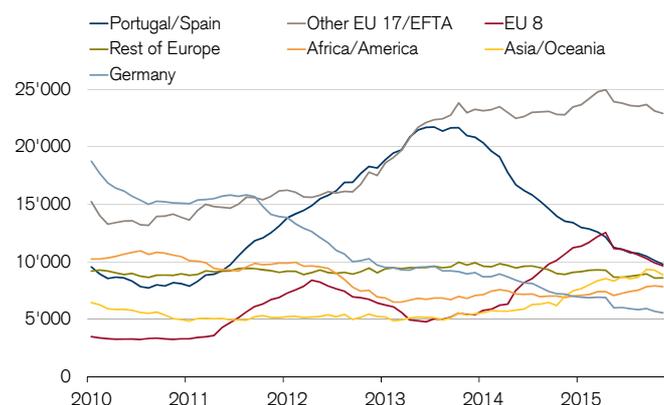
Falling immigration figures from the predominant countries of origin so far are responsible for the slowdown in immigration (Figure 24). Particularly the flow of immigration from the Iberian countries is subsiding further, and the temporary wave of migration from the eight new Eastern European EU member states has also been abating since the spring of 2015. A further flattening can also be observed in net migrations from Germany, while the balance of migration with the other 17 EU and EFTA countries is also likely to have passed its peak. The decrease in European migration reflects the positive development of the labor markets in many countries of origin. On the other hand, a positive trend can be observed for immigration from America, Africa and above all Asia. Immigration from the latter region has risen from 5500 in 2013 to 8900 in present (moving 12-month total as per November 2015). However, this will barely comprise an increase in labor migration as the Federal Council reduced the quotas for skilled labor from third countries by 2000 residence permits for 2015. The sharp rise in immigration from Syria is particularly noticeable. While in 2014 15% of net migration from Asia was attributable to this country, this had already gone up to 19% in 2015 (as per November 2015). Immigration from India has also increased considerably (from 8% to 11%). By contrast, the share of migrants from Sri Lanka, the Philippines, Iraq, Afghanistan and Japan has fallen.

Training and education and asylum gaining importance as reasons for immigration

A new development is the sharp rise in immigration with the purpose of seeking asylum. Altogether, 3.7% of immigrants in 2015 comprised recognized refugees newly recorded in the statistics for foreigners (2007–2014 average: 1.7%). This trend is set to gain further strength in the current year. As well as the motive of asylum, education and training also made significant gains as a reason for immigration in 2015 and rose to 10.9% (+1.9 percentage points). Meanwhile, family reunions (31%) remain the second most frequent reason for immigration.

Figure 24: Net immigration by origin

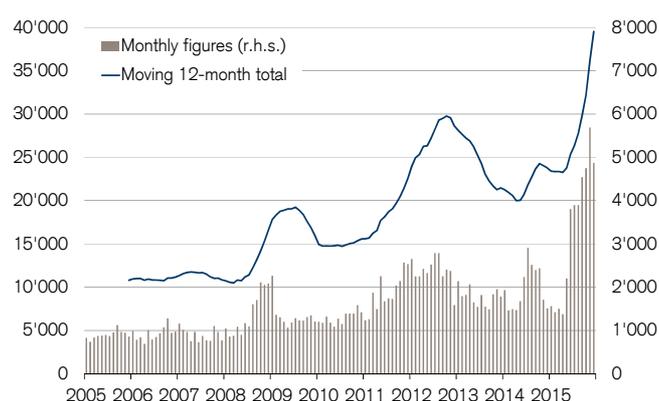
Including change of status, moving 12-month total



Source: State Secretariat for Migration, Credit Suisse

Figure 25: Number of asylum applications

Monthly figures (r.h.s.) and moving 12-month total



Source: State Secretariat for Migration, Credit Suisse

European refugee crisis could keep immigration high for years to come

There have been repeated changeovers between the countries of origin with the highest growth rates in recent years. The German wave of immigration was replaced in 2012 by that from the Iberian Peninsula which was followed in 2014 by a rapid increase in the number of immigrants from the eight new Eastern European EU member states. And the falling influx of labor migrants is likely to be offset in the future by the influx of refugees. Not only the conflicts in Syria, Afghanistan and Iraq, but also the repression and poverty in various African countries have triggered a wave of refugees coming to Europe that has not been seen on this scale at least since

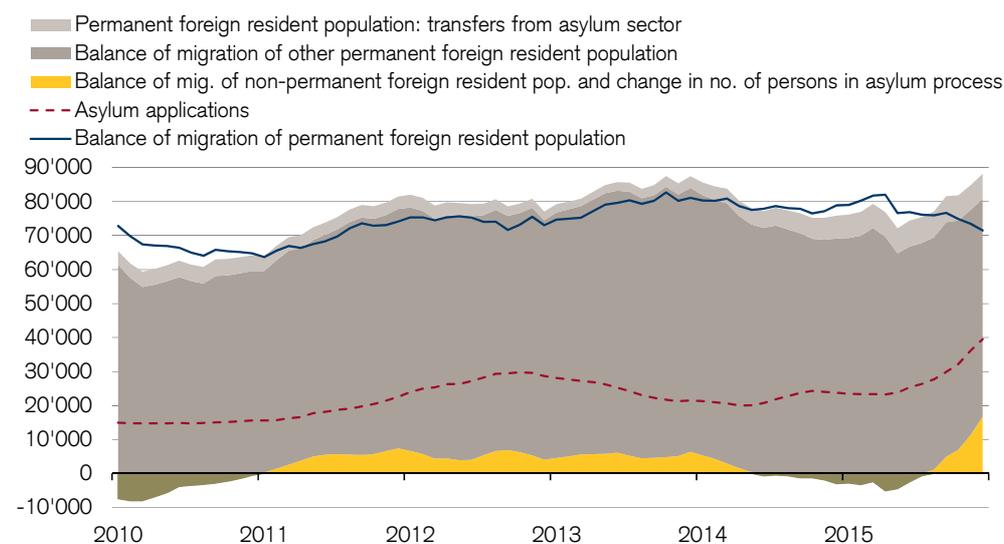
the 1990s. According to the United Nations High Commissioner for Refugees (UNHCR), over a million refugees came to Europe in 2015, the vast majority via the so-called Balkan route. Some 480'000 asylum seekers have arrived in Germany alone. Various European countries have been overstretched by this influx, with the result that borders have been closed and conflicts between countries and in some cases xenophobic tendencies have arisen. Switzerland initially appeared not to play any central role as a target destination of these refugee flows. However, the number of asylum applications then also rose markedly in Switzerland in the second half of the year (Figure 25). At the end of 2015 the 12-month total of applications was 66% up year on year. We estimate the total number of asylum applications received in 2015 at around 40'000. This is the highest figure since the Kosovo conflict back in 1999. As there can be no talk of any easing of tension in the crisis hotspots, a large inflow of refugees must also be expected in 2016.

Housing demand of asylum seekers only partially recorded statistically

The recent increase among asylum seekers is barely reflected in the 2015 foreign population statistics that we draw on to estimate migration and demand for rental accommodation respectively (Figures 22–24). Only asylum seekers recognized as refugees are recorded in the statistics for foreigners of the State Secretariat for Migration (SEM). Asylum seekers and temporary refugees are not included, not even if they have already been living in Switzerland for more than 12 months (unlike the migration statistics of the Federal Statistical Office). According to the SEM, the ordinary extended asylum procedure lasts around a year. The most recent wave of immigration is therefore only likely to result in a higher number of recognized refugees in the statistics in 2016 and 2017 and thus to offset the declining economically motivated immigration trend.

Figure 26: Overall picture of net immigration of foreign resident population

Moving 12-month total, including register corrections



Source: State Secretariat for Migration, Credit Suisse

No fall in immigration when taking into account asylum seekers

The statistics for foreigners of the SEM thus take too little account of the growing number of asylum seekers. We have therefore attempted in Figure 26 to provide a picture as complete as possible of the net migration of the foreign resident population. To this end the balance of migration of the permanent foreign resident population has been supplemented by that of the temporary foreign resident population and the inventory changes in the asylum process according to the asylum statistics. This shows that total immigration at the end of 2015 was around 16'700 persons higher than the balance of migration of the permanent foreign resident population. There has effectively therefore been no downturn in immigration.

2016: Total immigration to remain at the current level

Owing to the high number of expected asylum applications and temporary refugees, the transfers from the asylum sector (positive asylum decision) into the permanent resident population and the portfolio of asylum seekers are set to rise markedly in 2016. The existing forecast of 70'000 immigrants (permanent domestic and foreign resident population including growth in number of recognized refugees) therefore falls short of the mark. The increase in the number of asylum seekers and temporary refugees must be added to this. Owing to the high protection rate at present, some of them are likely to settle in Switzerland permanently and generate demand in the medium term on the rental housing market – even in the case of just provisional admittance (Permit F). An isolated consideration of the statistics for foreigners accordingly underestimates the future demand for housing. We address the features of this additional demand for housing (especially the rental price segment) in the section on direct real estate investments (cf. page 67 et seq.).

Mass immigration initiative remains an unknown quantity

The greatest uncertainty factors regarding the medium-term development of immigration remain the implementation of the mass immigration initiative and its consequences for the relationship between Switzerland and the EU. The Federal Council announced its intention in December 2015 to control immigration by means of a safeguard clause. It would be able to make unilateral recourse to this if the negotiations with the EU failed to produce a satisfactory outcome. We continue to expect the EU not to renegotiate the Agreement on the Free Movement of Persons. However, we also do not expect a termination of the Agreement on the Free Movement of Persons and the bilateral agreements in the event of a unilateral adoption of the safeguard clause. Furthermore, an adoption of the safeguard clause in 2017 would not result in the imposition of quotas on immigration until 2018 (if the threshold is exceeded). Having said this, the quotas ought not to be too strict if termination of the Agreement on the Free Movement of Persons is to be prevented.

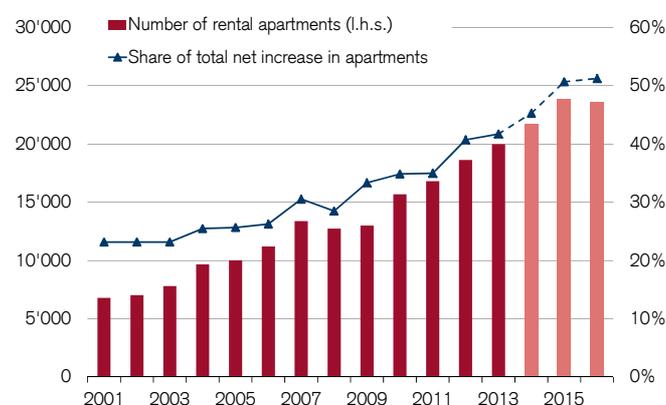
Supply: No end to the construction boom in sight

2016: Continuation of rental apartment construction at a high level

The last few years have been shaped by a strong expansion in the number of rental apartments. The annual net addition of rental apartments has risen continuously since 2009 and amounted to around 24'000 residential units in 2015 (Figure 27). We expect a sideways movement at this very high level for 2016. The share of rental apartments in housing construction as a whole should remain above 50%. The key driver remains the investment crisis caused by the low interest rates that is prompting institutional investors in particular to invest in rental apartments (cf. direct real estate investments page 67 et seq.).

Figure 27: Net addition of rental apartments

Rental apartments: Number (l.h.s.) and share of total net addition (r.h.s.); 2014–2016: Estimate/forecast



Source: Credit Suisse, Swiss Federal Statistical Office, Baublatt

Figure 28: Apartment construction by type of municipality

Share of building permits by type of municipality as % (l.h.s.), moving 12-month total of building permits and planning applications (r.h.s.)



Source: Credit Suisse, Baublatt, Swiss Federal Statistical Office

Compared with the returns on sovereign bonds on the capital market, real estate returns still remain attractive despite yield compression and limited rental income potential (due to constant base rate, rising vacancies). Most of the capital is flowing into new developments. The rising number of large building complexes in excess of 50 residential units bears witness to the high

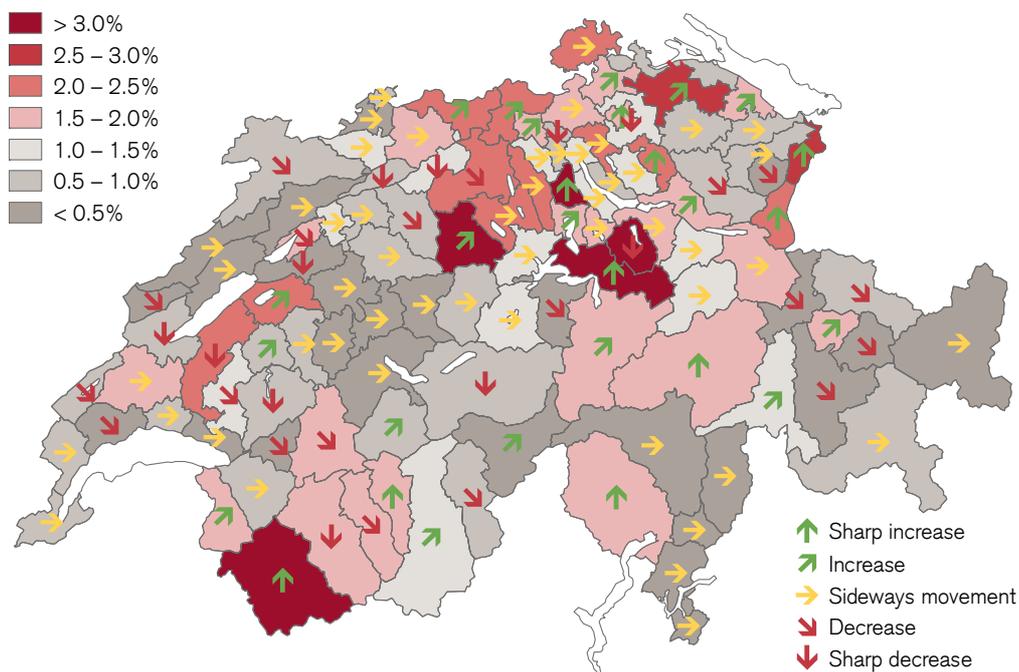
investment activity of institutional investors. The ongoing phase of low interest rates in Switzerland and the development of planning applications (Figure 28) suggest that the construction of rental apartments will also attract a lot of capital after 2016 and that around 24'000 rental apartments will continue to be built annually in the future.

Regulation partly to blame for geographical imbalance

The construction boom was for a long time considered a welcome response to the high immigration and lack of housing in the urban centers. While immigration has now slowed down somewhat for the time being, the situation on the rental housing markets in the urban centers has only eased partially (cf. market outcome). The reason for this is an imbalance between supply and demand. Demand is strongly focused on the urban centers and their environs. The lack of building land, rigid construction laws and resistance toward a continued concentration in the urban centers – one need only mention the new Zurich Building and Zoning Ordinance (BZO) – have forced rental apartment construction out of the urban centers into the peri-urban and above all rural areas (Figure 28). However, this tendency has not intensified further since 2014. Figure 29 shows the regional hotspots for expected rental apartment production which lie around the Greater Zurich area and in the St. Gallen Rhine Valley. The expected expansion in Western Switzerland is less pronounced. The focal points here lie in Valais and the Vaud hinterland. In order to ensure a sufficient supply of housing in the urban centers in the longer term, the incentives for investors need to be improved. A focusing of construction laws on increased high-quality utilization, more upward rather than sideways building and the rezoning of commercial properties could serve to provide the urgently needed residential properties in the places where they are in demand. This is all the more urgent in view of the fact that the revised Federal Act on Spatial Planning strongly impedes rezonings on greenfield sites. The ball here is now in the court of the cantons and municipalities.

Figure 29: Expected expansion of rental apartment stock in 2016

Expected expansion as % of total number of rental apartments; arrows: trend in comparison with previous year



Source: Credit Suisse, Baublatt, Geostat

Market outcome: Move toward a tenant's market

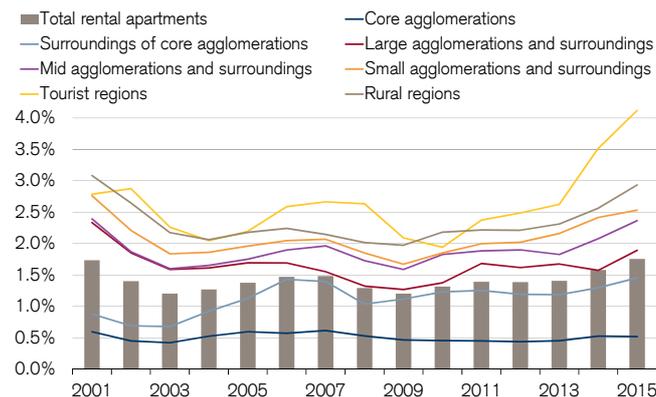
Rental accommodation market becoming more liquid

A continued high level of rental apartment construction contrasts with lower demand in terms of purchasing power if not in terms of numbers. Particularly outside the urban centers, demand is no longer able to keep pace with supply. Another marked increase in the vacancy rate was accordingly recorded in 2015 (by 0.18 percentage points to 1.76%, Figure 30). Vacancy rates in rural regions have risen even more sharply than in the previous year and now reached 2.9%, while regions close to the urban centers are also increasingly affected by an oversupply. Vacancy rates have likewise increased further in small (2.5%) and medium-sized agglomerations (2.4%)

and their surroundings, and unlike in previous years an easing of the market was also observed in the large agglomerations of Lucerne, Lugano and St. Gallen/Rorschach. The overall vacancy rate here is 1.9%, and in the St. Gallen/Rorschach region it even amounts to 3.1%. The easing of the markets is thus spreading from the rural regions, where we are increasingly talking about an oversupply, toward the urban centers. By contrast, housing in the regions of the five Swiss major centers themselves (referred to in Figure 30 as 'core agglomerations') remains a scant commodity – particularly in the lower price segments. Altogether the vacancy rate remains in these agglomerations at a low 0.5%. The housing shortage has only improved slightly in the City of Basel, although starting from a very low level (from 0.24% to 0.4%).

Figure 30: Vacancy rate by type of area

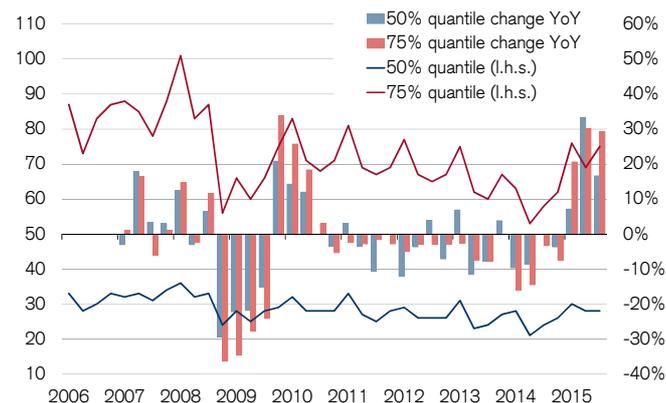
As % of number of rental apartments (estimate) as per 1 June



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 31: Time on market for rental apartments

Time on market (in number of days) of advertised rental apartments



Source: Meta-Sys AG, Credit Suisse

Increasing time on market also signaling easing

Alongside the vacancy rate, the number of days on the market also provides information about the situation of local and regional markets. The number of days on the market – also referred to as "time on market" (TOM) – measures the time period during which rental housing is advertised on online platforms. An increase in the number of days on the market points toward a relative drop in demand or a rise in supply. It can be seen from Figure 31 that as with residential property (cf. page 13) there is a lot of variation in the number of days on the market as it essentially depends on the property features and the regional market environment. In the third quarter of 2015, the median time on market (50% quantile) throughout Switzerland was 28 days. This means that it was possible for an apartment to be successfully let within 28 or fewer days in 50% of cases. In another 25% of cases the number of days on the market lay between 28 and 75 days (75% quantile) and the remaining 25% of advertisements were online for longer than 75 days. Compared with the previous year, these values represent a marked increase in the time on market of four days in the 50% quantile and 17 days in the 75% quantile.

Intact absorption around the major centers, in Central Switzerland and in the Lake Geneva region

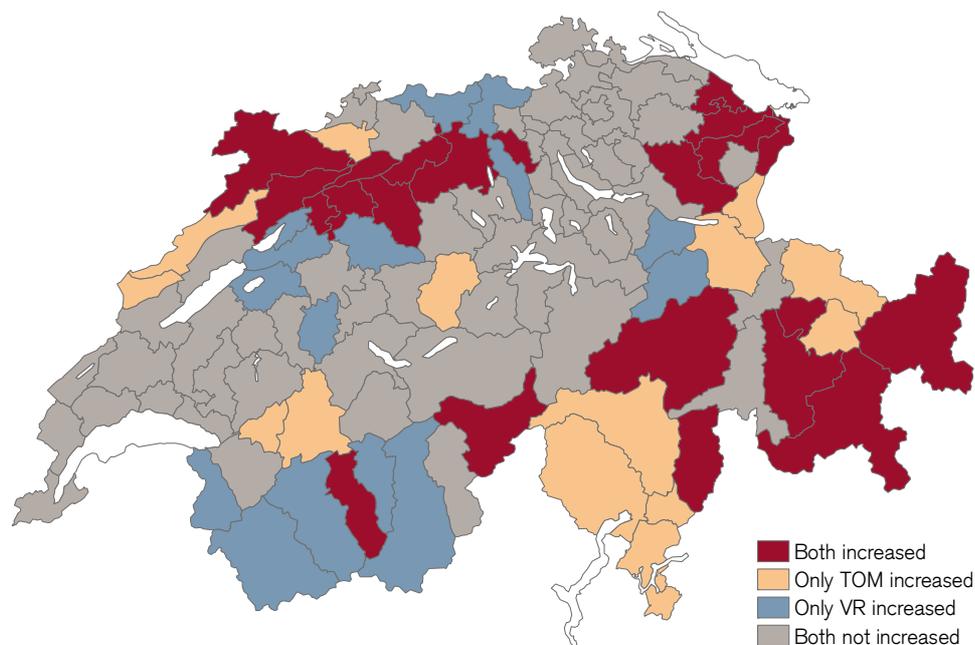
Throughout Switzerland as a whole, the vacancy and time on market trends are thus pointing in the same direction and unanimously signaling an easing of the market. A comparison of the two indicators can also be instructive for assessing the market situation at regional level (Figure 32), such as for identifying an oversupply. In the gray colored regions of the map, neither the vacancies nor the number of days on the market are up. In terms of oversupply risks these regions can currently be considered unproblematic as neither of the two indicators are pointing upwards. These regions include all the major centers and most of the adjacent regions as well as the entire Lake Geneva region and Central Switzerland. Further regions (colored blue) have an increased vacancy rate but do not stand out in terms of time on market. This constellation can suggest that a lot of new apartments are coming onto the market that on the key date for the vacancy survey were still vacant while at the same time the advertised properties are relatively easy to find tenants for. However, it is also conceivable, for instance, that apartments in poor condition that have already been empty for some time are no longer being advertised. This category accordingly comprises both regions with low population dynamics (e.g. Canton Glarus and Schwarzwasser) and regions with a high level of construction activity (e.g. Lower Valais and Freiamt).

Limited demand in rural regions

Finally, the yellow colored regions have relatively moderate vacancy rates but an increased time on market – a typical constellation for rural regions with small housing markets. These regions generally have a higher number of days on the market due to a comparatively low demand (e.g. Val-de-Travers, Entlebuch, Prättigau). This explanation cannot be applied to Southern Ticino. According to local market observers, the marketing difficulties here are largely limited to the high-price segment and to old properties with moderate locational quality.

Figure 32: Regions with increased vacancy rates (VR) or time on market (TOM)

Definition of "increased": TOM or VR lies in top third of all economic regions (TOM > 37 days, VR > 2.9%)



Source: Swiss Federal Statistical Office, Meta-Sys AG, Credit Suisse

Oversupplies in the north-western Swiss Plateau and in Eastern Switzerland

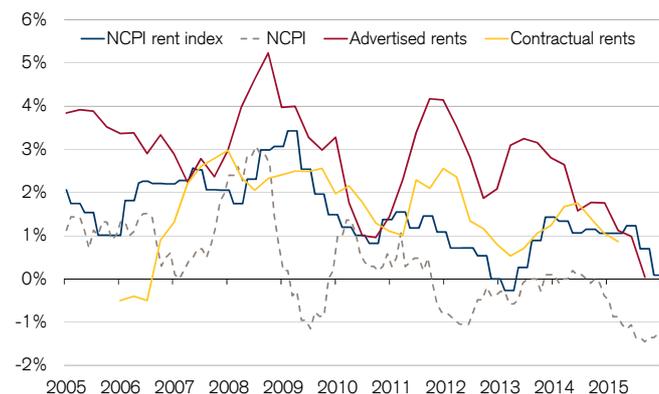
The red colored regions in Figure 32 contain the highest third of both vacancy rates and time on market among all the regions. Depending on the precise characteristics, an oversupply must be assumed on the rental housing market in these regions. Our analysis identifies three hotspots: a strip in the northwestern Swiss Plateau from the Aarau region to the Canton of Jura, the regions between Toggenburg and the eastern part of Lake Constance (excluding Appenzell Innerrhoden) and parts of the Canton of Graubünden. The spectrum extends here from rural regions with low demand to the regions surrounding smaller and medium-sized centers (e.g. Aarau, Olten, St. Gallen) in which very lively construction activity has been recorded in recent years with which demand has partially been unable to keep pace.

Growth in rents virtually halted

With vacancies on the rental accommodation market having risen sharply since 2013 and a marked increase in time on market over the past year, this development is gradually also starting to be reflected in rents (Figure 33). Both the growth of advertised rents and that of contractual rents and the rental components of the National Consumer Price Index (NCPI) displayed a downward trend in 2015. While advertised rents stagnated year on year, the growth of contractual rents came to 0.9% (as per the second quarter of 2015). Meanwhile, there was barely any further increase in the rent index of the NCPI (+0.1%). The illustrated rent indices comprise nominal values. If we add the overall NCPI, it becomes clear that the strong growth in rents in 2008/2009 was not only attributable to the strong immigration in 2008 but partially also to a short-term rise in the inflation rate. By contrast, this was not the case for the surge in rents in 2011/2012 which arose due to a housing shortage. However, the fall in the growth in rents in 2015 does not just reflect the gradual easing of the market. Other factors responsible are the inflation rate that at an average of -1.1% has slipped well into negative territory, and a further reduction of the base rate in June 2015 that triggered a widespread demand for rent cuts. No further change to the base rate is to be expected before the fall of 2017.

Figure 33: Rental indices in comparison

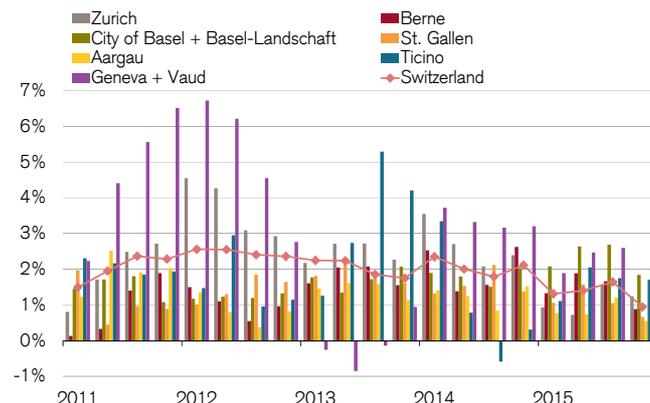
Annual growth (nominal), NCPI: National Consumer Price Index



Source: Wüest & Partner, Swiss Federal Statistical Office, Credit Suisse

Figure 34: Regional trend in advertised rents

Selected cantons, annual growth (nominal), adjusted for quality



Source: Homegate

Stabilization of rents also in the expensive regions of Zurich and Lake Geneva

Figure 34 shows that the trend toward a lower growth in rents is affecting almost all regions and that the differences between the regions are receding. An exception is formed by the two Basels where higher rent increases were recorded in 2015 than in the past. The decisive factor here will be the very scarce supply on the housing market of the City of Basel. Nevertheless, a decline of the growth in rents was also observed here recently. Rents also continued to rise by over 2% year on year in the cantons of Geneva and Vaud, although considerably higher growth rates have been recorded here in the recent past. There has been a significant slowdown of the growth in rents in the cantons of Zurich and Ticino.

2016: Development from a landlord's to a tenant's market will continue

The rental accommodation market has passed its peak and is still in the stabilization phase of the market cycle. This is reflected by the fact that rents have slowed down but are still increasing and the growth of supply remains unchecked. The combination of ongoing construction activity and at least qualitative falling demand should in 2016 cause the transition from a phase of stabilization to one of downturn gradually to set in. We anticipate a further increase in vacancies and expect the growth in rents gradually to come to a complete standstill. However, this process will only take place slowly as there are currently no signs of a collapse in demand. Falling rents should also remain the exception in 2016 and be limited to individual regions and the high-price segment.

Tenants benefiting from greater supply and stable rents

Outlook for rental apartments in 2016

Strong immigration will support the demand for rental apartments in 2016 too. Although the Swiss franc shock and improved economic situation in Europe are likely to reduce the number of economic migrants, the growing influx of refugees and regulatory-driven shift in demand from owner-occupied housing to rental apartments are increasingly important factors. Demand is therefore likely to remain stable in quantitative terms, although qualitative changes are expected in terms of the demand structure. Lower-cost apartments are in increasing demand, with potential tenants willing to compromise on specification and locational quality providing there is a minimum degree of accessibility. The continued, extremely strong growth in supply means a supply overhang is slowly but surely building up. The ongoing construction boom in rental apartments is down to the interest rate situation and associated dearth of investment opportunities. The latter factor is ensuring the unbroken popularity of residential investment properties as an asset class. The fact that the investment market is becoming increasingly decoupled from the end-user market is reflected in a constant rise in vacancies and time on market outside the urban centers. This trend is likely to become increasingly noticeable in the more outlying urban municipalities in 2016 too. In the urban centers, on the other hand, the tight supply of housing will improve only marginally. At national level, the amended Spatial Planning Act created the statutory basis for a spatial planning policy that is geared toward the sustainable use of land as a resource. However, the high level of construction-related regulatory density in many cities prevents significant densification given the lack of appropriate incentives. Supply in the cities is consequently unable to keep pace with demand in the long term. Rather than tackle the problem at its roots, increasingly frequent attempts are being made to cushion the impact of the home-grown shortage of housing by encouraging the construction of social housing. At any rate, new tenants in the urban centers too are likely to benefit from a further slowdown in rent growth in 2016. We also believe the upward trend in rents will come to a virtual standstill across the nation as a whole.

Demand, supply and market outcome

Demand	Background	Outlook
<i>Population trends:</i> Immigration from European countries is likely to fall again year-on-year in 2016. We expect another 70'000 immigrants, though this does not include any refugees whose status has not yet been recognized. The growing influx of asylum-seekers is likely to ensure that the demand for rental apartments remains stable overall, but increasingly shifts to the lower-price segments.	↘	↘
<i>Regulation:</i> Due to the high level of prices and tighter rules on mortgage lending, we continue to expect a slight fall in the domestic demand for owner-occupied housing. This will have a stabilizing effect on the demand for rental apartments.	↗	↗
Supply		
<i>Net addition to stock of rental apartments:</i> 2016 production will likely match more or less the high level of the previous year with the construction of around 23'000–24'000 new rental apartments.	↗	→
<i>Medium-term expansion plans:</i> Planning applications received in recent months suggest that production of rental apartments will remain high in 2017.	→	→
Market outcome		
<i>Vacancies:</i> We expect another significant rise in vacancies for rental apartments in 2016. Markets in the urban centers are likely to continue easing slightly. Excess supply is becoming less and less confined to rural areas and is increasingly an issue in the more outlying urban municipalities too.	↗	↗
<i>Rents:</i> The major expansion of supply is having a dampening effect on rent increases. All in all, we expect a very small increase in 2016. In expensive regions and in the case of high-specification apartments, we actually expect to see a slight fall in rents offered.	→	→
<i>Performance (total return):</i> We expect slightly lower total returns in 2016. Cash flow yields are likely to remain stable given that we expect rental income to flatline. However, the growth in prices for residential investment properties is likely to have peaked. Consequently, we do not expect a repeat of the capital growth rates seen in previous years.	→	↘

Source: Credit Suisse

Special focus: Digitalization

Digital revolution spreads to construction sector

The digital revolution of recent decades has brought far-reaching changes to a number of sectors. For instance, the manufacturing sector and financial industry of today bear little resemblance to how they were thirty years ago. Digitalization has triggered a structural change involving winners and losers. New companies and economic sectors have emerged, Silicon Valley being an impressive example. The effects of the new competition have been painful for companies that failed to adapt their business model in good time, such as in the music industry, media sector and tourism. By contrast, the construction process and work on building sites have seen very little significant change in recent decades. The digital revolution is set to hit construction as well over the next few years, however, resulting in a massive shake-up of existing processes and structures.

Swiss construction sector facing digital revolution

Fragmented structure and high workload preventing progress

Switzerland's construction industry is only at the start of a sweeping process of digitalization, whereas in other countries the digital revolution in the construction sector is already at a more advanced stage (Figure 36). Why is Switzerland so far behind? On the supply side, the highly fragmented structure plays an important role: The construction process consists of very different phases that in turn involve a large number of companies. In other sectors, the process of digitalization was often driven by global sector leaders. In Switzerland's case these are few in number due to the strong domestic orientation as well as the "distance protection" – a significant factor in the construction industry. Consequently, the Swiss construction sector is to a large extent sealed off from foreign influences. Another factor is the boom in construction activity seen in previous years. Despite dwindling margins, full order books ensured that rationalization measures and cost-cutting were not a vital priority for most firms. The influence on the part of customers on cost was likewise very limited. In addition, the high skill levels of specialists in Switzerland allow planning errors to be rectified at the construction site. The low willingness to accept change and the sector's fairly limited attractiveness to talents with an affinity for technology have also been a drag on developments.

Growing margin pressure will spur digitalization

The consequences of having stayed on the sidelines of the digitalization revolution thus far are a fragmentary exchange of information and accompanying information loss. This prolongs the planning phase but also contributes to errors in planning and construction, costing time and money. Over the next few years, however, margin pressure is likely to increase again significantly in the construction industry. Since the construction boom will have peaked, the remaining customers will be able to exert greater pressure on prices. Lower order volumes will force the sector to work more efficiently and cost-effectively. The adoption of additional regulations will also increase the complexity of construction, thereby favoring digitalization. These challenges will significantly increase the pressure to innovate.

Laggard position reflected in minimal progress on productivity

Although the construction sector ranks fourth among all Swiss sectors based on gross value added (2013: CHF 32.2 billion), its labor productivity is below average. Among the eight sectors with the highest value added, it came in last place in 2013 with value added per full-time equivalent of CHF 96'494 (in 2010 prices), behind the retail trade (Figure 35). Because of insufficient innovation, labor productivity in the construction sector has grown at a below-average rate (0.3% p.a.) versus the economy as a whole (1.1% p.a.) since 1997. Furthermore, the growth that was achieved is rather due to the integration of more productive tertiary services (e.g. real estate development) in the construction sector than to improved efficiency at the construction site.

BIM as cornerstone of digitalization

Digital representation of the future building

Building information modelling (BIM) constitutes the first step toward the digitalization of the construction sector. The building information model is a digital representation of the building, including all its elements. Unlike technical drawing or computer-aided design (CAD), the focus here is on the modeling of objects. Attributes such as material, weight and manufacturer are in turn assigned to individual objects (3D BIM). A significant advantage is that various properties of the building such as lighting, structural resistance, heating and requirements for escape routes can be tested directly on the model. Material requirements can also be calculated using BIM. By assigning a construction time to each object (4D BIM), the delivery of materials and use of labor can also be planned precisely and the developer is better able to assess the work progress. Where costs are assigned to the objects in the model (5D BIM), the new costs can be estimated directly when changing the model.

Simplified exchange of information between participants during the construction process

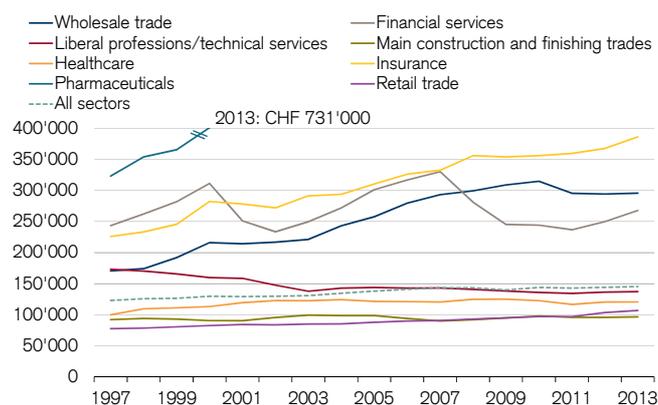
When using BIM, information is exchanged between the various disciplines in two ways. In the initial phase of implementation, the software is used internally and data is exchanged in the conventional way ("little BIM"). It is estimated that more than one fifth of architects use BIM in this way; among specialist planners the proportion is likely to be considerably higher owing to the more complex tasks. The differences within the sector are considerable: Larger and integrated companies have introduced BIM on an extensive scale, whereas smaller firms have not yet recognized the need for implementation. However, the full power of BIM can only be exploited when the models of the various disciplines are linked together ("big BIM"). These individual models (architecture, supporting structure, installations, etc.) are brought together to create an overall model representing a digital representation of the future building. In Switzerland, BIM has so far been used at this level for only a few large projects, e.g. the Roche skyscraper.

Other countries significantly more advanced

Implementation of BIM is at a considerably more advanced stage in other countries (Figure 36). More than half of all construction-sector operators in the US deploy BIM on an intensive basis, and the share is continuing to grow. The pioneers in Europe are the UK and the Nordic countries. In the case of the latter, BIM is currently used in around 70% of projects. These countries also require BIM to be used in public buildings, thereby strongly encouraging the spread of BIM. Similar rules are likely to be introduced on a Europe-wide basis soon. In Switzerland's case, standardization has so far been limited to the creation of BIM guidelines; there are no plans for a statutory provision. Unlike abroad, implementation of BIM in Switzerland is driven not by the authorities but by a few industry leaders.

Figure 35: Labor productivity per employee

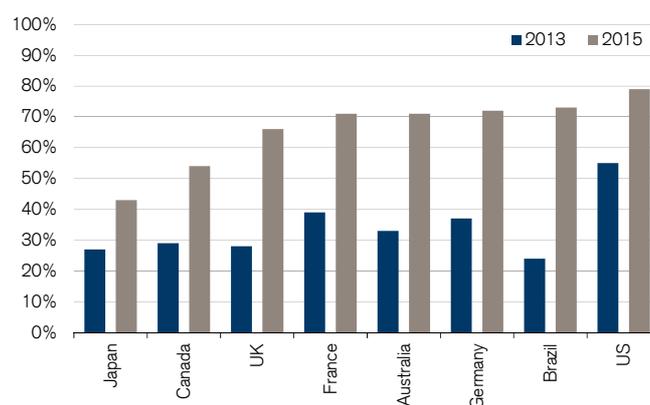
Labor productivity in CHF per employee (full-time equivalent), eight sectors with highest value added



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 36: BIM integration abroad

Countries with companies that exhibit a high degree of BIM integration



Source: "Business Value of BIM", SmartMarket Report, 2014

BIM is an element of process change

But the introduction of BIM is more than just the use of new software: Fact is, BIM is an element of the digitalization of the entire value chain. An exchange of information via a shared model requires closer and earlier cooperation between the parties involved. Accordingly, greater effort is required early on in the design phase and not – as is the case in the traditional construction process – during the final construction documentation and tendering stage (Figure 37). This should be seen as positive, since the more advanced a project the more

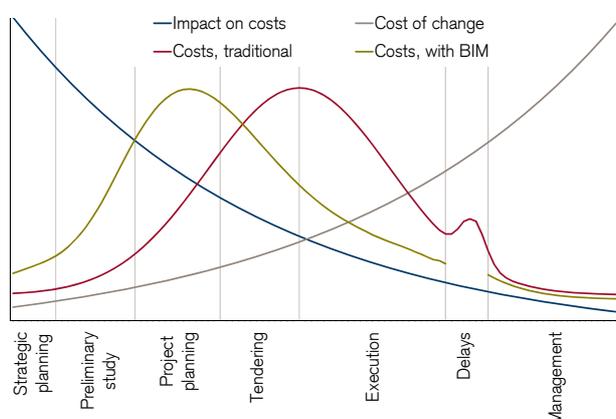
difficult and expensive it becomes to make changes. Digitalization necessitates a redefinition of processes within the business. These processes must be more closely geared to collaboration and the handling of digital data.

Digitalization reduces costs through time savings and better information flow

The cost and time savings realized through BIM are mainly down to a better flow of information between the parties. For example, sub-contractors and suppliers are included in the process at an earlier stage, meaning fewer time-consuming changes to plans prior to the start of construction. The owner also has a more precise idea of what it will receive, when he will receive it, and at what price. The model also enables the complexity of a project to be handled better, as construction errors can already be identified from the model (Figure 38). In the UK, the hope is that full implementation of BIM will shorten the construction and planning process by up to half. In purely financial terms, the use of BIM should generate savings of up to one third. It is with major projects that the advantages of BIM really come into their own. It will undoubtedly be worthwhile using BIM in smaller projects too, although this requires wider adaptation.

Figure 37: Construction process – traditional and BIM

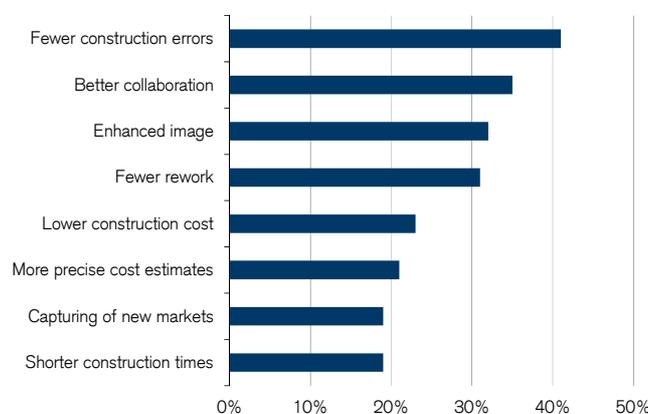
Schematic illustration



Source: BIM Guidelines for Germany

Figure 38: Most frequently cited benefits of BIM

Share of respondents (in industrialized countries, excluding Switzerland) citing each point as one of the three most important benefits



Source: "Business Value of BIM", SmartMarket Report, 2014

Introduction slowed by cost and corporate culture

Extensive digitalization is impeded by its high introduction cost and the high degree of capacity utilization in the construction sector. Smaller firms face a high hurdle, given that they have to cope with the task in parallel with their current operations. Whether the process succeeds depends above all on a firm's ability to adapt and openness toward innovations. Introduction is being slowed by the culture within the Swiss construction sector. Many firms are run by a generation that has little affinity with technology. A radical rethink needs to take place within such firms – or new companies with disruptive technologies will take over the market.

The building site goes digital

Robotics, networking and prefabrication as a second step

Digitalization will not stop at the planning process, especially as there may be even greater potential for digitalization at the construction site itself. BIM can be used to improve monitoring and management of the construction process. Augmented reality could be used for better visualization of the model at the building site. This enables installers and construction managers to view the finished building with all installations on site. The networking of work tools with the model opens up further opportunities. First, construction machinery can work exactly in accordance with the requirements of the model. Second, enhanced monitoring makes it easier to control and optimize capacity utilization. In addition, material can be delivered to the construction site just in time. The next step toward the "Internet of Things" is the use of drones and robots that work with the model on an autonomous basis and report back to it on the progress of construction.

Long-term development toward a "construction industry 4.0"

Another possibility is the automation and digitalization of the process of manufacturing components, a step that occurred years ago in automotive manufacturing. The decentralized storage of information has prevented automated prefabrication until now. Thanks to the digital model, however, mass customization becomes possible. The use of 3D printing is ideal here, since this technology can manufacture structural elements in accordance with model requirements. The printing of entire houses on the construction site is unlikely to be the way forward, however. What's more likely is that wall elements, for instance, will be printed in the factory and equipped with the required pipework and installations. Work at the building site will then be confined to the assembly of these elements. In future, therefore only assembly personnel will be needed at the construction site. The industrialization of production is also likely to result in a reduction in construction errors. How quickly and to what extent prefabrication takes hold, however, depends above all on the potential savings compared with traditional on-site production. But thanks to scale effects, the factory is likely to produce more quickly, cost-effectively and accurately.

Four hypotheses on the construction of tomorrow

The digitalization of the Swiss construction sector is not yet very advanced. Nevertheless, there is no doubt that it can no longer be stopped and that in the long term it will fundamentally alter the construction process and market structure. Below we present four theses on these changes:

1. Market structure is shaken up

Extensive implementation of BIM is likely in Switzerland within the next five years. For companies that have not yet taken any steps in this direction, it means they will need to demonstrate flexibility in this regard in the near future. Not all of them will succeed: As a result of growing pressure on margins and the cost advantage enjoyed by competitors, some players will be squeezed out of the market.

2. Value chain shifts away from the building site

Digitalization will trigger changes in the value chain. For firms involved in planning, a greater focus on this phase will enable them to generate more value added. Value added will increasingly shift from the construction site to the planning process and in the longer term to specialized manufacturers of prefabricated elements as well. Since production does not necessarily have to take place on site, a further shift in value creation to other countries would also be possible. Due to the rising value added intensity, productivity in the construction sector is also likely to increase significantly and make up for lost growth.

3. New requirements on employees

Digitalization requires new skills and triggers a change in career paths. Demands increase in the planning phase: Greater competency in the use of digital technology is required. Due to intensive cooperation, new professions will emerge in the coordination area. At the construction site itself, on the other hand, fewer personnel will be required in the long term due to prefabrication. The requirements on installers at the construction site will also change: Whereas the focus until now has been on craft-type skills, in future the ability to use the digital tools provided will be in greater demand.

4. Real estate investments become less risky

A reduction in construction times and better cost control will reduce the risks of project development and make it more attractive. Due to a shortening of the overall construction process, supply could converge with demand in the longer term. The likelihood that the market environment will change for the worse before the construction project is completed is therefore reduced. The time saved in the planning and construction process as a result of digitalization could easily ensure that the "pork cycle" in the real estate sector becomes less pronounced in future and that excess supply can be reduced. The risk of objections and other legal delays will continue to exist, however.²

² We wish to thank Peter Scherer (Digital Construction Switzerland) as well as Dr. Jörg Kaiser (Implenla), Alar Jost (Implenla) and Dr. Christian Kraft (Implenla) for their valued assistance with this article.

Office property

Falling demand exacerbating cut-throat competition

Despite the moderate economic growth of the past few years, the office property market has shifted to a position of oversupply. The focus is therefore being directed toward the demand side as it is only from there that the balance can be reestablished. However, we are unable to offer much hope, particularly since structural changes are shaping events. Not only are important customers such as the financial services industry in Switzerland struggling with a new starting position but the entire service sector is facing new challenges owing to the digital revolution. The transfer of certain administrative support functions to low-wage countries due to digitalization (offshoring) is a comparatively recent although not entirely new phenomenon for the service sector. However, digitalization also offers opportunities, which is why all in all investors shaken by negative interest rates are not reducing their investment activity further but shifting it regionally. On balance, however, the cut-throat competition is not set to subside.

Demand: Few rays of hope

At 0.7%, employment in Switzerland grew somewhat more modestly in 2015 than in the previous year. The service industries achieved high growth rates. Particularly telecommunications and IT as well as healthcare have seen strong expansion in the past five years averaging at over 3% per year (Figure 39). In absolute terms, notably healthcare and education, followed by IT, corporate services and the wholesale trade contributed to growth. Healthcare and education alone recently accounted for more than half of the entire annual increase in employment. Although employment in IT decreased in 2015, we consider the industry, alongside public³ and social services, to be that with the best growth prospects. We expect the number of employees in Switzerland only to rise by a marginal 0.1% in 2016. Declines are expected in the construction industry (-0.5%), manufacturing (-1.2%) and most of all in the catering industry (-2.9%). As in the past two years, above all public administration and healthcare and social services are set to grow. The demand for services of the aging society and the associated growth of these sectors will lead to an increasingly one-sided pillar of employment growth.

These employment prospects do not bode positively for office space demand even if the falls in employment are not predominantly expected in the typical office-based sectors. According to our estimates, demand for office space increased by around 300'000 m² in 2015 (Figure 40). Government agencies in particular have been grateful recipients of office space over the past year, with demand driven primarily by public and social services. We only expect marginal additional demand for office space of around 10'000 m² in 2016, which is equivalent to stagnation. While the state-oriented sectors will continue to generate solid growth of some 150'000 m², the general lack of impetus from other sectors will drag overall demand downwards. In the industrial and construction sector the ongoing tertiarization triggering an additional requirement for office workplaces is merely capable of offsetting the decline in the demand for office space resulting from the fall in employment. There is also no additional demand for office space to be expected from the typical office-based sectors in 2016. Owing to the uncertainties concerning Corporate Tax Reform III (CTR III), the offshoring of jobs to low-wage countries and the structural changes in the financial services sector, employment in the typical office-based sectors is set only to grow by a meager 0.4%. Moreover, as modern working practices (desk-sharing etc.) and the more flexible working opportunities brought about by digitalization (e.g. home office) are facilitating a more efficient use of office space, no additional demand is resulting despite a slight growth in the number of jobs.

Employment growth is becoming weaker and focusing on healthcare and education

Stagnation of demand for office space in 2016

³ Includes all state-oriented sectors, above all healthcare, education and public administration.

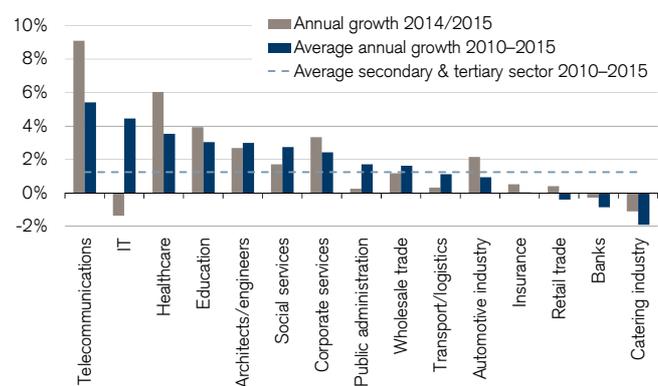
Consolidation in the financial services sector reducing demand for office space ...

One characteristic of the recent cycle of office space demand is the lack of demand from the financial services sector. There is also barely any growth momentum to be expected in the near future. On the contrary, the consolidation of the sector is progressing further and leading to a decline in the demand for office space. With the automatic exchange of information from 2017, banking secrecy will be finally abolished for most foreign clients so that structural change continues. According to the Swiss National Bank, the number of banks in Switzerland already fell from 282 to 241 institutions between 2008 and 2014, with foreign banks in particular reducing their presence in Switzerland in recent years. The number of employees in Switzerland has fallen by 5.5% since 2008 to 104'053. The tightened regulatory provisions have served to contain the decline in employment as the banks have had to hire additional staff to cope with the massive increase in the regulatory burden. This has made it impossible for many financial services providers to adjust costs to the fall in earnings. Above all independent asset managers, private bankers and smaller banks are facing a massive deterioration of their cost-income ratios which is set to result in increased consolidation and further job losses. The private bank Hottinger (insolvency) and the Valartis Group (debt restructuring moratorium) are among the most recent victims.

... and the number of branches

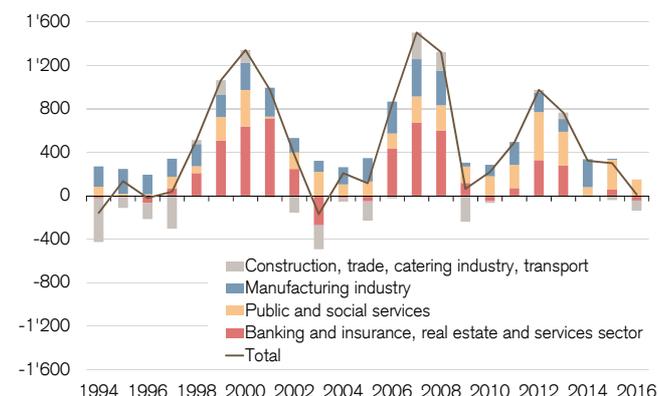
Not only the amount of office space but also the number of bank branches is decreasing continuously. There were 2937 bank branches in Switzerland in 2014 – 223 fewer than six years before. With an average office space requirement of around 250 m² per branch, this equals to a reduction in the demand for office space of 55'750 m² that is often concentrated in highly frequented locations. The consolidation of the branch networks is set to be stepped up further in the near future as on the one hand digitalization is enabling bank transactions to be carried out independently of branches, and on the other hand cost pressure is increasing so that branches with remote catchment areas are increasingly being reviewed in terms of their profitability.

Figure 39: Employment development in the service sector
Annual growth of selected service providers in terms of FTEs



Source: Credit Suisse, Swiss Federal Statistical Office

Figure 40: Annual additional demand for office space
Estimated additional demand in 1000 m²; 2015 and 2016: forecasts



Source: Credit Suisse, Swiss Federal Statistical Office

Offshoring of jobs affecting widely the service sector

The outsourcing of production to low-cost foreign countries that has shaped the industrial sector for years is now also catching on in the service sector. While multinational service groups and large companies have been outsourcing administrative activities for years, the strength of the franc and margin pressure are increasingly also forcing medium-sized and even smaller enterprises to make use of this form of rationalization. Structural changes are serving to facilitate the outsourcing of back offices to countries with significantly lower cost levels. These include digitalization and modern communications technology that make it possible to access the same information quickly and easily around the globe. Thanks to this development, local companies can draw on a global pool of well-qualified labor. Meanwhile, the globalization of the service industry is only just starting to get underway. Large Swiss enterprises are with respect to this one step ahead and have for over ten years been gaining experience in the offshoring of standardized service activities from the fields of payment transactions, information technology, accounting, data management and human resources.

Large wage differential as driver of the development

Despite high error rates and frequent interface problems at the beginning, outsourcing pays off because the labor costs in countries such as Poland only amount to a quarter of those in Switzerland. In India they even only come to a mere tenth. Not only the lower wage costs carry

weight here but also the workplace costs that abroad often only amount to a fraction of the costs in Switzerland. UBS is accordingly planning to transfer 4000 IT jobs from high-wage locations such as Zurich and London to less expensive locations in the next two years. Credit Suisse intends to increase the share of jobs at the so-called shared service center from 15% to 25% by 2018. Julius Bär is also planning to cut 200 jobs in Switzerland and partially outsource them. However, not only banks but all globally active Swiss enterprises that are in competition with rivals abroad and therefore exposed to cost-cutting pressure will review domestic jobs in terms of their outsourcing potential. For example, Novartis operates several service centers in Eastern Europe and India. The pharmaceutical multinational recently acquired an office building in Hyderabad with space for 8000 staff. Zurich Insurance Group and SR Technics have also announced transfers, and with cable producer Huber+Suhner a medium-sized enterprise has now also joined the list of players outsourcing administrative tasks to less expensive locations.

Increased outsourcing by SMEs could considerably reduce demand for office space in Switzerland

The positive overall experience of multinational companies with offshoring is increasingly also prompting small and medium-sized enterprises (SMEs) to jump on this bandwagon. Moreover, it is not just cost savings that are paramount here. Such division of labor enables these companies to gain access to specialized professionals for which they lack diversification on their own. The outsourcing trend therefore no longer just applies to straightforward administrative activities but increasingly also to more complex services such as legal and analytical activities and financial services. However, outsourcing also has its limits. The handling of sensitive data and information (e.g. client data) speaks against the outsourcing of activities. Management and business processes considered to be the core competence of a company are likewise affected little by outsourcing. The outsourcing process is already well advanced in the case of large companies. Potential for further transfers of service jobs will therefore primarily lie with small and medium-sized service providers. Service providers specializing in SMEs that provide their services for a large number of small organizations serve to simplify considerably the outsourcing process. According to our own calculations, there were 250'000 employees working in support functions at service SMEs in 2010. A hypothetical reduction of these activities of 10% due to outsourcing would result in a sharp fall in demand for office space of almost 500'000 m², which is equivalent to the nationwide production of office space during an average year.

Corporate Tax Reform hindering settlements

Owing to pressure from the Organization for Economic Co-operation and Development (OECD) and the G20, it is necessary to adapt Swiss corporate taxation to the new international standards. The privileged taxation of companies that primarily generate their earnings abroad can no longer be upheld. Instead, innovative companies are in future to benefit from internationally accepted support measures. The uncertainty concerning the precise form that Corporate Tax Reform III (CTR III) will take has for some time put Switzerland as a business location at a disadvantage. It is not least for this reason that the settlement of companies from abroad has fallen considerably (Figure 41). A restructuring of corporate taxation thus awaits Switzerland that is significant for various reasons. First of all, at 15% of overall tax revenues, companies make an important contribution to state finances. Of this, over 90% is attributable to tax on profits and 8.2% to the taxes on capital that are only levied at cantonal and municipal level. Secondly, abolition without replacement of cantonal tax privileges for special status companies is likely to result in a migration of companies currently subject to preferential taxation that are of considerable significance for Switzerland. They generate around half the Federal Government's tax on profits and a fifth of that of the cantons and municipalities. Moreover, these companies are in many cases among the most innovative of their sector and altogether provide employment for around 150'000 people in Switzerland (3.2% of the total). As most of these jobs are office-based, this corresponds to use of around 3 million m² or 5.7% of all office space.

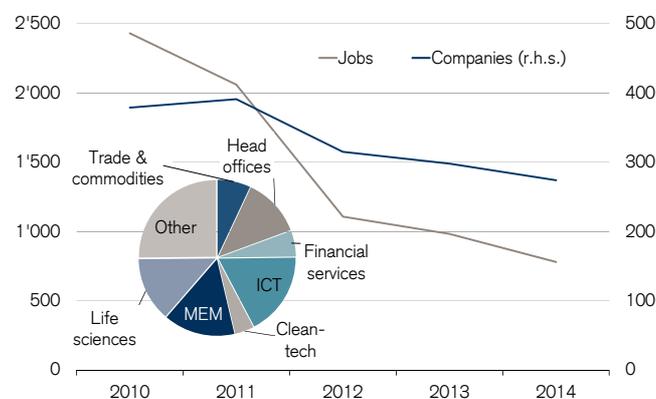
Mass migration of special status companies is unlikely

However, the risk of a mass migration of companies currently enjoying privileged taxation can be considered low as long as the cantons implement their planned cuts in tax rates on profits. Even after CTR III, Switzerland will remain among the most attractive business locations when compared internationally (Figure 42). Nevertheless, intercantonal competition for companies on the basis of ordinary tax rates on profits is set to increase and to lead to relocations of company head offices within Switzerland. However, as the draft bill is still being debated in Parliament, the consequences of the reform can only be predicted to a limited extent with the current state of knowledge. Moreover, the fiscal strategy of each canton also depends on the measures of the other cantons and competing locations abroad. Whether this actually enables a level playing field to be created will only become clear when the fiscal strategies of all countries are transparent. In view of the financial importance of corporate taxation it is quite conceivable that new legal loopholes might arise in certain places or that individual countries might deliberately evade the

necessary reforms. However, certain cantons have already presented strategies setting out how they intend to deal with the challenge. Details of this can be found in the section on the five largest office property markets.

Figure 41: Company settlements

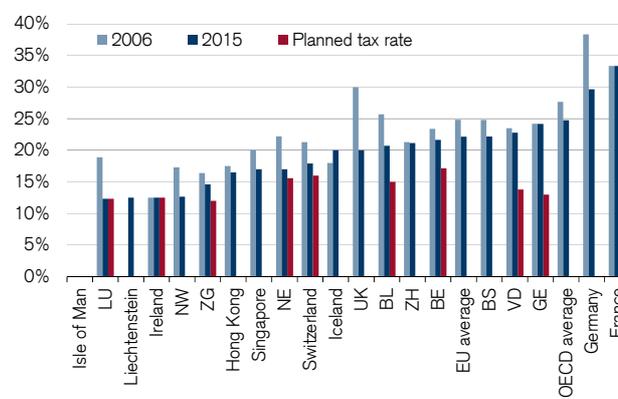
Development of jobs and companies from settlements; pie chart: settlements by sector, 2014



Source: Swiss Conference of Cantonal Directors of the Economy

Figure 42: International corporate taxation

Maximum tax rates on profits; CH: cantonal capital, planned tax rate on profits after CTR III



Source: KPMG, government sources, Credit Suisse

Supply: Growth in supply of space stopped for the time being

Planned expansion corresponds to long-term average

Since the end of 2013, the moving 12-month total of building permits for office space has been moving sideways at just under CHF 2 billion. The approved investments for 2015 amount to CHF 2096 million, which is slightly above the long-term average since 1994 (Figure 43). Despite growing vacancy rates and a subdued economic outlook, the planned volume of investments remains at this level. As on the labor market there is no increase in employment growth in the office-based sectors to be expected in the medium term, the planned expansion is therefore too high to bring about a trend reversal in vacancy rates.

Medium-sized centers now in the focus of investment-seeking capital

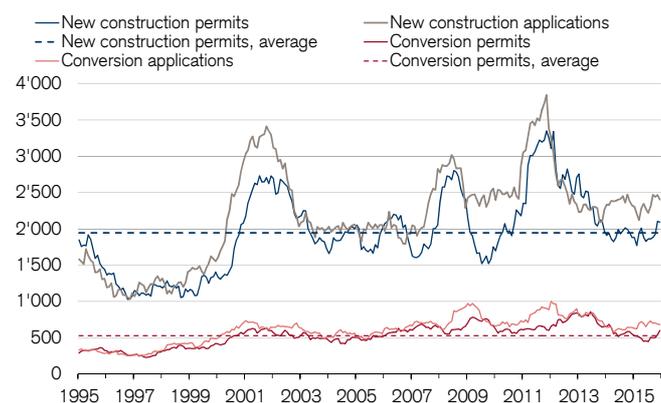
Due to the marketing problems for office property in the five major centers, the focus of investment-seeking capital has shifted. The approved volume of investments in office properties in the five major office property markets at the end of 2015 came to CHF 629 million, which is 19% below the long-term average. By contrast, the office property markets of the medium-sized centers have attracted the attention of investors shaken by negative interest rates. The supply rates of these locations are well below those of the five major centers, thereby resulting in better absorption capacity for new properties (Figure 51). The approved new construction sum in the six largest medium-sized centers accordingly rose to CHF 384 million by the end of 2015, which is more than 50% above the long-term average (Figure 44). There will therefore be a noticeable increase in office properties in these medium-sized centers in the medium term. The largest expansions are to be expected in Aarau, Zug, St. Gallen and Lugano. Approved construction volumes in the other centers, the suburban municipalities and outlying areas have lost momentum over the last year and are now only slightly above the long-term average. Not only the planned increase in new properties, but also the approved construction sum for office conversions are fluctuating close to the level of the long-term average of CHF 530 million (Figure 43).

No shortage of project ideas

As reflected by the large number of actively marketed projects, there is no lack of either funds or ideas for pushing ahead with the expansion on the office market. The best filled product pipeline is likely to be that of the Swiss Federal Railways (SBB). Following the major projects in Berne Wankdorf and Europaallee in Zurich, the SBB are now planning to extend their successful concept to other locations. Service centers are being constructed on proprietary sites in prime locations immediately adjacent to busy railway stations and let at market conditions. The excellent public transportation connections and proximity to other services are crucial arguments for many companies to relocate, thereby facilitating an outstanding positioning of the SBB amid the fierce competition for tenants.

Figure 43: Office property planning

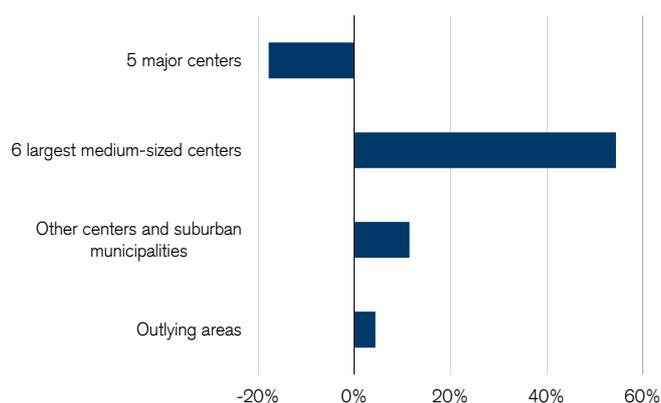
Building permits and planning applications: moving 12-month total in CHF m



Source: Baublatt, Credit Suisse

Figure 44: Building permits by geographical expansion

Total building permits in 2015 compared with long-term average since 1994



Source: Baublatt, Credit Suisse

Halt amid growing property supply

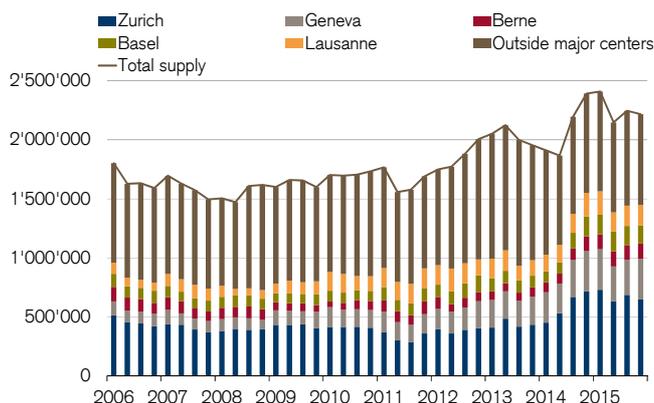
The return of office property investments to their long-term average has contributed significantly to preventing a further exacerbation of the oversupply of advertised office space. Advertised existing and new office space amounted to 2'218'000 m² in the fourth quarter of 2015 – down by more than 174'000 m² compared with the end of 2014 (Figure 45). The share of advertised office space in the five major centers lies with 65.3% at a high level on a historical comparison. However, this figure did not increase further during 2015. The Zurich business district in particular accounts for almost a third (29.1%) of all advertised office space, followed by Geneva with 15.6% and Lausanne with 7.7%. At 35.9% or just under 232'000 m², Zurich's share of office space originates exceptionally strongly from new properties coming onto the market for the first time. At 60.6% this rate is higher only in Basel, although based on a considerably lower supply rate. Lower shares of new property were registered in Geneva at 5.1% and Lausanne at 7.7%. The oversupply around Lake Geneva is therefore primarily attributable to existing properties. On the overall Swiss office property market, 27.5% of all office space is being advertised for first-time let.

Advertised supply concentrated on initial belt around CBD

With large companies in particular having in recent years moved many offices from exclusive locations in the central business district (CBD) to less central but nevertheless well-connected locations, thereby triggering a temporary rise in CBD supply rates, the supply of property in the CBD has recently normalized again somewhat. However, the endeavors of important employers in Basel and Berne to consolidate administrative locations outside the expensive central locations have still not yet been completed so that an increasing number of centrally located properties will arise on the rental market in these two cities in the next few years. Meanwhile, there has barely been any reduction in the oversupply in the "initial belt" surrounding the CBD. The share of advertised office space in the extended business districts of the five major centers has risen from 10.4% to 22.4% since the start of 2012 (Figure 46). The share of advertised space in the outer business districts amounts to 29.6%. Not only is supply shifting geographically but the properties are increasingly also becoming larger. The latter phenomenon is exclusively attributable to the new properties advertised with average office space of 1200 m², which is around 40% more than three years ago. By contrast, the advertised office space in existing properties averages at 300 m² per advertisement. This figure has for some years largely remained constant.

Figure 45: Supply of office space

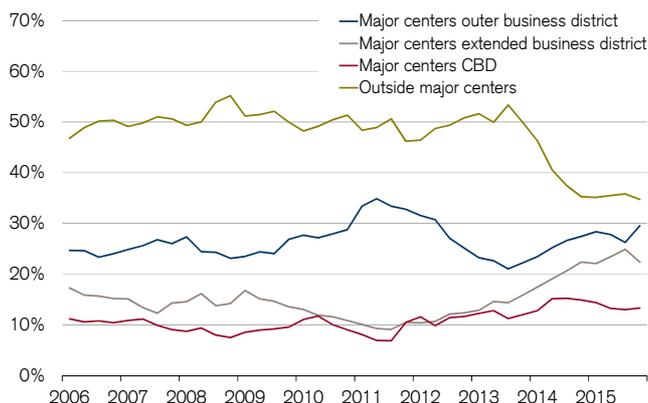
Advertised office space: quarterly totals in m²



Source: Meta-Sys AG, Credit Suisse

Figure 46: Supply by type of business district

Share of business districts in total advertised office space



Source: Meta-Sys AG, Credit Suisse

Market outcome: Strategies sought amid fierce competition

Vacancy rates have risen sharply in Geneva and Berne

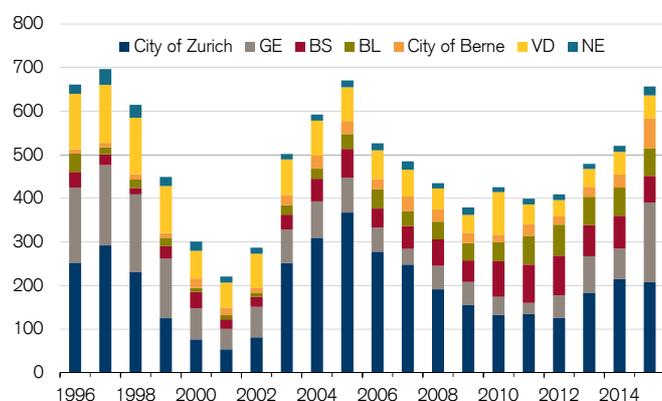
The high volume of investments in office properties in recent years has given rise to an over-supply in particular in the major centers. On a positive note, some places have not seen any further increase in the amount of vacant office space over the last year or, as is the case in the City of Basel, have even recorded a decrease (Figure 47). In other places the high level of construction activity of the past few years is only now starting to be reflected more clearly in the vacancy rates. Starting from a low level, the amount of vacant office space in Berne has more than doubled over the past year, and in Geneva it has almost tripled. Altogether this has resulted in a rise in vacancies across the regions surveyed of 26% over the last 12 months.

Lower vacancies for smaller properties and locations with good public transportation connections

A comparison of vacant versus let office space based on data of the Real Estate Investment Data Association (REIDA) reveals which office properties run a greater risk of being vacant (Figure 48). Vacancies are more frequently encountered at locations with lower public transportation accessibility than at top locations. Properties built between 1961 and 2000 are also more frequently vacant. Buildings constructed before 1960 and post-2000 buildings seem to be more popular among tenants. The increasing size of advertised property as outlined above is likewise reflected in vacancies: Properties measuring 500 m² and above become vacant significantly more often than smaller properties of up to 250 m².

Figure 47: Vacant office space

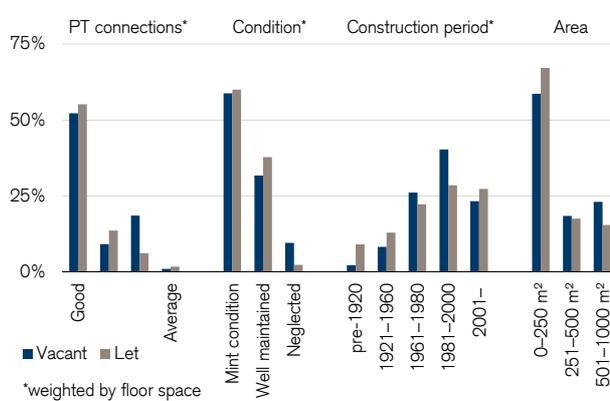
In 1000 m²; partial survey: around 43% of the Swiss office property market



Source: Various statistical offices, Credit Suisse

Figure 48: Features of vacant office space

Features of vacant and let properties; Q3 2015; PT = public transportation



Source: REIDA, Credit Suisse

Increasing bargaining power of tenants and falling rents

The high vacancy rates have strengthened the bargaining position of tenants and increased the pressure on rents. Zurich and Geneva in particular have developed into strong tenants' markets on which tenants are generally able to choose between several properties and buildings are occasionally also customized to the needs of the tenant. According to the quality-adjusted

hedonic rent indices, office rents in the major office property markets already passed their peak in most regions at the start of 2013 (Figure 49). In Zurich, where there has been a particularly strong expansion of office space, office rents have fallen by a total of 8.5% since reaching their peak. Rents have also fallen significantly in Basel and Geneva by 7.2% and 6.7% respectively since the end of 2012. In Berne (-2.9%), the City of Lausanne (-4.2%) and the rest of Switzerland (-4.4%), rents are falling at a slightly lower level. Altogether the speed of the price correction has decreased. Geneva is the only place where there is no slowdown in the fall of rents to be observed yet. In view of the prevailing oversupply situation, the decrease in office rents is set to continue in the current year, although no longer with the same momentum.

Growing concessions with rental conditions

However, the contractual rents measured here do not sufficiently reflect the pressure on the conditions. In order to forgo the necessity of making painful value adjustments to office properties, landlords tend as far as possible to avoid rent reductions and to grant price discounts in the form of rent-free periods or contributions to interior design. According to Wüest & Partner, over half the contracts analyzed contained such incentives already in 2013 and this share will rise further with the increasing vacancy rates. Because tenants have more bargaining power, they are increasingly demanding fully developed and therefore more expensive properties. This structural effect is one of the factors explaining why no decline in the median rents of the properties advertised has been observed. These have increased in a relatively linear manner since 2011 from CHF 202/m² to CHF 240/m² (Figure 50), which is also due to the fact that better and more expensive locations are increasingly being advertised and therefore distorting the median value upwards.

Marketing costs rising, time on market increasing

The fact that tenants are becoming more discerning and marketing costs have therefore risen is reflected in the increase in the average time on market. While the number of days on the market halved from 135 days to 61 between 2009 and early 2014, it has since risen again to 110 days. Strategies are therefore called for successful marketing on the increasingly competitive cut-throat office property market. The growing heterogeneity of the tenant structure is giving rise to a change in the property requirements of the market. Investors are advised as far as possible to construct properties for multi-tenant usage, especially since tenants are also able to obtain shorter contractual periods or earlier exit options in the negotiations. According to the analyses shown, smaller and more flexible premises are likely to be easier to market in the future. Locations with good public transportation connections will continue to enjoy a comparative advantage in marketing. For large multinationals in particular, the sustainability of the property can serve as an additional criterion. Presenting specialized products adapted to the needs of tenants that stand out from the competition in the heterogeneous office property market is also set to be a decisive factor.

Figure 49: Regional rent price trend

Hedonic rent index based on contractual rents, 2005 = 100

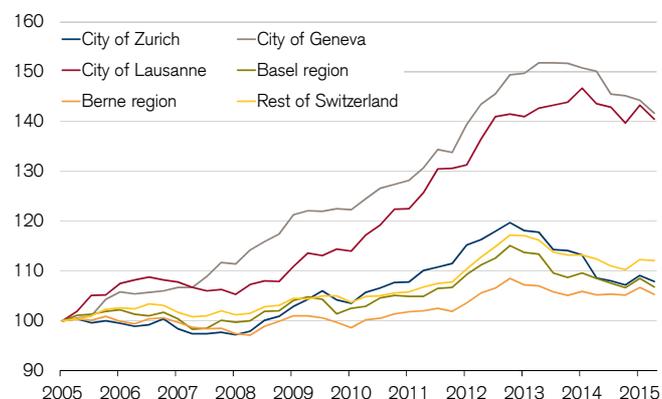
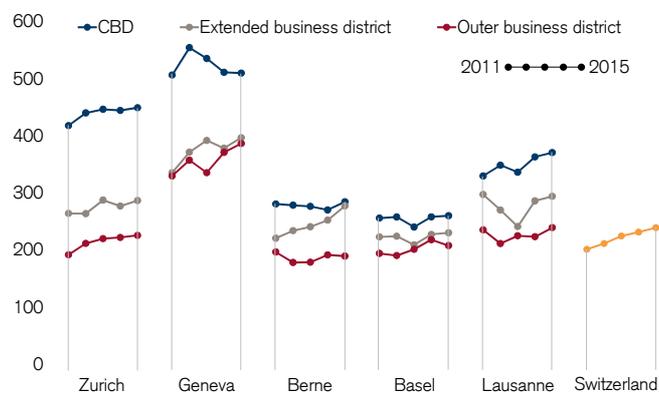


Figure 50: Advertised rents by business districts

Net median rents of properties advertised in CHF/m²; 2011–2015



The 15 largest office property markets at a glance

Figure 51 summarizes the development of the 15 largest office property markets. Altogether there were 2.2 million m² of new and existing office space advertised in Switzerland at the end of 2015. Based on estimated stocks of office space of 52.4 million m² in 2013, this corresponds to a nationwide supply rate of 4.2%. The supply of property has therefore stabilized for the time being. Nevertheless, individual hotspots continue to record comparatively high supply rates – above all the three major centers of Zurich, Geneva and Lausanne with supply rates of 6% and above.

Figure 51: Overview of the 15 largest office property markets

Existing and advertised office space (existing and new construction) in m² in Q4 2015; 2012–2015 area-weighted average rents (net) in CHF/m² per year; expected expansion and price trend for 2016

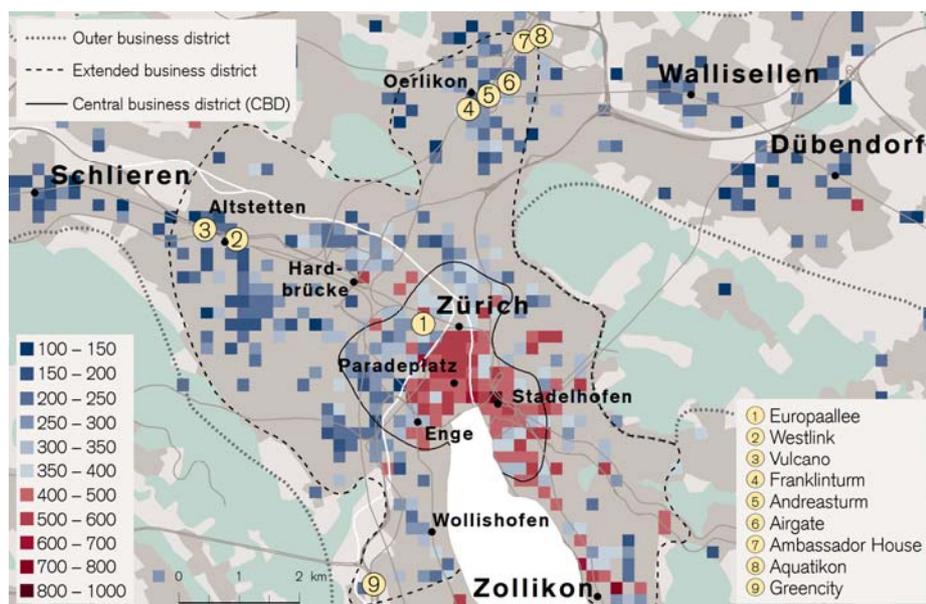
Office property market	Existing office space	Advertised office space	Supply rate	Expected expansion	Average rent	Price trend
Zurich	10'006'916	645'204	6.4%	↘	307	↘
Geneva	4'024'949	346'324	8.6%	↗	444	↘
Berne	3'419'608	131'786	3.9%	↘	221	→
Basel	3'202'542	152'442	4.8%	↘	222	→
Lausanne	2'531'358	171'898	6.8%	↘	269	↘
Economic region						
Lucerne	1'570'621	50'995	3.2%	↗	201	
St. Gallen/Rorschach	1'411'873	25'468	1.8%	↗	185	
Aarau	1'332'233	30'177	2.3%	↗	184	
Lugano	1'246'475	41'363	3.3%	↗	237	
Lorzenebene/Ennetsee	1'231'475	40'007	3.2%	↗	233	
City of Winterthur	742'672	24'287	3.3%	↘	226	
La Sarine	710'111	22'094	3.1%	↘	193	
Baden	704'541	11'892	1.7%	↗	199	
Neuchâtel	632'690	15'398	2.4%	↗	192	
Olten/Gösgen/Gäu	565'073	13'785	2.4%	↘	177	
Switzerland	52'365'502	2'218'439	4.2%	→	273	↘

Source: Meta-Sys AG, Credit Suisse

The five largest office property markets in detail

Office property in Switzerland is largely concentrated on the main centers of employment. For this reason, 44.3% of all property is located within the largest office property markets of Zurich, Geneva, Berne, Basel and Lausanne. The developments of these markets as a whole and in particular also the momentum between the different characteristics of the various business districts of the individual office property markets are of interest. Such observations enable insights to be derived concerning nationwide trends and developments that are equally relevant to the market performance of the other regions.

Zurich

Figure 52: Advertised rents (net) of the Zurich office property marketIn CHF/m² and year, grid size 200 x 200 m, 2012–2015; area-weighted average rent = CHF 307

Source: Meta-Sys AG, Federal Office of Topography, Credit Suisse

Major price difference between CBD and remaining business district

The median advertised rents in Zurich's central business district (CBD) have now reached a price level of CHF 450/m² net. However, rents within the CBD can vary significantly. In the triangle between the Limmat and the Sihl down to Enge and in the area around Stadelhofen station, net rents of CHF 400 to CHF 1000/m² are being advertised universally. Outside the CBD the average price level is considerably lower. This difference is greater in Zurich than in any other major center, which is one of the reasons explaining the many relocations seen in recent years. However, expensive properties are also advertised outside the CBD. A high price level is occasionally found in District 5, in the immediate vicinity of Oerlikon and Hardbrücke S-Bahn stations with their excellent connections and on the right shore of Lake Zurich. Less expensive locations within the CBD can be found north of the main station, southwest of Enge station and to the west of the Sihl that separates the expensive city center locations from the less expensive locations in Aussersihl like a watershed. Advertised net rents there rarely exceed CHF 400/m². District 3 in particular is the least expensive office location within reach of the city center. Even lower rents are to be found to the west of Hardbrücke and outside the city itself.

Geographical shift of focus of supply to the extended business district

While the supply of property on Zurich's office property market has stabilized in the course of 2015, it remains at a very high level at 6.4%. There are currently 645'000 m² on offer – around 83'000 m² fewer than at the last peak in the first quarter of 2015 (Figure 54). Particularly in the CBD an improvement in the occupancy rate can be observed. Advertised office space in the CBD in the third quarter of 2014 still came to 161'000 m². It has since fallen to 113'000 m². The official vacancy data confirms this development: Vacancies in Zurich's CBD have fallen by 15'000 m² compared with the previous year and now amount to just under 81'000 m². The difficult situation for Zurich's expensive city center locations is therefore starting to ease somewhat. Although this is being accompanied by the odd price discount here and there. Particularly companies offering management and legal consulting are making use of the situation to occupy larger properties in the city center. However, it is too early to sound a general all-clear. What we are instead seeing is a geographical shift of the focus of supply. Over the past two years, the advertised supply of office space has increased almost exclusively in the extended business district that largely comprises Binz, the Altstetten area, District 5 and the north of Zurich. At 278'000 m², 43.1% of the advertised properties at the end of 2015 lay in this initial belt surrounding the CBD. Three years earlier the share was still just under a third. Supply in the outer business district that stretches to Spreitenbach, Kloten and Schwerzenbach is comparatively stable and has fluctuated around the level of 200'000 m² since the start of measurements back in 2004.

Public administration as a welcome buyer of office property

One of the reasons for the stabilization of the oversupply on Zurich's office property market over the last year was the additional demand from public administration and the emergence of the city government as a welcome recipient of advertised office properties. The City of Zurich forwent the planning and construction of a new administration center in Altstetten and instead acquired the Airgate office building near the Hallenstadion. The city also purchased a second property on Eggbühlstrasse in Neu-Oerlikon where it intends to accommodate around 660 jobs. This way it has secured around 28'000 m² of its office space requirements until 2020 that it estimates to lie between 46'000 m² and 70'000 m².

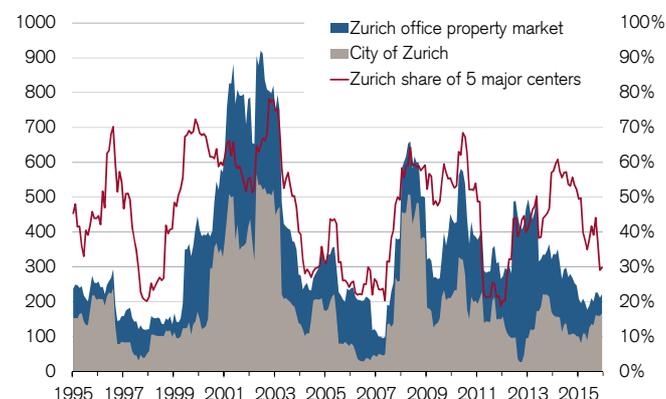
Expansion of office space remains strong in the north and west of Zurich

With approved investment volumes of CHF 223 million in 2015, scheduled expansion is a significant 38% below the long-term average of CHF 358 million but this will barely suffice to ease the oversupply (Figure 53), particularly since several properties are still under construction. In total and including Europaallee, The Circle (first stage), Ambassador House, Westlink and various properties in the Escher-Wyss neighborhood there are currently around 220'000 m² of office space under construction or being refurbished. The realization of around 65'000 m² of additional space is as good as certain. This includes the Franklin and Andreas Towers directly next to Oerlikon station, the Vulcano building complex at Altstetten station and the new Zurich Insurance building. In order to absorb these properties by around the end of 2019 without a further increase in the supply rate, some 15'000 office-based jobs will have to be created, which entails four years with normally high employment growth. This looks set to be difficult to achieve. Moreover, further larger properties also await realization with the second stage of the Circle, the major Greencity project at Manegg, Aquatikon in the Glattpark and the Airport Business Center in Rümlang.

Zurich with challenging CTR III starting position – migrations could weaken demand for office space

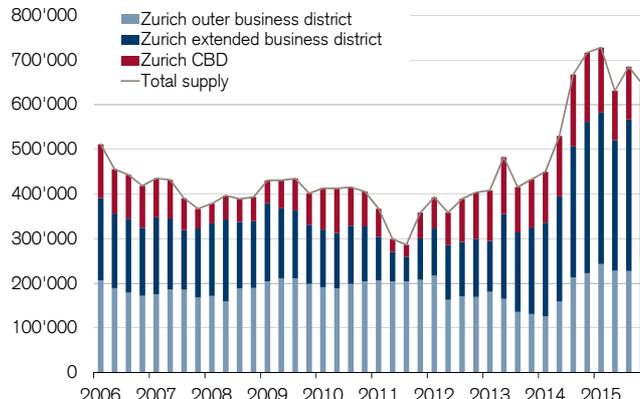
It still remains unclear how the fiscal policy of the Canton of Zurich will embrace CTR III. Although only 3% of all companies in Zurich are special status companies, they account for 6% of tax on profits and 19% of tax on capital. In view of the current high ordinary tax rate on profits of 21.2%, it will be difficult without more significant changes to keep these companies, that are currently taxed at just under 10%, within the canton. Moreover, neighboring cantons such as Zug and Schaffhausen have announced their intention of reducing the rate of tax on profits to a very competitive 12%. This means that for companies in Zurich subject to ordinary tax, other locations will become even more attractive with regard to the tax burden. Corporate profit taxation in Lucerne and Nidwalden is already at a low level. A reduction in tax on profits may become necessary for the Canton of Zurich in order to prevent the difference in taxation from becoming even greater. However, owing to the high share of legal entities in tax revenues, this would soon lead to tax losses that would in turn limit the scope for tax rate reductions. Due to this tricky starting position, demand for office space in Zurich could come under additional pressure.

Figure 53: Approved construction projects
Office space, in CHF m (l.h.s.); share in total of five major centers (r.h.s.)



Source: Baublatt, Credit Suisse

Figure 54: Trend in advertised office space
Advertised office space: quarterly totals (existing and new constructions) in m²

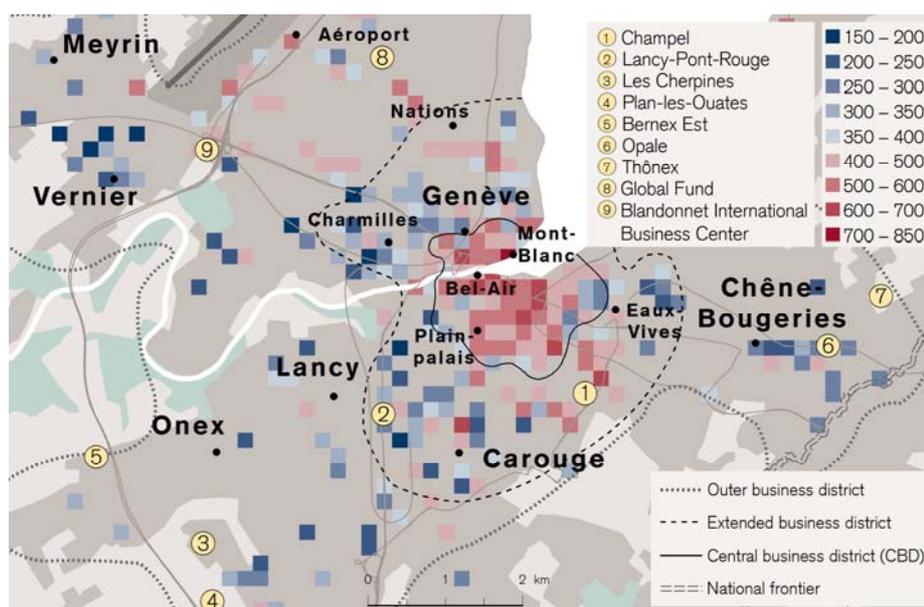


Source: Meta-Sys AG, Credit Suisse

Geneva

Figure 55: Advertised rents (net) of the Geneva office property market

In CHF/m² and year, grid size 200 x 200 m, 2012–2015; area-weighted average rent = CHF 444



Source: Meta-Sys AG, Federal Office of Topography, Credit Suisse

Geneva is the most expensive office property market

With advertised median rents of a net CHF 510/m², Geneva's central business district (CBD) remains the most expensive business district in Switzerland despite the fact that the upwardly distorted advertised rents in Geneva have declined in recent years. Properties below CHF 400/m² are only rarely to be found in the CBD. Rents in the extended and outer business districts of Geneva are significantly lower and currently amount to a median of around CHF 390/m². Because advertised rents above CHF 400/m² are the norm on the axes from the city center to the airport and in the airport area, median rents in the extended and outer business districts are practically at the same level. Outside the CBD, above all properties in the southeastern neighborhoods of Eaux-Vives and Champel and in the international district north of the station area are recording average rents above CHF 400/m².

Supply of property has stabilized at a high level

The high supply level on Geneva's office property market stabilized in the course of 2015. Advertised office space in the fourth quarter of 2015 came to 346'000 m² or 8.6% of stock (Figure 57). Only 5.1% of the supply was advertised to be let for the first time, thereby illustrating that the problem lies on the demand side. The oversupply that has built up over the years is now also reflected in the officially recorded vacancy rates: In June 2015, almost 183'000 m² of office space in the Canton of Geneva was vacant, 2.6 times more than was the case a year earlier. More and more properties are standing empty above all in the CBD and in the airport region. A third of these are new properties that are less than five years old. This also reflects the ongoing structural changes taking place in the weighty banking sector that has resulted in new properties also being abandoned.

Temporarily above-average expansion despite over-supply

The prevailing uncertainties have caused investments in new office buildings in Geneva to become extremely rare (Figure 56). The approved volume of construction investments in 2014 was 50.1% below the long-term average and last year it was only thanks to the start of construction of the new administrative headquarters of the Global Fund, an organization that aims to fight AIDS, malaria and tuberculosis, that the current volume of investments was raised above the long-term average. 700 employees of the Fund will move from Blandonnet International Business Center in Vernier to the new office building in Le Grand-Saconnex at the end of 2017. According to the Fund this will enable cost savings of up to 40%. Accordingly, vacancy rates at the old location in Vernier are set to rise. Having risen sharply recently, an easing of the oversupply in the City of Geneva is to be anticipated in the medium term as the approved volume of projects here amounted to a low CHF 8 million over the past year so that no significant expansion in the supply of office space is expected in the next two years. The relaxation of the Law on the Demolition, Conversion and Renovation of Homes (LDTR) accepted by 58% of the Geneva electorate could also help to ease the situation. The law was originally intended to prevent speculation in the housing market but has instead exacerbated the shortage of housing

in Geneva. The change in the law now envisages forging an upper rental limit following the conversion of an office into an apartment and is therefore explicitly aimed at promoting the conversion of empty office space. However, this will only be possible away from the expensive locations where the increased rent of apartments versus offices is sufficiently large for such a conversion to pay off.

Geneva will be one of the most attractive corporate locations nationally and internationally

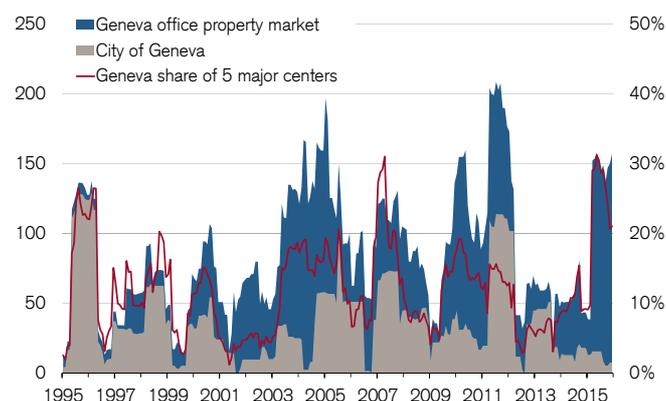
As well as the subdued economic outlook, CTR III is also provoking uncertainty among investors on the Geneva office property market. Corporate profits were on average taxed at an ordinary effective rate of 22.4% (Federal Government, canton and municipalities) in the Canton of Geneva between 2009 and 2011. This makes Geneva one of the cantons with the highest regular tax rates. However, a disproportionately large number of companies have settled that benefit from privileged taxation. According to a study by the research institute Créa, some 22'000 staff were employed at 1100 special status companies in 2011, which corresponds to an 8.1% share of overall employment. Around 70% of the cantonal profit tax substrate originates from these special status companies that on average are taxed at a rate of 10.8%. The planned reduction of the ordinary effective tax rate to 13% will result in a slightly higher tax burden for special status companies that are unable to benefit from a patent box, for instance, while all those subject to ordinary taxation will be taxed less. The envisaged tax rate will place Geneva among the most attractive corporate locations nationally and internationally in terms of its ordinary tax burden. In view of the other factors distinguishing Geneva as a location for companies, special status companies are therefore set to remain loyal to the birthplace of Calvinism. Another question that remains unanswered is how Geneva intends to finance the considerable annual tax losses.

CEVA will put Geneva's office property market on a new footing

The new Cornavin–Eaux-Vives–Annemasse railway line (CEVA) that is set to link Annemasse, just across the border in France, with Geneva's Cornavin railway station from the end of 2019, will have a decisive influence on the development of the Geneva office property market. It will result in the creation of a Swiss-French rail network with more than 40 stations serving 230 kilometers of track on both sides of the border. More than 240'000 people will live and work within a radius of 500 meters of the CEVA stations, thereby underlining their importance. The sites surrounding the future stations have accordingly become the focus of development. Probably the largest construction project in the vicinity of Lancy-Pont-Rouge station is set to include 110'000 m² of office space (30'000 m² by the end of 2018). Eaux-Vives station will be replaced by an underground station, which will create space for a new neighborhood comprising 22'000 m² of office and retail space. A new neighborhood is to arise at Chêne-Bourg station with the Opale project. The SBB are planning a tower there with 20 floors and 12'000 m² of office and retail space. If the projects are realized, the office properties will enjoy a decisive competitive advantage on the cut-throat market due to their location at railway stations. Swiss Prime Site AG is planning a further major project in Plan-les-Ouates comprising five office buildings with a total of 67'530 m² of office space. The major projects and neighborhood developments of the canton are of a more long-term nature. Upon full completion, up to 320'000 m² of additional space would be created in the next eight years in Les Cherpines, Thônex and Bernex Est. However, their imminent realization is questionable in the current economic environment.

Figure 56: Approved construction projects

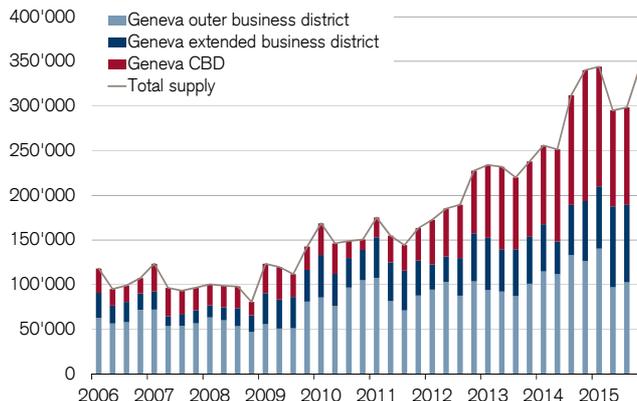
Office space, in CHF m (l.h.s.); share in total of five major centers (r.h.s.)



Source: Baublatt, Credit Suisse

Figure 57: Trend in advertised office space

Advertised office space: quarterly totals (existing and new constructions) in m²

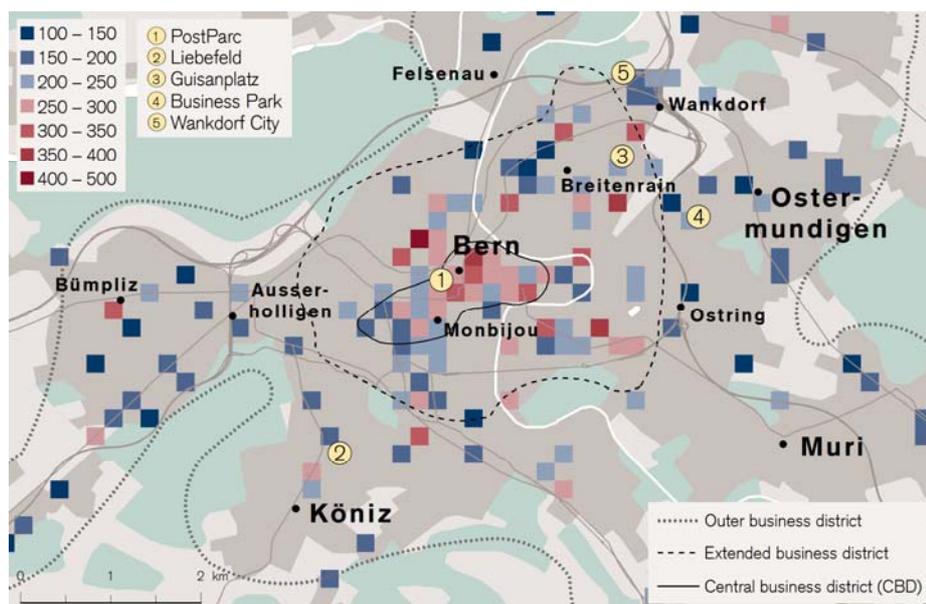


Source: Meta-Sys AG, Credit Suisse

Berne

Figure 58: Advertised rents (net) of the Berne office property market

In CHF/m² and year, grid size 200 x 200 m, 2012–2015; area-weighted average rent = CHF 221



Source: Meta-Sys AG, Federal Office of Topography, Credit Suisse

Flat rent differential between CBD and extended business district

Together with Basel, the Berne office market has the least expensive properties among the major centers. At CHF 221/m², the area-weighted average rent (net) is almost 30% below that of Zurich. Berne's outer business district in particular is a less expensive location compared with other centers with a median rent of CHF 190/m². Top rents of over CHF 300/m² are largely to be found in the immediate vicinity of the railway station or occasionally in adjacent neighborhoods to the north and south. The rents advertised in the outer business district have in recent years aligned themselves strongly with the rents in the central business district (CBD) that have only become marginally more expensive. This reflects the high quality of the modern properties that have been newly built in locations with good connections (e.g. Wankdorf City) that have recently supplemented the supply of office space in the city center.

Sluggish marketing of large office properties

The construction progress and completion of major projects has heralded an increase in supply on Berne's office property market. At the end of 2015, the peak of 132'000 m² of advertised space was reached, which corresponds to a comparatively low supply rate of 3.9% (Figure 60). Marketing of advertised property is proving sluggish. Most of the larger properties already advertised at the end of 2014 were still on the market at the end of 2015. The slow marketing also means that the temporary oversupply has become visible in the official vacancy figures. As of 1 June 2015, vacancies in the federal capital had jumped to 68'000 m², which is more than double those of the previous year and represents the highest level of vacancies since measurements began in 1998. Planning activity has therefore fallen clearly (Figure 59): The approved volume of investments in office properties was 58.4% below the long-term average in 2015. In view of such a small future expansion of supply, the Berne office property market is bound to recover over time.

Large supply of property above all in the outer business district

Unlike other major centers, only a small share currently amounting to 8.2% of advertised office space is attributable to Berne's extended business district. However, almost three quarters of advertised space is located in the outer business district. Although this share was already larger in the past in Berne's office property market than elsewhere, it has increased further in the past two years. This has been caused among other things by the relocation of Swisscom to Ittigen from the tower in Ostermundigenstrasse that is currently being marketed as a business park. Negotiations regarding this property are allegedly underway with the Bernese Cantonal Police that is seeking a site for its new headquarters. Further such examples are set to follow, as the consolidation of office property locations is still far from complete. Although in Wankdorf City most of the new properties are already occupied, another 2300 jobs will follow by 2020 as part of development phase 2. This comprises almost 50'000 m² of gross floor space, including around 30'000 m² of service space. Between November 2015 and autumn 2016, 30'000 m² of service space, offices and practices and 10'000 m² of retail and restaurant space are set to be

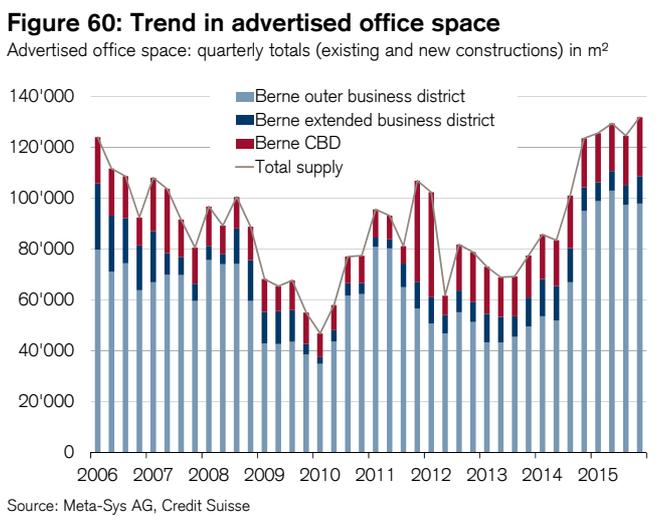
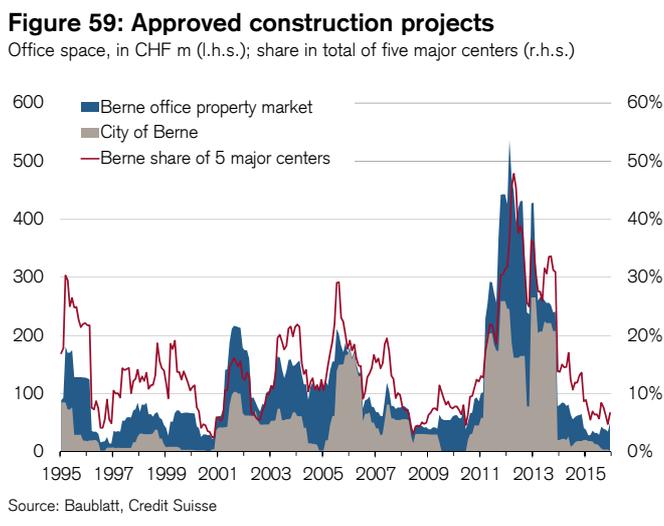
occupied in the new PostParc immediately adjacent to the railway station. Over 80% of the entire space has already been let. However, the largest casting on the office property market will result from the workplace relocations of the Federal Government. Around 2700 Federal Government workplaces are to be created in the Guisanplatz area by 2020, with a further 2000 later on. Following the arrival of the FOPH at the Liebefeld Campus in Köniz with 840 Federal Government employees, a further 600 Federal Government jobs are planned there in the longer term. The Federal Government wishes to house 2000 jobs in Kleinwabern in the longer term. In the Ey/Papiermühle area (Ittigen) it intends to house a further 900 employees close to the new Swisscom site after 2020. And the Federal Government already settled around 700 jobs in the Meielen area of Zollikofen back in autumn. In the longer term it sees potential there for a further 1500 jobs.

Conversion potential to be reviewed on a case-by-case basis

As a result of the planned relocations, some offices that are aging somewhat may be considered for other usages, as the office properties that are frequently old and in need of renovation will be difficult to market in the current demand situation. Conversions into housing could be a solution in some cases. However, the rent difference between old office properties and newly refurbished housing is not steep enough in Berne for such solutions to become feasible on a comprehensive basis. According to a rule of thumb, conversion is feasible if the difference in the annual rent per square meter amounts to CHF 100 or more. After factoring in a prolonged period of vacancy, conversion can also make sense if the difference is lower. Ultimately, however, each individual case has to be reviewed separately in terms of its viability and a detailed investigation carried out as to whether the property and location are suitable for residential usage.

CTR III could impact Berne through indirect effects

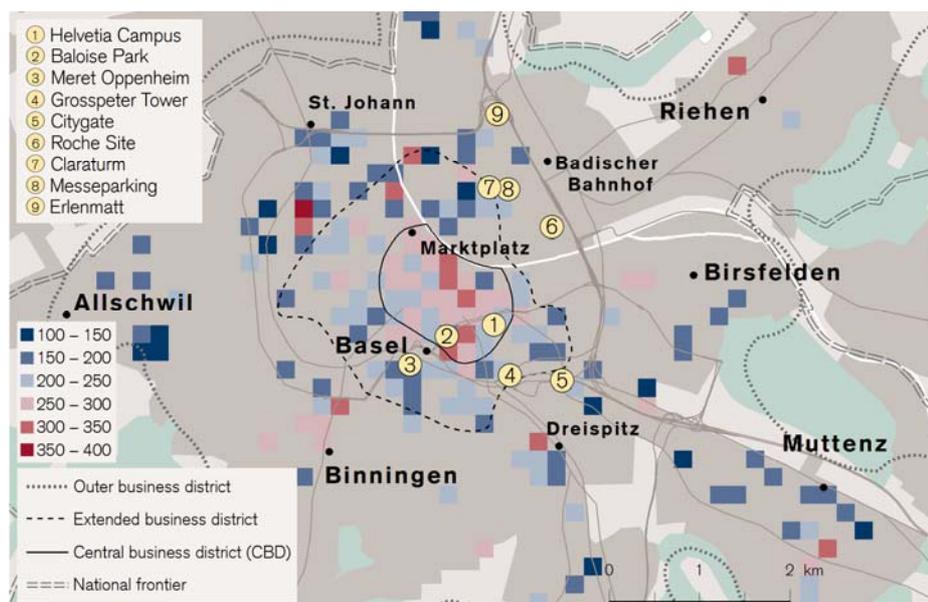
Owing to its high rate of corporate taxation, relocations to Berne are not to be expected as a consequence of CTR III. Instead the canton needs to consider that other cantons are in some cases planning a massive reduction in the tax burden for legal entities that will make them more attractive for companies subject to ordinary taxation. In order to prevent relocations for fiscal reasons, Berne also intends to reduce its maximum rate of tax on profits from 21.6% at present to between 16.4% and 18% by 2021. This will not make it entirely competitive as a location in terms of fiscal attractiveness. However, special status companies only play a minor role in the Canton of Berne and corporate profit taxation only accounts for 10% of overall tax revenues. Nevertheless, the office property market could be indirectly affected by the revenue shortfalls faced by the Federal Government due to CTR III. In order to increase the leeway of the cantons to reduce the ordinary tax rates on profits, the Federal Government intends to increase the cantonal share of direct federal tax from 17% to 20.5%. The revenue shortfalls resulting from this of around CHF 1 billion each year could cut the future growth in expenditure and ultimately force the administration to reduce its high employment growth seen in recent years, which would curb demand.



Basel

Figure 61: Advertised rents (net) of the Basel office property market

In CHF/m² and year, grid size 200 x 200 m, 2012–2015; area-weighted average rent = CHF 222



Source: Meta-Sys AG, Federal Office of Topography, Credit Suisse.

Low price differences between the business districts

With an area-weighted average net rent of CHF 222/m², Basel, alongside Berne, is the least expensive major center in terms of office property prices. Particularly in Basel's central business district (CBD) the median rent lies at a comparatively low level of CHF 260/m² and differs from that in the outer business district by just CHF 52/m². In Zurich this difference is more than four times as great (Figure 50). Relocations out of the city center for cost reasons have therefore never been as significant an issue in Basel as in other major office property markets. Outside the CBD and the outer business district, the municipality of Binningen in Basel-Land has a high price level for the region. Advertised rents below CHF 200/m² are primarily to be found in the outer business district, the extended business district in Kleinbasel and in the Gundeldingen neighborhood close to the railway station.

The most dynamic office property market in Switzerland

Basel is currently proving the most dynamic office property market among the Swiss major centers. The share of properties being let for the first time in the entire supply of property lies at a comparatively high 60.6% and there is no shortage of ideas for further projects in the office segment. Since with the exception of the works premises of the pharmaceutical multinationals at the Rhine knee only few properties have recently been constructed, the amount of advertised office space has fallen to 152'000 m² in the course of 2015, down by 17'000 m² compared with four quarters previously (Figure 63). Only 11.9% of the advertised property is located in the CBD, a historically low share. Instead, 40.8% of the advertised office space is to be found in the outer business district that is largely composed of the adjacent municipalities in Basel-Land. In line with supply, the amount of vacant office space in the Canton of Basel City has fallen from more than 75'000 m² in 2014 to just under 61'000 m² in 2015. This puts it back at the level of 2008.

Basel high-rise fever continuing

With an approved volume of construction investments of CHF 201 million in 2015, Basel's office property market currently has a share of almost one third in the volume of investments of all the five major centers (Figure 62). However, most of the investments are not planned in the City of Basel but primarily originate from the construction of two new office buildings for Roche in Kaiseraugst. Within the city the Meret Oppenheim Tower is the largest approved project seen in the past year. The 81-meter-high tower being constructed by the SBB with around 10'000 m² of office space already has a pre-letting rate of 76% and is to be moved into in January 2019. The Grosspeter Tower has already been under construction for over a year and alongside a hotel is set to bring 11'500 m² of office space to the market in 2017. The dismantling of the Hilton Hotel to make space for the new Baloise Park has already commenced. 700 jobs from various parts of the company will be converged at the new Baloise headquarters in 2020 and a further 600 office workplaces let to third parties. The building complex on the Erlenmatte site with 6870 m² of office space is likewise under construction. Helvetia

Insurance is planning a similar expansion project to Baloise with a new office tower at its Swiss headquarters in the St. Alban neighborhood. However, the Basel high-rise fever is also prevailing outside the city: With the Aquila, Ceres Tower and Helvetia Tower projects, three high-rise buildings are under construction in Pratteln that altogether will offer around 12'500 m² of office space. Further projects such as CityGate, Claraturm and the tower to replace the parking block at the exhibition center also envisage office usage but for various reasons (pre-letting rate, approval procedure, objections) are not yet ready for construction.

Roche intends to give up branch offices in the city center in the medium term

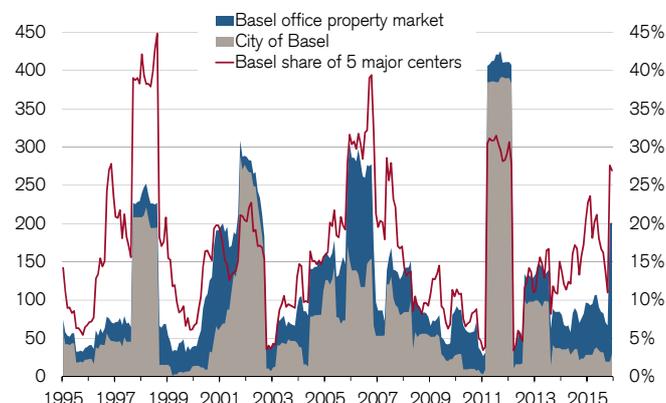
Additional properties will come onto the market in Basel with the ongoing restructuring and consolidation of the Roche site. As well as the building already opened (Building 1) that is currently the tallest building in Switzerland, an even higher office building (Building 2) with around 1500 to 1700 workplaces is to be constructed in virtually identical form by 2021. Adjacent to this a new research and development center is being built by 2022 (Buildings 4 to 7) with around 950 laboratory and 950 office workplaces. Further new buildings, refurbishments and extensions are planned. It will not be possible to occupy the new workplaces by means of a purely organic growth of the workforce. Instead, Roche intends to give up its network of branch offices within the City of Basel and to concentrate its staff on the Wettstein site in order to simplify communication and strengthen collaboration. Around 4000 employees work at the 16 office locations that are largely rented. For this reason an estimated 70'000 m² of existing office space in Basel city center will gradually become available by 2024 if Roche implements its intentions as planned.

City of Basel relying on the patent box

80% of the profit tax substrate and 56% of the actual profit tax revenues of the Canton of Basel City originate from special status companies enjoying privileged taxation. No other canton depends so much on special status companies. In the important life science sector with around 20'000 FTEs, virtually every company benefits in one form or another from the current tax privileges. Without countermeasures the profit tax burden will rise significantly following the implementation of CTR III and is likely to lead to the migration of companies affected. As part of CTR III the Federal Government envisages the introduction of a patent box for the fiscal support of research expenditure, replacement measures for tax on capital and transitional measures for today's special status companies. The patent box is an important element for enabling the City of Basel to remain competitive in research and development-intensive industries (R&D). As not all of the current revenues subject to reduced taxation are covered by the patent box, the Canton of Basel City will also have to cut the ordinary tax rate on profit in order to maintain its attractiveness. Revenues taxed at the ordinary rate before and after the reform will benefit from the reduction in the ordinary tax rate by way of a knock-on effect. Compared with the cantons with the lowest taxes, the City of Basel will still be barely competitive for companies subject to ordinary taxation even after the tax reform but it should remain an attractive location for companies with a high share of R&D.

Figure 62: Approved construction projects

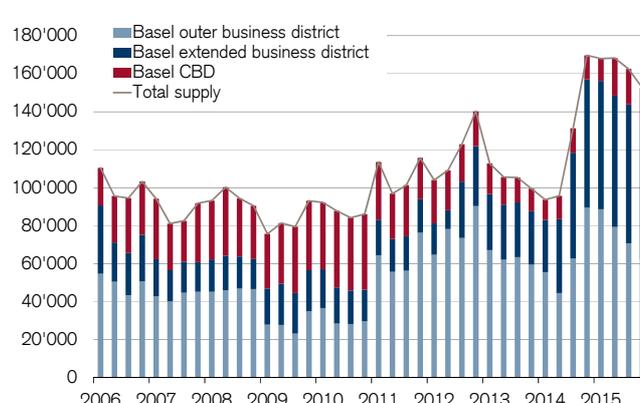
Office space, in CHF m (l.h.s.); share in total of five major centers (r.h.s.)



Source: Baublatt, Credit Suisse

Figure 63: Trend in advertised office space

Advertised office space: quarterly totals (existing and new constructions) in m²

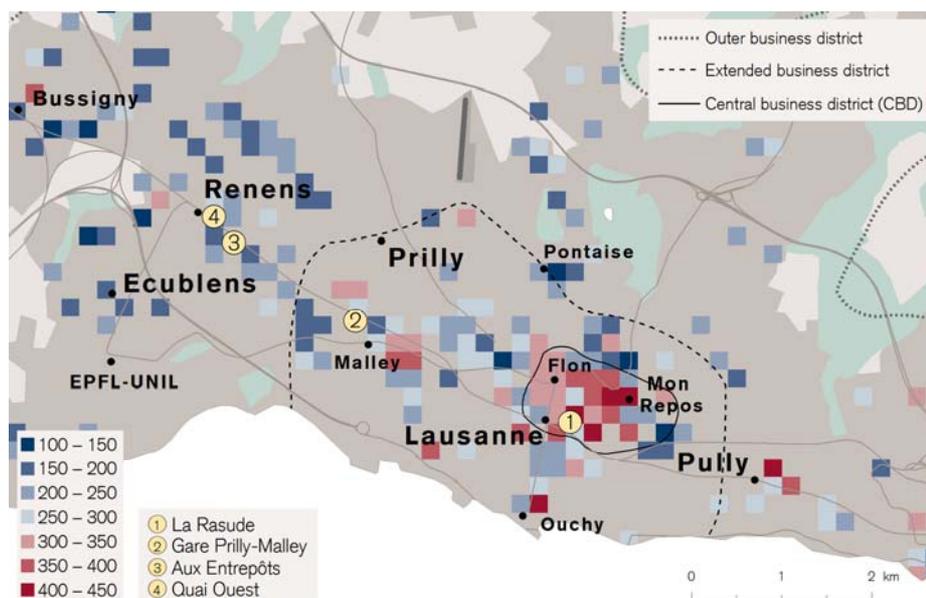


Source: Meta-Sys AG, Credit Suisse

Lausanne

Figure 64: Advertised rents (net) of the Lausanne office property market

In CHF/m² and year, grid size 200 x 200 m, 2012–2015; area-weighted average rent = CHF 269



Source: Meta-Sys AG, Federal Office of Topography, Credit Suisse

Office rents on average 40% lower than in Geneva

With its superb location on Lake Geneva, world-renowned education and research institutes and its function as the center of French-speaking Switzerland, Lausanne is an attractive place for service companies to settle. Moreover, at a net CHF 269/m², area-weighted average rents are almost 40% lower than in neighboring Geneva – even in the central business district (CBD). The triangle between the railway station, Flon and Mon Repos is home to the most exclusive office locations in Lausanne with net rents of up to CHF 450/m². Above-average rents exceeding CHF 300/m² can also be found in Pully, to the east of up-and-coming Malley and in one or two locations immediately adjacent to the lake. Outside the CBD office rents are considerably lower: Advertised office rents only a few hundred meters from the station can be below CHF 250/m². Less expensive properties with net rents frequently below CHF 200/m² are to be found to the north of the university and the Swiss Federal Institute of Technology of Lausanne (EPFL) in Ecublens and Renens. In view of the projects being realized in this area as part of the Lausanne Ouest Development Plan (tram t1, high-performance buses, Renens railway station), it is set to continue to gain in attractiveness and inject strong impetus into the west of Lausanne.

Peak in supply of property likely to have been passed

After supply on Lausanne's office property market reached its previous record of over 199'000 m² in the fourth quarter of 2014, it subsequently decreased and now lies at 172'000 m², which equates to 6.8% of existing office space (Figure 66). The high supply of property in Lausanne had developed in the aftermath of the financial crisis due to a combination of lower demand and high office space expansion. Because planning activity already decreased sharply in 2013, the share of property advertised for first-time let is today significantly lower at 7.7% than in the major centers of German-speaking Switzerland. However, as in other major office property markets, supply is also increasingly shifting to the extended business district in Lausanne. Five years ago advertised office space in this district amounted to 10% of the total but today it has risen to around a third. On the other hand, the share of supply has decreased in the outer business district despite still accounting for half of all advertised properties. The share of the CBD lies at a comparatively stable 10% to 20%. The official vacancy figures suggest that the supply of property could have passed its peak. While there was barely any change to the total amount of empty office space in the Canton of Vaud over the year, vacancies in the Lausanne region recently fell to just under 29'000 m². An easing of the oversupply can therefore also be observed in terms of vacancies.

CTR III and discontinuation of Lex Bonny significantly increasing tax burden for privileged companies

The uncertainties concerning CTR III are set to hamper demand on Lausanne's office property market. They gradually appear to be getting settled. While the Canton of Vaud has similarly high ordinary tax rates as Geneva, its tax rate for special status companies is considerably lower at just under 4% – only in the Canton of Fribourg is this rate lower. Thanks to comprehensive tax breaks, the average effective tax rate on profit for all legal entities in Vaud is just 7.3%. These

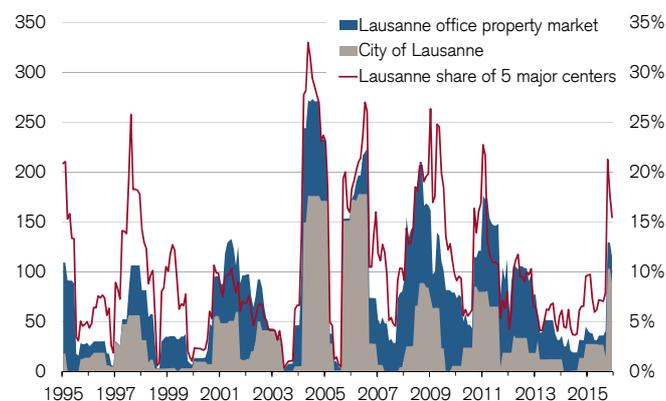
include special tax breaks for the first ten years after settling in the canton and Lex Bonny tax incentives that in line with the regional policy of the Canton of Vaud comprise tax privileges due to expire by the end of 2017 at the latest. The ordinary effective rate of 13.79% envisaged by the cantonal government accordingly represents a significant tax increase for companies that today enjoy privileged taxation. According to the Créa study there are 9200 employees in the entire canton (3.2% of the total workforce) working for 701 special status companies. If they are unable to benefit from tax reductions (e.g. patent box), some of these highly mobile companies may migrate to locations abroad with lower taxes – unless these are also obliged to abolish their privileges. Assuming, for instance, that due to CTR III 10% of the affected jobs of special status companies disappear without replacement, the demand for office space would fall by around 18'400 m². However, greater weight is carried not by possible migrations but by any lack of new settlements. With the envisaged effective tax rate and taking into account further locational factors, Lausanne would altogether prove to be an attractive and competitive corporate location. Nevertheless, as the companies that until now have enjoyed privileged taxation are assumed to be among those with the highest mobility, a certain degree of uncertainty remains concerning the effects of Corporate Tax Reform III on the Lausanne office property market.

Attractive projects planned around the stations

The oversupply of properties and uncertainties concerning future demand has given rise to restraint among investors in the last two years. The new construction project of the International Olympic Committee has recently increased the moving 12-month total of approvals with a sum of CHF 116 million over the longterm level (Figure 65). However, as in Geneva there is no lack of ideas on the office market of Lausanne. Particularly at locations with a high quality of public transportation connections close to Lausanne, Renens and Prilly-Malley railway stations there are plans for some major site developments. In the La Rasude neighborhood in the center of Lausanne and in the immediate vicinity of the railway station, site owners Mobimo and SBB Real Estate are planning a major project. A large-scale complex with offices (70%), apartments, services and shops is to be constructed on a site measuring 76'000 m². A new neighborhood is planned in Renens with the Aux Entrepôts project. As part of this, three new office buildings are being constructed next to the railway tracks – two of them for the SBB which is building its new Western Switzerland head office there. This would expand the office property market by 25'000 m². In the immediate vicinity, directly adjacent to Renens station, among other things almost 5000 m² of office space are to be added as part of the Quai Ouest project. And at Prilly-Malley station the SBB is planning 20'340 m² of floor space for offices, retail units, services and apartments. Should the attractive projects be realized as of 2017/2018, there will be sound prospects of finding tenants for the office space despite weak demand. However, less well connected locations may then come under pressure.

Figure 65: Approved construction projects

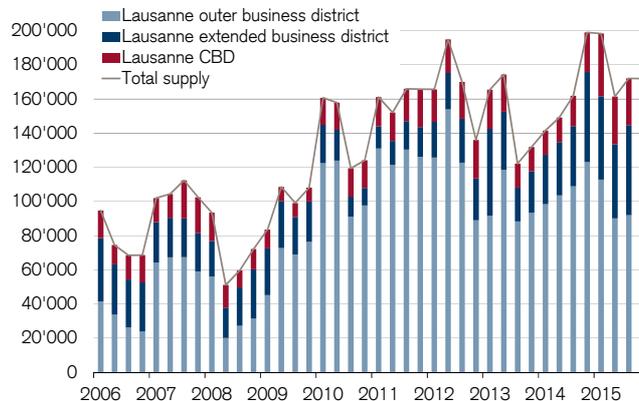
Office space, in CHF m (l.h.s.); share in total of five major centers (r.h.s.)



Source: Baublatt, Credit Suisse

Figure 66: Trend in advertised office space

Advertised office space: quarterly totals (existing and new constructions) in m²



Source: Meta-Sys AG, Credit Suisse

Dwindling demand causes further rise in oversupply

Outlook for office property in 2016

The Swiss economy will not gain much momentum in 2016, with growth likely to remain well below potential at 1.0%. High location costs and margin pressures are forcing companies to automate processes on an extensive basis as well as outsource jobs to lower-cost locations. Structural changes in the financial services industry coupled with the reforms to corporate taxation are creating uncertainty and making businesses reluctant to hire additional staff. We therefore expect only a slight rise in employment and an increase in the unemployment rate from 3.3% in 2015 to an average of 3.7% in 2016. On the supply side, negative interest rates and investment pressures are keeping the volume of investment in office property above the long-term average despite a high supply rate and growing vacancies. Medium-sized centers, where supply rates are still modest, are generating increased interest among investors. As we do not expect higher employment growth in the office sectors in the medium term, and in fact expect a slowing-down, planned expansion is too great for there to be a trend reversal in vacancies. Consequently, we expect the imbalance between supply and demand to increase further after having appeared to stabilize for a short while. This is likely to maintain the pressure on rents and intensify competition. We expect a continuous rise in vacancies, above all in the extended and outer business districts of the major urban centers and also in the medium-sized centers in the medium term. Vacancies can easily be reduced in the central business districts, but at the cost of granting concessions on rental conditions.

Demand, supply and market outcome

Demand	Background	Outlook
<p><i>Development of demand:</i> Due to regulatory-driven locational uncertainties (Mass Immigration Initiative, Corporate Tax Reform III), as well as the offshoring of jobs and structural change in the financial services sector, employment in the traditional office sectors is likely to show only marginal growth. Demand is additionally being reduced by the consequences of digitalization, which enables office properties to be used more efficiently. A marginal increase in demand of only about 10'000 m² is expected across all sectors in 2016.</p> <p><i>Situation in individual sectors:</i> Although government-related sectors will continue to show solid growth, the absence of strong stimuli in other sectors is depressing overall demand. Falling demand is expected in industry as well as in the financial services sector. We view IT – besides public services and social care – as the sector offering the best growth prospects.</p>	→	↘
<p>Supply</p> <p><i>Planning activity:</i> Undeterred by the growth in vacancies and subdued economic outlook, the planned investment volume is still marginally above the long-term average of CHF 2.0 billion. Relative to the projected dip in demand, the planned expansion is too great for there to be a trend reversal in vacancies. In regional terms, investment is shifting from the major centers to the medium-sized ones.</p> <p><i>Supply structure:</i> Advertised supply stabilized at a high level during 2015 and stands at around 2.2 million m². The share of advertised space in the five major centers is high by historical standards, but did not rise any further in 2015. Whereas many advertised properties in the major urban centers of German-speaking Switzerland are new, supply in the major urban centers of the French-speaking part of the country consists mainly of existing stock.</p>	→	→
<p>Market outcome</p> <p><i>Vacancies:</i> The vacancy rate within the partial survey, which covers 43% of the office property market, increased for the fourth year in a row. Vacancies increased by 26% in 2015 to a total of 657'000 m². The high rate of construction activity seen in a number of places in recent years is only now being more clearly reflected in vacancy rates; other locations saw an easing. In view of the existing imbalance between supply and demand, vacancies will continue to rise in the medium term.</p> <p><i>Rents:</i> The high level of vacancies has strengthened the negotiating position of tenants and increased the pressure on rents. With the exception of Geneva, however, the pace of the price correction has slowed. In view of the ongoing supply overhang, the decline in quality-adjusted office rents is likely to continue this year – if not at quite the same rate.</p> <p><i>Performance (total return):</i> The introduction of negative interest rates by the Swiss National Bank allowed a further reduction in discount rates, with the result that there were no adjustments to office property values. In light of rising vacancies and falling rents, however, such adjustments have merely been deferred. We therefore expect a weaker performance this year.</p>	↗	↗
	↘	↘
	→	↘

Source: Credit Suisse

Retail property

Shake-up has only just begun

As if the boom in e-commerce were not enough of a challenge, the situation for the retail trade has continued to worsen due to the strength of the Swiss franc and increased cross-border shopping. The fact that the planning of new retail space has been extremely weak for years shows the scale of the uncertainty. The prospects for bricks and mortar retailing in an online world and the types of properties that have the better chances of finding a tenant are the issues that interest us most.

Demand hits the buffers due to shopping tourism and e-commerce

Abandonment of EUR/CHF exchange-rate floor gives fresh boost to cross-border shopping ...

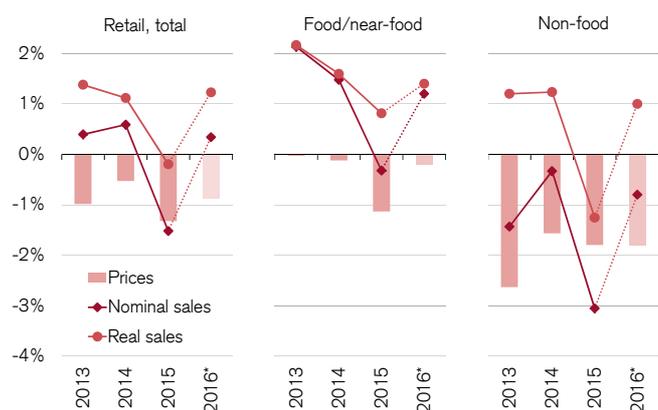
For the retail trade, 2015 was a year to forget. Two-thirds of retailers failed to achieve their sales targets, with more than half missing their profit targets. The abandonment of the EUR/CHF exchange-rate floor early in the year put a major spanner in the works for the retail trade. The marked rise in the value of the Swiss franc gave a fresh boost to cross-border shopping, which had stabilized at a high level in 2012–2014. CHF 11 billion – or around one-tenth of the sales of the entire retail sector – was spent abroad in 2015 by Swiss consumers. As in previous years, most of the spending is likely to have been on food/near-food as well as clothing and sports equipment.⁴

... and causes retail sales to fall in 2015

Besides shopping tourism, the deterioration in consumer sentiment also had a negative impact on retail sales. Neither persistently robust population growth nor higher purchasing power could make up for these negative effects. In 2015 the retail trade posted a 0.2% fall in real sales on a year-on-year basis (Figure 67).⁵ The nominal drop in sales was 1.5%, because retailers adjusted their prices more quickly following the rise in the value of the Swiss franc than they did back in 2010/2011. Although the food segment continued to hold up comparatively well (–0.3% year-on-year in nominal terms), the non-food segment suffered a catastrophic year with nominal sales falling 3.1%.

Figure 67: Retail sales and prices

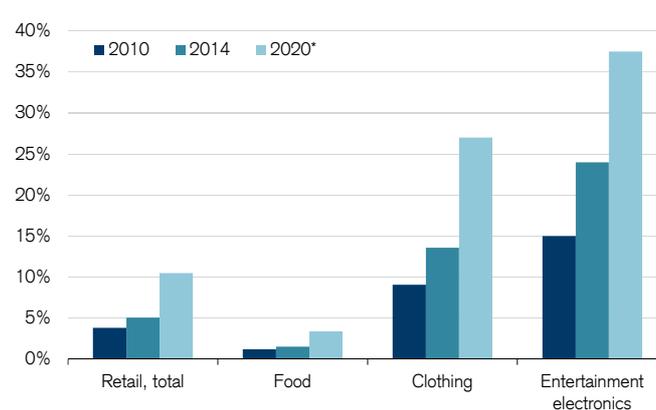
Year-on-year change (calendar-adjusted); * forecast



Source: GfK, Swiss Federal Statistical Office, Credit Suisse

Figure 68: Online share of Swiss retail sales

Online share (retailers in Switzerland) of total sales; * forecast



Source: GfK, Verband des Schweizerischen Versandhandels (VSV), Credit Suisse

⁴ Cf. GfK on behalf of the Swiss retailers' association IG DHS (IG DHS) (2013): "Auslandeinkäufe 2012" and University of St. Gallen (2015): "Einkaufstourismus Schweiz 2015".

⁵ Cf. Credit Suisse (2016): "Retail Outlook 2016: How Swiss is the Swiss Retail Sector?".

2016: Return to faintly positive sales growth

Overall conditions for the retail trade are likely to brighten slightly in 2016. Growth in the Swiss economy is likely to get going again (GDP +1%), while immigration – and therefore population growth – will remain robust and purchasing power will see a mild improvement. Cross-border shopping is likely to stabilize thanks to an expected EUR/CHF exchange rate of 1.10. By contrast, the unemployment rate is increasing and consumer sentiment is subdued; consequently, we expect only minimal nominal sales growth of 0.3% for the retail trade (Figure 67). This is again based mainly on the food/near-food segment; in the non-food segment, by contrast, we expect another nominal fall in sales. Prices in the retail sector as a whole are likely to fall again by a slightly less sharp 0.9%, giving a rise in sales of 1.2% in real terms. However, the challenging profitability situation is therefore likely to stabilize at most.

E-commerce accounts for all the growth ...

The growth figures above also include e-commerce, which is growing at very dynamic rates of 7%–10%. This is down to a combination of demographic trends, advances in technology and changing consumer behavior. The growing proliferation of mobile devices means more and more consumers are discovering the many benefits of shopping on the internet. The more familiar they become with the convenience of buying online, the less they want to miss out on the low prices and wide product range it offers. Further market share losses for bricks and mortar retailers are therefore inevitable. In addition, millennials and digital natives are growing as a share of the total number of consumers. They have grown up with the internet, and using it comes completely naturally to them. Their share of the population is set to increase from 31% to 46% by 2025. Due to this factor alone, e-commerce is likely to gain further market share. Therefore, it is highly probable that virtually all the growth in the retail sector will come from the online channel in the next few years too. Online market shares will develop differently depending on the segment (Figure 68). We expect market share of 11% for retailing as a whole by 2020, but a share of up to 27% and 38% in clothing and entertainment electronics respectively. Bricks and mortar retailing is accordingly fighting a rearguard battle. Last year saw bankruptcies and business closures in the retail clothing sector in particular. Others are likely to follow.

... but also does offer opportunities for bricks and mortar retailing

A complicating factor is that it is unclear which concepts could be successful. A wait-and-see strategy is dangerous in this market situation, however. Innovative ideas and a trial-and-error approach are called for alongside close monitoring of the market. Combining the advantages of bricks and mortar retailing with the advantages of the online world (price comparisons, depth of range) provides opportunities, although it requires transforming physical outlets into digital stores. Businesses that focus on mobile and omni-channel commerce will have a greater chance of success. This nevertheless presupposes a high level of online expertise, which most retailers are currently lacking.

Uncertainty curbing the demand for floor space

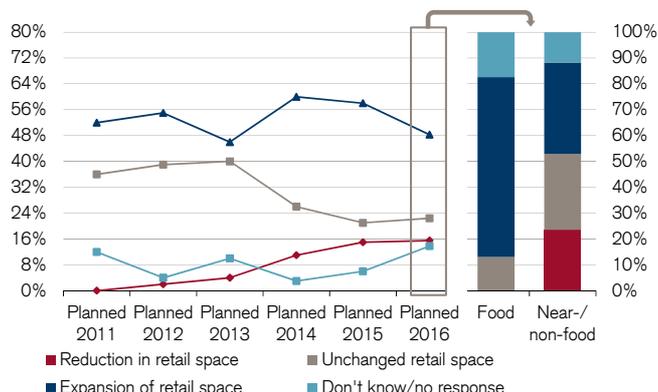
Uncertainty about the strategy to be taken, together with urgently needed investments in online capacity, has unforeseeable consequences for the demand for retail property – demand that is already weak due to the poor profitability situation in retailing. Yet according to a regular survey conducted in the fall by Fuhrer & Hotz, fewer than 50% of the retailers questioned plan to expand their retail space (Figure 69). The proportion planning a reduction has increased only slightly to 16%. Partly due to the different challenges posed by e-commerce, food and near-/non-food retailers are embarking on different ways to optimize their retail space. While 70% of food retailers are on the hunt for additional or larger properties, 53% of those in the near-/non-food segment believe their current or even reduced retail space will be sufficient to meet their future needs. The uncertainty is also evident from the high proportion of respondents (14%) who simply do not know what strategy they should follow. The leeway for expansion strategies is therefore likely to be limited in this environment and to be concentrated on the food segment. Outside the border regions, the latter is less heavily exposed to either shopping tourism or online competition and can therefore concentrate on closing gaps in its own branch network and capitalizing on the opportunities provided by population growth, which varies considerably from region to region.

International comparison: Swiss e-commerce at early stage of development

Given the absence of empirical data on the impact of e-commerce on retail property, it is worth taking a look at the picture abroad. Fact is, although Switzerland is easily one of the most developed countries for online shopping among 16 to 74-year-olds and for household internet access, e-commerce in Switzerland is still comparatively underdeveloped with a market share of 5.4% (2014) (Figure 70). This is confirmed by PwC's "2015 Global Omnichannel Retail Index", which ranks Switzerland in only 14th place out of the 19 countries examined. One reason is the fact that by international standards the omnichannel strategy is still not very widespread in the Swiss retail sector. This raises fears that structural change has just set in.

Figure 69: Planned change in retail space

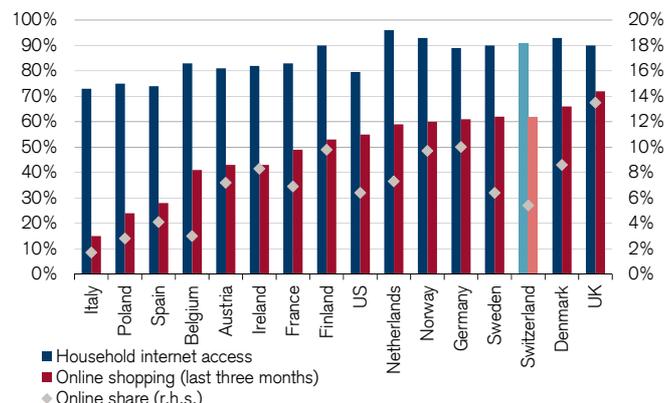
L.h.s.: total retailing, n=47 (2011) to 90 (2014); r.h.s.: 2016 projections by segment (food: n=23; near/non-food: n=34)



Source: Fuhrer & Hotz

Figure 70: International comparison of internet access and online shopping

Number of households with internet access, proportion of 16 to 74-year-olds having shopped online in the last 3 months (l.h.s.); online as a percent of sales; 2014



Source: Swiss Federal Statistical Office, Statista, US Bureau of Census, Center of Retail Research, HUI Research, Verband des Schweizerischen Versandhandels (VSV), GfK, Credit Suisse

UK serves as a guide

The UK is the absolute front-runner with an online market share of an impressive 13.5% (Figure 70). A glance across the Channel is worthwhile given the UK's similarities with Switzerland in terms of demand structure, internet access and shopping behavior. The list of long-established UK retailers that have gone to the wall is a long one: Comet, JJB Sports, HMV and Jane Norman are just some examples. According to the Centre for Retail Research, a total of 294 medium-sized to large retailers had to close more than 23'500 outlets in 2008–2014. The vacancy rate, meanwhile, increased from 5.4% to 13.4% (Local Data Company), although this was partly caused by the economic crisis and not just by the strong growth in the share of e-commerce from 8.3% to 13.5%. Thus the impact of e-commerce should not be over-estimated. This is also indicated by the slowdown in store closures and stagnation in vacancies seen in recent years in the course of the economic recovery. Even so, the trend is impressive and shows how weak consumer spending and an expanding e-commerce segment can trigger structural change and impact on the demand for retail space. A similar mix of factors can be seen in the Swiss retail sector right now with the strong growth in cross-border shopping, a change that prompted one or the other well-known clothing retailers (e.g. Companys, Bernie's and Jamarico) to give up last year.

Despite successful concepts, overall demand for retail space in the UK is falling

Despite a high number of shop closures in the UK, e-commerce also creates opportunities for new concepts and the development of successful businesses provided the changing market conditions are reflected. Examples include retailers like Argos, Next and John Lewis, where online sales now accounts for more than 30% of total sales. John Lewis, for example, has expanded its branch network from 27 stores in 2008 to 46 in 2015. However, these individual examples of successful concepts should not obscure the fact that at the end of the day the result is reduced demand for retail property. This is the inevitable outcome in Switzerland too.

Planning activity on the back-burner

Supply: Uncertainty stronger than investment pressure

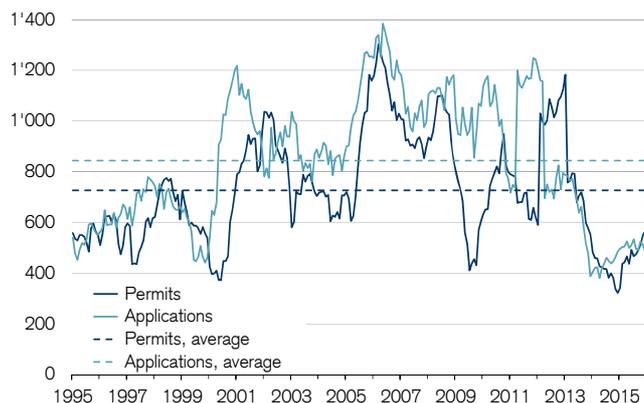
Despite the low interest rate environment and therefore ideal financing conditions, together with strong investment pressures for investors, the latter are showing extreme hesitancy on retail property projects. This reticence is due to the difficulty of finding tenants for new retail property projects. It is evidenced not only by the total construction volume of approved new retail properties (Figure 71) but also by how they break down by project size (Figure 72). With a construction volume of CHF 80 million, a major development approved in February 2015 is the first retail property project with an investment cost of more than CHF 50 million to have been approved since June 2012. Planning for the project – a shopping mall in Ebnet in Sirmach (Canton of Thurgau) – originally began in 2002. Like a number of other projects, it is among the stragglers of the major wave of expansion seen during the last decade. Planned construction volumes are lower in the CHF 20–50 million and CHF 10–20 million investment categories, too.

Expansion set to remain minimal in 2016

New retail property with a total construction volume of CHF 565 million was approved in 2015 (Figure 71). This shows that permitted retail projects have recovered again slightly from the low point reached at the end of 2014, the total value of projects is still well below the long-term average of CHF 727 million though. What's more, the approved projects include a noticeable number of mixed-use developments where retail space takes up only a small proportion and construction is able to start without pre-letting of the retail space. In view of applications for new retail property, this situation is unlikely to change at all any time soon. At CHF 486 million, they too remain at a level that is well below average.

Figure 71: Retail property planning

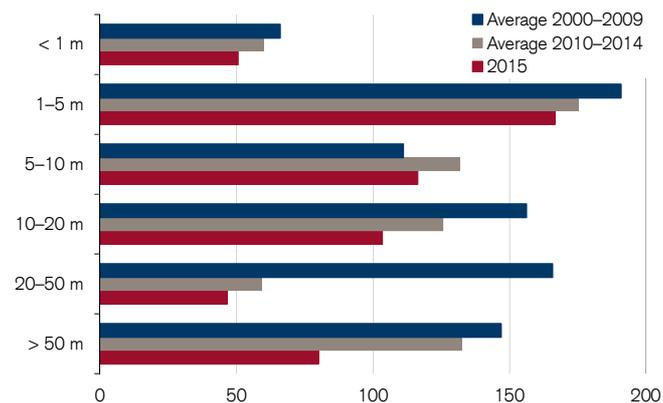
New construction, 12-month moving average, in CHF m



Source: Baublatt, Credit Suisse

Figure 72: Permits for new construction by project size

New construction, 12-month moving average, in CHF



Source: Baublatt, Credit Suisse

Larger projects nevertheless still being completed in some cases

Although the planning of new large-format developments has practically come to a halt based on applications and approvals activity, one or the other larger property is nevertheless being completed. Low interest rates do not seem to be entirely without impact, after all, and some projects are not quite as dead they were thought to be. Take, for instance, the Stade de Bienne (completed), Mall of Switzerland (under construction) and FCS Park (Lipo Park) in Schaffhausen (under construction) – projects that had already been written off but have been or will ultimately be completed. The delays are due firstly to a protracted planning phase given size and complexity and secondly to subdued market sentiment. It sometimes took several attempts for these projects to actually make it to the construction stage. That said, the number of project completions has fallen massively compared with the last decade, during which one in three Swiss shopping malls opened its doors. Just two shopping malls/retail parks opened in 2015: the Allmend Center in Frauenfeld and the Tissot Arena in Biel/Bienne (Stade de Bienne). In 2016 and 2017 we are likely to see a total of four to five. With no new project ideas sprouting up, the project pipeline is gradually thinning out. Ultimately the actual annual expansion of retail space is likely to be slightly higher than building permits would suggest. Total expansion of retail space – the only exception being the Mall of Switzerland – will nevertheless remain modest and will at least not cause any more problems for a market that is looking for direction.

Market outcome: Landlords have the weaker hand

Rising vacancies

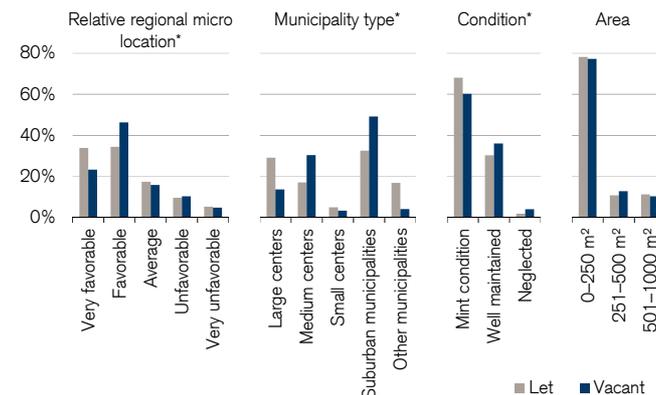
In view of the negative retail sales trend and challenges currently facing the retail property market, it was expected that properties reported as being vacant would increase. According to the partial survey covering around one-third of the market, 86'500 m² of retail space was empty as at June 1 (Figure 73). This represents a year-on-year increase of 4.7% and is now 12% above the average for the period since 2001. Vacant properties have risen for the second time in a row after oscillating around 70'000 m² in the 2008–2013 period. The biggest increase was recorded in the Canton of Geneva, where total retail vacancies reached a 10-year high. With the exception of Lausanne, vacant properties increased in all city regions – if only marginally in some cases. In light of the difficult demand situation, we do not expect any change in the trend of rising vacancies over the next few years.

Figure 73: Vacant retail spaceIn m², as at June 1, partial survey: around 33% of the Swiss retail property market

Source: Various statistical offices, Credit Suisse

Figure 74: Benchmark vacancies by characteristics

Distribution of vacant/let space, as at September 30, 2015



* weighted by floor space

Source: REIDA, Federal Office for Spatial Development, Credit Suisse

Prime locations at much less risk of vacancies

The more the number of vacant properties increases, the more interesting it is to see which properties are hit worst of all by letting difficulties. Data from the Real Estate Investment Data Association (REIDA) enable initial conclusions to be drawn about the characteristics of vacant retail properties. A total of 4.5% of retail properties owned by institutional investors were empty as at the end of September 2015. "Very favorable" locations, i.e. 1A sites, are much less affected by vacancies (Figure 74). The situation with "good", i.e. 1B sites – which are not among the best but are nonetheless above-average – is precisely the opposite. Vacancies at these locations are growing, which just goes to prove an old retail truism: A shop 50 to 100 meters away from the best locations can literally starve to death.

Vacancies no greater in small stores than in large ones

It is rare to find retail properties at poor or "unfavorable" locations. Nearly 70% of the retail properties examined fall into the "very favorable" or "favorable" categories of location, although we apply a strict regional approach to the classification of locations. This means individual sites are only compared and classified within the same region. Medium-sized centers and agglomerations (suburban municipalities) in particular are having to contend with above-average vacancies. On the other hand, Switzerland's five major centers seem to be more attractive to new business ideas and to branches of international retailers. The size of outlets does not appear to have any impact on vacancy rates. Although properties of up to 250 m² account for nearly 80% of vacancies, this corresponds fairly precisely to the share of rented properties in the same category. It might be an indication that the structural change toward larger-scale properties is over. With regard to the condition of properties, those that are in mint condition tend to be less affected by vacancies; this at least partially explains why new properties continue to be built.

High demand for prime locations ...

Competition for rented floor space remains high on prestigious shopping streets and at well-frequented railway stations. These sites offer high footfall and major economies of scope, providing a unique shopping experience. Tenant fluctuation at these sites never poses a problem for landlords. Quite the opposite: Expiring leases enable landlords to readjust rents in line with higher market levels. Generally speaking, however, it is only the leading retailers in their segment that can withstand the cost pressures at such locations. The face of these shopping streets is therefore constantly changing. Long-established businesses are disappearing with great regularity. This trend is likely to gather pace in the future: Fact is, visibility is only possible in the front row and it is only there that successful retailers – whether originally bricks and mortar or online – are prepared to dig into their pockets in order to have a presence at these choice locations.

... whereas sites away from prime locations face marketing difficulties

The situation looks different at locations away from the major shopping streets and well-frequented transport hubs. Here it is increasingly the landlords that are having to look for tenants. Tenant losses are frequent but generally occur unnoticed. New properties have the greatest trouble finding financially strong tenants. This is partly due to the fact that locational qualities in the world of bricks and mortar no longer have the same significance in an omni-channel world. When the internet becomes the retailer's shop window, factors such as visibility and footfall no longer play the same role. A retailer consequently needs to be clear about what online strategy they wish to pursue. The choice of location then becomes a secondary decision.

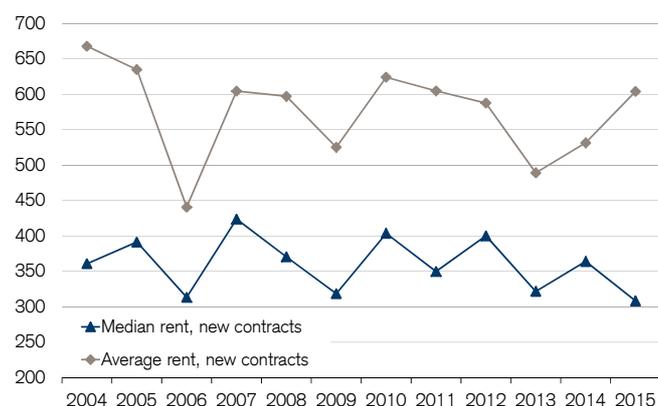
The decreased importance of locational qualities is reflected in the fact that away from the best locations marketing is a slow process across the board. There are several indicators of this.

Indicator 1: Rents are under pressure

Rents are under pressure, with Wüest & Partner data showing that rents offered have declined by 2% annually in recent years. In addition, the development of newly agreed contractual rents also shows a declining trend (Figure 75). As at September 30, 2015, the median rent for newly agreed rental contracts in 2015 was just under CHF 310/m² per year. This compares with an average figure of CHF 350/m² per year during the last five years. The volatile development of average rents is attributable to the wide range of newly agreed rents in the top price segments. In 2015, the 95th percentile of net rents climbed to its highest level since 2005 at more than CHF 2400/m² per year. This underscores the persistently high demand at prime locations.

Figure 75: Contractual rents on retail property

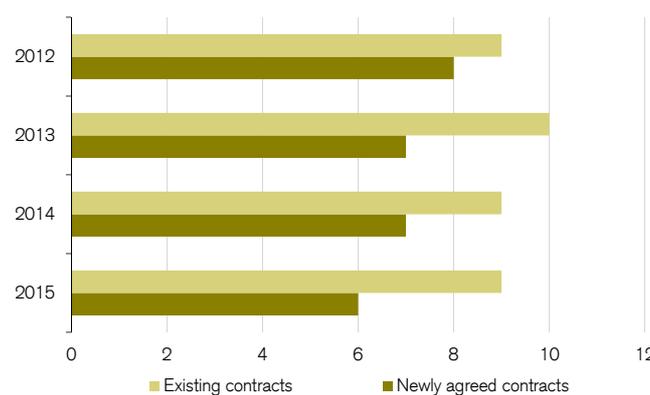
Net rent in CHF/m² p.a., based on year contract agreed



Source: REIDA, Credit Suisse

Figure 76: Term of rental contracts

Average term of contract in years



Source: REIDA, Credit Suisse

Indicator 2: Shorter contract term

A further indication of the growing difficulties with the marketing of retail property is the negotiating success of tenants, which are increasingly able to push through shorter contract terms (Figure 76). Shorter contract terms are often in the landlord's interest in the case of shopping malls because they ensure greater flexibility in terms of tenant mix and more active mall management. At other locations, however, landlords essentially prefer long-term contracts. Based on the contracts newly agreed in 2015 in properties belonging to institutional real estate investors, the average term of the contract has fallen once again. At six years it is now well below the term for existing tenancies, which accounts for an average of nine years.

Indicator 3: New marketing strategies

Marketing difficulties are forcing landlords to adjust their marketing strategies. On the one hand, retail properties will increasingly be posted on online portals. The ability of search engines to access these internet platforms gives them far greater reach. On the other, we can see that not only are the same properties posted on different platforms but often simultaneously on the same one. The likely reason for this is that new postings attract greater attention. Advertisers therefore deliberately stop advertising a retail property, only to post it again immediately afterward. An analysis of these redundant properties on the same platform shows that around 50% of retail properties are currently advertised in duplicate. Up to and including mid-2010, this figure was still below the 20% mark.

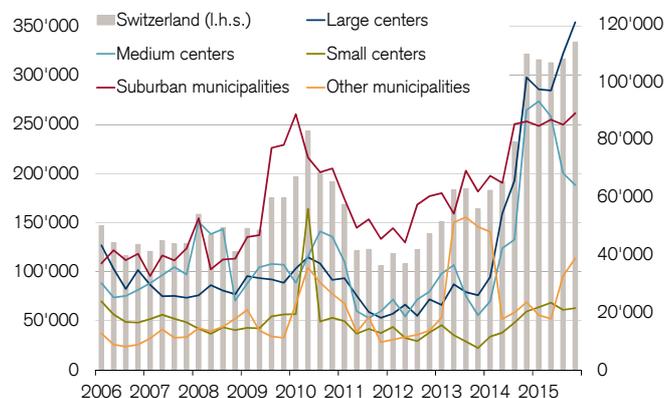
Indicator 4: Major supply of floor space

Adjusting the advertised offerings to take account of redundant postings and aggregating them on a quarterly basis gives us the volume of advertised retail properties. The comparison of advertised properties over time is a good indicator of the health of a market. An initial rise in the supply of properties could be seen following the outbreak of the financial crisis (Figure 77). The situation then calmed down, before a further steep rise set in during 2014. At that point it became clear that not everything was running smoothly on the retail property market. Advertised retail space stock amounted to a very high 335'000 m² in the fourth quarter of 2015. Advertised space therefore increased once again year-on-year. Advertised space in the agglomerations (suburban municipalities) has likewise continued to increase in recent years, although the biggest rise was seen in the large and medium-sized urban centers. The increase in the major urban centers remains unchecked, however. The volume of properties advertised in these urban

centers is more than twice the level of the last peak, in 2010. This clearly shows that we are dealing with structural changes on the retail property market – changes that in their current phase are mainly affecting the urban centers. With regard to the distribution of vacancies in Figure 74, however, it seems the re-letting of premises that become vacant has so far been easier in the large urban centers than in the medium-sized centers.

Figure 77: Advertised space

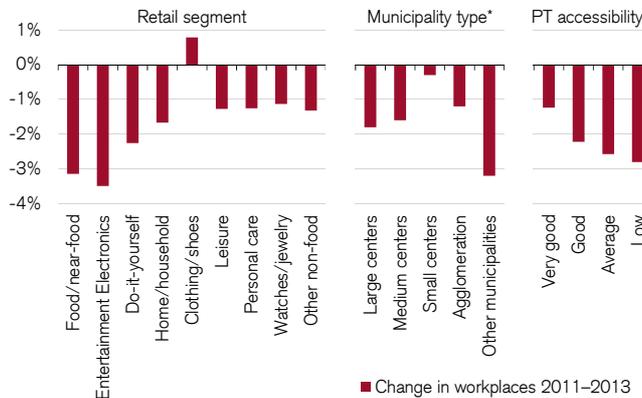
Existing space (l.h.s.), by type of municipality (r.h.s.), in m²



Source: Meta-Sys AG, Credit Suisse

Figure 78: Change in retail structure, 2011–2013

Change in workplaces; * retail trade as a whole; PT = public transportation



Source: Swiss Federal Statistical Office, Federal Office for Spatial Development, Credit Suisse

Structural adjustment in the retail property market has only just begun

The retail property market has been undergoing structural change for a number of years, a process accompanied by a continuous thinning-out of the number of retail businesses. Over the last decade we have seen a trend toward greater floor space as well as the multi-branch model. 1.2% of retail businesses disappeared annually during the 1998–2008 period. At the same time, the proportion of employees in retail chains climbed from 52% to 55%. The current decade, on the other hand, is increasingly influenced by the growth in e-commerce; this is set to dwarf the structural changes previously seen.

Ongoing trend to "death of the shops" and multi-branch strategies

"Death of the shops" and multi-branch strategies continue to dominate bricks and mortar retailing. The number of retail workplaces fell by around 950, or 1.9%, in the 2011–2013 period (Figure 78), representing a slight slowdown compared with the last decade. The high rate at which shops are dying in the food/near-food segment (3.1%) is mainly due to the disappearance of small shops (<100 m² floor space) and specialty grocery stores (specialist retailers). In the non-food segment, on the other hand, there were only 1.5% fewer workplaces in 2013 than in 2011. Numerous shops disappeared, especially in the entertainment electronics segment (–3.0%), where e-commerce is already at a highly advanced stage, but also in do-it-yourself (–2.3%) and home and household (–1.7%) (Figure 78). The positive growth of 0.8% recorded by clothing retailers in the period to 2013 is likely to be attributable to ongoing market penetration by new players. The negative reports in the clothing segment in 2015 are not yet visible in the data due to a two-year delay. The degree of multi-branching, meanwhile, increased to 62% at the end of 2013⁶. This trend is likely to continue unabated, because only retail conglomerates and the largest multiples have sufficient capital to bring urgently required online expertise on board through acquisitions or investments. This option does not exist for the smaller specialized dealers and retailers. For them, open platforms or joint ventures remain the only way forward.

The better the public transport accessibility, the greater the prospects of survival

Analysis of the rate at which shops are dying based on public transport accessibility shows a clear trend: The better a location is served by public transport, the greater the prospects of survival for retail businesses. For retail businesses with a very high public transport accessibility, shops were disappearing at a rate of 1.2% in 2011–2013; this compares with 2.8% for shops in low-quality public transport locations. The explanation is simple: Footfall is likely to be higher where public transport accessibility is good, bringing in more consumers and sales for retail businesses. Across all types of municipality, it was the municipalities away from the urban centers and suburbs that lost most businesses. Contrary to expectations, shops in the small urban

⁶ Due to a change in the system for collecting data, the figures are not comparable with the 1998/2008 data.

centers had the lowest closure rate at -0.3%. In the large and medium-sized urban centers, on the other hand, there were 1.8% and 1.6% respectively fewer shops in 2013 compared with 2011. Although medium-sized and large urban centers score the highest figures in terms of population density and accessibility and benefit from a large base of consumers, even they are not exempt from structural change.

Search for alternative uses is not necessarily bound to fail ...

In the event of a business closure, the question of how to deal with the vacancy soon arises. The preferred option is usually to retain retail use. But depending on the segment of the retail sector, re-letting within the traditional product area is difficult. For example, if an entertainment electronics dealer gives up its operation our analysis suggests there will only be a very small likelihood of a similar tenant being found again at the same location. In the case of food retailers the chances are nearly three times as high. Because retail properties generally have relatively good locational qualities, such properties are suitable for various alternative uses: Properties for small businesses (e.g. hairdressers, cosmetics salons), community facilities (e.g. children's day care centers), doctors and healthcare practices, restaurants as well as service-sector properties for small companies (e.g. graphics firms and architecture practices) are the solutions we see most frequently. All in all they actually provide greater opportunities than re-letting within the traditional product area or in another area of retailing. This applies in particular to large and medium-sized centers. Fact is that with population growth, increasing health awareness and the growing number of women among the labor force, the need for such uses is also increasing. Whereas 1.9% of store-based retail businesses disappeared between 2011 and 2013, the number of companies in the healthcare and childcare sector grew by 9.5% and small businesses by 4.3%.

... but is generally associated with lower returns

If a property owner decides on an alternative use in order to reduce shop vacancy periods, this does not usually happen without making concessions on rent. This can be worthwhile if structural shifts – as we are currently experiencing on the retail property market – rather than phases of economic weakness are the reason for the vacancies.

Shake-up has only just begun

Outlook for retail property in 2016

After a difficult 2015, overall conditions for sales in the retail sector are likely to brighten slightly in 2016. We expect a return to mildly positive nominal growth in sales. Despite the improved sales outlook, the demand for floor space is nevertheless likely to remain weak given that e-commerce is continuing to expand at a dynamic rate. The fact that online trading is still in the early stages of development in Switzerland raises fears that this structural change has only begun. The marketing of properties away from the best locations has become a challenging task. This is evidenced by rising supply rates, increasingly frenzied marketing as well as reduced rents and other types of concessions given to tenants. Accordingly, we do not expect any change in the trend to rising vacancies over the next few years. Uncertainty among retailers about the strategy to be taken, together with urgently needed investment in online capacity, is absorbing available resources – which are limited in any case by the sector's poor profitability. The resources required for an expansion of capacity are therefore lacking. Due to persistently robust population growth, the biggest boost to demand is likely to be seen in the food/near-food retail segments. The wider picture for the retail property market consequently looks likely to become gloomier, posing challenges for landlords and owners of retail space away from the prime locations in particular. Store closures, the search for tenants, vacancies and changes of use will remain key issues. With concessions often having to be granted on rental conditions, the pressure on rents is likely to continue. Locational factors such as accessibility by public transport and footfall remain key, and have a critical influence on marketing efforts and letting ability. The fact that future expansion of floor space is likely to remain modest overall will at least not cause any more problems for a market that is looking for direction.

Demand, supply and market outcome

Demand	Background	Outlook
<p><i>Retail sector:</i> Overall conditions are likely to brighten slightly in 2016. We expect a mild recovery in employment growth (+1.0% YOY), robust population growth, slightly higher purchasing power and stable cross-border shopping. On the other hand, the unemployment rate is likely to grow and consumer sentiment to remain subdued. This is therefore likely to result in minimal nominal sales growth of 0.3% for the retail sector, most of which will be accounted for by the food/near-food segment. In the non-food sector, on the other hand, we expect a further fall in nominal sales.</p>	↘	→
<p><i>Structural change:</i> While sales are likely to stagnate for the retail trade as a whole, sales generated by e-commerce are likely to grow at a dynamic rate in 2016 again. E-commerce is likely to expand to more than 6% of total sales this year. The switch in retail investment to online channels is dampening the demand for space, both directly and indirectly, because a switch to e-commerce ties up resources and capacity.</p>	↘	↘
Supply		
<p><i>Planning activity:</i> New retail property with a total construction cost of CHF 565 million was approved in 2015, well below the long-term average. The plans mainly involve smaller retail property projects and space in mixed-use buildings. Thus the expansion of floor space continues to be shaped by uncertainty and caution; consequently, it is likely to remain weak in 2016.</p>	→	→
<p><i>Expansion of shopping malls:</i> Given that shopping malls are a long time in planning, a number of individual projects remain in the pipeline. Four to five shopping malls with a minimum floor space of 7000 m² are due to open in Switzerland in 2016 and 2017. This is roughly equivalent to the expansion of the last two years.</p>	→	→
Market outcome		
<p><i>Vacancies:</i> Vacant properties have risen for the second time in a row after averaging around 70'000 m² in the 2008–2013 period. 86'500 m² of retail space was vacant as at June 1, 2015, equivalent to a year-on-year increase of 4.7%. In view of the demand situation, the trend to rising vacancies will continue in 2016.</p>	↗	↗
<p><i>Rents offered/contractual rents:</i> Rents are under pressure, as is clear not only from rents offered (Q4 2015: –5.6% YOY) but also from the decline in newly agreed contractual rents. Only prime locations have to some degree been able to buck the pressure on rents.</p>	↘	↘

Source: Credit Suisse

Special focus: Healthcare real estate

Medical centers: Sharing economy in healthcare

Whether homes, cars or drills – sharing has become a trend and is taking place in more and more areas of our economy. From an economic perspective this development is desirable as the available resources are used more efficiently, which ultimately results in lower costs and higher revenues. This trend can also be observed in healthcare and is most noticeable in the case of doctor's, dentist's and physiotherapy practices that are joining forces to become medical centers or group practices. From the perspective of real estate players, healthcare properties are one of the few remaining growth areas. Having in previous years provided in-depth analyses of hospitals and nursing homes, our focus this year is on medical centers.

Sharing increases efficiency and reduces the cost base

From a business perspective, medical centers offer some convincing benefits compared with individual practices. First of all, a range of medical specialties can be offered under one roof so that patients are supported for a longer stretch of their illness. The exchange of information between the units enhances the efficiency of the care process and creates synergies for patient acquisition. Chains of medical centers even allow the patient records to be managed across multiple locations, thereby making the patient location-independent. Secondly, the high costs for the procurement and maintenance of medical equipment (e.g. ultrasound or x-ray devices) can be spread across several users. The improved utilization of the equipment directly exerts a positive influence on operating income. Particularly in small practices these devices are often not sufficiently utilized. Further synergies and hence savings can be achieved in the purchase of drugs and dressing material, in administration or at patient reception.

Medical centers permit modern working practices

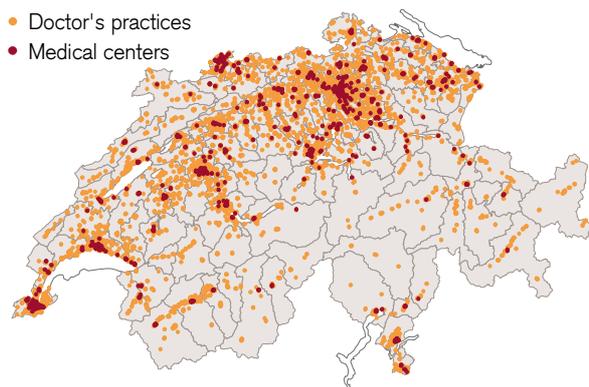
Thirdly, opportunities arise in human resource management: Employees can be deployed more flexibly or carry out more specialized activities. The on-call service can be split up between several people. Furthermore, part-time hours can be more easily applied to all job profiles; vacations and other absences can be better cushioned. This flexibility is an important argument particularly for younger doctors or mothers when choosing an employer. It is not unusual for traditional doctor's practices in outlying areas to encounter difficulties in succession planning as young doctors are no longer prepared to accept the drawbacks of a single practice. Significant advantages arise also for patients such as longer opening hours, speedy mediation, treatment without the need to make an appointment in advance, short distances etc. that underlie the success of the medical center model. There are other obvious benefits such as professional marketing and better locations because the costs for this can be split up.

Different forms of medical center

The term "medical center" is not precisely defined. We subsume several common concepts under this generic term. The simplest form is the traditional medical center in which the practices of various medical specialists are brought together and operated at a single location irrespective of their legal form (legally independent medical specialists or joint operating company). The term "health center" is often also used for this. Joint practices go one step further: The legally independent doctor's practices share premises, inventories and staff. Where complementary healthcare services such as physiotherapists, psychosocial and socio-medical services, midwives, pharmacies or emergency services are housed at the medical center or joint practice, we often talk about "healthcare centers". These kinds of medical centers are primarily to be found in the urban centers and are often located close to railway stations (Figures 79 and 80) as we will explain in more detail below.

Figure 79: Locations of medical centers

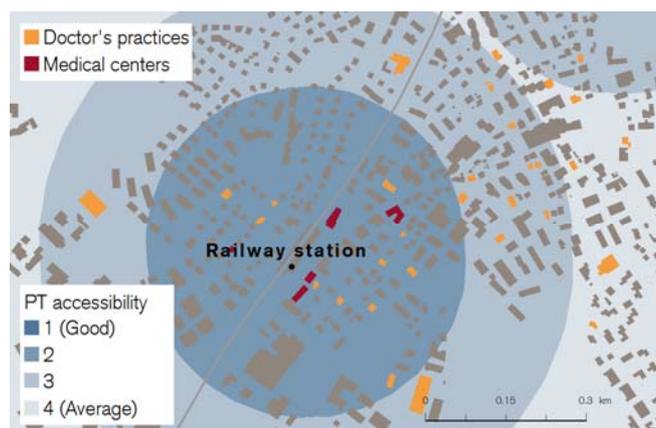
Geographical distribution of medical centers and doctor's practices in Switzerland, 2012



Source: Swiss Federal Statistical Office, Geostat, Credit Suisse

Figure 80: Micro locations

Doctor's practices, medical centers and public transportation (PT) connections



Source: OpenStreetMap, Credit Suisse

Chains of medical centers on the up

A rather new business model is the professionally managed medical center where the doctors have a traditional employment relationship. The form of a joint stock company is frequently chosen for this. The company as a whole stands to benefit from the separation of medical and business expertise. Moreover, the scalability of such a model is high. Its success is reflected in the growing share of private providers that operate a large number of medical centers and therefore have a lot of operational experience. One example is the Migros subsidiary Medbase that operates healthcare centers at over a dozen locations and is striving to expand further.

Structural changes at the cost of the single practice

However, compared with abroad, the development toward medical centers has not yet progressed very far in Switzerland. According to the International Health Policy Survey (IHP) of the Commonwealth Fund, a majority of doctors in Switzerland (53.9%) work in single practices. However, this primarily applies to doctors belonging to older generations. Almost 30% of the doctors in Switzerland are aged 60 or above and only a fifth are younger than 45. A significant share will therefore be retiring in the next few years. On top of this comes a growing and aging society that is set to additionally increase the demand for healthcare services in the years to come. In order to counter the expected shortage of doctors, the Federal Council has held out the prospect of supporting the training of doctors with additional financial resources in the coming years. A rapid trend is to be observed among younger doctors toward working in group practices or medical centers. Structural changes are therefore set to take place at the cost of single practices in the next few years and we therefore consider the growth potential of medical centers to be high.

Role for institutional investors

The expected growth of medical centers is increasing the demand for suitable properties. Potential is also arising for the financing, management and operation of such properties as these functions do not belong to the core competences of medical centers. There is much interest on the part of institutional investors in such investment opportunities. However, the question arises for interested investors of which locations medical centers can be successfully operated at. In order to answer this question, a detailed understanding of the decisive locational factors of existing properties is required.

Where can optimum locational conditions for medical centers be found?

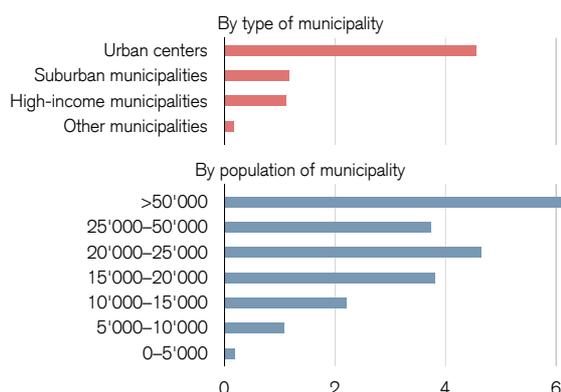
With this in mind we have analyzed all buildings in Switzerland in terms of their composition of employees. We have defined properties in which at least ten FTEs work for general medical practices or for specialist, dentist's or physiotherapy practices as medical centers (Figure 79). In a second step the locations of these medical centers are compared with the locations of all other practices and additionally with all residential properties. At the municipality analysis level it becomes apparent that, even when taking into account the higher population figures, medical centers are primarily to be found in the urban centers (Figure 81). They are less frequently found in suburban and high-income municipalities. The supply of healthcare services at medical centers is therefore significantly lower in municipalities with fewer than 15'000 inhabitants. Medical centers according to our definition are only very rarely found in smaller municipalities with a population of less than 5000.

Transport accessibility as a key locational criterion

Another key locational factor is the accessibility of the medical centers, both at municipal level and in terms of the micro location (Figure 82). The analyzed buildings are largely situated at locations with optimum public transportation connections and most are also very accessible for individual motorized transport. However, in order to make use of the advantage of accessibility for individual motorized transport, parking facilities for patients in the immediate vicinity of the building are essential. Medical centers are therefore most frequently situated at central locations within the urban centers as is also the case for bank branches, for instance. Patients are often not mobile and therefore prefer well connected central locations. However, the flow of pedestrians is less decisive as a locational factor so that quieter but less expensive locations in side streets are also worth considering.

Figure 81: Municipalities with high density of medical centers

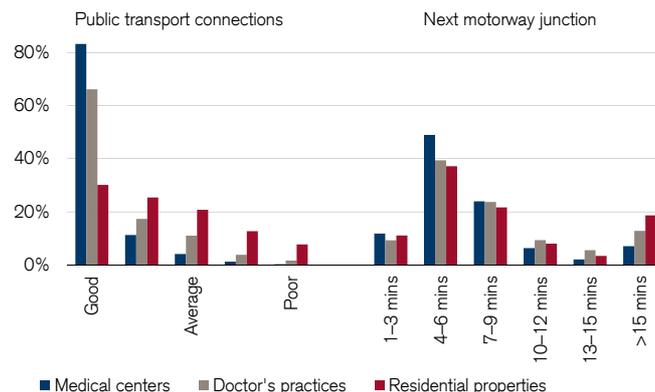
Average number of employees at medical centers per 1000 inhabitants, 2012



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 82: Characteristics of medical center micro locations

Distribution of locational characteristics, 2012



Source: Swiss Federal Statistical Office, Federal Office for Spatial Development, Credit Suisse

Conversion potential

The current market environment shaped by an oversupply of office space and ground floor commercial space (cf. office property page 36–54 and retail property page 55–63) offers a certain degree of potential for the conversion of empty properties into medical centers. As retail properties generally offer relatively good locational qualities (particularly with regard to transport accessibility), the locational criteria required for medical centers will in some cases already be met. Medical centers also function as magnets so that together with other retailers and traders an attractive mix of tenants can be pursued. This promises synergies for all involved and comes close to the healthcare center mentioned above.

Conversion entails costly adjustments to interior design

Medical centers have special requirements in terms of interior design: In order to maintain high standards of hygiene, medical centers require significantly more water connections than those envisaged for conventional office facilities, for instance. The use of x-ray equipment also calls for specific construction measures. Nevertheless, in view of the current vacancy situation pertaining to office and retail properties, conversions to medical centers could still make sense in individual cases. However, the investment costs must not be underestimated and the viability of envisaged projects should be reviewed in detail.

Real estate as an investment

In thrall to negative interest rates

Real estate remains the star performer of the investment markets, although growing challenges in end-user markets can no longer be overlooked. Given the likelihood of a more challenging market environment in future, we take a look at price segments that continue to hold promise and also present a method of identifying the "slow movers" of tomorrow. In terms of indirect investments, we discuss the contributions that can be expected from the individual return components for the current year; we also offer useful guidance on the question of currency hedging for international investments.

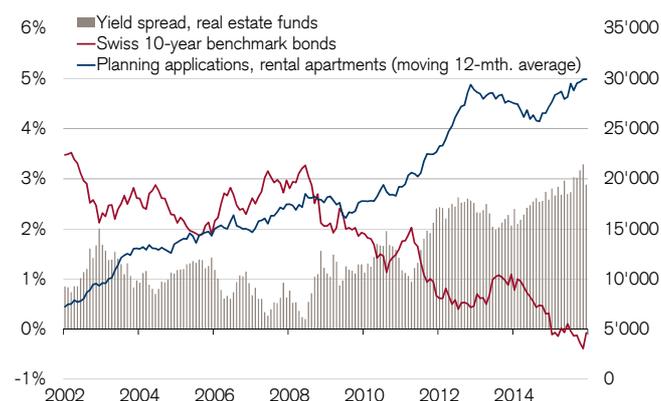
Direct real estate investments: Popular high-yielders

Some of the key determinants of the market environment for direct real estate investments deteriorated over the course of last year. Economic activity slowed considerably as a result of the Swiss franc shock. Persistent excess supply in the largest office markets (cf. [office property page 36 et seq.](#)) and a slight fall in demand for rental apartments (cf. [rental apartments page 23 et seq.](#)) are dampening the momentum in rents and adversely affecting the potential income from real estate. At the same time, prices of investment properties have climbed to very high levels (+42% since 2008). The potential correction in market prices is therefore considerable. Despite all these factors, real estate remains very popular with investors. The dearth of investments caused by the low interest rate environment has dominated the markets since the financial and euro crises and became more acute again in 2015 after the cut in interest rates by the Swiss National Bank. Real estate investment remains exceptionally attractive against such a backdrop ([Figure 83](#)). The gap between distribution yields on real estate funds and yields on 10-year Swiss government bonds has widened to nearly 300 basis points. The higher yield spreads are in turn triggering a greater number of construction projects, with planning applications for a record 30'000 or so rental apartments submitted in 2015.

Attractive yields pull in capital and spur construction activity

Figure 83: Yield spread and construction activity

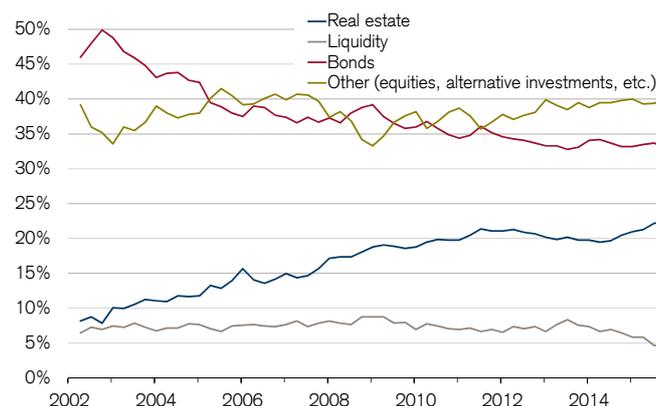
Yield spread of real estate funds: distribution yield less benchmark bond yield; planning applications: numbers of rental apartments (12-month total, r.h.s.)



Source: Credit Suisse, Datastream, latest annual reports of real estate investment funds, Baublatt

Figure 84: Investment allocation of Swiss pension funds

Individual asset classes as a % of total assets



Source: Credit Suisse Pension Fund Index

There's no way direct real estate investments can be avoided in 2016 either

Direct investments in Swiss real estate are likely to remain a favorite for investors against the backdrop of heightened volatility on financial markets and a shaky global economy. Yield spreads are likely to have peaked, however, especially given the fact that we expect a slight uptick in long-term interest rates this year. We anticipate a yield of around 0.1% on 10-year government bonds by the end of 2016. Yet even in that scenario investors will find it very hard to avoid real estate, as is clear from pension fund investment allocations, for example ([Figure 84](#)). The real estate allocation in their portfolios had risen to a new high of 22.4% by the end of 2015, according to the Credit Suisse Pension Fund Index (average since 2002: 16.7%). Liquidity was

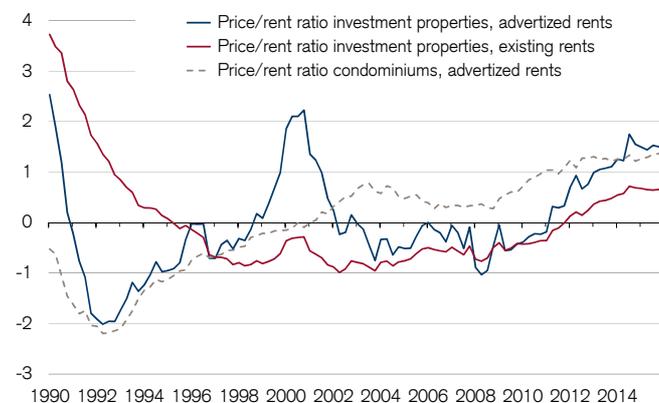
reduced to a record-low 4.7% due to negative interest rates, with the real estate sector virtually the only beneficiary. The importance of real estate to institutional investors is highlighted by annual returns. The positive annual return of 0.95% for the Pension Fund Index was only possible thanks to the contribution from real estate (+1.05%). For pension funds, however, the advantage of being able to use secure cash flow yields to finance the 1.25% minimum interest rate for occupational benefits comes at the price of greater risk. Purchasing at current, high price levels involves the risk of relatively substantial losses in value being incurred in the medium to long term.

Low point in initial yields not yet reached

Despite strong demand, gross initial yields for residential property did not fall any further in 2015. Indeed in overall terms they actually rose very slightly (Figure 86). The range of initial yields nevertheless widened. This means an increasing number of properties at B and C locations also changed hands. Initial yields at above-average locations (30% quantile) fell again significantly (from 3.8% to 3.4%). In terms of the few office properties traded there was another small decline – probably the last. According to the transaction database of the Real Estate Investment Data Association (REIDA), the major institutional investors have carried out fewer transactions since 2013. It would appear that high prices (buyer side) and a lack of opportunities for attractive reinvestments (seller side) have caused the market for existing properties to dry up to a certain extent. Stamp duty data from the Statistical Office of the Canton of Zurich confirm the trend to a declining number of transactions, although seen across the market as a whole this does not amount to a slump: the number of multi-family dwellings changing hands in 2014 was 6% (canton) and 20% (city) below the average for the 2011–2014 period. The rise in the number of planning applications submitted for residential investment properties (Figure 83) also points to the conclusion that the demand for direct real estate investments is currently driving new developments above all.

Figure 85: Ratio between prices and rents (residential)

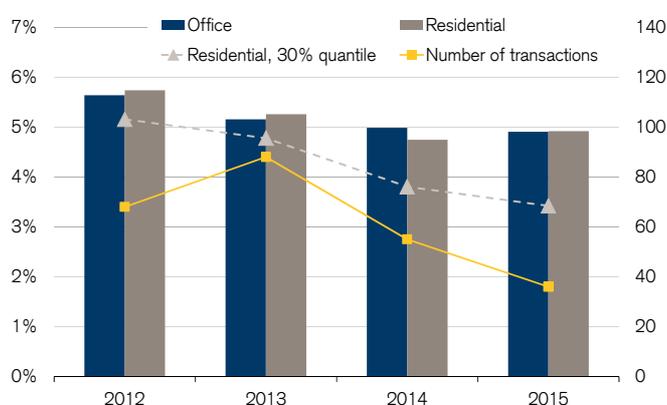
Deviation from long-term average in number of standard deviations



Source: IAZI, Swiss National Bank, Swiss Federal Statistical Office, Credit Suisse

Figure 86: Gross initial yields

Gross initial yields (weighted and quality-adjusted) and numbers of transactions (r.h.s.) by institutional investors



Source: REIDA, Credit Suisse

Prices: Considerable potential for correction in long term

When assessing the current phase of the real estate cycle, it is helpful to look at the long-term development of the relationship between prices and rents. This price/rent ratio shows that prices for residential investment properties have risen significantly faster than rents since 2009 (Figure 85), resulting in a fall in initial yields. In terms of advertized rents, the price/rent ratio is currently more than 1.5 standard deviations above the long-term average – a value that was last exceeded 15 years ago for only a brief period. In terms of existing rents, this is the highest value in as many as 22 years. Consequently, the level of prices must be regarded as high from a long-term perspective – although it is still far off the disastrous level seen during the real estate crisis in the early 1990s. Future developments will depend on interest rates in particular but also on the demand situation in the end-user market, which is in turn dependent above all on immigration and economic performance. In view of the ongoing dearth of investment opportunities, we expect a further rise in prices for residential investment properties – though this is likely to be only just above zero. Longer-term, investors should be aware that the capital growth returns seen in recent years will not be repeated. On an assumed increase in 10-year government bond yields to 2% over the next ten years, rental income would need to increase by

2%–4% annually over several years for valuations to remain stable. This can be seen in DCF model calculations in which we illustrate the development of rents, rental losses and discount rates. The prospect of an increase in rental income on this scale is minimal, particularly in the case of recently constructed properties. If such additional income completely fails to materialize, negative value changes of up to 25% could be in store.

Growing excess supply leading to more challenging market environment

End of period of grace

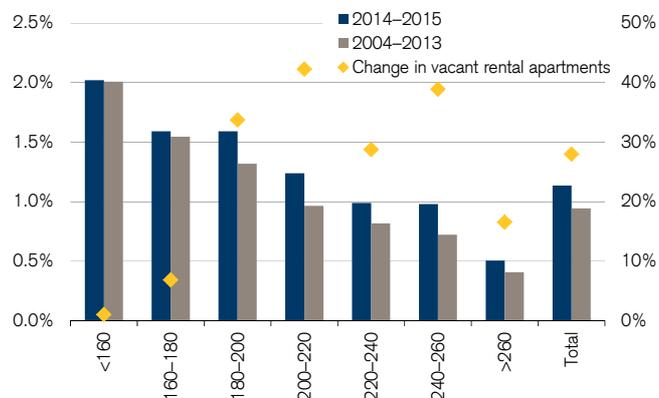
While vacancies in the office sector have shown a marked upward trend for the last three years, vacancies for residential investment properties have also been rising at an accelerated pace since 2014. The housing stock nevertheless continues to grow at a rapid pace, including outside the major centers, leading to a situation where in many places demand can no longer keep pace with this development. It is becoming increasingly difficult to market residential properties, and mistakes made in property development could prove costly in the future. We have therefore taken an in-depth look at the reasons for the vacancies, and also present a method for identifying problem properties early in the game.

Low-cost locations escaping the trend to rising vacancies

Figure 87 illustrates the level and development of vacancies between municipalities with different rent levels. Municipalities with higher rent levels generally exhibit lower vacancy levels. This is unsurprising given that rents reflect the degree of scarcity in residential property. However, a glance at the change in vacancies shows that they are virtually no longer increasing in the very low-cost municipalities; in the average to expensive municipalities, on the other hand, they have been more than 40% above the long-term average at times during the last two years. Very low-cost locations are therefore managing to escape the trend to increasing vacancies.

Figure 87: Vacancies in residential property by price segment and time period

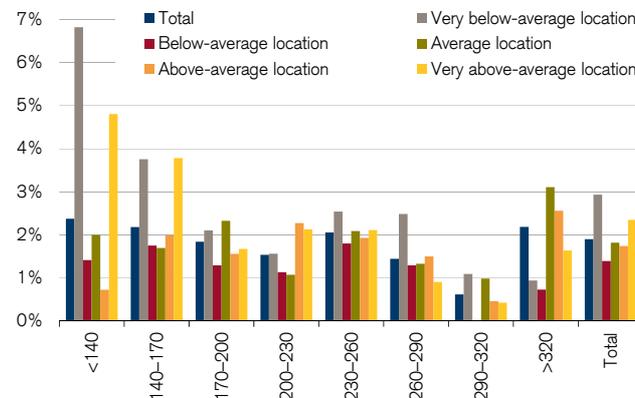
Vacancies in % by price segment of the municipality in CHF/m² and year; squares: rise in vacancies for rental apartments 2014/2015 vs. average 2004–2013



Source: Swiss Federal Statistical Office, Wüest & Partner, Credit Suisse

Figure 88: Vacancies in residential property by price segment and locational quality

Vacant properties in % of total space in portfolio, rent segments (net) in CHF/m² and year



Source: REIDA, Credit Suisse

Top-end properties hit by higher vacancy levels

Rents at municipality level allow initial conclusions to be drawn about the causes of the vacancies. However, they primarily reflect the macro situation and do not take sufficient account of the individual properties. We have therefore attempted to conduct a more in-depth analysis of the distribution of vacancies by price segment at the level of individual properties (Figure 88). This shows that the correlation at individual property level is much less clear. It is particularly interesting to note that vacancy rates are highest for the lowest-cost homes (net rent < CHF 140/m² and year) as well as the most expensive homes (net rent > CHF 320) at over 2% in each case. This confirms the currently held market view that luxury homes are relatively difficult to market at the moment. The same holds true for the lowest-priced properties, the quality of which is presumably rather unimpressive. In Figure 88, vacancies are additionally broken down by quality of micro location. Vacancies at average micro locations tend to be lower than those at very below-average or very above-average locations. In the former case, the high vacancy rates reflect low demand for poor locations. As for the latter, the high prices for prime locations are likely to prompt many tenants to cut corners in terms of micro location in favor of a better macro location or higher level of specification. In overall terms, these findings reveal that

despite rising vacancies even properties at average or indeed below-average locations can work well if they match the tenant's preferences and the price/location ratio is right.

Identifying "slow movers" at an early stage

Ultimately it is always the individual relationship between rent and benefits, and between the characteristics of the location and a property itself, that decides about its marketing success. Successfully marketed properties can sometimes be seen only the shortest distance away from problematic ones. By evaluating online advertisements over the last nine years, we have been able to identify high-turnover properties (Figure 89). These are residential properties where a change of tenant occurs on an excessively frequent basis. A fairly scarce supply of accommodation and/or strong demand – as we have seen in recent years – ensures that these properties are easily let. However, their frequent turnover is a sign that tenants are not totally satisfied and will move out again at the earliest opportunity. This means it is possible to identify portfolio properties that are highly likely to have vacancy issues in future in the event of low demand. The fact is that, in a market increasingly characterized by excess supply, vacancies will be concentrated in these high-turnover properties.

Figure 89: High-turnover properties point to future vacancies

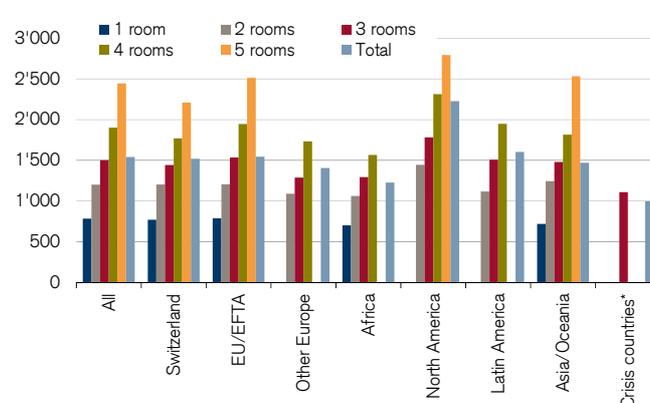
Example of frequency at which rental apartments were advertised (2006–2015)



Source: Meta-Sys AG, Swiss Federal Statistical Office, Credit Suisse, OpenStreetMap

Figure 90: Net rents of immigrant households

Average rent, by number of rooms and nationality, 2009–2013, in CHF/month



*Top six asylum-seeker countries in 2015: Eritrea, Afghanistan, Syria, Iraq, Somalia, Sri Lanka

Source: Swiss Federal Statistical Office, Credit Suisse

Willingness to pay for rental apartments heavily dependent on origins and motives of immigrants

Major potential demand for lower-cost rental apartments

We examined the development and structure of immigration in the chapter on rental apartments market (cf. page 23 et seq.). A key question for investors wishing to attune themselves to future demand trends concerns the rent segment they intend to target. With that in mind, we analyzed a random sample of nearly 14'000 households that had immigrated to Switzerland in the 2009–2013 period (Swiss and foreign nationals). This showed that immigrants are paying an average net rent of around CHF 1500 across all sizes of home (Figure 90). Swiss citizens who immigrated from abroad as well as EU/EFTA nationals and Asians are also in line with the average, although immigrants from the EU/EFTA and Asia are willing to pay slightly more for larger homes. On average, however, they are looking for smaller homes than Swiss immigrants. The average net rent paid by immigrants is higher than the aforementioned groups of immigrants in the case of those from Latin America (CHF 1600) and significantly higher again in the case of North Americans (CHF 2200). In the case of households immigrating from the other European countries (CHF 1400) and African countries (CHF 1200), however, the figure is considerably lower. If we look at immigration from the crisis-hit countries of Eritrea, Afghanistan, Syria, Iraq, Somalia and Sri Lanka (top six nationalities among asylum-seekers in 2015), the average rent paid is much lower at CHF 1000.

Differences also caused by price levels in destination municipalities

While some of the considerable differences seen in rent levels paid are explained by different levels of income and wealth among the immigrant groups, other differences are down to market prices in the destination municipalities. Thus migrant workers from third countries (e.g. North America) typically head for the main centers, which exhibit higher rent levels. Asylum-seekers,

on the other hand, are assigned to the individual cantons by the federal government; this means they are spread around the entire country and their net rents are consequently lower on average.

Demand to shift to lower price segments

These findings regarding various groups of immigrants' willingness to pay are pertinent for property developers and investors. The number of migrant workers from the EU/EFTA showing a willingness to pay a relatively high rent for a home is on a distinct decline (cf. [rental apartments page 23 et seq.](#)). What's more, the Federal Council has reduced quotas for professional workers from third countries; this has affected immigrants from North America, for example. All in all, our conclusion is that the immigrant-led demand for rental apartments in the medium to higher price segments will tend to decline. At the same time, the number of asylum-seekers rose sharply in the second half of 2015 in the course of the European refugee crisis – a trend that is likely to continue in 2016. What we are seeing is more a case of a changing immigration structure than a general decline in immigration. Even greater demand for lower-cost rental apartments can therefore be expected in future.

Reduction in excess supply thanks to refugees?

Arriving asylum-seekers are assigned to the cantons by the federal government and then distributed across the various municipalities. Where there is a shortage of housing they are often housed in provisional accommodation at present, including civil defence facilities and improvised shelters such as those in Hall 9 at the Messe Zurich. In more rural regions, however, the municipalities are in some cases renting empty homes in order to make them available to asylum-seekers. The latest wave of refugees may therefore bring about a slight reduction in excess supply in housing markets with high vacancy levels. At the end of 2015, the total number of persons within the asylum process was 17'000 higher than the figure for the previous year. If these people were to be allocated between 6000 homes, this would theoretically correspond to a reduction of 15% in vacancies. Given that the protection quota, i.e. the proportion of applicants granted asylum or temporary residence, is currently very high (2015: 55%), many of them are likely to remain in Switzerland in the medium to long term and will accordingly require housing. Alternatively, government agencies responsible for finding housing for asylum-seekers could act as tenants.

Indirect real estate investments: Low interest rates are a powerful driver but are losing momentum

Negative interest rates ensured higher trading volumes in 2015

In contrast with 2014, when long-term interest rates on Swiss government bonds had gradually fallen, last year was notable for the much greater volatility in interest rates ([Figure 91](#)). If we look through the volatility, however, the negative trend was the same. At nearly -0.4% , a new low in 10-year Swiss government bond yields was reached at the start of December. This was in the wake of discussions about a fresh extension of quantitative easing in the euro zone. The lower the level of interest rates on government bonds, the more attractive the distribution yields on indirect real estate investments appear. When the Swiss National Bank first announced negative interest rates toward the end of 2014, the trading volumes of listed investment funds increased at a stroke ([Figure 91](#)). The average agio (premium) on listed real estate funds consequently surged to 36.2% at the end of February 2015 before temporarily rising again to 36.4% at the end of April. In addition, the average premium on listed real estate equities increased to 12.8% at the end of February 2015. Trading volumes subsequently leveled out again in the period to the end of 2015, while agios also failed to match the values seen in the initial months despite record-low interest rates. As at the end of 2015, the premium was 25.2% in the case of real estate funds and 9.5% for listed real estate companies. Meanwhile, the gulf between the agios on residential real estate funds (30.4%) and commercial real estate funds (13.1%) remained in place and actually widened during the course of the year; this reflected the varying state of the underlying real estate segments.

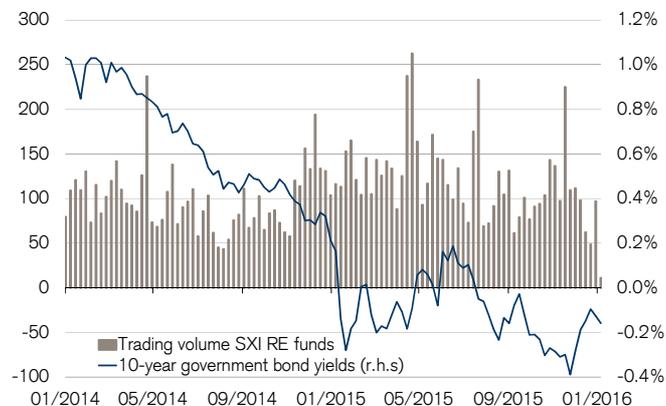
Low interest rates alone are no longer a guarantee of dazzling total returns

Supported by low interest rates, the real estate funds listed on SIX produced a total return averaging 4.2% last year while listed real estate companies generated a return of 9.6%. Thus both categories once again outclassed the broad Swiss Performance Index (SPI), which achieved a figure of 2.7%. The fact that total returns were not any higher, despite a further fall in interest rates, was mainly down to the mixed economic outlook and weak expectations for rents. Secondly, performance is likely to have been dampened by various capital increases and the launch of new investment vehicles (more on that later). As Switzerland is at a highly advanced stage of the real estate cycle by international standards, performance was fairly modest compared with Europe. Despite the rise in the value of the Swiss franc, real estate equities

from the UK and euro zone, for instance, fared better in Swiss franc terms with returns of 15.2% and 6.0% respectively (Figure 92) – although they went on to suffer hefty losses at the start of 2016.

Figure 91: Interest rates and fund trading volumes

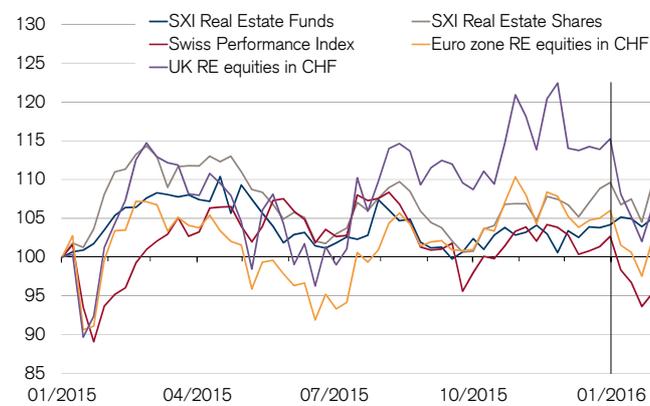
Trading volumes for listed real estate funds in CHF m (l.h.s.)



Source: Datastream, Credit Suisse

Figure 92: Performance of indirect real estate investments

Overall performance, index: Jan. 1, 2015 = 100



Past performance is no guarantee of future returns. Performance can be impaired by commission, fees and other costs, as well as exchange rate fluctuations.

Source: Datastream, Credit Suisse

Market anomaly in case of real estate funds

Last year's major swings in interest rates highlighted an interesting phenomenon. We were surprised by the delayed reaction shown by real estate funds on the stock market after the abandonment of the EUR/CHF exchange rate floor on January 15, 2015. It was not until the period from January 26 to 30 that prices for listed real estate funds reacted more strongly to the increase in interest-rate spreads. We therefore decided to analyze the delay econometrically. In fact, based on weekly returns since 2000, it is clear that the model that uses the interest-rate change for the last week but one in each case provides the best explanation for the price movements shown by real estate funds. By contrast, the share prices of real estate companies reacted much more immediately to the shock of mid-January. Nevertheless, analysis of real estate equities likewise shows that the (albeit weak) negative effect of long-term interest rates on stock market prices occurs after a two-week delay. The reason for this could be the low trading volume for certain investment funds, prompting investors to invest on a staggered basis. Another explanation is the fact that such investment decisions are taken by committees, which require a certain amount of time to find consensus and reach decisions; hence the occurrence of a delayed effect. This short-term deviation by real estate funds from their "true" value represents a market anomaly and offers opportunities to achieve excess returns. This would apply when prices of real estate funds are exposed to an exogenous shock that dominates performance in the short term. In shock-free times, on the other hand, volatile weekly returns on real estate funds are much more heavily influenced by movements on the Swiss equity market – which we have also taken into account in the regression – than by the short-term change in long-term interest rates. It therefore proved difficult to actually ascertain this surplus return.

Short-term stability versus high long-term risks

Limited potential for further agio improvements

The challenges for indirect Swiss real estate investments remain substantial given that increasingly low interest rates have lifted agios and premiums to considerable heights. Although the price levels reached may be justified in fundamental terms, they are heavily based on extremely low interest rates. In the case of real estate funds in particular, the importance of the change in agios in 2015 pushed the other components of returns, specifically the distribution yield and the change in net asset values, into the background (Figures 93 and 94). Distribution yields have tended to fall slightly in recent years, and at the end of 2015 averaged 2.8% (real estate funds) and 4.1% (real estate equities). It should be noted, however, that distribution from real estate funds with directly held properties are exempt from tax and thus the after-tax returns are more favorable compared with other investments.⁷

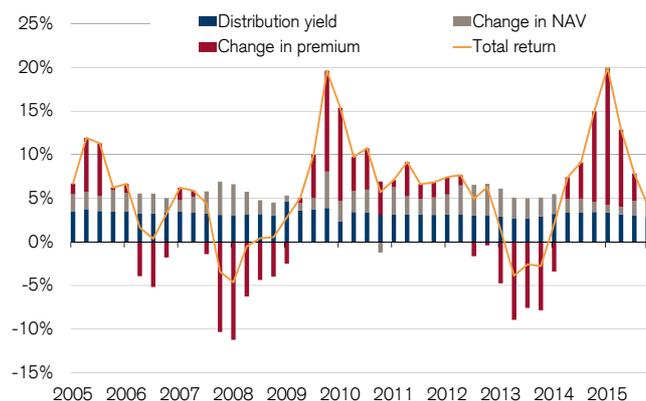
⁷ Cf. Credit Suisse Economic Research (2012): "Real Estate Market 2012", p. 56 et seq.

We expect stable agios for 2016

Although distribution yields have fallen due to rising valuations, they remain very generous compared with those on alternative capital market investments. However, investors will only be able to benefit from them as long as agios remain at the current level. This is precisely what we sought to explore with the model we presented last year, to which we have now added the effect of capital increases. Our forecast last year of an agio of around 22% as at the end of 2015 was slightly too pessimistic: In actual fact, agios stood at 25.2% at the end of the year. Based on our interest rate and economic forecasts for the current year, the average agio for listed real estate funds is unlikely to see much of a downward correction and in a normal economic scenario is likely to end the year at a similar level of between 23% and 28%. On the whole, therefore, we expect stable agios for 2016.

Figure 93: Return decomposition, real estate investment funds

Return decomposition on a year-on-year basis

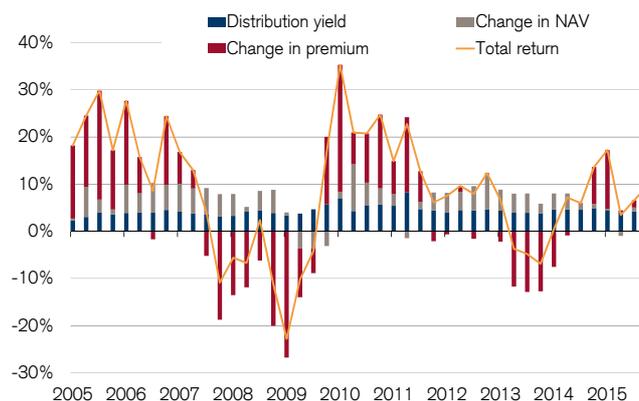


Past performance is no guarantee of future returns. Performance can be impaired by commission, fees and other costs, as well as exchange rate fluctuations.

Source: Credit Suisse, Datastream

Figure 94: Return decomposition, real estate companies

Return decomposition on a year-on-year basis



Past performance is no guarantee of future returns. Performance can be impaired by commission, fees and other costs, as well as exchange rate fluctuations.

Source: Credit Suisse, Datastream

Lower revaluations of net asset values expected in future

Besides distribution, annual revaluations of net asset values contribute positively to overall returns. Since 2005, revaluations have averaged 2.2% per year in the case of investment funds and 3% for real estate companies. These contributions to returns are likely to be smaller in future, since the higher valuations of recent years have generally been down to lower bond yields rather than increased rents. This enabled the discount rates used to value property to be reduced year after year. Although the potential for reduction was not fully exhausted, this growth driver is unlikely to deliver the same contributions to returns in future. In future such contributions will need to come from increases in rental income, although the latter is likely to be limited in view of increasing vacancies and greater regulatory intervention. In the case of commercial real estate, it is even expected that lower income in individual portfolios could impact negatively on net asset values.

Swiss real estate vehicles attracted new money of CHF 5.8 billion in 2015

Indirect Swiss real estate investments had an almost magnetic ability to attract new money in 2015. The SIX-listed real estate funds alone increased their capital by CHF 1.21 billion. In addition, real estate funds with a market capitalization of CHF 1.09 billion were listed on SIX for the first time. New launches and capital increases of unlisted real estate funds amounted to CHF 1.50 billion. Real estate investment trusts pulled in a further CHF 857 million in new money for Swiss investment groups. Real estate companies, meanwhile, carried out capital increases totaling CHF 570 million and raised a further CHF 542 million of capital through bonds. In total, Swiss real estate investment vehicles therefore attracted money in the region of nearly CHF 5.8 billion in 2015. In the case of listed vehicles alone, the figure was CHF 3.4 billion.

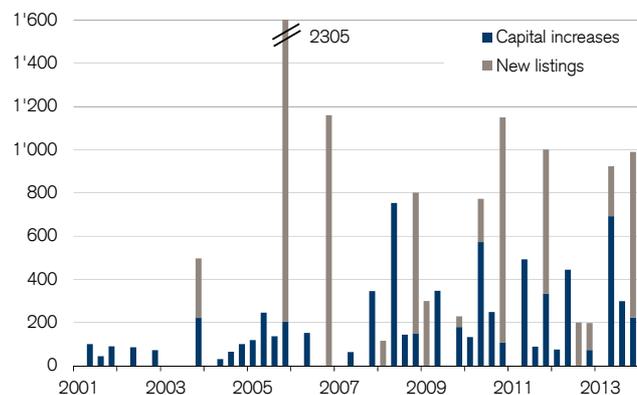
Capital increases and new launches with slightly negative effect on prices

Taking listed vehicles alone, the inflow of new money last year added up to more than 7% of market capitalization. Such capital inflows have a negative influence on stock market valuations and agios because certain investors are merely shifting their money. For example, money is withdrawn from vehicles with high agios. Due to changes in index composition or new listings/capital increases, very passive investors switched their money into larger or new vehicles. Such effects were seen in the second quarters of 2010 and 2012, for example, as well as the fourth quarter of 2007 (Figure 95). However, the impact was at all times temporary only and

always well absorbed. The seasonal nature of capital increases is no coincidence because the second quarter is an ideal time for an issue in the case of funds that close their financial year on December 31. First, market value estimates are still valid then; second, there is no question of an increase in the first quarter, prior to the preparation of the annual report. Based on our model, we can identify a rule of thumb whereby a capital increase/new launch with a value of around CHF 500 million causes a temporary fall in agios of around 1%.

Figure 95: Capital increases and new listings

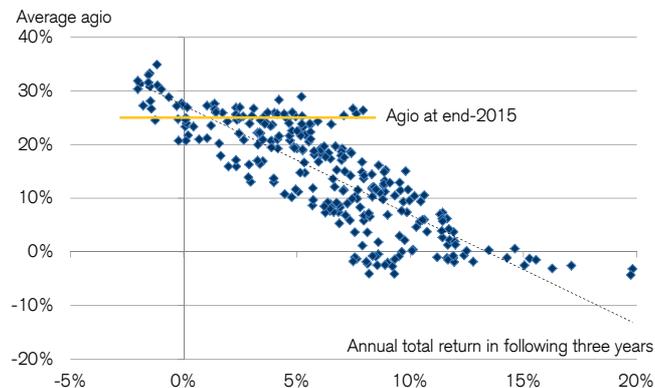
Real estate funds listed on SIX Swiss Exchange, in CHF m



Source: Information from real estate investment funds, Credit Suisse, Datastream

Figure 96: Real estate fund returns by agios at time of entry

Average annual total return for following three years; data since 1990



Past performance is no guarantee of future returns. Performance can be impaired by commission, fees and other costs, as well as exchange rate fluctuations

Source: Datastream, Credit Suisse

Total returns of more than 5% unlikely in next few years

In view of the expected changes in net asset values, agios and distribution yields, total returns are likely to be only slightly above distribution yields in the next 12 months. This was normally the case in the past, too, at an agio level of more than 20%. Figure 96 shows that for real estate funds the historical correlation between the agio level at the time of entry and the total return for the next three years is generally relatively narrow. The point cloud is accordingly pressed up close to the trend line. According to all 88 past observations, annual total returns of between -1.8% and 7.9% were achieved in the following three years in the case of an agio of between 20% and 30%. The average was 3.0%.

Hedging costs dependent on international interest rate spreads

Foreign real estate equities – to hedge or not?

In light of the rather modest performance expectations for domestic real estate investments, foreign investments inevitably come up for consideration. We examine this factor this year from the viewpoint of currency hedging for indirect foreign real estate investments, using the total returns of global real estate indices (FTSE EPRA/NAREIT). When forward contracts are used for hedging they are typically purchased for a week or a month at a given price. This price depends on the interest-rate spread between the two currencies, such that no arbitrage opportunities arise. In the event of a rise in the value of the Swiss franc, a loss is incurred in terms of cash flows and real estate values but a gain made on the forward contract, provided the investor is hedged. Hedging therefore results in an additional – negative or positive – flow of returns that absolutely needs to be taken into account in the case of a foreign investment.

Local foreign returns are usually deceptively high for CHF investors

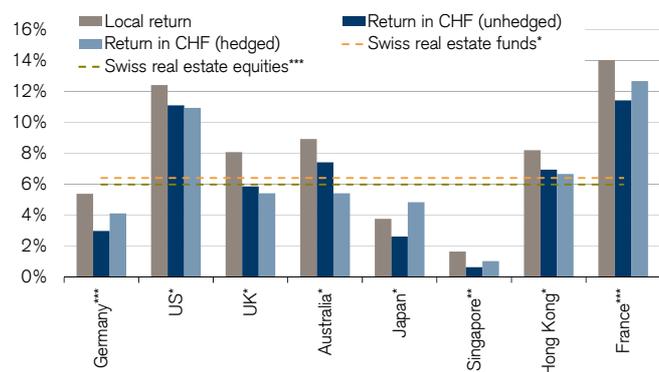
A hedge against currencies with a high level of interest rates such as the Australian dollar or South African rand is relatively expensive given that the Swiss franc will rise in value against these currencies over the longer term based on interest rate parity. In this context, hedging results in an alignment with or – from a Swiss point of view – reduction in dividend yields for real estate in high-interest countries on yields in low-interest countries such as Switzerland. This should also apply to unhedged payment flows over a sufficiently long period, since currency fluctuations should iron out different levels of interest rates in the long term. However, currencies can be detached from their fair value for relatively long periods. Therefore, we have also run through a strategy in which we do not hedge when the Swiss franc is overvalued.

Higher returns usually achieved on foreign investments despite hedging cost

Figure 97 shows the local return in the relevant currency zone and the return in Swiss francs for some of the most important and liquid country indices of real estate equities – in one case unhedged and in the other hedged against currency fluctuations. With the exception of Japan, local returns are in all cases higher than the returns for investors calculating on a Swiss franc basis. Despite that, there is no clear answer to the question of currency hedging. According to the comparison of hedged and unhedged returns in CHF, a hedge would only have been worthwhile in four out of eight cases. In the case of Australian real estate equities, investors would have fared much better without a hedge. This is the case because the Swiss franc did not rise as strongly as would have been expected based on the interest-rate differential. In various countries, the Swiss investor achieved a greater return compared with the domestic market. This underscores the opportunities offered by foreign indirect real estate investments – with or without hedging.

Figure 97: International real estate equity returns

Annual returns, Swiss real estate funds: weighted DB Rüd Blass Index

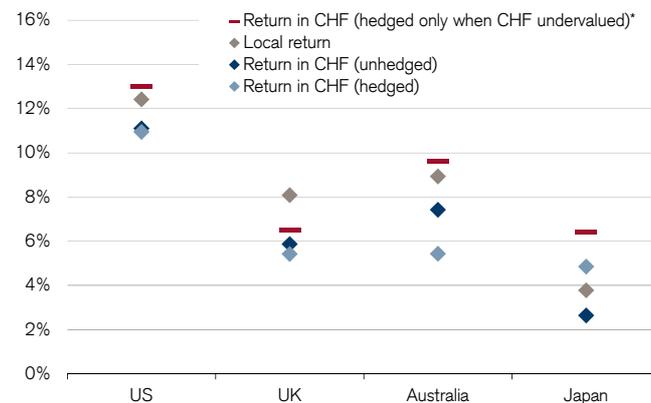


* Data from 1992 onward; ** from 1995 onward; *** from 1999 onward
 Past performance is no guarantee of future returns. Performance can be impaired by commission, fees and other costs, as well as exchange rate fluctuations.

Source: Credit Suisse, Datastream, Bloomberg

Figure 98: Comparison of hedging strategies

International real estate equity returns p.a., data from 1992 onward



* Undervaluation: Current exchange rate below fair value
 Past performance is no guarantee of future returns. Performance can be impaired by commission, fees and other costs, as well as exchange rate fluctuations.

Source: Credit Suisse, Datastream, Bloomberg

Opportunistic hedging was successful

A clear conclusion as to whether the investor should hedge or not cannot, therefore, be drawn from Figure 97. The fact that volatility in returns falls slightly favors a hedge. This has a substantial effect in the case of Australian securities only, however, where it was possible to reduce volatility by around a quarter. As hedging costs most from the perspective of a low interest rate currency like the Swiss franc, we tested a strategy in which hedging is only conducted when the Swiss franc is undervalued. In this case the Swiss franc should tend to rise in value, thereby squeezing foreign returns in Swiss francs. Indeed this rule did work very well in the past (period of analysis since 1992, Figure 98). This strategy not only enabled hedging costs and uncertainties to be eliminated but returns with rule-based hedging (in red) also tended to be higher than returns in local currency for US, Australian and Japanese real estate equities. In the case of German and French real estate equities, where we were only able to evaluate data since 1999, local returns could not be beaten with this strategy. Returns in Swiss francs (hedged or unhedged) were, however, exceeded. All in all, we can say that from the perspective of a Swiss investor it was worth adding foreign real estate equities to the portfolio over the last 20 to 25 or so years from the viewpoint of returns as well as diversification. From the perspective of a CHF investor, however, the local return could only be achieved with a well thought-out hedging strategy – although this does not constitute a guarantee of future success.

Outlook for real estate as an investment in 2016

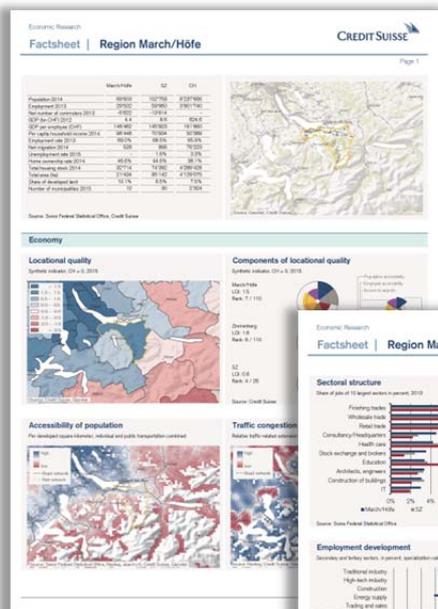
Direct real estate investments: Continued popularity despite growing risks

Rising yield premiums on real estate investments are likely to stabilize at a high level in 2016. We therefore expect a raft of new projects once again, particularly in the construction of rental apartments. At the same time, vacancies – and therefore risks – are likely to continue to increase outside the main centers. Due to the already very high level of prices and slowdown in potential rental income, the risks of a price correction in the medium to long term are growing. Opportunities for investors are offered by the low-cost housing segment, for example. This is because of the emerging change in the immigration structure away from migrant workers from the EU/third countries toward asylum-seekers.

Indirect real estate investments: High point in potential returns exceeded

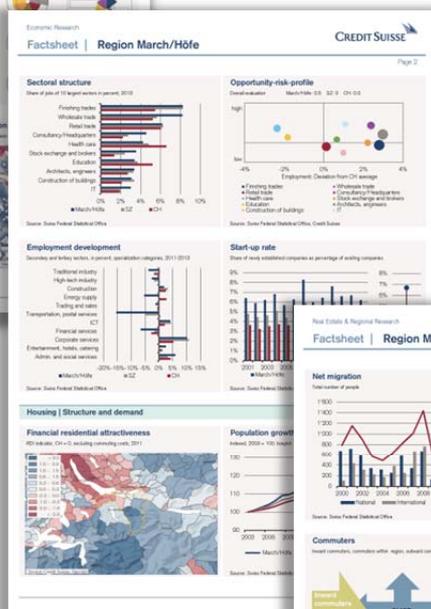
From a fundamental perspective there seem to be few positive growth drivers for indirect Swiss real estate investments; consequently, the potential returns are unlikely to match those seen in previous years. There are still some question marks on the regulation side, for example. Even so, we do not expect the average agio on real estate funds to fall below 20% in 2016 given that low interest rates make the stable distribution of these investment vehicles immensely attractive. In addition, with Swiss real estate investments an investor can systematically build up domestic exposure without having to consider exchange rates. Notwithstanding this, we recommend investing in foreign real estate: it currently offers the greater potential, and can therefore complement portfolios from a risk/return perspective.

Factsheets: Regional real estate markets at a glance



Periodically updated key indicators for the 110 economic regions

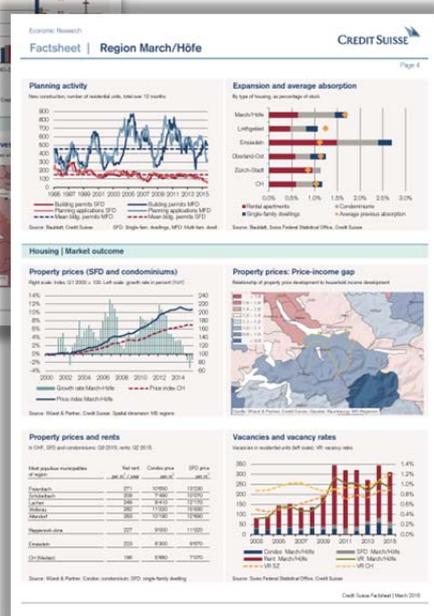
What are the locational qualities of the March/Höfe economic region? What sectors are particularly important for the region? How high are house prices in the region's municipalities? The Credit Suisse Factsheets answer these and many other questions concerning the regional economy, demographic developments and housing markets. Regularly updated statistics are presented in the form of meaningful diagrams, tables and maps.



Regional economy and demographic developments
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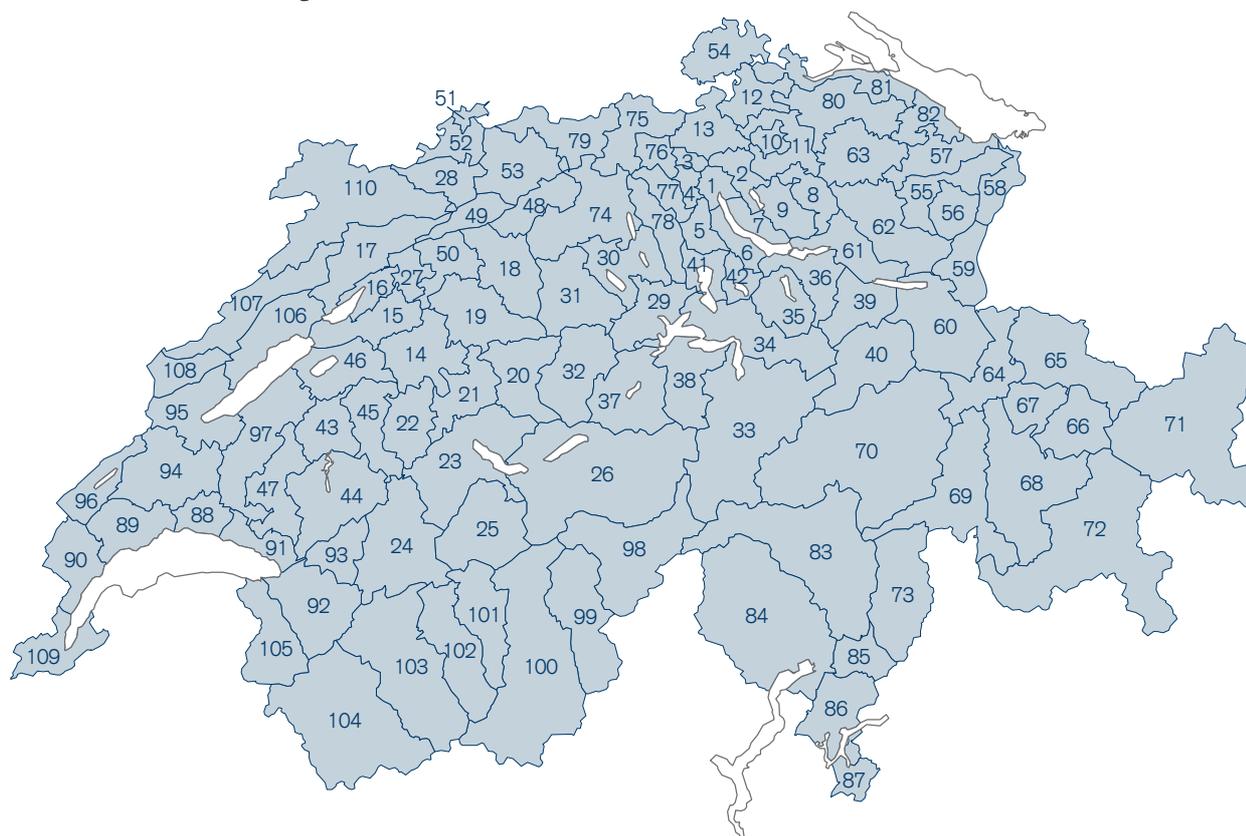
www.credit-suisse.com/immobilienstudie

You will find a list of Switzerland's 110 economic regions on the next page.

Appendix: Switzerland's economic regions

Credit Suisse Economic Research has defined these economic regions on the basis of the Mobilité Spatiale regions used by the Swiss Federal Statistical Office. Political borders play less of a role in the definitions than economic phenomena, geographical and demographic features, and mobility patterns. Consequently, some of these economic regions straddle cantonal borders.

Switzerland's economic regions



1 Zürich-Stadt	23 Thun	45 Sense	67 Schanfigg	89 Morges/Rolle
2 Glattal	24 Saanen/Obersimmental	46 Murten	68 Mittelbünden	90 Nyon
3 Furttal	25 Kandertal	47 Glâne/Veveyse	69 Domleschg/Hinterrhein	91 Vevey/Lavaux
4 Limmattal	26 Berner Oberland-Ost	48 Olten/Gösgen/Gäu	70 Surselva	92 Aigle
5 Knonaueramt	27 Grenchen	49 Thal	71 Engiadina bassa	93 Pays d'Enhaut
6 Zimmerberg	28 Laufental	50 Solothurn	72 Oberengadin	94 Gros-de-Vaud
7 Pfannenstiel	29 Luzern	51 Basel-Stadt	73 Mesolcina	95 Yverdon
8 Oberland-Ost	30 Sursee/Seetal	52 Unteres Baselbiet	74 Aarau	96 La Vallée
9 Oberland-West	31 Willisau	53 Oberes Baselbiet	75 Brugg/Zurzach	97 La Broye
10 Winterthur-Stadt	32 Entlebuch	54 Schaffhausen	76 Baden	98 Goms
11 Winterthur-Land	33 Uri	55 Appenzell A.Rh.	77 Mutschellen	99 Brig
12 Weinland	34 Innerschwyz	56 Appenzell I.Rh.	78 Freiamt	100 Visp
13 Unterland	35 Einsiedeln	57 St. Gallen/Rorschach	79 Fricktal	101 Leuk
14 Bern	36 March/Höfe	58 St. Galler Rheintal	80 Thurtal	102 Sierre
15 Erlach/Seeland	37 Sarneraatal	59 Werdenberg	81 Untersee/Rhein	103 Sion
16 Biel/Seeland	38 Nidwalden/Engelberg	60 Sarganserland	82 Oberthurgau	104 Martigny
17 Jura bernois	39 Glarner Mittel- und Unterland	61 Linthgebiet	83 Tre Valli	105 Monthey/St-Maurice
18 Oberaargau	40 Glarner Hinterland	62 Toggenburg	84 Locarno	106 Neuchâtel
19 Burgdorf	41 Lorzenebene/Ennetsee	63 Wil	85 Bellinzona	107 La Chaux-de-Fonds
20 Oberes Emmental	42 Zuger Berggemeinden	64 Bündner Rheintal	86 Lugano	108 Val-de-Travers
21 Aaretal	43 La Sarine	65 Prättigau	87 Mendrisio	109 Genève
22 Schwarzwasser	44 La Gruyère	66 Davos	88 Lausanne	110 Jura

Source: Credit Suisse

Risk warning

Every investment involves risk, especially with regard to fluctuations in value and return. If an investment is denominated in a currency other than your base currency, changes in the rate of exchange may have an adverse effect on value, price or income.

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Where this report relates to emerging markets, you should be aware that there are uncertainties and risks associated with investments and transactions in various types of investments of, or related or linked to, issuers and obligors incorporated, based or principally engaged in business in emerging markets countries. Investments related to emerging markets countries may be considered speculative, and their prices will be much more volatile than those in the more developed countries of the world. Investments in emerging markets investments should be made only by sophisticated investors or experienced professionals who have independent knowledge of the relevant markets, are able to consider and weigh the various risks presented by such investments, and have the financial resources necessary to bear the substantial risk of loss of investment in such investments. It is your responsibility to manage the risks which arise as a result of investing in emerging markets investments and the allocation of assets in your portfolio. You should seek advice from your own advisers with regard to the various risks and factors to be considered when investing in an emerging markets investment.

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Commodity transactions carry a high degree of risk and may not be suitable for many private investors. The extent of loss due to market movements can be substantial or even result in a total loss.

Investors in real estate are exposed to liquidity, foreign currency and other risks, including cyclical risk, rental and local market risk as well as environmental risk, and changes to the legal situation.

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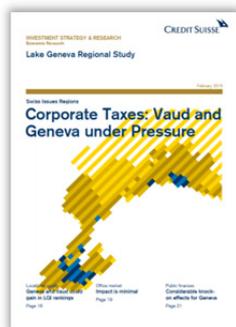
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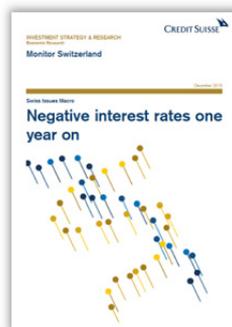
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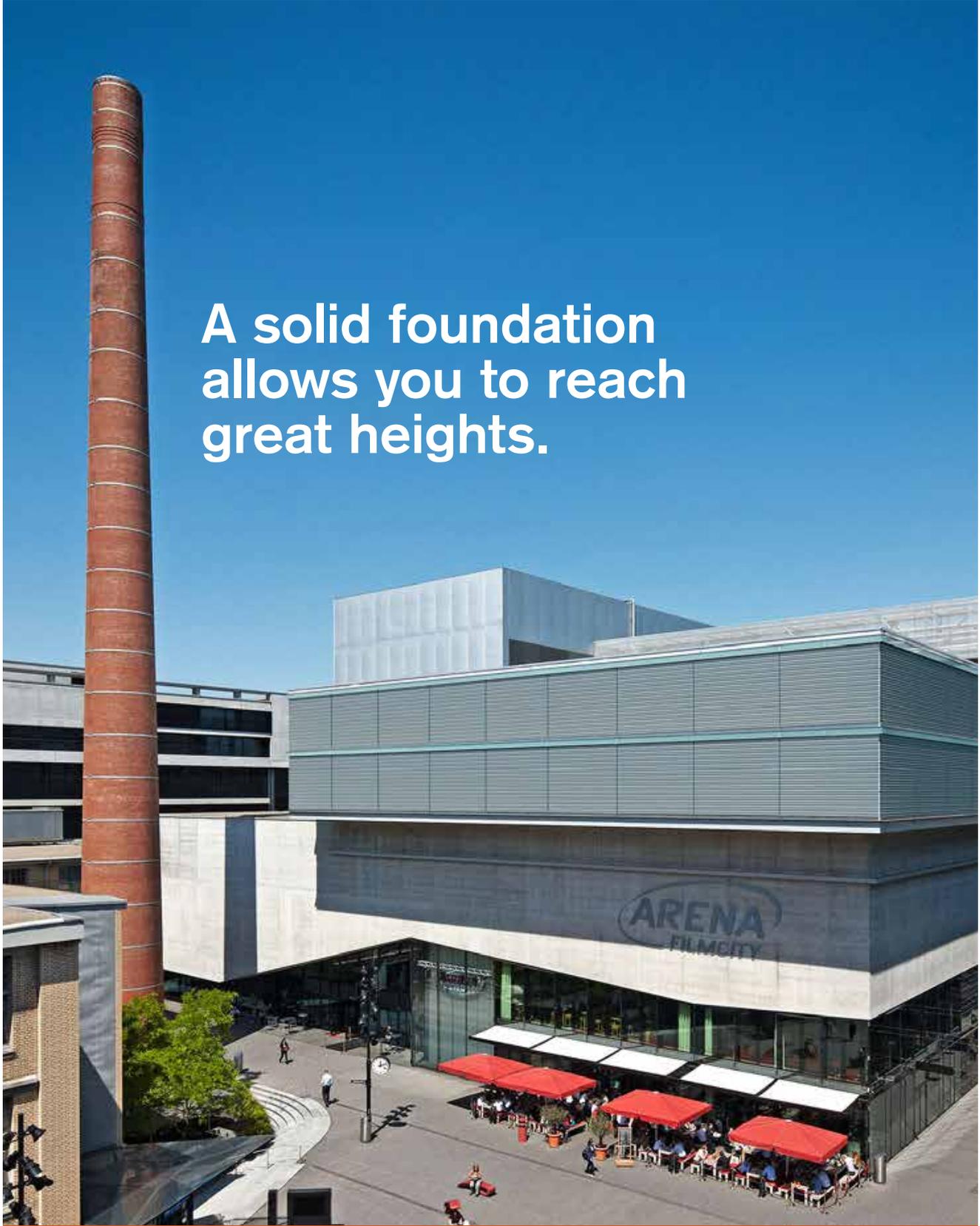
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June 2, 2016

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