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Economic upturn coming just at the right time

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Management summary

Economic upturn coming just at the right time

The Swiss real estate market is beset by a record level of expansion, growing vacancies and downward pressure on rents. The economic upturn is therefore coming to its aid at precisely the right time. Thanks to the cyclically driven revival of demand, the real estate market is receiving a final boost of energy following the unexpected wave of immigration after 2007 and the massive revaluations due to low or even negative interest rates. While the revival of demand will relieve the symptoms of the oversupply, it will not be able to bring about any decisive change to the challenging situation.

Owner-occupied housing
Page 7

Return to price growth

The regime change to falling residential property prices following 14 years of price growth was just a brief intermezzo. Prices on the owner-occupied housing market are significantly up again and have returned to the growth zone even in the high-price segment. The strong economic upturn is generating new demand on the owner-occupied housing market, especially since mortgage interest costs are still at very low levels despite a slight upward trend. The renewed price increase is favored by a continuous fall in construction activity in the ownership segment in recent years. Promoters are only gradually becoming more confident again and planning more housing for homeowners. Supply should decrease further in the short term and we therefore anticipate prevailing low vacancies and solid price growth in the majority of regions. However, we do not expect a return to an overheated owner-occupied housing market as the momentum is being too strongly neutralized by the high price level and regulatory restrictions for this to happen. On top of this, the aging population will no longer foster the demand for owner-occupied housing to the same extent in the future. The high-demand babyboomer cohorts are gradually reaching an age at which on balance the demand for owner-occupied housing starts to fall.

Special focus: Decision process when buying a home
Page 16

Clear division of roles between men and women

The acquisition of owner-occupied housing is one of the most important decisions of a household. Individual family members with different roles and preferences contribute to the decision. Both international studies and a survey conducted by us reveal major differences between the genders in the decision-making process. Sellers are well advised to focus on women, as they are the key factor in the decision to buy a property, while men are primarily concerned about how to finance it. While the disparity between the preferences of men and women is commonly known, its magnitude nevertheless comes as a surprise.

Rental apartments
Page 19

The upturn will not be enough

The outlook on the rental accommodation market is deteriorating further. This is evidenced by growing vacancies, rising pressure on rents and tenants who outside the major centers are increasingly gaining the upper hand. However, thanks to high yield premiums, investors are not being put off by the increasing risks and are continuing to invest in the rental accommodation market. Rental apartment construction therefore remains at a very high level. At the same time the market is being confronted with falling demand as immigration is continuously losing momentum. However, the rental accommodation market is receiving support at exactly the right time and the emerging robust economic upturn is set to stabilize demand. It may curb the growth of vacancies, but it will not be able to halt it. Because we expect excessive construction activity again in the current year, vacancies are set once again to go up sharply to around 2.5%. We therefore anticipate a continued fall in advertised rents of around 1% in 2018.

Special focus: High-rise buildings
Page 27

Comeback of residential high-rise buildings

Cities are the focal points of economic, social and cultural life, which therefore gives them a strong appeal. The improvement of the quality of life in cities as well as various social trends such as falling household sizes have also contributed to the rediscovery of urban living. Solving the resultant settlement pressure calls for structural consolidation for which high-rise buildings offer a potential answer. Residential high-rise buildings have since 2010 therefore experienced a renaissance. They appear to be a suitable product for urban living requirements at central locations. For the investor, however, high-rise buildings are complex construction projects that entail higher investment costs. But with an enhanced tiering of rents by floor level and a focus on the correct target groups, the additional expenditure can be recovered again through higher rental income.

Office property
Page 31

Fragile revival of demand

There are increasing signs of an improvement in the market situation. However, it remains to be seen how sustainable these signs are. Due to low financing costs, attractive yield spreads and a lack of investment alternatives, investments in office property projects are still attractive. Following two years of relative calm, an acceleration in the planning of new office properties can therefore be observed again. These new capital inflows are jeopardizing the stabilization of the office property market. Hopes are therefore entirely based on the gradual recovery of the Swiss economy in 2018 and that this is able to stimulate the demand for office space sufficiently. In the longer term, the aging of the Swiss population that will more or less result in a stagnation of the working population from 2025, and the falling space consumption per employee point toward a noticeable decline in demand. Demand-boosting trends such as increased immigration, a higher participation rate among women and senior citizens and a continued tertiarization of the Swiss economy might mitigate the expected weak demand but will hardly turn the situation around. The scenario of a long-term slowdown in the growth of demand for office space therefore appears undisputed.

Special focus: Urban logistics
Page 40

Logistics are taking over the cities

Owing to reurbanization and the triumph of e-commerce, logistics locations are gaining importance within the centers and their immediate vicinity – despite the prevailing shortage of space. Modern concepts of urban logistics for overcoming the last mile are geared toward four approaches. As well as swifter means of transport and new delivery models (e.g. pick-up stations), more refined forms of cooperation and conversions of office and retail properties are also being tested. However, such cascaded systems of urban logistics are still largely pie in the sky in Switzerland. Nevertheless, more and more real estate investors are becoming aware of this fast-growing sector.

Retail property
Page 43

The knock-out race has begun

The decline in retail sales has come to a halt. However, falling space productivity, major growth disparities between e-commerce and bricks and mortar retailing and rising bankruptcy rates suggest that the structural change within the sector is still in full swing. The development in the US shows that the victims are ultimately the providers of retail property because they are losing tenants. A glance at China reveals where the retail business is going. Despite much less widespread internet usage than in western countries, China has already taken the lead regarding e-commerce. With this in mind we subject the bricks and mortar shopping formats to a digital stress test and consider department stores and shopping streets at B and C locations to be most at threat. Because the future course of business has become much less certain, retailers are striving for more flexibility. They are therefore reducing the number of their locations and aim to expand their online business toward an omnichannel strategy. As rising vacancies despite a reduced expansion of space make clear, the structural change has therefore only just begun.

Special focus: Behavioral economics
Page 52

When psychology plays tricks on investors

Traditional economic models and theories are mostly based on the assumption that people's behavior corresponds to that of a rational utility maximizer (homo oeconomicus). In reality, however, human decision behavior displays a large number of in some cases systematic deviations from the rational economic behavior model. This is where behavioral economics comes into play. As a subdiscipline of modern economics, it aims by means of findings above all from psychology to explain irrational behavior by market participants and gain a better understanding of market inefficiencies. Real estate markets in particular are considered to be inefficient due to their lack of transparency and their inertness. Various theories of behavioral economics can therefore be directly applied to the players on the real estate market. These include, for example, loss aversion that causes significantly fewer real estate transactions to take place in phases of downward price corrections.

Real estate investments
Page 55

Negative interest rates dominating cycle

Despite a deterioration in the earnings situation due to a lack of demand on the end user markets, the yields on direct and indirect real estate investments remain impressive. The negative interest rates are to some extent dominating the classic property cycle and despite falling potential for rental income preventing a corresponding price adjustment to investment properties and products. This is evidenced by a continued yield compression of direct investments and persistently high agios and premiums for indirect investments. Although the agios will disappear as yield drivers in the next few years, according to our main scenario they should not exert a negative impact. Owing to the sideways trend for long-term interest rates and the slight upward trend in short-term interest rates, the net asset values are in future set to make positive but lower yield contributions than in the recent past. Altogether our main scenario anticipates a slight downturn in the performance of indirect real

estate investments in the next few years but not a collapse of the market. Because there will barely be any change to the intense quest for yields in 2018, direct real estate investments are set to build on the excellent performance of the past few years with at least an average return for another year.

Owner-occupied housing

Return to price growth

The regime change in the winter of 2016/2017 to falling residential property prices following 14 years of price growth was just a brief intermezzo. House prices quickly bottomed out thanks to the prevailing low interest rates and a continuous decline in construction activity and started to rise again in the second half of 2017. Because economic momentum and regulatory obstacles are at present largely canceling each other out, the focus is shifting to demographic effects. The babyboomers are heading toward retirement and departing from working life. The time when they will also turn their backs on residential property is no longer far off. What marks will this leave on the owner-occupied housing market?

Demand: Financing hurdles canceling out momentum

Economic recovery supporting demand for residential property …

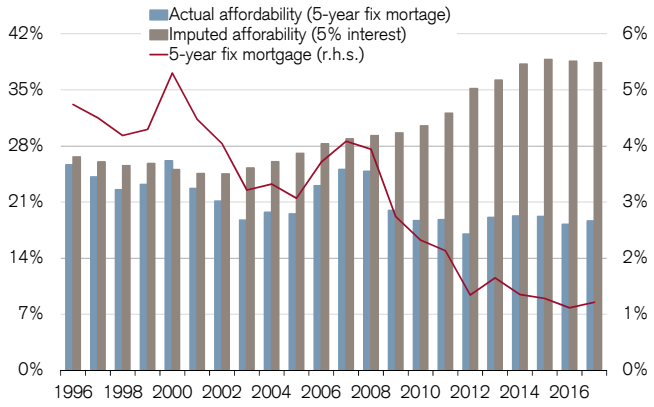
We expect very good underlying economic conditions for the current year. The growth of Swiss gross domestic product (GDP) is set to accelerate noticeably to 1.7% and a slight fall in the unemployment rate is expected. On top of this comes positive news about the economic recovery in the Eurozone from which Switzerland should additionally benefit. Thanks to the economic upturn, households are able to expand their work volumes and thereby increase their incomes. However, from a purely earnings-related perspective, the upturn will only be reflected in consumers' wallets after a delay owing to just moderate nominal and real wage increases.

… especially since mortgage interest rates remain low

Nevertheless, the altogether positive news is likely to increase the desire for home ownership as mortgage interest rates are expected also to remain very low in 2018. We do not anticipate any change in money market rates. However, we expect the interest rates for fix mortgages with medium to long terms to rise by 15 to 40 basis points between the end of 2017 and the end of 2018. Nevertheless, actual mortgage costs remain extremely low when viewed historically. A home owner with an average income last year had to spend 18.6% of his income on mortgage, repayment and maintenance costs for a new condominium of an average standard (Figure 1). Between 1996 and 2017 these costs averaged at 21.1%.

Figure 1: Affordability of residential property

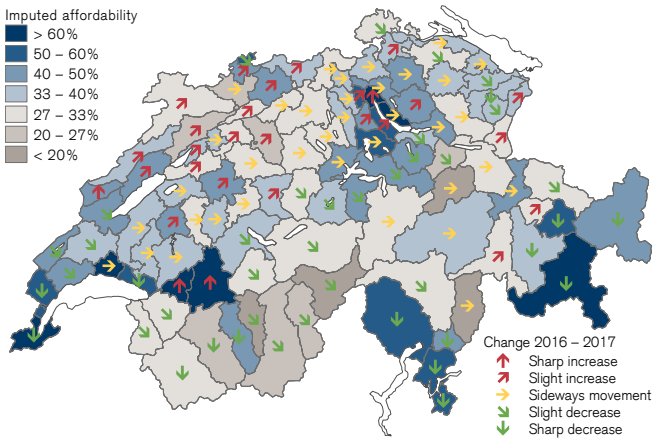
For average household as % of income under the following parameters: new construction, 1% maintenance, 80% loan to value ratio, repayment on two thirds within 15 years



Source: Credit Suisse

Figure 2: Regional imputed affordability

For average household as % of income under the following parameters: 5% interest, 1% maintenance, 80% loan to value ratio, repayment on two thirds within 15 years



Source: Credit Suisse, Geostat

Imputed affordability curbing demand …

Although the actual affordability will more or less remain at its current low level in 2018, many households continue to be denied access to home ownership. Apart from the high capital requirements, the imputed affordability prescribed by regulatory factors also serves to limit the ability of households to acquire residential property. A household with an average income would have had to spend an imputed 38.4% of this on a new condominium of an average standard in

2017 (Figure 1). Although this burden has fallen marginally in the past two years, it is still well above the critical threshold of 33%.

… and continuing to steer potential buyers to less expensive regions

The demand for residential property remains curbed by this. However, strongly varying restrictions emerge between different regions which are primarily due to the prevailing price levels (Figure 2). The home ownership burden is greatest in the areas surrounding Lakes Zurich, Geneva and Zug and is unaffordable for a majority of households. This burden has increased further in particular in the Canton of Zurich. We therefore expect a continued shift of some of the demand to regions with more affordable prices and correspondingly lower imputed affordability.

Demand determined by demographics in the long term

Demographics are a key driver of demand for residential property

As well as economic performance and the affordability of single-family dwellings and condominiums, the demographic trend is also decisive for the demand for residential property. Unlike the two initially mentioned factors, demographic effects barely exert any impact on demand in the short term. However, their long-term effect is all the more substantial. Knowledge of the age structure of home owners and information about when households switch from a rental apartment to home ownership and when they give this up again are therefore crucial to understanding the owner-occupied property market.

Babyboomers: key buyers of residential property

According to the latest figures from 2015, the average home owner in Switzerland is 58 years old. He therefore belongs to the babyboomer generation, that is, the high birth rate age groups born from 1946 to 1964. Babyboomers account for 42% of home owners despite the fact that they only have a share of around 31% of all households.

Home ownership only widespread after reaching mid-thirties

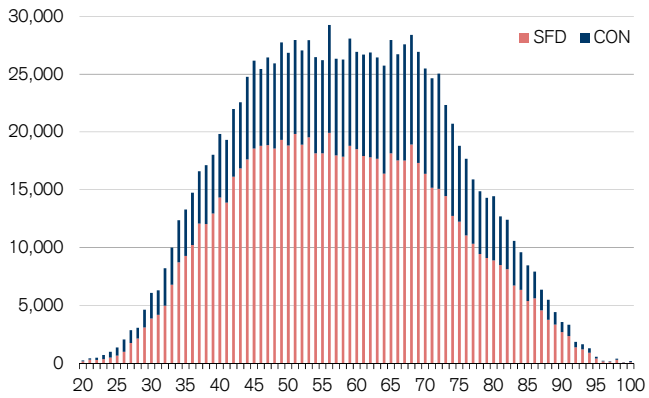
The major importance of the babyboomers for demand is also a result of their age. While hardly any young households own their own homes, the number of home owners rises with increasing age (Figure 3). Although the quest for ownership already lies dormant in many young adults, the desire for flexibility and mobility initially dominates among the young. They also often lack the necessary income and/or assets. This means that while just 13.5% of all 30 to 34-year-olds are home owners, the share among the babyboomers is almost 51%.

Home ownership in the life cycle of owners

The age and in particular also the composition of the household play a role not only in the choice of home ownership but also in the choice between single-family dwelling (SFD) and condominium (CON). Figure 4 illustrates this situation based on an observation of the age cohorts of the year 2015. It shows how the number of home owners in the individual age groups has increased or decreased in the immediately preceding five-year period from 2010 to 2015. It emerges that the behavior of younger households (age groups 25 to 44) differs clearly from that of middle-aged (age groups 45 to 69) and older households (age groups 70 and above).

Figure 3: Number of home owners by age

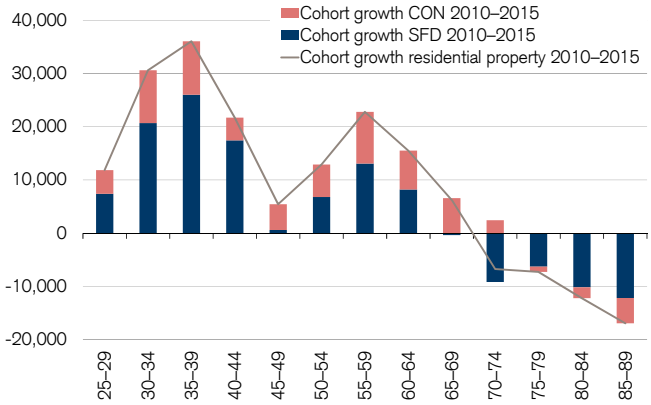
Number of owner households by age



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 4: Growth of home owner cohorts

2015 cohorts over the period 2010 to 2015



Source: Swiss Federal Statistical Office, Credit Suisse

Condominiums gain importance with age

While condominiums are also valued by younger households, they primarily gain importance for the age cohorts above 45 that at the start of the five-year period were aged 40 and above. These will comprise urban households that did not venture into home ownership until a late stage, childless couples and those switching to a condominium after their children leave home as

well as households finding the lack of age suitability or maintenance of a single-family dwelling a burden.

The share of home owners falls from the age of 70

The preference for condominiums is also apparent among older households. However, due to deaths and switches to age-friendly housing types the number of home owners falls from the age of 70 so that the growth of the cohort and therefore the demand for residential property prove negative (Figure 4). The single-family dwelling is primarily affected by this. By contrast, the condominium continues to gain importance right into the age group of 70 to 74-year-olds.

Young households continue to prefer the single-family dwelling

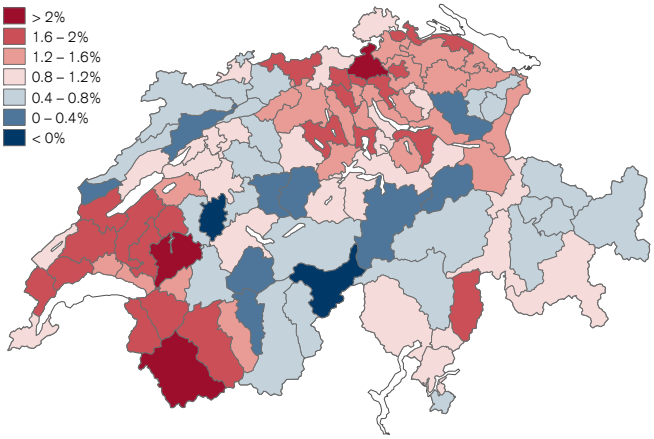
Young households are often the buyers of these single-family dwellings as they become vacant (Figure 4). The single-family dwelling dominates growth in the young age groups. This may at first glance seem surprising since single-family dwellings when new are generally significantly more expensive due to their higher share of land. However, older single-family dwellings for which the value of the building has largely depreciated can also be affordable for younger households, particularly at locations outside the urban areas. Having said this, such a purchase is frequently associated with layouts that are no longer in keeping with the times and a backlog of refurbishment requirements entailing additional costs. Nevertheless, the single-family dwelling ultimately remains the preferred form of ownership for many couples with children.

Outlook: Demand remains scarce at its existing level

Based on the structure of home owners by age and taking account of the expected population growth, it is possible to forecast the demand for residential property in the years to come. This estimate disregards cyclical fluctuations in demand. On average we expect additional demand potential of almost 23,000 home owners nationwide by the year 2025, which is slightly below the growth of the period from 2010 to 2015. The growth is set to be somewhat higher at the beginning as above all middle-aged households will remain as potential buyers of property. Toward the end of the period, however, demand is likely to fall below the aforementioned potential as the lack of babyboomers is increasingly felt. The average age of home owners will also rise further due to the aging population. However, this does not automatically mean that the buyers of properties advertised on the market increase in age. As the willingness to move decreases rapidly with increasing age, the growth is instead concentrated on young and middle-aged buyers in a manner similar to that illustrated in Figure 4.

Figure 5: Regional demand potential until 2025

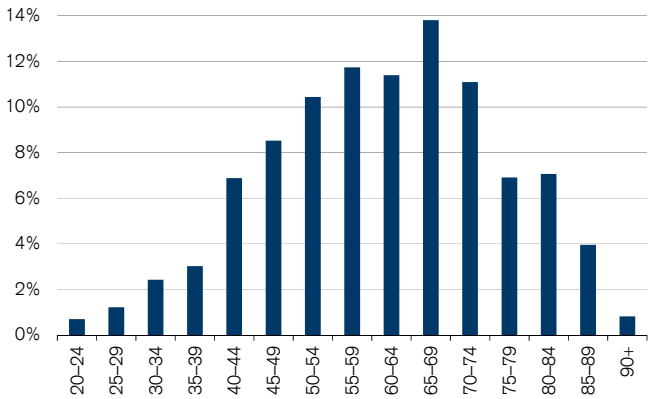
Forecast of annual expected demand potential for residential property, as %



Source: Credit Suisse, Swiss Federal Statistical Office, Geostat

Figure 6: Age structure of second home owners

Distribution of second home owners by age group, in %



Source: Swiss Federal Statistical Office, Credit Suisse

Major differences in regional demand potential

Major differences are manifested regionally in terms of future demand potential. We see the greatest future potential for home ownership in German-speaking Switzerland in the catchment area of the major center of Zurich (Figure 5). Here, the annual potential in Zurich Unterland, for instance, is expected to amount to 2.1% of the current stock of property. However, demand in Western Switzerland is also set to grow above average, particularly in the Canton of Fribourg, the Vaud hinterland and in Lower Valais. By contrast, demand in many rural regions is barely expected to rise further and we even anticipate a fall in demand in the regions of Schwarzwasser and Goms.

Demand for second homes is undergoing upheaval

In the tourist regions the demand for first homes is supplemented by that for second homes, which is likewise dependent on the aging population. For many households of the babyboomer generation, owning a vacation home in the Swiss mountains is an achievement, a status symbol, a place of retreat or all in one. By contrast, the generation of millennials has other preferences. The young generation wishes to be as spontaneous as possible, to experience a lot and discover the world. Thanks to budget airlines, trendy and fancy regions of the world lie just around the corner. Sharing rather than owning has become the motto thanks to the sharing economy. For an excursion to the mountains, an apartment is rented for a few days via Airbnb. However, the purchase of a vacation home is no longer a priority. The outcome of this development is that the buyers of vacation homes are getting increasingly older. Even today the average owner of a vacation home is 61 years old, and at almost 14%, the age group of 65 to 69-year-olds comprises the largest cohort (Figure 6). An increasing number of households will accordingly reach an age in the years to come at which they decide to give up their vacation home. If the children do not wish to take over the home, it will have to be sold on a market with falling demand in the long term. This is set in future to create a more challenging market environment in particular outside the top tourist destinations.

Supply: Continued fall in construction activity

Condominiums becoming increasingly popular

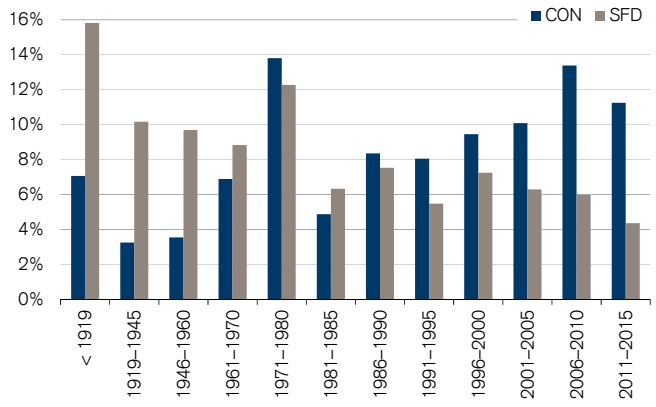
Much attention is normally devoted to new construction activity, including that of condominiums. Although at around 22,000 units the production of residential property in 2017 was impressive in itself, compared to existing stock it is just a dwarf. What do we know about existing stock? While it is dominated by single-family dwellings, condominiums are catching up as can be seen from a breakdown by construction period and age (Figure 7). Condominiums are on average considerably younger than single-family dwellings. Condominiums completed since 2001 by themselves account for 34.7% of their entire stock. By contrast, only 16.6% of single-family dwellings originate from the same period.

Condominium concept facing test of endurance

From a legal perspective, condominium ownership as a form of housing has only existed since 1965, which explains the young age structure of condominiums. Condominiums dating from before this have been created from conversions of multi-family dwellings into condominium ownership. Owing to sharp land price increases and a growing scarcity of building land at well connected locations, condominiums today dominate construction activity versus single-family dwellings at a ratio of 2:1. However the benefits of condominiums are also offset by disadvantages. These include the difficulties of reaching decisions within communities of condominium owners. This topic is set to gain even more relevance in the future as in 2015 almost 19% of all condominiums were between 30 and 44 years old. Major renovation work such as to the roof or the facade becomes increasingly difficult to postpone at this age.

Figure 7: Housing stock by construction period

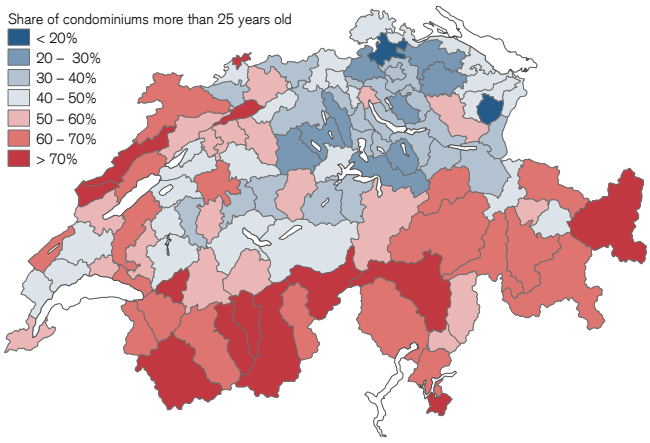
Share per construction period, measured against applicable stock (first homes), 2015



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 8: Share of condominiums more than 25 years old

First homes, as %, 2015



Source: Swiss Federal Statistical Office, Credit Suisse, Geostat

Urban locations offer more options for solving decision-making blockades

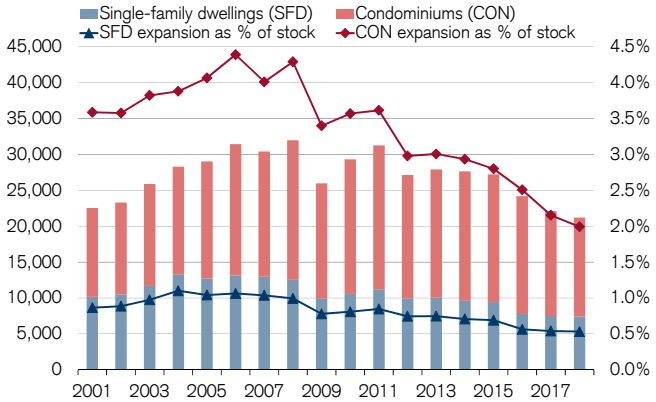
Above all a lack of financial resources and disagreement regarding the procedure in most cases prevent an optimum renovation strategy. Illustrative examples are in future set increasingly to be observed in the regions, where the share of condominiums over 25 years old is high. This is particularly the case south of the Alps, at the southern foot of the Jura and in Basel and Berne (Figure 8). Thanks to the sharp increase in the value of building land, selling offers an additional possible solution in urban regions, while potentially increasing the number of floors in combination with large-scale refurbishment can also pose an attractive option.[1] These possibilities are often lacking in the Alpine regions apart from at top destinations. This situation is further exacerbated by the fact that the heterogeneity within communities of condominium owners is even greater in the case of second homes.

The number of new owner-occupied properties will fall further in 2018

The construction activity of residential property is set to decrease further in 2018. Altogether we expect an additional 21,200 residential units (Figure 9). As in the previous year, the condominium segment is likely to be affected most by this decline. An estimated 13,800 condominiums are expected to be completed, down 5.5% compared with the previous year. However, measured against existing stock, the expansion remains at a respectable level at 2%. We only expect a downturn of 1.1% for single-family dwellings, with around 7,400 houses (0.5% of existing stock) set to come onto the market. From a regional perspective, with the exception of Geneva and Nyon, it is not the urban centers or high-price regions that are displaying a lively expansion of residential property but regions located further away from the urban areas (Figure 11).

Figure 9: Net increase and expansion of residential property

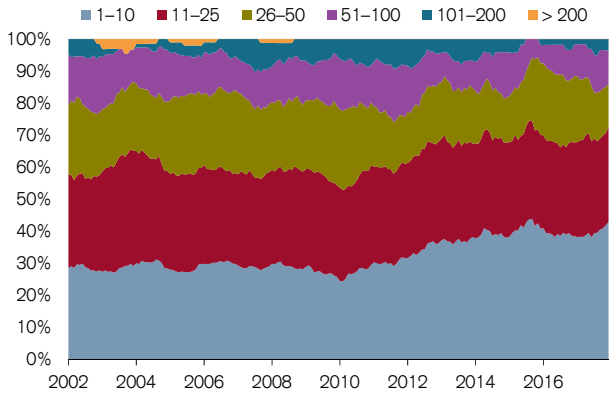
Net increase in residential units; right-hand scale: expansion as % of stock



Source: Credit Suisse, Baublatt, Swiss Federal Statistical Office

Figure 10: Condominium building permits by project size

Project size in number of apartments, share in %



Source: Credit Suisse, Baublatt

Promoters starting to abandon their restraint

The decline in the production of condominiums is primarily the consequence of the sharp tightening of financing requirements. Particularly threshold households in urban areas are no longer able to venture into home ownership. The promoters have therefore been more cautious in recent years in the development of new condominium projects. This caution is reflected in smaller project sizes. While in 2011 around 25% of all newly approved condominiums were attributable to projects with more than 50 apartments, by the end of 2017 this share had fallen to 14% (Figure 10). The successful soft landing of residential property so far is now prompting investors to increase their planning activity again. This is set to become visible in the next two years in planning applications and building permits.

Conversions can increase expansion

The extent of the expansion of owner-occupied properties is currently afflicted by greater uncertainty than is otherwise normally the case. Many investors are increasingly planning both condominiums and rental apartments in the case of major projects. This way they wish to keep open the option of switching from one segment to the other shortly before completion and marketing. Growing marketing difficulties on the rental accommodation market are also prompting investors to advertise properties already completed as condominiums – not infrequently with success.

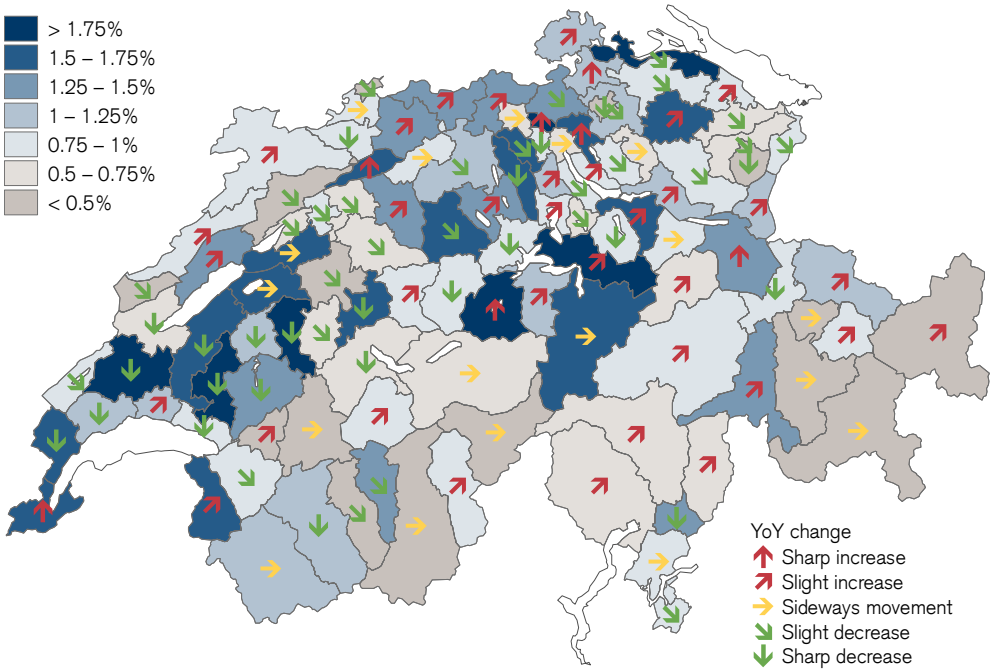
"Buy-to-let" properties could likewise boost supply

A further uncertainty factor is posed by "buy-to-let" investments. These comprise individual condominiums or single-family dwellings purchased by private individuals with the objective of letting

[1] Galliker, P., Mötteli, M., Qelaj, D. (2017). *Ausschöpfung des Verdichtungspotenzials im Stockwerkeigentum durch Aufstockung*, Lucerne University of Applied Sciences and Arts

them out for investment purposes. It is estimated that almost a fifth of all newly completed condominiums fall under this category. Their owners bear a high cluster risk and are likely to dispose of these apartments again in the event of a further rise in vacancies. A detailed examination of rental apartments advertised on online platforms reveals that 7,150 advertised rental apartments are located in properties that also contain condominiums. Measured against the total number of 91,700 advertised rental apartments, this is a substantial number. The current overproduction of rental apartments could therefore also trigger an upturn in supply on the residential property market. However, as the target groups of these two housing types differ relatively significantly from each other, conversions involve challenges that mean that we do not expect all that great an effect in terms of volumes.

Figure 11: Planned expansion of residential property
As % of housing stock and compared with the previous year (arrows)



Source: Credit Suisse, Baublatt, Geostat

Market outcome: Residential property prices rising again

Supply and demand lie close to each other

Supply and demand on the market for owner-occupied residential property remain close to each other. The cautious expansion of residential property by the promoters corresponds well with the deliberate curbing of demand by the regulators so that in volume terms no noticeable imbalances have emerged. Vacancies have therefore only increased slightly in the past year. The vacancy rate of condominiums rose from 0.84% to 0.87% (Figure 12), which is equivalent to 332 additional vacant condominiums. At 220 houses, the increase for single-family dwellings was even lower. The vacancy rate of single-family dwellings rose from 0.40% to 0.41%. Vacancies thus remained at a low and unproblematic level in both segments.

Vacancies only at a high level in the Alps

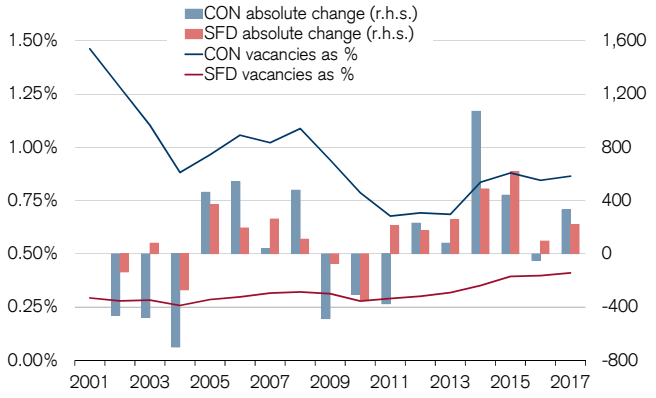
A decrease in vacancies was even recorded in several regions (Figure 13). Vacancies fell in particular in the areas surrounding Switzerland's major population magnets in the Lake Geneva and Zurich areas. The highest residential property vacancy rates continue to be recorded in the Alpine regions. Partially they have been somewhat reduced. However, the oversupply brought about by the second home initiative and the uncertainty among buyers have obviously not yet been completely digested.

Supply rate even falling

In contrast to vacancies, the number of advertised existing properties is actually falling slightly at present (Figure 14). Compared with the previous year, the supply rate of condominiums decreased again slightly from 3.4% to 3.3%. In the case of single-family dwellings it fell from 1.7% to 1.6%. The decline to levels recorded in the boom years of 2010 to 2012 illustrates

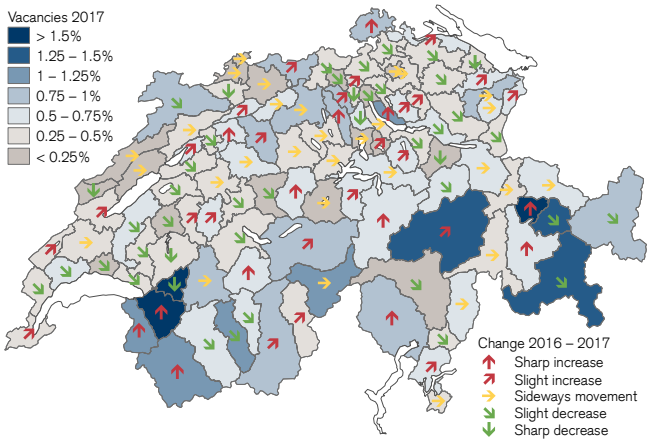
how strong demand would actually be if it were not artificially stifled by the high financial requirements for mortgage lending.

Figure 12: Vacancies of residential property
Left-hand scale: as % of applicable stock; right-hand scale: absolute change



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 13: Regional vacancies of residential property
As % of stock of residential property



Source: Swiss Federal Statistical Office, Credit Suisse, Geostat

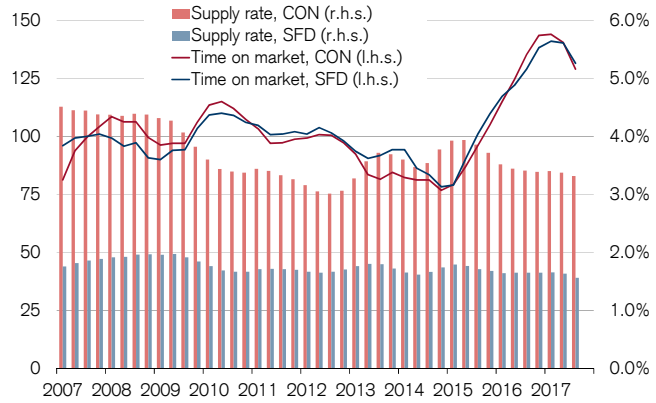
Time on market has fallen again recently

The increase in time on market following the entry into force of the lowest value principle and higher payback requirements due to tighter self-regulation measures in the fall of 2014 serves to prove that the regulatory measures are having an effect (Figure 14). Since then, potential buyers have had to contribute more equity in all cases in which the purchase price exceeds the lending value. Furthermore, the imputed affordability has deteriorated further owing to the higher repayments. The tightening of affordability has now come to a halt and the time on market and hence the marketing costs have fallen again somewhat in the last few quarters. This will be attributable to the price correction at the end of 2016 and start of 2017 that benefited the attractiveness of owner-occupied properties.

Expensive residential property causes the greatest marketing costs

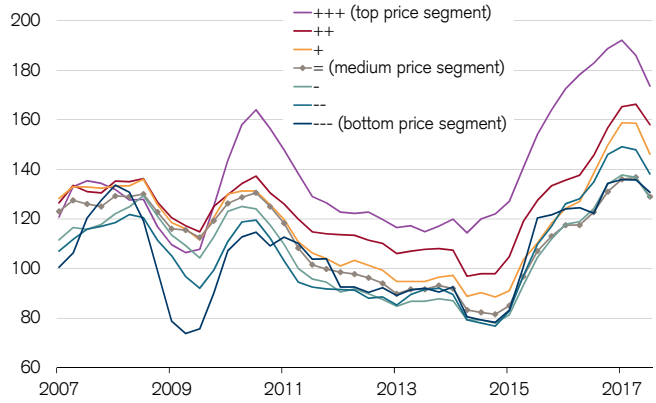
The marketing costs have for some years risen all the more with the increasing price level. This applies to the majority of regions and refers less to the absolute than to the relative price level in a region. For this reason we have analyzed the price level of the advertised properties in relation to the average in the corresponding region. The evaluation in Figure 15 shows that properties sold at the average price in 2017 were on average advertised for 129 days. By contrast, the average time on market in the most expensive price category in which the price level is at least 50% above the average was 45 days longer at 174 days. In some cases the time on market of expensive properties lasted for more than 60 days longer than for the average property. However, the different times on market have started to converge again since mid-2016.

Figure 14: Supply rate and time on market
Existing properties, supply rate as % of applicable stock, time on market in number of days



Source: Meta-Sys AG, Credit Suisse

Figure 15: Time on market by price segment
Time on market in number of days

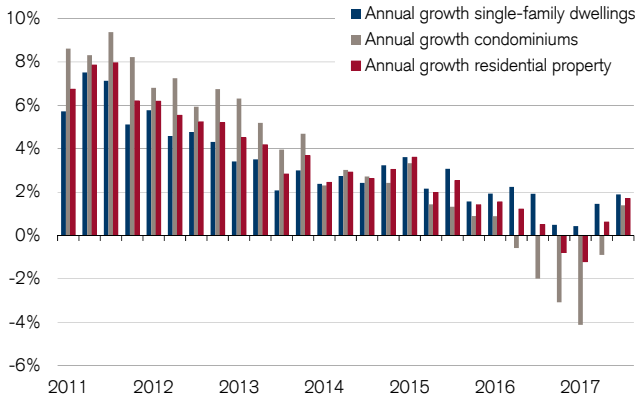


Source: Meta-Sys AG, Credit Suisse

Vacancies should remain low and prices increase moderately in 2018

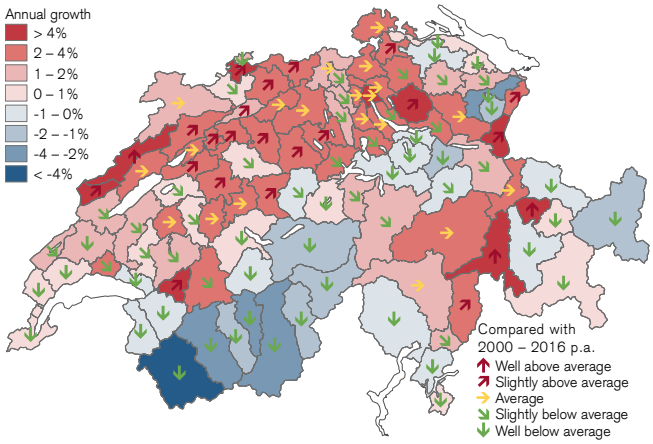
In view of the economic performance supporting demand and the continued decline in construction activity, we expect a relative shortage of residential property. This will be reflected in 2018 in continued low vacancies. Even a slight fall in vacancies lies within the realms of possibility. We therefore anticipate a solid positive price performance again for 2018. After still remaining negative at the end of 2016 and the start of 2017, there was a turnaround over the past year in the price trend for owner-occupied residential property (Figure 16). Compared with the prior-year quarter, the latest price increase came to 1.4% for condominiums and 1.9% for single-family dwellings (3rd quarter 2017). Even in the area around Lake Geneva, where the recent price correction was felt the most, the majority of prices rose again. Moderate price falls are still currently being recorded in particular in the cantons of Valais, Schwyz, Glarus, the two Appenzells and in parts of the cantons of Ticino and Graubünden (Figure 17). Altogether we expect moderate price growth of 2-2.5% for 2018, with prices in the Zurich/Zug area set to rise most sharply. In the high-price segment as well the correction of prices should be completed. However, we do not expect a return to an overheated owner-occupied housing market as the momentum is being too strongly neutralized by the high price level and regulatory restrictions for this to happen.

Figure 16: Price growth of residential property
Annual growth rates in the medium price segment



Source: Wüest Partner, Credit Suisse

Figure 17: Price growth of residential property (regional)
Annual growth rates of residential property (medium segment), Q3 2017



Source: Wüest Partner, Credit Suisse, Geostat

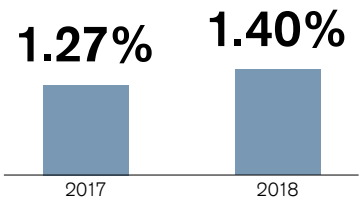
Imbalances set to increase again

As property prices increase once more, the discussions concerning the sustainability of price performance are set to flare up again. We still consider the current price level in a majority of regions to be unsustainable. While in many places the widening gulf between property prices and income has been narrowed somewhat thanks to the price falls at the end of 2016 and the start of 2017, the discrepancies still remain substantial. However, the imbalances are not the result of speculative exaggerations but of an equally unsustainable interest rate level. The future changes to the interest rate level will therefore define the path for bringing property prices better into line with incomes again in the long term.

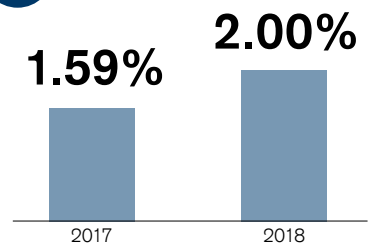
Outlook for owner-occupied housing in 2018

Mortgage interest rates

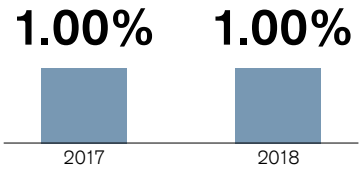
5-year fix mortgage



10-year fix mortgage



LIBOR mortgage (3-month LIBOR)



Demand

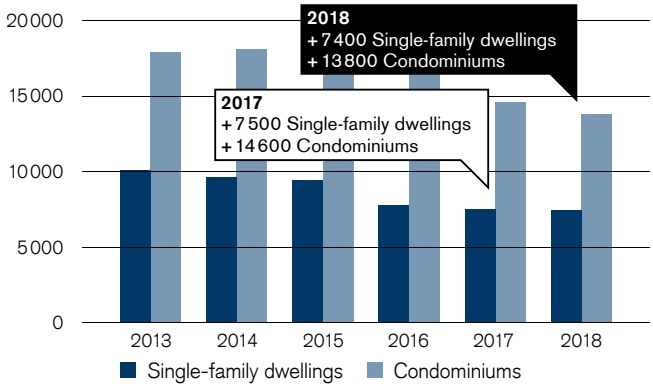
Curbed demand:

- Low mortgage interest rates and an improved economy boosting demand
- High prices and regulatory requirements curbing demand

2018: Demand neutralized

Supply

Net increase in no. of homes

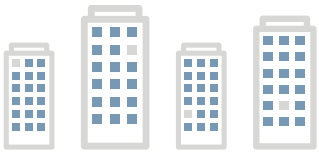


Falling new construction activity losing momentum:

- Promoters starting to abandon restraint
- Increased conversions of rental apartments to owner-occupied housing

2018: Supply to fall again due to delayed impact

Vacancies



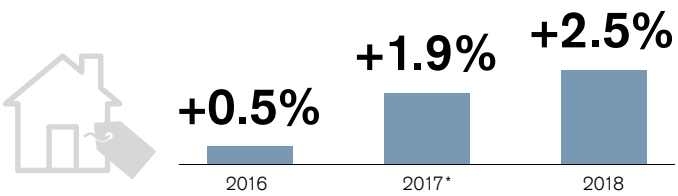
- Even a slight fall in vacancies is possible due to the falling demand
- Marketing costs will nevertheless remain high

2018: Vacancies of owner-occupied housing to remain at a low level

Prices

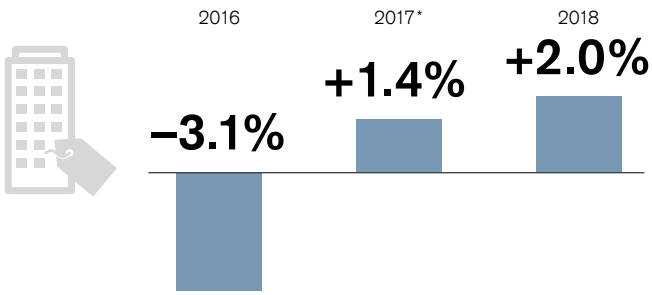
Growth of transaction prices in %

Single-family dwellings



* Q3 2017

Condominiums



Special focus: Decision process when buying a home

Clear division of roles

The acquisition of owner-occupied housing is one of the most important decisions of a household. The decision process normally follows a clear sequence of steps from recognizing the need, seeking a property and evaluating alternatives through to the final purchase decision. The theory generally ignores the fact that a household consists of individual family members with different roles and preferences. In order to find out more about this decision process, we have talked not only to real estate agents but also to our financing specialists with a view to the entire process from initial viewing to financing.

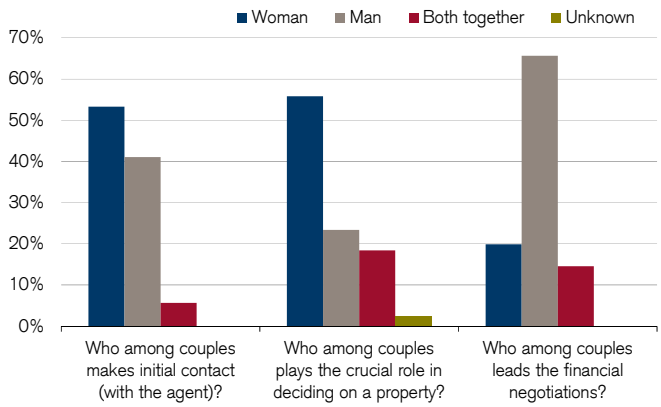
Joint purchase but individual needs

Our survey among both agents and financing specialists has revealed that owner-occupied housing is in most cases jointly bought and occupied. Almost three quarters of all buyers are couples with or without children. This is also confirmed by data about home owners from the Swiss Federal Statistical Office. However, it is interesting to note that single men buy property somewhat more frequently than women. There are also differences among couples between the genders. Ninety-seven percent (!) of the real estate agents questioned by us affirm gender-specific differences in the acquisition of owner-occupied housing and the financing specialists also see clear differences, although with a lower approval rate of 67%. An identical picture is painted by international studies.[2] Among younger families with children, it is often the mother who expresses the desire for home ownership. The reasons for this lie in the requirement for more space, the division of roles within the family and the financial security offered by home ownership. If, however, there are no children, the process is equally triggered by both partners. Meanwhile, men are the driving force behind the desire for home ownership above all in later phases of life.

Women more active in search for property

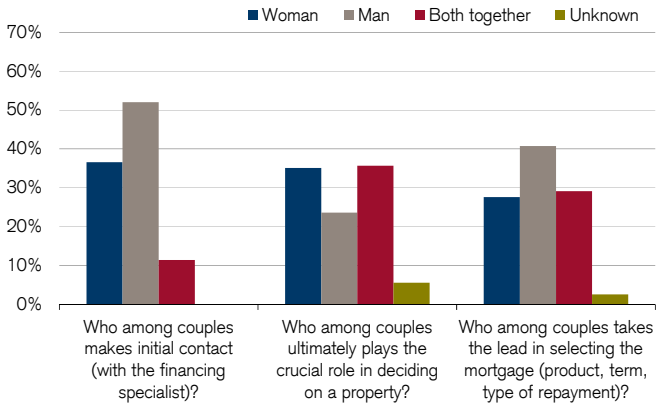
Women are happy to take the lead in the search for a desirable property. Our survey shows that in 53% of cases it is women who make initial contact with the agent (Figure 18) while men are only responsible for 41% of initial contacts. The dominant role of women is also manifested in the initial viewing. Particularly interesting here is what happens when only one of the two partners attends the initial viewing. If it is the man, it is more frequently the case that no transaction takes place even if he likes the property. The preferences of the woman concerning the property being focused on therefore carry more weight than those of the man. This may among other things be due to the fact that functional aspects play a greater role for the partner who mainly takes care of the children. This is still typically the woman today.

Figure 18: Decision behavior in search for property
Shares in %; agents canvassed: 31



Source: Credit Suisse

Figure 19: Decision behavior for financing
Shares in %; financing specialists canvassed: 96



Source: Credit Suisse

[2] See, e.g., Levy and Lee (2004). *The influence of family members on housing purchase decisions*

Kitchen, neighbors and child friendliness are the most important criteria for her

But what is it that is important for men and women when selecting a property? Our survey confirms the common clichés according to which men are interested in the technical fittings and parking space but women in the kitchen and bathroom. It is interesting to observe how clearly these patterns emerge (Figure 20). However, the focus of women is not limited to the features of the property itself. On the basis of insights into areas such as neighbors/social environment, child friendliness of the property and micro location, particularly also with regard to the reachability of kindergartens and schools, it can be seen that the home's surroundings and location play a more important role for women. Another significant factor is whether a property has an emotional appeal. If women do not like a property at the beginning, it generally falls right out of the race.

Financial aspects, parking and technical fittings important for him

A very different picture emerges for men. Financial aspects concerning the property are generally paramount here (Figure 20). The primary criterion is the price of the property and the potential scope for negotiation. Regarding the property itself, alongside parking/garage facilities, the technical fittings are important for many men. These range from heating systems to electrical sockets and internet connections. Men are also more likely to question the construction quality/structure and the refurbishment requirements of existing properties. However, in contrast to women, the features of the property have less significance and men rarely raise the topics of children/neighborhood.

Women ultimately decide on the choice of property

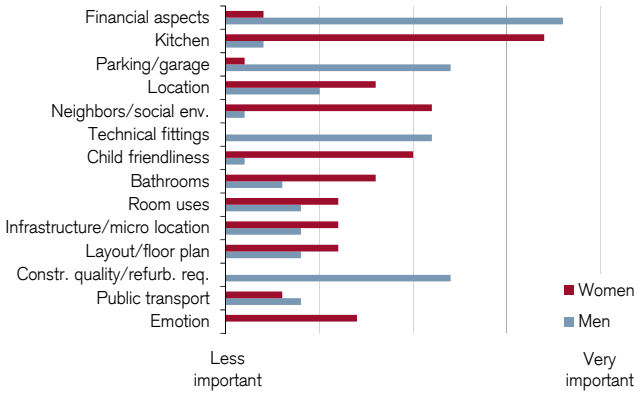
As a result of the major differences concerning the importance of the different areas, couples mutually complement each other very well and jointly cover the relevant aspects. In view of the clear division of roles between the genders, it ultimately comes as little surprise that it is largely women who play the crucial role in deciding for or against a property (Figure 18). Our survey among agents reveals that women are responsible for this decision in 56% of cases but men in only 23% of cases.

Men conduct the price negotiations

However, the roles are reversed when it comes to price negotiations for the desired property. Men are responsible for this in almost two thirds of cases. Women only take on the lead in the price negotiations in 20% of cases. Here too a classic division of roles between the genders can therefore be observed.

Figure 20: Topics in search for property

On which topics are the questions of potential buyers concentrated; agents canvassed: 31



Source: Credit Suisse

Figure 21: Topics for financing

On which topics are the questions of potential buyers concentrated; financing specialists canvassed: 96

Source: Credit Suisse

Men contact the bank

However, the property acquisition process is not complete with the selection of the desired property as the financing still has to be secured. This places many households before major and in some cases insurmountable obstacles specifically in Switzerland with its high property prices and strict financing guidelines. An opposite division of roles compared to the property search already emerges at the initial contact with the bank. Initial contact with the bank is made by men in 52% of cases (Figure 19). Women only establish initial contact in 37% of cases. In financing issues such as selection of the mortgage product, the desired mortgage term and type of repayment, the man assumes the leading role in 41% of cases and the woman in only 28%. This confirms what was already observed concerning the choice of an object: As soon as financial aspects come into play, the man is more frequently in the lead.

Women focus on security in terms of financing

Aspects important for women when contacting the financing specialists above all revolve around the topic of financial security (Figure 21). The affordability and in particular uncertainties concerning affordability are likewise important discussion points for women. For example, this includes questions of whether and in what form part-time work after the birth of a child, possible unemployment or retirement could impact the affordability of the property. The high importance of the security aspect is also reflected in the fact that the topic of repayment is more frequently broached by women. It is interesting to note that the topic of location/infrastructure is often raised again with the financing specialist. Women thus also tend more to seek the expertise of the financing specialist with regard to the property itself.

Men wish to optimize the financing

By contrast, the prime issue of importance for men in their dealings with the financing specialist is what mortgage interest rate they receive and which costs are ultimately entailed by the mortgage. They more closely address the question of mortgage products and their terms. The property price also plays an important role for men. This may be influenced by the fact that men see the acquisition of owner-occupied housing more as an investment and therefore wish to know from a financing expert whether the price for the selected property is justified. The property's resalability often comes up in this respect. With properties recently having become very expensive, verification of the price will no doubt also be aimed at sounding out any potentially existing scope for price negotiations with the seller.

Women make the final decision

The decision about financing and therefore ultimately about the object of purchase is taken jointly in 36% of cases (Figure 19). Where the decision is not taken jointly, according to the financing experts women are more frequently responsible for the final decision (35% of cases) than men (just 24% of cases). This thus confirms the picture gained concerning the choice of home ownership of women more frequently having the final say. According to the literature, the differences are relativized accordingly where there are no children. Some of the gender-specific differences can therefore be explained by the varying division of roles.

Stronger together than alone

Our surveys confirm the results of international research studies according to which clear responsibilities emerge between the genders for the individual process steps in the decision process for the purchase of owner-occupied housing. However, a glance at the different focuses of concern also very nicely illustrates how well the two perspectives complement each other and how all relevant aspects concerning the purchase of owner-occupied housing are jointly covered. Couples therefore mutually support each other in an optimum manner and ensure that nothing gets forgotten.

Utilizing gender differences in negotiations

Sellers and agents can attempt to make strategic use of the differences in decision behavior. In order to sell a property, they primarily need to convince the woman. For this purpose it is essential to address consciously the areas that are important for women and to provide appropriate information. Potential buyers should also be aware of this. This is particularly crucial for any price negotiations. If the woman has already made known how much she would like to have a property, the man will barely have any leeway in the price negotiations. The following therefore applies from the perspective of potential buyers: Don't put your cards on the table immediately but act skillfully in order to preserve your scope to act in the event of any price negotiations.

Rental apartments

The upturn will not be enough

The outlook on the rental accommodation market is deteriorating further. This is evidenced by growing vacancies, rising pressure on rents and tenants who outside the major centers are increasingly gaining the upper hand. However, thanks to high yield premiums, investors are not being put off by the increasing risks and are continuing to invest in the rental accommodation market. Rental apartment construction therefore remains at a very high level. At the same time the market is being confronted with falling demand as immigration is continuously losing momentum. However, the rental accommodation market is receiving support at exactly the right time and the emerging robust economic upturn is set to stabilize demand. It may curb the growth of vacancies, but it will not be able to halt it.

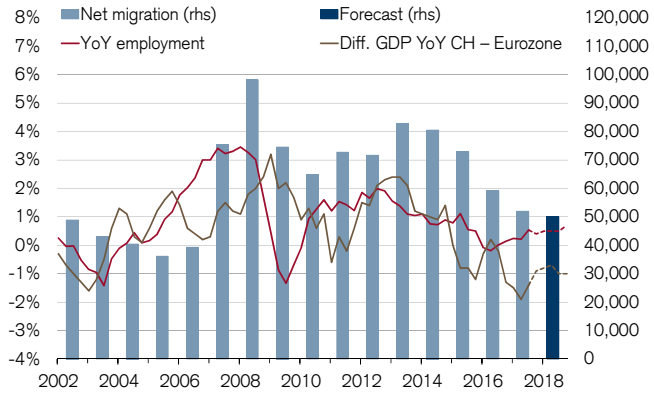
Demand: Immigration stabilizing

Net migration down again in 2017

2017 was the fourth year in succession with falling net migration. Taking account of immigrations and emigrations of Swiss citizens, net migration over the past year reached an estimated 52,000 persons, a decrease of 12% compared with the previous year (Figure 22). This represents the lowest net migration since the year preceding the entry into force of the full free movement of persons with the 15 EU countries ten years ago. The gradual decline in immigration since 2013 is also almost completely attributable to net migration from EU countries (–50%) and was brought about by an economic downturn in Switzerland due to the franc shock in combination with an economic upturn in most EU countries. Net migration from Portugal, for instance, that in 2013 on balance amounted to 14,600 persons, changed into a net return migration of 570 persons in 2017. By contrast, migration from non-European countries has had a stabilizing effect since 2013 and grown by 28%.

Figure 22: Net migration and economy

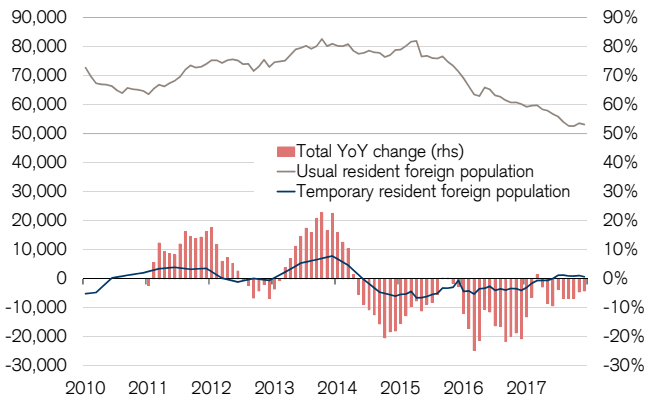
Net migration of permanent resident population (excluding register corrections, including net outward migration of Swiss citizens); 2017: extrapolation; 2018: forecast



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

Figure 23: Permanent and temporary resident population

Net migration, 12-month totals, including register corrections



Source: State Secretariat for Migration, Credit Suisse

Exaggerated decline in immigration

A closer examination reveals that immigration stabilized toward the end of 2017. Net migration even recorded slight year-on-year growth (+1.1%) in the fourth quarter of 2017. The net migration of short-term residents (temporary resident foreign population) also developed dynamically and at a good 700 persons was in positive territory again in 2017 for the first time since 2013 (Figure 23). The main reason for this is the safety valve concerning Bulgaria and Romania (EU-2) ratified by the Federal Council on 1 June 2017 that limits migration from these countries for a maximum of two years. As it has so far only been applied to residence permits (B permits), there

has been a shift of immigration to short-term residence permits (L permits). If the temporary resident population (including short-term residents) is also included in the assessment of immigration, the net migration of the past year is just 4.2% below that of the previous year.

Net migration should stagnate in 2018

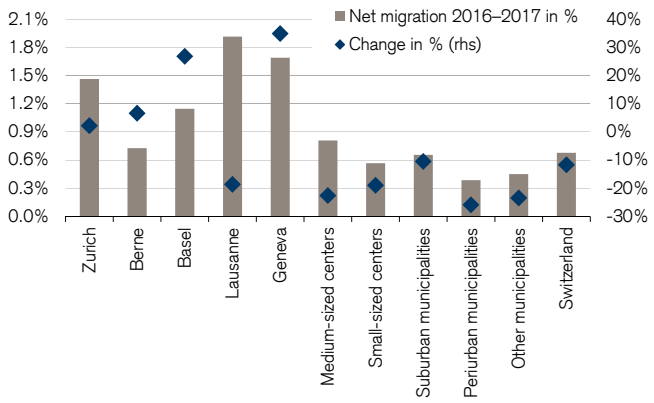
There is evidence to suggest that migration will bottom out in the current year. The most important factor here is the revitalization of the economy (Figure 22). We expect growth of gross domestic product (GDP) in 2018 of 1.7% (previous year: 1.0%) and employment growth of 0.5% (previous year: 0.3%). As the Federal Council has increased the quotas for migration from third countries by 500 in 2018, a slight upturn is to be anticipated here. The quotas for service providers from EU/EFTA countries without a Swiss employment contract have likewise been raised by 250 B permits and 1,000 L permits. A potential extension and expansion of the safety valve concerning Bulgaria and Romania could have a negative impact on short-term residents. Altogether we expect stagnating net migration of around 50,000 persons for 2018.

Migration largely to the major centers

The fall in migration can be felt above all outside the major centers. Immigrants from abroad were primarily attracted to the country's five major economic centers in 2016 and 2017. Their population grew over these two years due to net migration by an average of 0.7% (Berne) to 1.9% (Lausanne), which is considerably more than the other centers and the municipalities outside the centers (Figure 24). Another striking development here is that four of the five major centers even recorded a year-on-year increase in net migration in 2017 in contrast to the declining national trend. This was particularly pronounced in the cities of Basel (+26.9%) and Geneva (+34.9%). The gradual stabilization of immigration expected for the current year has thus already set in in these centers and there is consequently little sign of a slump in demand on the rental accommodation market in the major centers.

Figure 24: International migration by type of municipality

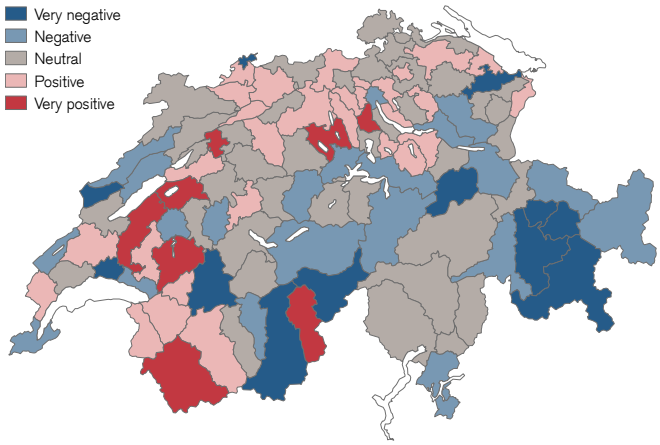
2016/2017 net migration as a percentage of the population of the previous year, 2016–2017 change in % (rhs), including register corrections



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

Figure 25: Internal migration

Net migration in relation to the population of the previous years, 2015/2016



Source: Swiss Federal Statistical Office, Credit Suisse, Geostat

Internal migration concentrated on the areas surrounding the major centers

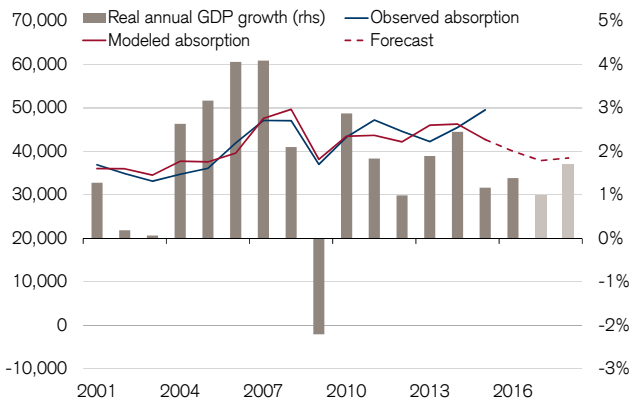
While immigrants are thus primarily heading for the major centers, households wishing to relocate are tending to move away to regions outside the major centers (Figure 25). Their focus is on suburban to rural municipalities within commuting distance of the large urban areas. The motive for such a relocation is not infrequently to purchase an affordable home so that this additional demand only partially benefits the rental accommodation market. Compared with the high-migration period from 2010 to 2014, it can also be seen that the relocation of households away from the major centers and their immediately adjacent regions decreased in the years 2015 to 2016 – particularly in the Greater Zurich area where the high construction activity has brought slight relief to the market.

Economic upturn boosting the absorption of rental apartments …

Immigration is inarguably an important demand determinant of the rental accommodation market. However, the factor of the economy is also not to be neglected and influences the demand for rental accommodation via three channels. The first channel in turn leads to immigration: Growing economic activity boosts job creation, thereby increasing the attractiveness for immigrants. Also decisive here is the economic situation in the immigrants' countries of origin (Figure 22). Secondly, an economic upturn of the kind we are expecting for the current year also supports the

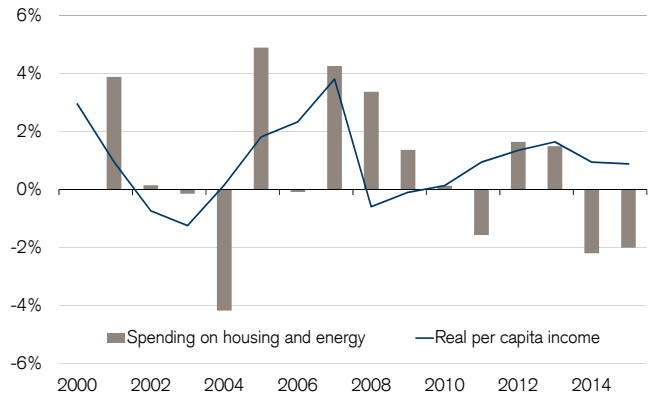
demand for rental accommodation independently from immigration as there is also an increased housing demand among residents when their economic prospects improve. For example, a small apartment (pied-à-terre) is additionally rented at the workplace or children leave home earlier. We have used a statistical model to depict the annual housing absorption depending on immigration and GDP (Figure 26). Based on this model and our current forecasts of net migration and GDP growth, we expect a slight increase in housing absorption of around 500 residential units (rental and ownership) for 2018.

Figure 26: Economic growth and housing demand
Absorption (actual and modeled) in number of residential units



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 27: Income and housing spending
Development of spending on housing and energy and of real per capita income, annual growth rates in %



Source: Swiss Federal Statistical Office, Credit Suisse

… and increasing the household budget for housing

A third effect of the economic upturn pertains not to housing absorption but to the structure of housing demand: Demand is shifting to larger homes at better locations and with better features. This is also reflected by a very stable share of housing spending in household budgets over the years. Housing spending accordingly tends to increase as incomes rise (Figure 27). There are therefore good chances that in the course of the economic recovery the demand situation will also stabilize outside the lowest price segment. Although the additional demand generated by this will not suffice to end the downturn of the rental accommodation market, the economic tailwind is nevertheless coming at the right time.

Supply: Construction boom in the urban areas

No turnaround in rental apartment construction in sight

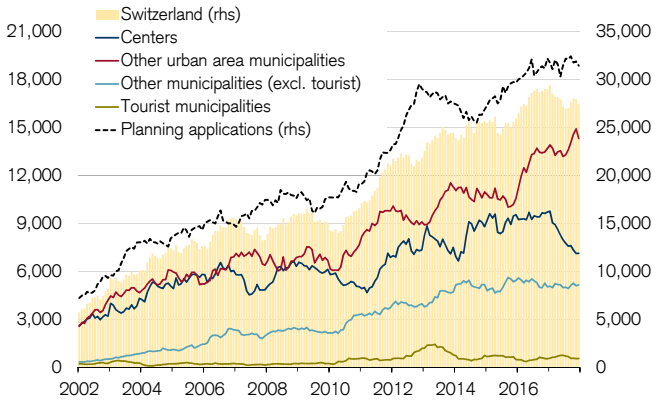
"Supply creates its own demand." The famous economist John Maynard Keynes used these words to summarize what is known as Say's Law and real estate investors still appear to act in accordance with this maxim. A total of over 27,000 rental apartments received construction approval in 2017 (Figure 28). While this is more than 1,500 residential units fewer than in the previous year, the development of planning applications does not suggest that this represents an initial sign of a turnaround. At more than 31,000 planned residential units, the number of planning applications hardly changed during the year and remains around a 20-year peak. This comes as little surprise with negative interest rates continuing to prevail as the key driver of this development.

Shift of construction activity from the centers to the suburbs

However, there has been a clear change in the last year or two in the geographical distribution of construction activity. Fewer rental apartments received construction approval in the centers than at any time since 2011, while construction activity in the other municipalities of the urban areas (suburban and periurban municipalities) has risen by around 35% since 2015 (Figure 28). Meanwhile, the limited absorption potential and the already sharp vacancy rises in many places appear to be putting developers and investors off further expanding their project activities in rural areas. At the same time, there are increasingly fewer properties suitable for rental apartment construction available in the major centers and the rigid construction laws frequently rule out the possibility or feasibility of replacement buildings with a higher density. The logical consequence of this is a shift to the suburbs.

Figure 28: Construction activity by type of municipality

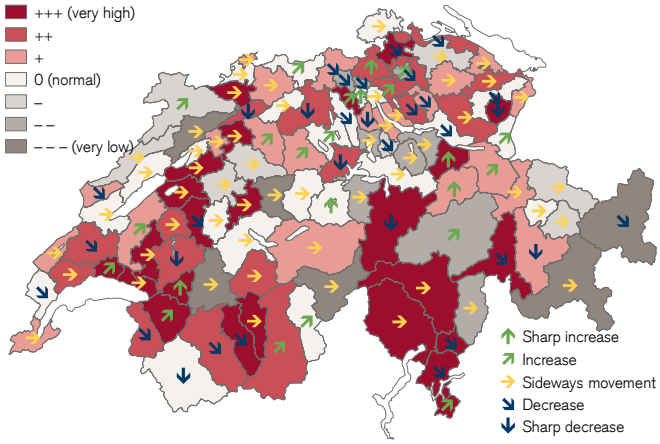
Building permits in number of housing units, 12-month totals, total (rhs) and by type of municipality



Source: Baublatt, Credit Suisse

Figure 29: Expected expansion of rental apartment construction in 2018

Expected expansion in relation to past absorption (2011–2015); arrows: trend in comparison with previous year



Source: Baublatt, Credit Suisse, Geostat

Slowdown particularly in parts of Aargau and Central Switzerland

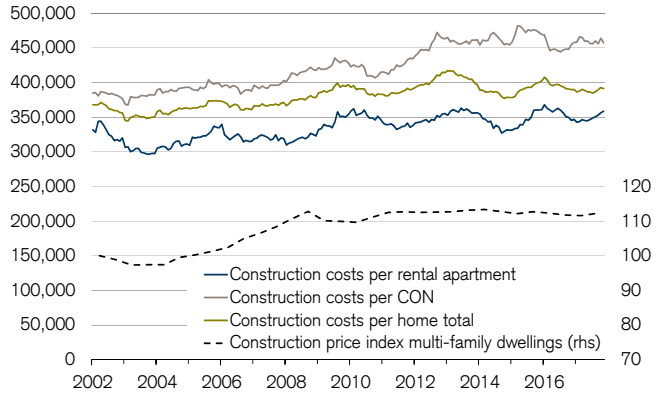
We accordingly anticipate a rising number of completed rental apartments in 2018 in some of the more urban regions surrounding the major centers such as in the northeast of Zurich and the regions surrounding Lausanne (Figure 29). We also expect the number of new apartments in many other regions including large parts of the cantons of Vaud, Fribourg, Solothurn and Ticino to lie above the average annual demand of the recent past. Vacancies are also set to display a continued upward trend in these regions (colored red on the map) in 2018. On the other hand, there are signs of a slowdown in construction activity at present in parts of Central Switzerland and the canton of Aargau. This development will be particularly welcome in the latter region where the marketing of rental apartments has recently become increasingly difficult.

Construction costs stable at around CHF 350,000 per apartment

The construction costs for an average rental apartment (including communal areas) today amount to around CHF 350,000 (Figure 30). They therefore lie a good 20% below the cost level of a condominium and have primarily been moving sideways for around eight years. Construction prices have been very stable over this period, while the once prevailing trend toward growing apartment sizes has not continued. However, there is also no major trend decipherable in the overall economy toward affordable rental apartments with concessions in terms of room size and features.

Figure 30: Construction costs by residential property segment

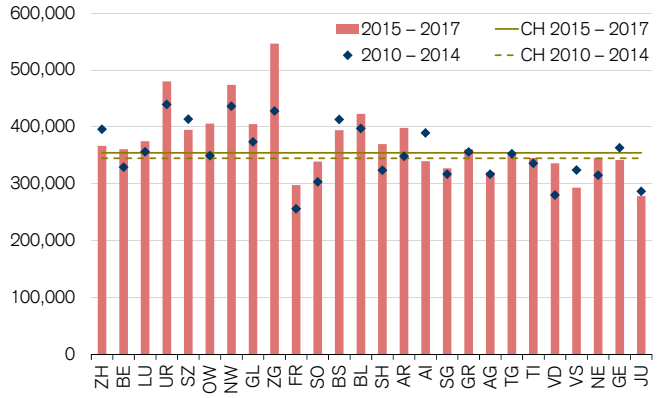
Multi-family dwellings excluding mixed usage, including costs for parking, garages and green areas, in CHF per residential unit; construction price index: 2002 = 100



Source: Baublatt, Swiss Federal Statistical Office, Credit Suisse

Figure 31: Construction costs of rental apartments by canton

Multi-family dwellings excluding mixed usage, including costs for parking spaces, garages and green areas, in CHF per residential unit



Source: Baublatt, Credit Suisse

Trend toward less expensive apartments in the urban regions

Having said this, a cantonal breakdown reveals significant regional differences (Figure 31). Builders spend around CHF 550,000 on a rental apartment in the economically strong canton of Zug but just CHF 280,000 in the canton of Jura. As well as differences in features, these cost differences reflect regional differences in average apartment sizes and to a certain extent also in construction prices. If we compare the average prices in the years 2015 to 2017 with those in the years 2010 to 2014, it can be seen that the urban cantons of Zurich (–7.4%), Basel City (–4.6%) and Geneva (–5.8%) recorded falling construction costs per apartment that ran contrary to the national trend (+2.8%). The high rent level and small household sizes are generating an increased demand for less expensive and smaller apartments here that also pay off from the investor's perspective.

Market outcome: Pressure on rents set to continue

Number of vacant homes continuing to rise …

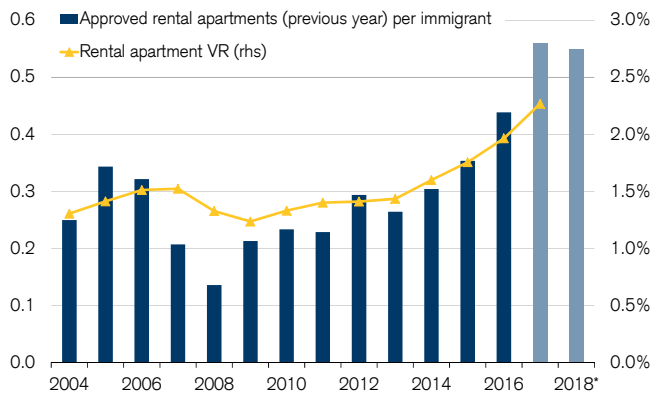
The disparity between supply and demand is increasingly leaving its mark on the rental accommodation market. This can be illustrated by comparing rental apartment construction approvals with net migration (Figure 32). The construction of around 0.2 to 0.3 rental apartments per immigrant was required recently in order to guarantee the complete absorption of newly built units and thus a stable vacancy trend. In 2017 this figure was estimated to lie at 0.56. The result was a sharp rise in the vacancy rate to almost 2.3%. As we expect continued high construction activity and only a slight increase in demand in the current year, vacancies are set once again to go up sharply to around 2.5%.

… and marketing remains challenging outside the centers

The increased difficulty in the marketing of rental apartments is also reflected in the prevailing high times on market. A rental apartment advertisement was online for an average of 40 days in 2017. This is nine days above the ten-year average. The fall in times on market in the second half of 2017 (Figure 33) may not be interpreted as a sign that the market is recovering. It instead appears to be explained by the fact that landlords are responding to marketing difficulties more rapidly with price discounts (see below). Supply on the online portals has grown strongest in the rural municipalities in the past ten years and it is here that the marketing situation is now proving particularly difficult. However, the centers and the suburban and periurban urban area municipalities are catching up in this regard: The strong construction activity in the suburbs is set to result in a sharp rise in times on market and vacancies in the next one to two years. The oversupply problem is thus getting closer to the centers although it is not yet affecting them. The average time on market in the five major centers lay at low levels between 21 days (Berne) and 35 days (Basel) in 2017. In Basel and Lausanne it even decreased slightly on the previous year.

Figure 32: Rental apartment construction approvals per immigrant

Approved residential units (previous year) in relation to net migration, development of vacancy rate (VR) as % of rental apartment stock

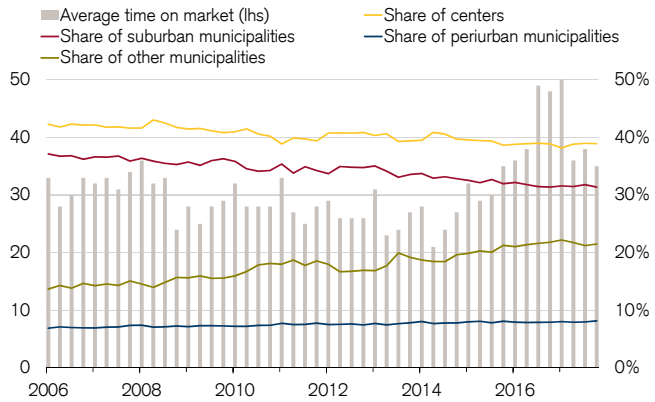


* 2017: estimate, 2018: forecast

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

Figure 33: Rental advertisements and time on market

Average time on market (number of days) of rental apartments (lhs) and distribution of advertised rental apartments by type of municipality



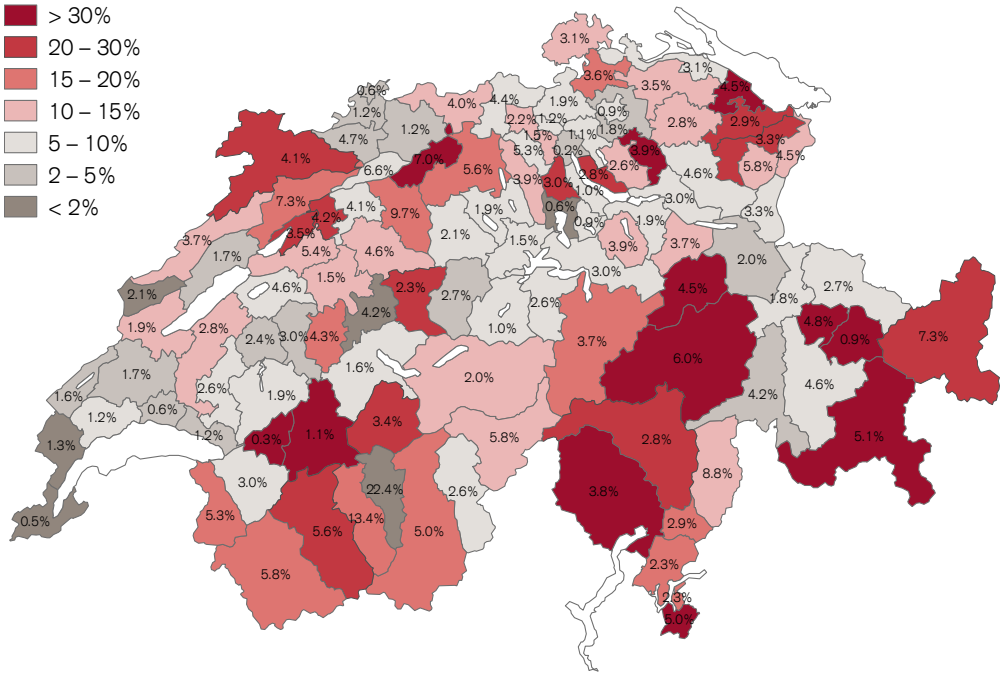
Source: Meta-Sys AG, Credit Suisse

Increased vacancies in new apartments

Vacancies have for a long time no longer just been a feature of existing stock. Of almost 65,000 apartments reported as vacant as of 1 June 2017, 10,000 comprise new homes completed since 2015. The share of vacancies among new apartments is revealing. According to our estimate, around 11% of all new apartments (ownership and rent) were vacant as of 1 June 2017 (Figure 34). Above all three-room apartments are increasingly affected by this. Vacant new apartments are most frequently encountered in large parts of the Alps, in Ticino and in parts of Eastern and Northwestern Switzerland with rates in some cases exceeding 20% or even 30%. Some of these regions have very high rental apartment vacancies that are clearly also affecting the market for new apartments (e.g. Olten and Sion). In other regions new construction projects still appear to have better prospects despite high rental apartment vacancies (e.g. the Aare Valley, Laufental, Mutschellen). The marketing of new apartments generally lasts longer in peripheral regions even in the absence of a structural oversupply (e.g. Kandertal, Upper Emmental).

Figure 34: Vacancy rate of new apartments and rental apartments

Coloring: Vacant new apartments (< 2 years, owner-occupied housing and rental apartments) as % of overall stock of new apartments (estimate); labeling: regional vacancy rates of rental apartments



Source: Swiss Federal Statistical Office, Baublatt, Credit Suisse, Geostat

Rent reductions for advertised apartments

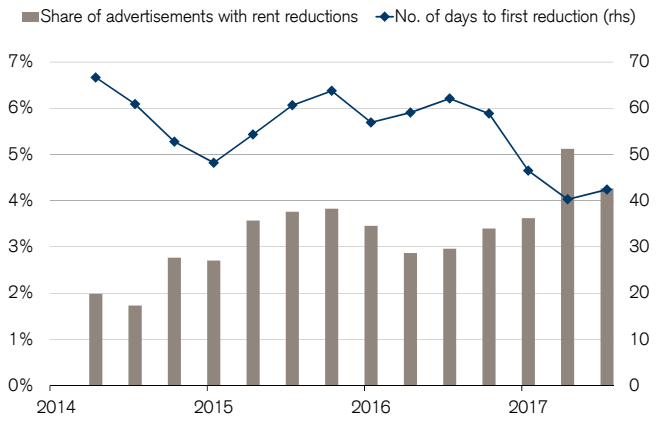
The diminishing market power of landlords outside the centers is forcing the latter to undertake greater efforts to broker rental apartments successfully. However, intensive marketing and the deployment of additional incentives such as rent-free months or vouchers are also increasingly no longer sufficing. Apartments unsuccessfully advertised on online portals are more and more frequently being re-advertised at lower rents. This was the case for over 4% of advertised rental apartments in 2017 and the trend is continuing to rise (Figure 35). At the same time, the period within which a reduction is carried out is contracting markedly.

Reduction of rents set to continue in 2018

The disparity between supply and demand has altogether resulted in a slight reduction in advertised rents over the past year (Figure 36). An exception comprises the cantons of Geneva and Vaud where rents increased again in 2017 after falling in the previous year. Generally, however, the decline in the growth of rents is continuing across all regions and this is also unlikely to change much in 2018. We expect a fall in advertised rents of around 1%.

Figure 35: Rent reductions on real estate portals

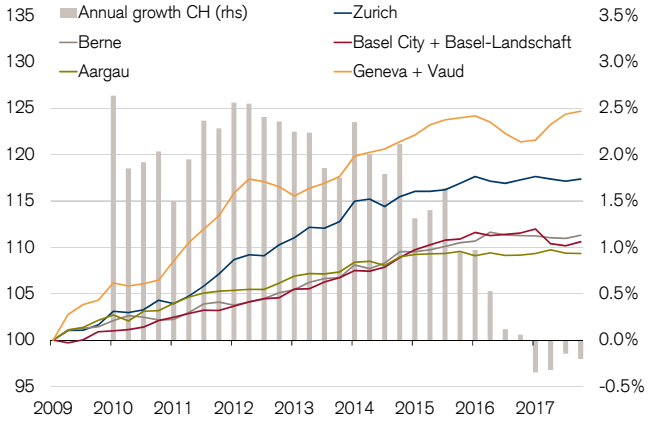
Share of advertised apartments with rents reduced over time and average number of days to first reduction



Source: Meta-Sys AG, Credit Suisse

Figure 36: Trend in advertised rents

Indices for selected cantons: 2009 = 100 (lhs)

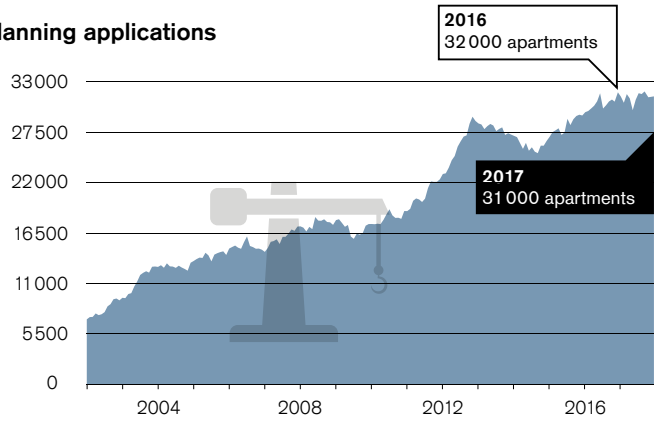


Source: Homegate, Credit Suisse

Outlook for rental apartments in 2018

Supply

Planning applications

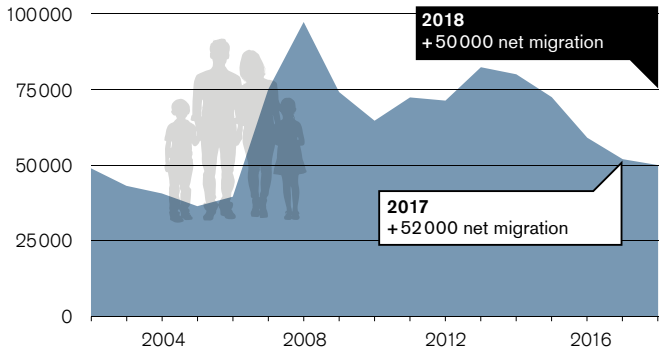


Negative interest rates driving housing construction:
- Pipeline of rental apartments remains full to bursting
- Focus of construction activity shifting to suburbs
- Building permits in urban area municipalities: +35% (since 2015)

2018: Number of newly built rental apartments to increase again slightly

Demand

Net migration

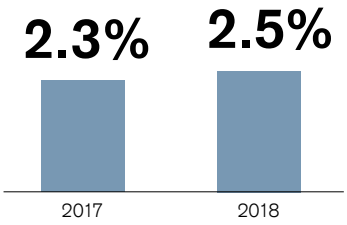


Revitalization of the economy:
- Stabilizing net migration
- Underpinning demand for rental accommodation of residents

2018: Increase in absorption: +500 residential units

Vacancies

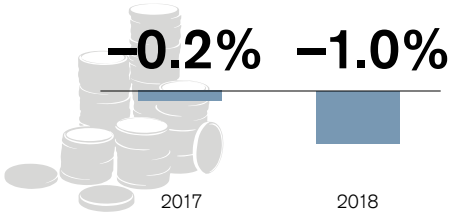
In %



Continued rise in vacancy rate:
- Construction activity remains high
- Only slight increase in demand

Rents

Growth of rents offered in %



Continued decline in advertised rents:
- In all regions
- Increasing re-advertising at lower rents

Time on market

In days

40–45

2018

Time on market of rental apartments on online portals:
- 10-year average = 31 days
- 2017: 40 days

2018: 40–45 days

Performance

Total return of residential investment property

4–6%

2018

Total return of residential investment property:
- Pressure on rental income rising due to falling rents and growing vacancies
- High investment pressure due to interest rates set to persist in 2018 and generate further increases in value

2018: Total return set to be somewhat lower than in 2017 and lie in a range from 4–6 %

Special focus: High-rise buildings

Comeback of residential high-rise buildings

Residential high-rise buildings have recently experienced a renaissance. They appear to be a suitable product for urban living requirements at central locations. We examine the reasons for the rediscovery of the residential high-rise building and use findings from recently completed constructions to illustrate which factors contribute to a successful project from the investor's perspective.

Residential high-rise buildings have experienced a revival since 2010

The Bel-Air Métropole in Lausanne (constructed in 1932) can be described as Switzerland's first high-rise building. Not long afterwards, the first residential high-rise building, the Tour de Rive in Geneva (completed in 1938) was erected. However, it was only in the 1960s and 1970s that the residential high-rise building experienced a proper boom. Over 340 buildings with fifteen or more floors were constructed over these 20 years (Figure 37). Important witnesses of this time include the Tscharnergut (1958–1967) in Berne-Bethlehem and the Hardau high-rise blocks (1976–1978) in Zurich. A long period of quiet then set in for residential high-rise constructions and it is only since around 2010 that the high-rise building has experienced a comeback, although the number of new tower blocks is still well below that of the initial boom period.

Reasons for the revival of residential high-rise buildings

Rediscovered appeal of the cities

As in the initial boom phase, one driver of the recent boom in high-rise buildings is the trend toward reurbanization. Cities are the focal points of economic, social and cultural life, which therefore gives them a strong appeal. Furthermore, the core cities have in recent years become more attractive to live in again. The relocation of industrial activities, targeted traffic calming measures and investments in the public sphere have revitalized the core cities. At the same time, the importance of urban infrastructure in areas such as education, public transportation and childcare has increased. Public transportation in particular has been and continues to be massively expanded in the cities.

Infrastructural and social density gaining importance

The rediscovery of cities as popular residential locations is also the consequence of various social trends. Falling household sizes due to the aging population, high divorce rates and the trend toward single living have caused infrastructural and social density and locations with the best possible connections to gain importance. Modern lifestyles and the requirements of two-income households call on the one hand for mobility and on the other for specific services such as cleaning, laundry, vacation care and the home delivery of meals and groceries. Such services can only be provided at a low cost where the population density is sufficiently high. In this respect residential high-rise buildings can fully play off their advantages thanks to their integrated services and central location.

Residential high-rise buildings perfectly suited to modern lifestyles

In sum, these trends together with dynamic immigration are giving rise to high settlement pressure in the urban centers. In view of the strong population growth and notorious lack of space in the cities, residential high-rise buildings offer a possible solution as they are suitable for structural consolidation. Occupancy data (such as the number of inhabitants or employees per hectare) confirm that high-rise buildings have a significantly higher concentration of persons than conventional buildings. Thanks to their vertical layering with a large number of apartments, high-rise buildings are also well suited to the sharing economy. Flexibly rentable guest rooms and jointly used offices, roof terraces and fitness facilities reflect the spirit of the times that can even extend to co-living communities. Moreover, with a view to commercial usage on the floors close to ground level, the high density is not only desirable but in many cases a prerequisite for profitable commercial undertakings. Today's generation of residential high-rise buildings in this way differ from the large building complexes of the 1960s and 1970s that were characterized by a high degree of anonymity and a lack of neighborhood structures.

Ecological housing

Residential high-rise buildings also convince from an environmental perspective. The more densely populated a neighborhood is, the less energy it consumes per capita. Thanks to a low floor space consumption, the footprint per inhabitant can be kept very low for high-rise buildings,

and thanks to their largely central location they also perform much better than other forms of housing in terms of the mobility behavior of their residents.

High acceptance of residential high-rise buildings

City dwellers are very open to the prospect of high-rise buildings. According to a study[3] carried out by gfs.bern in 2014, 54% of those canvassed in Basel can very well or well imagine living in a high-rise building; at 48%, the figure in Zurich in 2016 was slightly lower.[4] Acceptance is particularly high among residents of inner city and well connected locations. However, those born in the City of Zurich are less enthusiastic about high-rise buildings (39%) than newcomers from other towns, from the agglomeration or from the countryside (around 55%).

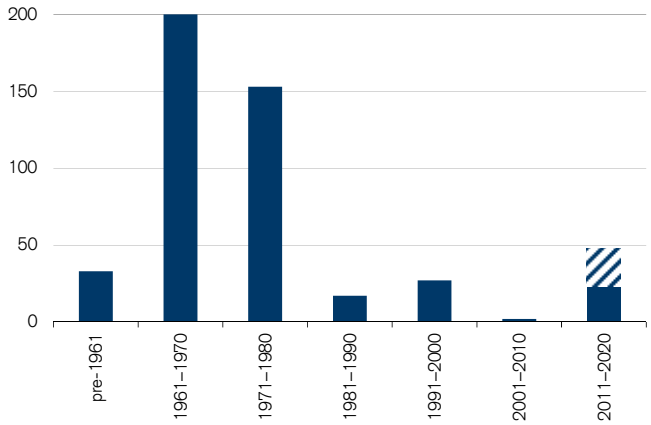
Experience from recently completed residential high-rise buildings

High-rise buildings constructed above all at well-connected central locations …

The costs of housing production rise above average with increasing building height. The construction of high-rise buildings therefore entails additional costs of 10% to 25%.[5] The reasons for this are of a technical and regulatory nature (e.g. special fire protection regulations). The situation is further aggravated by the fact that increased compaction (compared with normal building complexes) is in Switzerland often only possible with design plans that are in turn subjected to lengthy political processes. The high-rise building therefore has to make good the cost disadvantages primarily by means of higher prices per square meter. However, residents are only prepared to pay the premium for a particularly good view and enhanced sunlight on the upper floors if the high-rise building is also well located. The above-mentioned demand trends call for good public transportation connections and a high density of infrastructure facilities. Such qualities are by and large only to be found at central locations. However, high-rise buildings are not welcome everywhere. In order to ensure the integration of high-rise buildings in the urban landscape, many cities have now approved high-rise building models that contain binding rules on the location of high-rise buildings.

Figure 37: Residential high-rise buildings by construction period

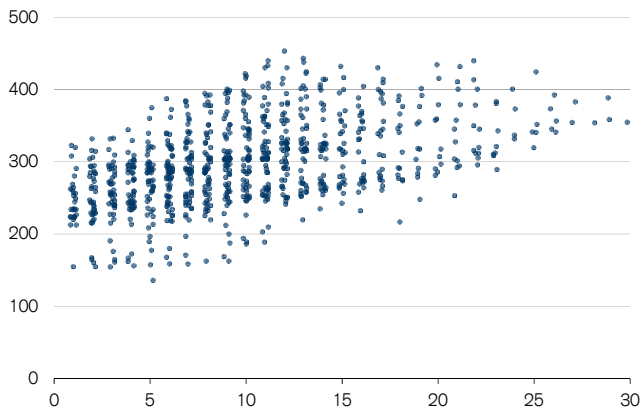
Buildings with 15 or more floors; from 2016: estimate



Source: Credit Suisse, Swiss Federal Statistical Office

Figure 38: Apartment rents by floor

Net rents in CHF/m² and year, buildings with ten floors or more, construction year from 1995



Source: Real Estate Investment Data Association (REIDA), Credit Suisse

… but the agglomerations are also growing upwards

The growing settlement pressure has also boosted the construction of high-rise buildings in the suburbs surrounding the major centers. Although in places such as Pratteln, Köniz, Ostermundigen, Dietikon or Dübendorf neither the locational quality nor the willingness to pay of buyers and tenants reach the level of the core cities, marketing has in most cases gone smoothly. One factor contributing to this may be that apart from a few exceptions the high-rise buildings in question have been erected within walking distance of S-Bahn stops. From the investor's perspective an attractively designed high-rise building as part of a building complex achieves a high level of attention with which the investor can also reach potential residents outside the usual

[3] gfs.bern (2014). *Nein als Folge aufsummierter Einzelkritik – Nachanalyse zur kantonalen Abstimmung zur Stadtrandentwicklung Ost.*

[4] Zimmerli, J. (2016). *Akzeptanz städtischer Dichte – Erwartungen und Prioritäten zum Wohnen in der Stadt Zürich.* Zurich: Raum + Gesellschaft.

[5] See also Credit Suisse *Bulletin* no. 5/2015: "Billions for buildings".

catchment area of a building complex. However, all the more importance needs to be attached outside the core cities to the design as the high-rise building will often dominate the local landscape on its own.

Optimization potential with tiered pricing by floor

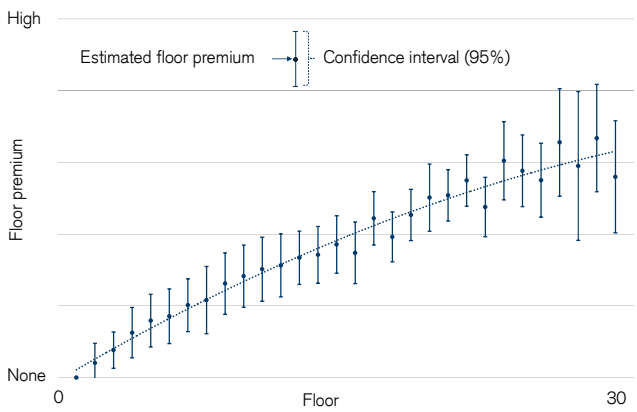
Tiered pricing is the core element with which the investor can offset the additional costs of construction. Based on the database of the Real Estate Investment Data Association (REIDA), we analyzed a small sample of 15 more recent residential high-rise buildings with 900 rental contracts. The median rent amounts to CHF 290/m² and year and the median area is 82 m² (Figure 38). This results in a rent of CHF 1,980 per month for the average apartment. The average contract duration is two years and is practically in line with the market. Based on the available rents per square meter, we estimated the price premium on the higher floors in comparison with the first floor (Figure 39).[6] The results show that the premium is not linear but forms a relatively accurate polynomial. The premiums are therefore low on the lower floors and then gradually level out as they increase.

Small apartments selling well

Based on the time on market of recently completed residential high-rise buildings, there is further optimization potential for pricing. Please note, however, that our examination is limited to various individual projects and does not claim to be representative. We also focus more strongly on rental apartments as these make up the vast majority of high-rise construction projects. It can frequently be observed that the time on market of the (expensive) apartments on the upper floors lasts longer. By contrast, smaller apartments mostly with 2.5 rooms sell very well regardless of the floor. This reflects the trend toward single living and the existing demand for second homes in the major centers. However, the apartment mix is frequently dominated by 3.5-room apartments. A differentiated pricing structure would therefore need to raise the prices of lower and smaller apartments somewhat but relieve those on the upper floors. There is little room for maneuver on the lowest floors without a special view. The prices there are generally geared to those of neighboring properties. Somewhat higher prices could be achieved on the market for the lowest floor with a view (around the sixth depending on the location). Above this the willingness to pay for a higher location largely only displays marginal growth as the view and sunlight do not improve significantly. The price increase should thus be more moderate. However, for reasons of prestige a significant premium can be charged for apartments on the top floor as is today already often the case. It remains to be added that marketing success generally varies greatly from project to project. The shaping of the price structure may therefore not be detached from an in-depth analysis of the location.

Figure 39: Estimate of floor premium

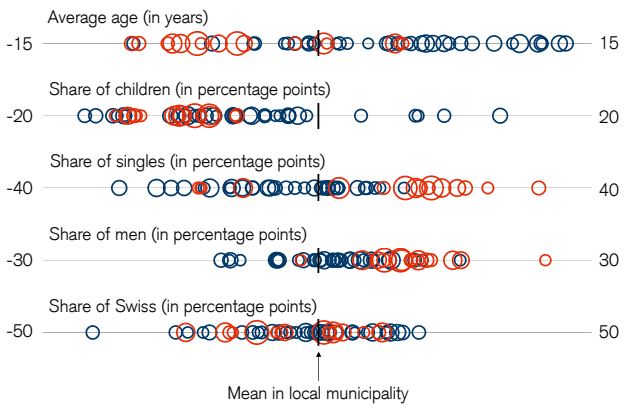
Premium as % of rent per square meter compared with the first floor



Source: Real Estate Investment Data Association (REIDA), Credit Suisse

Figure 40: Population structure in high-rise buildings

Deviation from local municipality; the size of the circles corresponds to the number of residents in the high-rise building, red circles: urban locations, blue circles: others



Source: Credit Suisse, Swiss Federal Statistical Office

Homogeneous population structure in high-rise buildings

Alongside pricing, the target group is the most important element for the marketing of a high-rise building. In this context we scrutinized the structure of high-rise building residents from a range of perspectives. High-rise buildings built after 1995 were the object of analysis and the

[6] We estimated the relation between net rent and floor by means of a fixed effects regression at building level. We also controlled for rental duration.

respective local municipality served as the benchmark (Figure 40). Generally speaking a split emerges between the large high-rise buildings in the Zurich/Lucerne urban areas (red circles) and the rest of Switzerland that includes buildings in places such as Lancy, Biel and Emmen (blue circles). While the average age of the first group of residents is below 35, that of the second group is around 45. A glance at the dispersion is also interesting: The 20% quantile of all high-rise buildings is higher than in the respective local municipality. In other words, the share of children at almost all high-rise buildings is lower than that of the municipality (around 15%). This is even more pronounced in the urban locations, where the share of children is only around 5%. The share of singles there is significantly higher than the average for the municipality. Men are also in some cases significantly overrepresented particularly in the urban areas. Some of these apartments could be second homes. However, the suspicion that only expats with good incomes live in high-rise buildings cannot be confirmed. The share of Swiss citizens is in most cases roughly in line with the municipal average. The duration of residence in Switzerland is also only slightly below the applicable benchmark. Most of the inhabitants are newcomers from another Swiss municipality. This finding is consistent with the aforementioned survey. The target group thus emerges as comprising young adults in gainful employment who are single but do not necessarily live alone, although other population groups also come into question: For example, affluent pensioners likewise appreciate central locations and in combination with assisted living they would also be an attractive target group in old age.

Architectural design as long-term investment in rentability

The external appearance of a high-rise building undoubtedly makes a decisive contribution to the urban landscape. However, the question arising from the investor's perspective is to what extent investments in the architectural design pay off. No such correlation can be derived from the data for lack of comparable properties. New properties generally find a ready market among tenants. The value of the design quality therefore in most cases only emerges in terms of long-term rentability. This is something history has taught us: Following the initial boom in high-rise buildings around 1970, a significant countertrend to urbanization set in. There was a sharp fall in demand for many high-rise buildings for which little importance had been attached to the design. Many of them are today occupied by non-affluent tenants. An attractive design and successful integration into the surroundings can therefore make a major contribution to acceptance among the population. Renowned architectural firms are therefore very frequently commissioned with the planning of high-rise buildings, although this alone is still no guarantee of success. Integration into the surroundings in many cases poses a hard nut to crack. Plinth buildings from which the high-rise building arises are commonly given the function of integrating the high-rise building into the structure of the neighboring buildings. The incorporation into the ground floor of public areas such as cafés is certainly helpful. However, it is not always easy to realize such solutions for lack of operators. On the other hand, without the integration of the local population the building will soon become a foreign body in the neighborhood and its rentability will decline.

Bottom line: High demand but also high complexity

With the paradigm shift in spatial planning that the Swiss electorate approved by voting for the revised Federal Act on Spatial Planning in 2013, the authorities were charged with prioritizing interior development over exterior development. Because high-rise buildings are characterized by very economical floor space consumption, they offer a possible solution to compaction. We therefore expect the renaissance of this type of building to continue for some time. The dissemination of modern lifestyles and the needs of older households serve by themselves to create sufficient demand for apartments in tower blocks. However, high-rise buildings pose greater requirements in terms of their architectural design and integration into established urban structures. The realization of residential high-rise buildings is therefore in practically all cases more complicated than that of conventional building complexes.

Office property

Fragile revival of demand

While the marketing situation remains extremely challenging, there are increasing signs pointing toward a slight improvement of the market situation. It remains to be seen how sustainable these signs are. The slightly better than expected rental price data and supply rates have triggered hopes but do not reflect the entire truth. For example, we are observing that certain properties are no longer or are only partially advertised in view of the growing oversupply. If we consider all the properties being advertised, the picture specifically in the largest markets no longer looks as hopeful. However, due to low financing costs, attractive yield spreads and a lack of investment alternatives, investments in office property projects remain very attractive. Following two years of relative calm, an acceleration in the planning of new office properties can therefore be observed again. In view of the ongoing high supply level and only subdued demand, the new capital inflows are jeopardizing the stabilization of the Swiss office property market. Hopes are therefore entirely based on the gradual recovery of the Swiss economy in 2018 and that this is able to stimulate the demand for office space sufficiently. In the long term, the aging of the Swiss population that will more or less result in a stagnation of the labor force in 2025 and the falling space consumption per employee point toward a noticeable decline in demand. Demand-boosting trends such as increased immigration, a higher participation rate among women and senior citizens and a continued tertiarization of the Swiss economy might mitigate the expected growth weakness but will hardly turn the situation around. The scenario of a long-term slowdown in the growth of demand for office space therefore appears undisputed.

Demand: Noticeable upturn in the short term

Employment growing more slowly than the economy

The Swiss economy is fighting its way back to its old growth path. Following a persistent slump, economic expansion in the current year is set finally to reach potential growth again. Consumer sentiment is positive, capacity utilization in industry has been increasing for months, tourism figures are rising and even retailers appear satisfied. Leading indicators such as the Purchasing Managers' Index (PMI) are closing at long-term highs. Employment growth is lagging behind this trend somewhat: After no jobs were created in net terms in 2016, the number of employees last year only rose moderately (Figure 41). Companies are clearly responding cautiously in their recruitment activities despite good capacity utilization and well-filled order books. They are primarily endeavoring to improve their profit situation again that suffered greatly under the strong franc. Nevertheless, the number of vacancies, which rose for the sixth time in succession in the third quarter of 2017 (+7.5% compared with the previous year), gives cause for optimism. We expect an acceleration of employment growth to 0.5% in 2018.

Structural change in the financial sector not yet complete

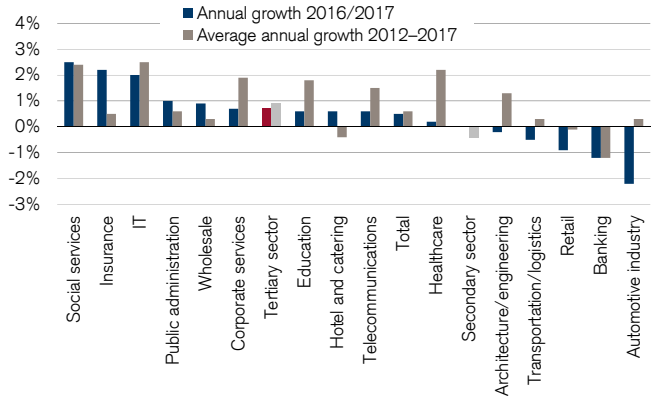
Employment in the typical office-based sectors already rose by 0.5% compared with the previous year in the third quarter of 2017. The highest growth was recorded in the insurance industry and the dynamic IT sector (Figure 41). The structural change in the financial sector is exerting a major influence on employment. Banks reduced their employment within the year by 1.2%. The key drivers of the change are digitalization, falling margins and increasing regulatory costs. Furthermore, the number of banks fell again in 2016 from 267 to 262 compared to over 330 before the financial crisis. In view of the high office workplace density in the financial industry, an employment reduction in this sector has more substantial consequences for the office property market than it does in any other sector. With a view to the office property market, the demand in the financial industry for office workplaces has thus decreased. At the same time, owing to branch closures additional space at prime locations that was previously used for consulting activities is coming onto the market. The reduction in branch numbers is also increasingly gaining speed. A total of 97 bank branches were closed in 2016. The annual closure rate has thus accelerated to 3.4% in the past few years, up from below 1% immediately after the outbreak of the financial crisis.

Demand for office space should pick up again in 2018

By contrast, the prospects for new settlements of companies appear to be brightening. For the first time since 2007, the number of annually registered new settlements no longer fell in 2016 but actually rose slightly. Thanks to an improvement in their profit situation, Swiss companies are likely to invest more again, which should have a positive effect on job creation. Following only

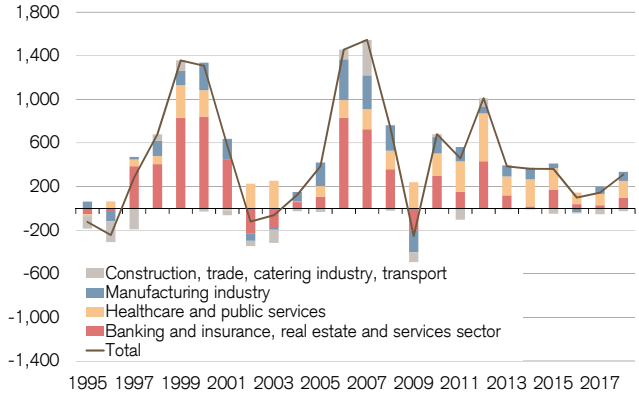
very weak momentum in the years 2016 and 2017, additional demand for office space should in 2018 therefore reach the substantial figure of 300,000 m² (Figure 42). It is expected that as in the recent past the healthcare sector and public services will make a significant contribution (50%) to this positive momentum. The gradual recovery of manufacturing that is not least being supported by the depreciation of the Swiss franc, and the increasing tertiarization of this sector (see p. 33 f.) are also set to contribute to positive additional demand. Stimulus from growing industries such as corporate services and IT and from the largely stable insurance sector should more than offset the weakness of the banking business that continues to be impeded by the negative effects of the structural change.

Figure 41: Employment growth by sector
Annual growth of selected service providers in terms of FTEs



Source: Credit Suisse, Swiss Federal Statistical Office

Figure 42: Additional demand for office space
Estimated additional demand in 1,000 m²; 2017 and 2018: forecasts



Source: Credit Suisse, Swiss Federal Statistical Office

Slowdown in demand in the long term

Three trends determining demand for office space in the long term

While the short-term prospects for the demand for office space have improved in recent months, major uncertainties prevail with regard to the long-term outlook. We identify three very different trends in this regard: firstly the retirement of the babyboomers that will potentially result in a smaller number of employees; secondly tertiarization, that is, the gradual shift from an industrial to a service society that will on balance increase the demand for office space; and thirdly the contracting space requirement per employee due to corporate cost-cutting measures and new working practices that are favored by digitalization and ultimately reduce the demand for office space.

Office space consumption per employee is falling …

Modern working practices are based on cooperation and an unhindered flow of information among employees. Depending on the work activities and the degree of interaction among the employees, various open plan office landscapes have emerged. The use of modern information technology also permits flexible working hours and workplaces so that fewer workplaces than employees can be provided within an organizational unit. The changes that office landscapes have undergone in recent years differ from company to company. However, what they all have in common is that they reduce the space consumption per employee. A requirement of just 14 m² to 16 m² per employee is assumed today for the construction of new office properties. According to Property Market Analysis, a British property advisor, the average office space per employee at Europe's eleven largest office locations has contracted over the last ten years by a total of 1.2 m² or 0.6% per year due to the ongoing renewal of office properties.

… and curbing demand

At a time when cost optimizations are playing an increasingly important role in corporate strategies, more efficient use of office space and savings in office rent are gaining attractiveness. The trend toward decreasing per capita work space is therefore set to continue in the years to come. Assuming that the speed of the reduction in space consumption observed so far remains constant (–1.2 m² per ten years), the entire demand for office space in Switzerland would fall by almost 6.7 million m² between 2020 and 2040. This is equivalent to almost the entire office property stock of the City of Zurich and illustrates clearly the strongly curbing effect of this de-

velopment. If the rate of decline were to fall to –0.8 m² per ten years, a reduction in demand of almost 4.5 million m² could be expected, which is still equivalent to more than the office stock of Geneva.

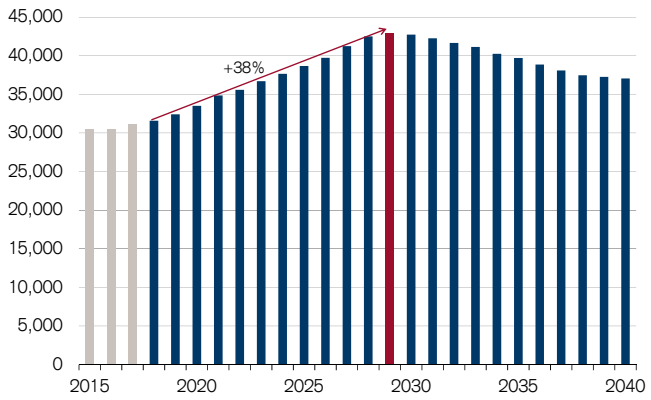
Babyboomers retiring …

As well as the decreasing space consumption per employee, the demographic factor is also pointing toward subdued momentum of the long-term demand for office space in Switzerland. The gradual aging of the population is not only affecting the housing market (see chapter on owner-occupied housing, p. 8 f.) but the office property market as well. The oldest babyboomers have already departed from working life and entered retirement. The younger ones will follow them in the next few years. Owing to the populous nature of the babyboomer generation, this development is also set to leave its mark on the Swiss labor market. The question therefore arises as to who will make use of the office properties left behind by the babyboomers. Based on statutory retirement age and our scenarios concerning the demographic trend, the size of the labor force reaching retirement age should increase continuously and in 2029 reach a peak of 42,500 persons before starting to fall again (Figure 43). The record level of new pensioners corresponds to growth of 38% compared with the level of 2017. The consequences of this demographic transition will continue to be felt long after the peak described: At 37,000, the number of potential workers entering retirement will still be well above that of today in 2040.

… and bringing employment growth to a standstill

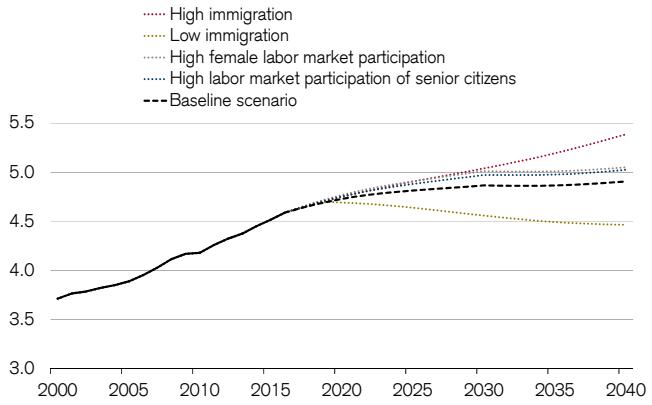
The wave of retirements underway will cause the current growth of the labor force gradually to grind to a halt. A decline is even to be anticipated in the years following 2030 before very moderate growth sets in again. Altogether the average growth of the labor force that amounted to 1.33% per year between 2001 and 2016 will decline to 0.21% over the period from 2020 to 2040 (Figure 44, baseline scenario). All other things being equal, what this means for the Swiss office property market is that according to the baseline scenario the annual organic additional demand will slide persistently below the threshold of 200,000 m² from 2024. In the period from 2031 to 2035 the additional demand triggered by changes in office employment is even set temporarily to fall below zero. Demand for office property would rise by 2.9 million m² over the entire period from 2020 to 2040. Further scenarios are illustrated in Figure 44 and discussed below.

Figure 43: Aging of the population up to 2040
Size of labor force reaching ordinary retirement age; from 2016: forecasts



Source: Credit Suisse, Swiss Federal Statistical Office

Figure 44: Swiss labor force up to 2040
In millions of persons; from 2017: forecasts based on various scenarios



Source: Credit Suisse, Swiss Federal Statistical Office

Tertiarization boosting demand for office property …

The ongoing shift of industry to become a service provider is the third factor alongside the aging population and the decreasing space consumption per employee. Unlike the other two, it exerts a demand-boosting effect. Industrial firms are more and more frequently not only selling just their machines and equipment but also their flexible use as a service. As part of Industry 4.0., services such as apps, online services for products, digital analyses of production processes and an intensive exchange of information are also increasingly accompanying the delivery of physical goods to customers. The more activities with a service character gain inroads at industrial firms and the greater their share of value creation becomes, the more office workplaces will be required by industry. This trend, which is subsumed under the term tertiarization, has boosted the demand for office properties in recent years. According to our calculations, the share of office

employment in the secondary sector rose continuously between 2010 and 2015 from 32% to 34%. Despite a fall in employment, there will therefore be more office jobs in industry today than back in 2010. In concrete terms, around 9,000 jobs disappeared in the industrial sector over the five-year observation period. Nevertheless, there are today over 13,000 more office jobs in industry. Demand in industry for office property has therefore altogether increased despite the reduction in employment.

… and not just limited to industry

The speed at which tertiarization is taking place varies between the different branches of the economy. For example, in the traditional industrial sectors the share of office jobs, that was already relatively high beforehand at 38.4%, increased further by 2015 to 41.4%. The share has gone up particularly markedly in the wholesale and retail trades from 39.3% to 45.9%. By contrast, the increase in the construction industry has remained relatively modest (from 14.3% to 15.8%). The imminent digitalization of the construction industry is certain to boost this share. Shifts in office workplace density are also being recorded within the service sector. In the financial industry that at 95.5% has the highest share of office jobs among the total number of employees and where there is barely any more growth potential, the rate only increased marginally by half a percentage point in the period from 2010 to 2015. However, the share of employees with an office workplace has risen from 32.8% to 37.0% in education.

Tertiarization as a driver of future demand for office property

The continued tertiarization trend in the decades to come will provide a welcome boost to the demand for office property at a time when the growth of the labor force is more or less stagnating. According to our forecasts, a moderate progression in tertiarization between 2020 and 2040 will increase the demand for office property in the labor force baseline scenario from 2.9 million m² to 7.3 million m² (+4.4 million m²). A higher intensity of tertiarization could cause demand to rise to up to 11.2 million m² (+8.3 million m²).

Bottom line: Paradigm shift in demand for office property

Depending on the overlapping of the three key drivers (departure of babyboomers, tertiarization and falling per capita space consumption), different space requirements result in the period from 2020 to 2040 (Figure 45). If per capita consumption were not to fall further – which is not a likely scenario – the demand for office property would rise in all cases (Figure 45: far-left row of columns). As long as space consumption continues its descent, however, this will result in a decline in the demand for office property in half the potential cases. It would no longer be possible in these cases for the lower space requirement per employee to be cushioned by the weaker growth of the labor force due to the departure of the babyboomers. Even in the best-case scenario of a continued strong tertiarization trend, at between 0.8 million m² and 6.0 million m², future demand is set to remain well below the growth in office space of the past 20 years of over 10 million m². Compared with the development in the past characterized by strong growth in the demand for office property, a paradigm shift is thus emerging. Growth in the demand for office property can no longer be taken for granted in the future. Only if tertiarization continues and there is no simultaneous exacerbation in the decline of space consumption will positive growth still be generated. Beyond this, the chances for the demand for office property rest on increased immigration or greater participation of women and senior citizens in the labor market, which could narrow the gap left behind by the babyboomers. We assume unchanged unemployment rates in our analysis and expect the advancement of technology not only to erase jobs but also to create a large number of new activities – just as has always been the case in history. To answer the question regarding the potential effects on the demand for office property of a high degree of automation of routine activities, we refer to our Swiss Real Estate Market 2017 publication.

Immigration as a further influencing factor …

As well as per capita space consumption and tertiarization, different scenarios are also conceivable for the development of the labor force. As the last few years have revealed, the development of the population depends strongly on immigration. Higher immigration could mitigate the demand-weakening effects of demographic aging on the labor force and therefore also on the demand for office property. Our baseline scenario of the labor force assumes long-term net migration of 40,000 persons per year, which is roughly equivalent to the average of the past few decades and around 10,000 below the net migration of the past year. A higher immigration scenario with 60,000 persons annually in net terms would increase the average growth rate of the labor force in the period from 2020 to 2040 to 0.64% per year (compared with 0.21% in the baseline scenario) (Figure 44, high immigration scenario).

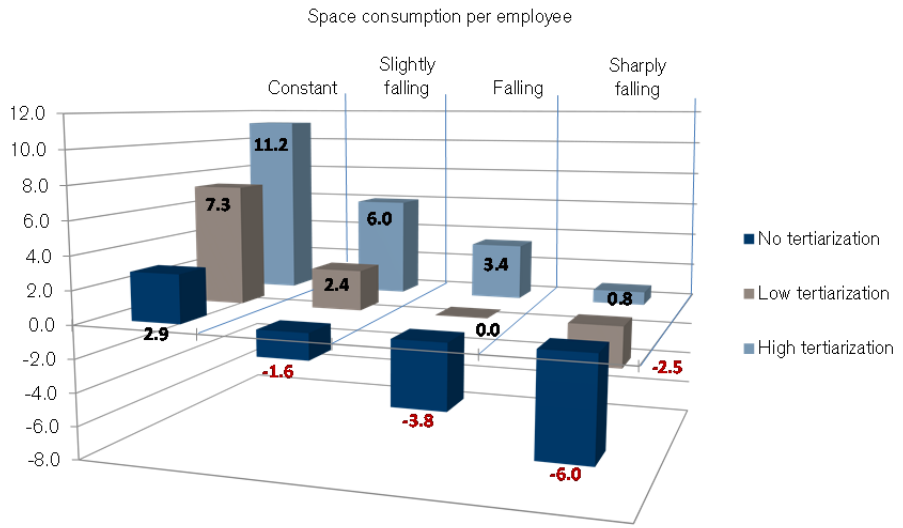
… with a relatively large impact

Migration momentum on this scale would lead to an additional demand for office property of 6.6 million m² over 20 years. By contrast, a downturn in the future intensity of immigration would fuel the negative effects of the aging population. In the case of long-term net migration of just 20,000 persons between 2020 and 2040, the average growth rate of the labor force (–0.24%

per year) would fall into negative territory (Figure 44, low immigration scenario). The demand for office property between 2020 and 2040 would therefore be around 6.2 million m² lower compared with the baseline scenario.

Figure 45: Long-term growth of demand for office property 2020–2040

In millions of m², according to extent of tertiarization and reduction of per capita office space consumption



Source: Credit Suisse

Higher labor market participation of women and …

As well as migration flows from abroad, social developments at home can also halt or mitigate the decline in the growth of the labor force. A higher participation of female workers could contribute to this, for example. While the average participation rate of women aged 20 to 69 was just 69.2% back in 2000, it had already reached 76.5% in 2016. Nevertheless, the female participation rate currently still remains well below that of male cohorts (86.3%). In the event of a gradual reduction of this difference by 50% by 2030, the average growth rate of the Swiss labor force between 2020 and 2040 would amount to 0.31% (Figure 44, high female labor market participation scenario). This increased participation of female workers in the labor market would generate additional demand for office property of 1.6 million m².

… of senior citizens as further rays of hope

A further contribution could be made by a longer participation of older workers in the labor market. Thanks to greater life expectancy and an improved state of health of the older sections of the population, more and more senior citizens are opting to continue working beyond statutory retirement age – often on a part-time basis. This phenomenon is confirmed by the statistics: The participation rate of the Swiss population aged between 65 and 74 increased between 2000 and 2016 from 14.5% to 18.6%. Assuming that the participation rate of older workers was to go up by 25% by 2030, the average growth rate of the Swiss labor force from 2020 to 2040 would reach a similar level at 0.30% per year as with a higher participation of women. The additional demand for office space would also be similar at 1.4 million m² (Figure 44, high labor market participation of senior citizens scenario).

But the exploitation of domestic resources is not sufficient in itself

However, even if it were possible to utilize the human resources at home better thanks to a higher participation of women and senior citizens, our calculations show that this would only offset the consequences of the aging population to a limited extent. At an average of 0.37%, the simulated growth rate of the labor force from 2020 to 2040 would still remain well below the momentum observed in the recent past (2001–2016: 1.33%). Figure 44 illustrates clearly that only immigration can prevent stagnation in the long term.

Bottom line: Long-term slowdown of demand undisputed

Even the additional inclusion of a very optimistic long-term immigration scenario with a net 60,000 persons p.a. would ultimately still culminate in a decline of the observed growth rate (2020–2040: 0.80%). It can be concluded from this that both the aging population and the decreasing space consumption per employee comprise strong trends that in the long term are set to result in a noticeable slowdown in the demand for office property even when taking ac-

count of opposing forces such as tertiarization or better utilization of domestic resources. It would only be possible to uphold the speed of growth at the accustomed rate with very dynamic immigration of the kind that does not presently appear realistic in combination with a rapid advancement in tertiarization.

Supply: Volume of investments increasing

Quest for yields driving planning activity

Despite the difficult marketing situation, substantial capital inflows continue to be observed on the Swiss office property market. Owing to the prevailing low interest environment, the low financing costs and the limited investment alternatives, the development of office properties remains attractive from the perspective of both investment and owner occupancy. The 12-month total of all approved new construction projects in Switzerland last December was 19% or CHF 360 million above the long-term average of CHF 1.95 billion (Figure 46). The recent increase in planning activity is primarily attributable to the project for the second Roche tower amounting to CHF 550 million that was granted approval in Basel last summer. This marks the end of a period of almost four years in which approved construction projects no longer reached the high levels of the years 2011 to 2013 but oscillated around the long-term average. Because the slack demand has delayed the realization of several earlier projects, the slight reduction in the expansion of space in the major centers during the years 2014 to 2017 is only partially being felt. However, it has contributed to a stabilization of the volume of advertised supply.

Focus of planning activity was recently geared to larger medium-sized centers

Meanwhile, planning activity in the six larger medium-sized centers (Winterthur, Lucerne, Zug, Aarau, St. Gallen, Lugano) has almost been a mirror image. This group absorbs an average investment volume equivalent to almost a third of the capital inflows to the major centers. However, the volume of approved new construction projects in these larger medium-sized centers has generally been higher in the last seven years or so and has only recently fallen significantly below its long-term average again. The remaining small and medium-sized centers have likewise recorded above-average planning activity since 2010. However, this already subsided again a good two years ago. If we consider the development of planning applications as even earlier indicators than building permits of the trend for planning activity, office property production throughout Switzerland should remain at a relatively high level. The volume of planning applications is currently at an above-average level not only for new construction projects but also for conversions (Figure 46). The necessity of remaining competitive in a market shaped by cutthroat competition is increasingly forcing many owners to refurbish their existing properties.

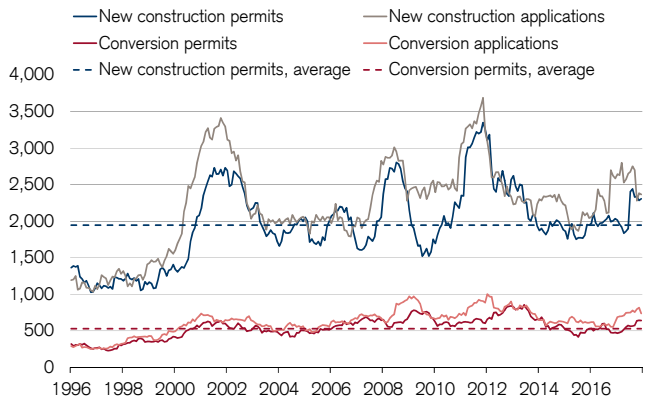
Supply level is generally reported too low

The volume of office space advertised online remains above the threshold of two million square meters. At –2.4%, there has only been a minor decline over the year (Figure 47). It is interesting to note that large properties and those already on the market for a long time are tending to disappear from the online portals. This will be explained less by the costs of advertising than by the low interest in these properties and the risk of being branded as slow-moving properties. Such properties are increasingly being advertised via individual project sites on the internet or on the sites of real estate agents. Because the marketing of large properties in excess of 2,000 m^2 often proves challenging, it is often the case that only a fraction of these properties is advertised on the portals. The greater the oversupply on a local market, the sooner this phenomenon sets in. As a result, the actual supply of advertised property is systematically underrated. This can currently be observed most vividly on the Zurich office market. For example, of the 144,000 m^2 of office space advertised around the Glattpark in the north of Zurich, only 51% were advertised on the online portals in the third quarter 2017.

Hesitant decline in advertised office space

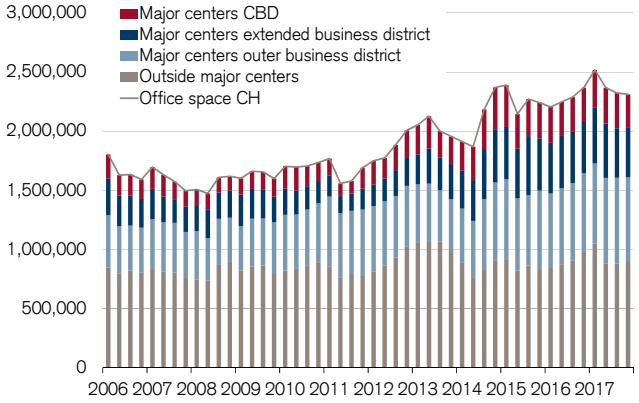
Taking account of properties advertised away from the online portals, advertised office space has only declined very marginally in the course of the year. Around 2.3 million m^2 are currently on the market throughout Switzerland, which corresponds to a supply rate of 4.3%. The slight reduction in advertised office space over the year is principally attributable to the temporarily low volume of projects approved between mid-2013 and mid-2015. The volume of advertised office space is falling in particular in Lausanne, Geneva and Berne and in the City of Basel. This is not the case in Zurich. It can be seen that advertised office space has decreased substantially above all in the extended business districts surrounding the expensive locations in the central business district (CBD) (Figure 47). This is partially also the case in some central business districts (Berne and Lausanne CBDs). The opposite can be observed in the outer business districts, some of which are extensive. Advertised office space there has remained at high level and even has been rising again on the Zurich office property market.

Figure 46: Planned expansion of office space
Building permits and planning applications, moving 12-month total in CHF mn.



Source: Baublatt, Credit Suisse

Figure 47: Advertised office space
Advertised office space*: quarterly totals (existing and new constructions) in m²



Source: Meta-Sys AG, Credit Suisse *office space advertised online

Oversupplies in outer business districts of office property markets

While on the outskirts of the major office property markets the consequences of the excessive planning activity are manifesting themselves more and more clearly in the form of a growth in advertised space and rising vacancies (Figure 48), a slight easing of the supply situation can be observed outside the office markets of the major centers where advertised office space has decreased by 8.5%. Altogether, the supply of office property outside the major centers has a share of less than 40%, which is low on a long-term comparison. For the office property market as a whole we expect a further decline in advertised office space in the short term as demand is set to revive and the increased planning activity still awaits realization. In the medium term, however, the supply of office property should remain at an above-average high level of around two million square meters. The marketing situation on the office property market will therefore also remain challenging in the years to come.

Market outcome: Signs of a slight easing

Vacancies: First fall since 2011

There are increasing signs of a slight improvement of the situation on the Swiss office property market. In parallel with the stabilization of the volume of advertised office space, the average time on market of office property has fallen slightly. The official vacancy data for 2017 that covers around 43% of the nationwide office property market also for the first time indicates a slight reduction of vacant properties following five consecutive increases (Figure 48). However, because the vacancies measured by the statistical offices are focused strongly on the large markets and in some cases only on the central business districts, they do not sufficiently reflect the situation on the outskirts of the office property markets. However, it is precisely there that vacancies are rising. Nevertheless, the vacancy data suffice to confirm the slight improvement of the situation in the central business districts that is also emerging in terms of the supply of office property.

Vacancies decreasing somewhat above all in the core cities

Vacancies have been reduced above all in the core cities of the major centers – in the cities of Geneva, Zurich and Berne by around 7% to 9% and in Lausanne even by around 30%. Only the City of Basel failed in 2017 to continue the trend set by the two vacancy declines of the preceding years. The picture outside the cities is not uniform. However, this generally positive development is unable to conceal the prevailing challenges in the individual office markets. For example, it is known that in Geneva the average vacancy duration has risen from 13 to over 15 months, which continues to point toward a difficult marketing situation. The progress also comes at the cost of price discounts. In Geneva, Berne and Zurich, where information is collected on the rents of vacant properties, the latter have all fallen. The price drop in these cities over the last three years reached almost ten percent.

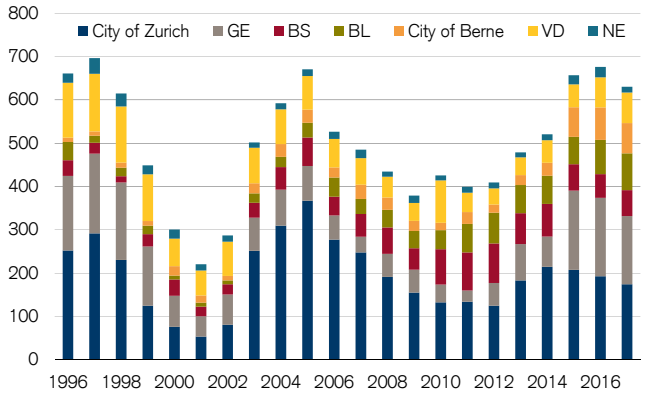
Rent falls largely halted

Contractual rents have also fallen in the last few years (Figure 49). Rents have decreased by almost 10% in the two most expensive markets of Geneva and Zurich since the end of 2012 and by 2% to 6% in the other major centers since the end of 2013. Office rents in Zurich and Geneva stabilized recently as per the end of the second quarter of 2017. Rents are also moving

sideways in the markets of Basel and Berne that have for some time largely been in a state of equilibrium. By contrast, the downward correction of rents in Lausanne has still not come to an end (–4% year on year), although this is largely explained by the fact that it did not set in until much later. The recent correction in both Lausanne and Geneva is the result of an excessive growth of rents in the years 2008 to 2012 brought about by the outstanding economic performance of the Lake Geneva Region and low construction activity. Rents outside the major centers already picked up in 2015 and have since then been rising continuously. A turnaround in rents also appears to have taken place in Basel. This will be related to the comparatively low price level in the city on the Rhine that implies a smaller potential fall. Based on the improvement signs in the large cities, we expect a continuation of the positive trend in rents in the short term. However, it must be borne in mind that the incentives increasingly required for the letting of office properties (e.g. free months) do not appear in the data for contractual rents. The price data used here thus tends to gloss over the actual marketing situation.

Figure 48: Vacancies of office properties

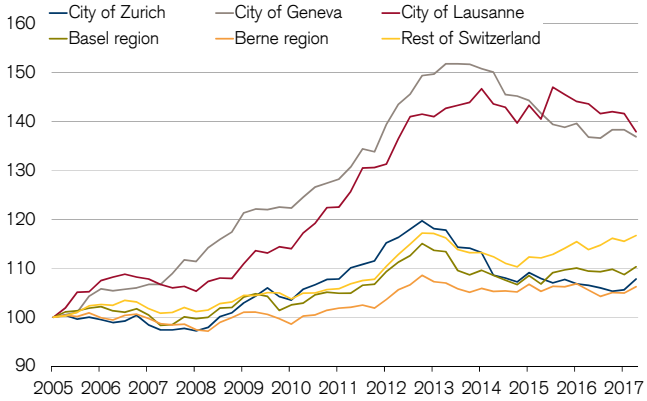
In 1,000 m²; partial survey covering around 43% of the Swiss office property market



Source: Cantonal statistical offices, Credit Suisse

Figure 49: Regional rents

Hedonic rent index based on contractual rents, index 2005 = 100

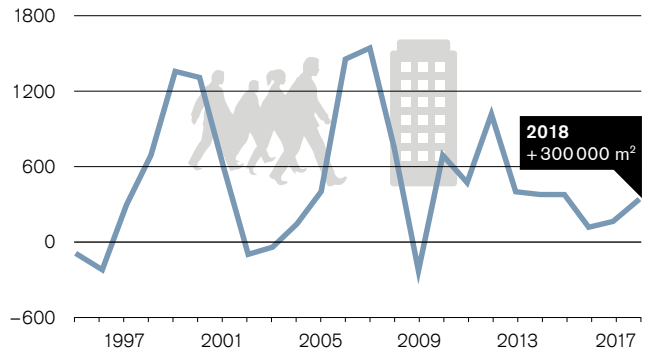


Source: Wüest Partner, Credit Suisse

Outlook for office property in 2018

Demand

Office property in 1000 m²

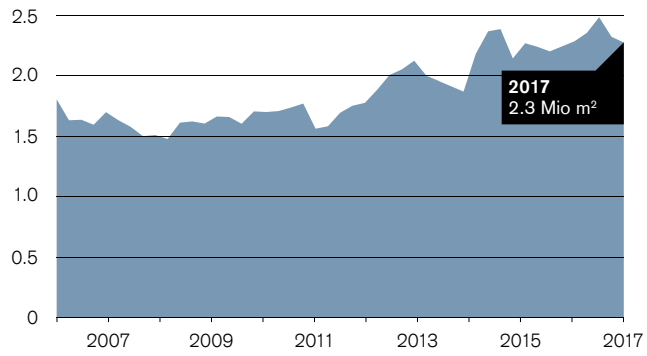


- Improvement of labor market situation exerting positive impact on demand for office property

2018: We expect additional demand of 300 000 m²

Supply

Advertised office property in million m²



- **Short term:** Moderate planning activity 2013–2015 = slight reduction in advertised office property
- **Long term:** Current planning activity +19% above long-term average = advertised office property remains at above-average level of two million square meters

Vacancies

- 2017: First reduction following five increases
- 2018: Further moderate reduction

Rents

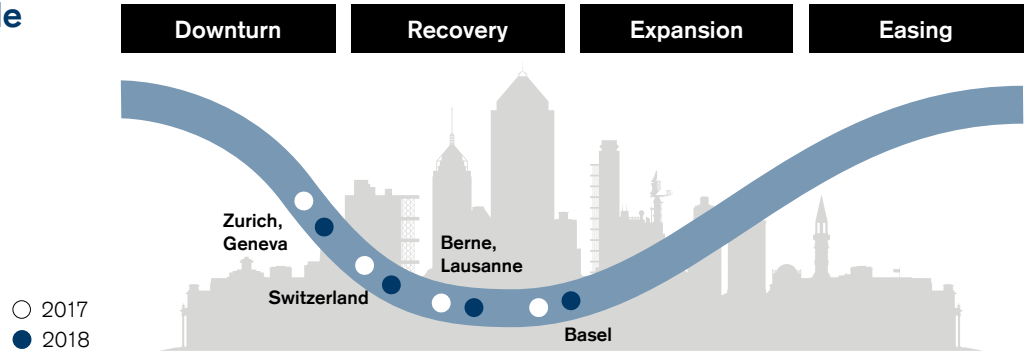
- Market situation: High supply level and only gradual recovery of demand
- 2018: Sideways movement of contractual rents

Total Return

- Upside potential exhausted (exception: exclusive prime locations)
- Little potential for rising rental income (high incentives cost earnings)

Status in property cycle

Five largest office property markets



Long-term outlook

Lower demand for office property from 2020 to 2040 but no collapse

Driver 1
Stagnation of working population (bye-bye babyboomers)

Driver 2
Tertiarization of industry

Driver 3
Decline in per capita space consumption

Depending on the scenario, the demand for office property is set to fall over 20 years from +10 million m² today to a range from +6 million m² to –6 million m²

Special focus: Urban logistics

Logistics are taking over the cities

Owing to reurbanization and the triumph of e-commerce, logistics locations are gaining importance within the centers and their immediate vicinity. Due to the prevailing shortage of space, logistics solutions are called for that are based on the conversion of existing properties as well as flexibility and cooperation. More and more real estate investors are becoming aware of this fast-growing sector.

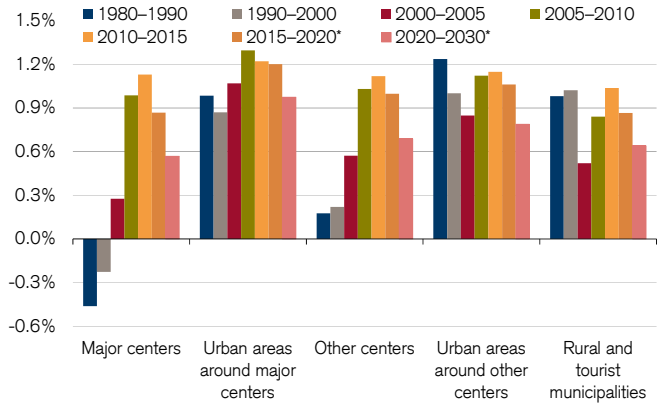
Reurbanization as the first …

Following an urban exodus lasting for decades, the Swiss major centers have been growing again since the turn of the century and their growth has accelerated significantly in recent years (Figure 50). Owing to the shortage of land and regulatory obstacles, some of the rising demand for urban housing is switching to the suburban and periurban municipalities. Today around 3.6 million inhabitants and therefore 43% of Switzerland's total population of 8.4 million live in one of the country's five large urban areas and the trend is continuing to rise. Above all the suburbs of the major centers are set to expand at an above-average rate between now and 2030. While this growth underlines the attractiveness of the large cities as places to work and live, it also entails various challenges – sometimes in logistics.

… and e-commerce as the second core driver of logistics in urban areas

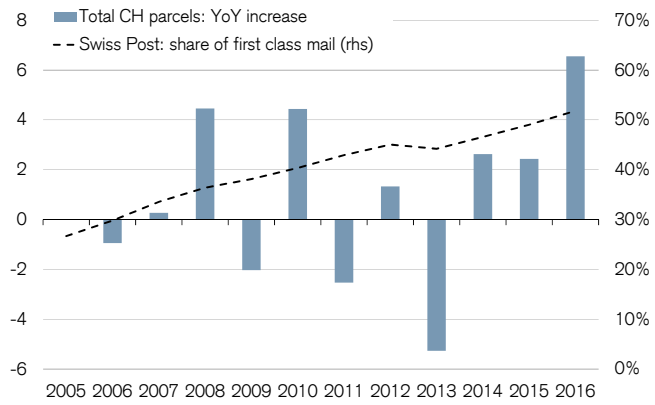
The second driver of logistic processes in urban areas is e-commerce. Around 8.3% of the domestic volume of retail trade in Switzerland (domestic delivery) was conducted online in 2017 and the growth potential remains large (see chapter on retail property, p. 43 ff.). Online and omnichannel trading exerts a major influence on the range of services and the business model of many logistics service providers and retailers. The number of small-item deliveries is increasing strongly and the business-to-consumer channel is gaining importance. Online and omnichannel retailers aim to stand out from their competitors not just in terms of their products and prices but also in terms of their delivery conditions and additional services such as free merchandise returns. Customers appreciate the variety of delivery options and are expecting a constantly increasing speed of delivery (i.e. same-day or even same-hour delivery). The share of parcels conveyed first class by Swiss Post has risen from 27% in 2005 to 52% in 2016. At the same time, the annual total number of parcels conveyed on the Swiss market has gone up since 2013 by around 12 million to a record high of 156 million (Figure 51). This trend is set to continue. A study for the German parcels market forecasts a doubling by 2025 – with a share of same-day deliveries of around 20%.[7]

Figure 50: Population growth by type of municipality
As % per time period, annualized; * Forecast



Source: Credit Suisse, Swiss Federal Statistical Office

Figure 51: Parcels conveyed
YoY change in number of parcels in millions (estimate)



Source: Swiss Post, Credit Suisse

[7] See McKinsey & Company (2016). *Parcel Delivery: The Future of Last Mile*, https://www.mckinsey.de/the-future-of-last-mile

Many challenges for logistics

Smaller and therefore more numerous households, rising consumer expectations, the expansion of the spectrum of tasks in e-commerce, increasing bottlenecks in the transport infrastructure and a high regulatory burden (e.g. ban on night driving for trucks) are posing major challenges for logistics in the agglomerations. The growing importance of urban logistics is reflected in an increase in delivery vehicle registrations from an average of 16,000 in the 1990s to over 30,000 p.a. today (Figure 52). According to the 2013 goods transport logistics of the Swiss Federal Statistical Office, half the volume of goods conveyed by light commercial vehicles covers short distances of fewer than ten kilometers.

Four approaches to more efficient urban logistics

Concepts to improve the efficiency of urban goods traffic and overcome the last mile have for some years been the subject of lively discussion among experts and subsumed under the term "urban logistics". These concepts essentially adopt four approaches: First of all alternatives to traditional delivery by truck/van are proposed (e-mobility, autonomous vehicles, drones etc.). Secondly, new delivery models are launched or tested (e.g. collection points and parcel boxes at central locations). A third approach for achieving more efficient urban logistics is based on cooperation: Logistics providers, parcel services and retailers should share their transport and storage capacities as well as their data in order to enhance resource efficiency.

Real estate concepts for the urban logistics of tomorrow ...

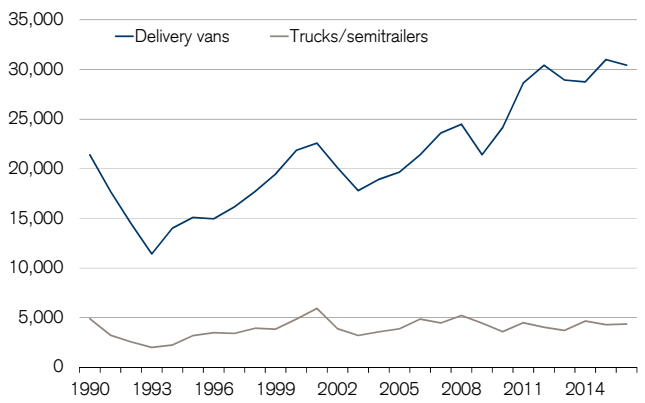
A fourth approach is geared toward real estate. The ideal type of urban logistics facility concept is considered here to be a cascaded system consisting of supply points (regional depots and e-fulfillment centers) in the urban areas and a network of smaller distribution centers and micro depots within the city. Such a concept is intended to accelerate significantly the last mile and facilitate same-hour delivery on a broader basis. Office and retail properties can also be converted for downtown logistics as the reachability of end customers takes priority for urban logistics properties and no classical requirements of the sort typical of conventional logistics buildings (e.g. room height, payloads) need to be met.[8]

... currently only exist on paper

Such cascaded systems of urban logistics are still largely pie in the sky not only in Switzerland but also in Germany. The construction investments for logistics properties exceeded the threshold of CHF 1 billion in 2015 (Figure 53). However, the geographical focal points remain the traditional locations at freeway interchanges outside the urban areas. There are several reasons for this: First of all, same-day and same-hour delivery are today still marginal phenomena as next-day delivery has only become widespread in the last few years. Secondly, there is a shortage of space prevailing in the major centers so that logistics properties are forced to compete with other uses such as residential and office facilities. Thirdly, the Swiss centers are spatially small when compared internationally so that locations beyond the city boundary often suffice for overcoming the last mile with sufficient speed.

Figure 52: Registrations of delivery vans and trucks

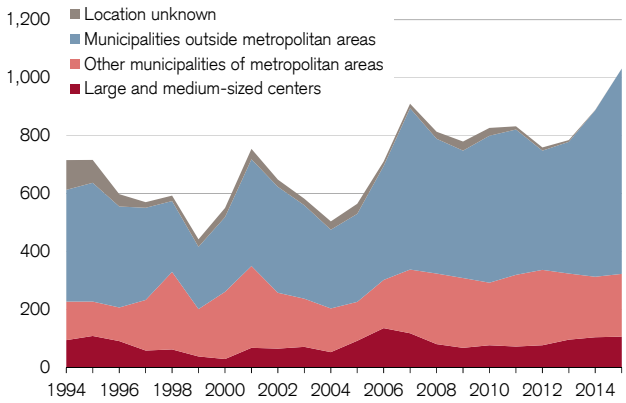
Annual new additions, in number of vehicles



Source: Swiss Federal Statistical Office

Figure 53: Construction investments for warehouse and logistics properties

New constructions and conversions, in CHF millions



Source: Swiss Federal Statistical Office, Credit Suisse

[8] See Bulwiengesa (2017). *Logistik und Immobilien 2017: Citylogistik – mit neuen Ideen in die Stadt*, pp. 58–63.

Limmattal and Glattal supply the City of Zurich

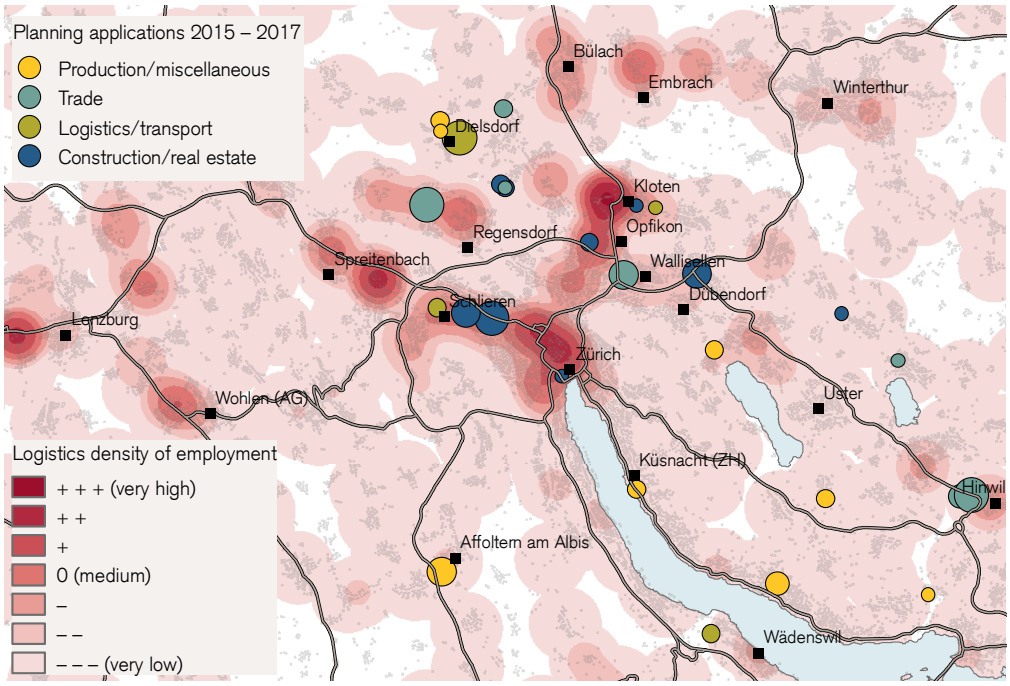
As an example of the logistics network of a Swiss city, we have examined the Zurich area in more detail (Figure 54). Based on the densities of employment in logistics-related sectors, the most important locations for logistics properties in and around Zurich become visible here. Postal and courier services are particularly frequently represented in the city itself. Meanwhile, the larger warehouse and logistics properties are concentrated on some ideally situated locations in the urban area in terms of transport connections such as the airport region and the Limmattal. Also discernable from the map are the planned logistics properties in the Canton of Zurich starting from a planned volume of construction costs of CHF 1 million (colored circles). The focal points comprise the Regensdorf/Dielsdorf and Altstetten/Schlieren regions and the Glatttal. Projects by builders from industrial sectors are somewhat more broadly dispersed. Not only proximity to the sales market is important here but above all also direct proximity to the production location. Conversion projects, for instance of retail properties to logistics properties, have so far barely been found. When new logistics properties are created from existing stock, they generally comprise former production facilities. On the other hand, there are some projects involving the conversion of former warehouse facilities to commercial or residential properties.

Demand for specialized properties for last mile logistics set to increase

Logistics properties are already very suitable today for diversifying broad real estate portfolios. Urbanization and the triumph of online and omnichannel trading will also continue in Switzerland in the next few years. There is therefore an increasingly urgent need for sustainable and economic solutions for urban goods traffic. As fast and sustainable solutions are gaining importance from the consumer's perspective for the problem of the last mile, the public attitude to the logistics sector is also set to change and the political acceptance of new logistics projects in urban areas to rise. Urban logistics facilities will gain value. Conversions of property types with a falling demand trend – particularly mortar retailing properties – should therefore become more attractive for investors. Connections to logistics networks are also becoming more important for new developments of business and commercial properties in urban areas. A current project pursuing an interesting approach in this regard is the Espace Tourbillon in Geneva – a large site development primarily comprising flexibly usable commercial and industrial properties. This includes plans for an underground logistics terminal that is also accessible to heavy trucks and is connected to all the buildings.

Figure 54: Zurich as a logistics location: Density of employment and construction projects in the logistics sector

Density of employment in logistics-related sectors (2015), planning applications by sector of builder (size of circle = construction costs)



Source: Swiss Federal Statistical Office, Baublatt, Credit Suisse, Geostat

Retail property

The knock-out race has begun

The decline in retail sales has come to a halt. However, falling space productivity, major growth disparities between e-commerce and bricks and mortar retailing and rising bankruptcy rates show that the structural change within the sector is still in full swing. The development in the US shows that the victims are ultimately the providers of retail property because they are losing tenants. A glance at China reveals where the retail business is going. We subject the individual shopping formats to a digital stress test and assess their (remaining) chances. As rising vacancies despite a reduced expansion of space make clear, the structural change has only just begun.

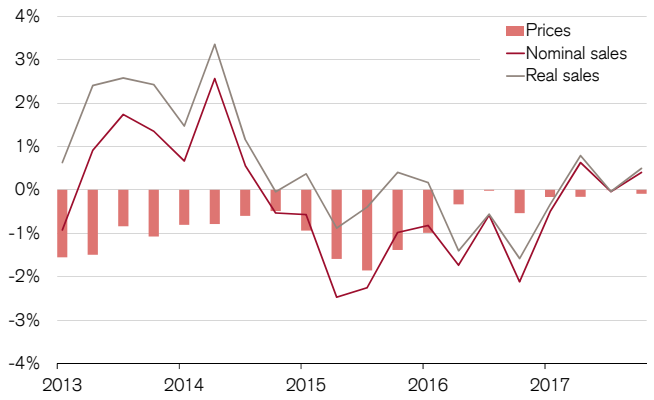
Demand: Cross-border and online shopping are costing revenues

Loss of revenues in the retail sector halted

According to our estimates, the retail sector once again barely grew in 2017 despite the improved economic situation. Stagnating prices (–0.1% compared with 2016) and marginally higher real demand (+0.2%) resulted in minimal nominal sales growth of 0.1% (Figure 55). The divergent sales performance in the two main segments food/near-food and non-food declined. While retailers of food/near-food products recorded a slight nominal rise in sales of 0.3% compared with the previous year, at –0.1% the downturn in retail sales in the non-food market practically came to a halt. However, the differences between the individual product groups within the non-food segment remained large: Do-it-yourself/gardening (+2.3%) and leisure (+3.3%) recorded significant growth again for the first time in years but benefited from weather-related special effects. Sales in personal care (–2.0%) and clothing and shoes (–1.5%) once again fell, although considerably less sharply for clothing than in the previous years. Nevertheless, retailers in these sectors continued to lose market shares to online providers abroad. This is the general state of affairs for bricks and mortar retailing. E-commerce will have grown again at a rate of around 8% in 2017, while bricks and mortar retailing shrank by almost one percent.

Figure 55: Retail sales

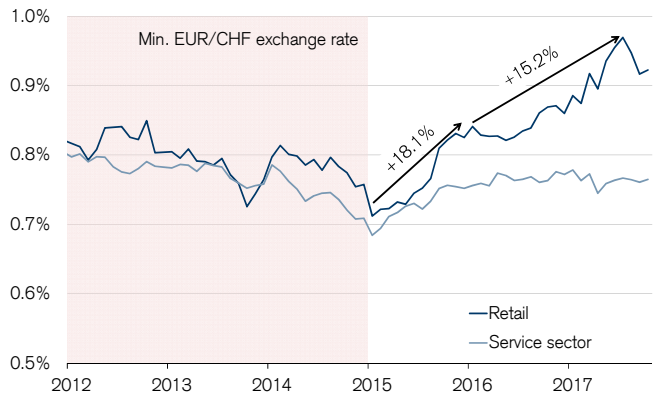
Nominal and real sales, prices, YoY change in %



Source: GfK, Swiss Federal Statistical Office, Credit Suisse, Q4 2017 estimated by Credit Suisse

Figure 56: Bankruptcy rate in the retail segment

Bankruptcy rate in %, 12-month average



Source: CRIF AG, Credit Suisse

Growing bankruptcy rate in the retail segment

Despite isolated recovery trends, it can be seen that a considerable number of retailers continued to suffer in 2017 from the after-effects of the franc appreciation, the subdued consumer sentiment resulting from this, shopping tourism and the structural change brought about by e-commerce. This not only led to some significant sales losses but also set in motion and accelerated a structural change of the sector. The bankruptcy rate in the retail segment rose sharply from early 2015 and was up 18.1% one year later. It went up by another 15.2% before bank-

ruptcies peaked in July 2017 (Figure 56). Since then there have been signs of a slight easing. Bankruptcies also increased in 2015 and 2016 in the rest of the Swiss service sector but considerably less sharply.

Small retailers were more pessimistic for a long time

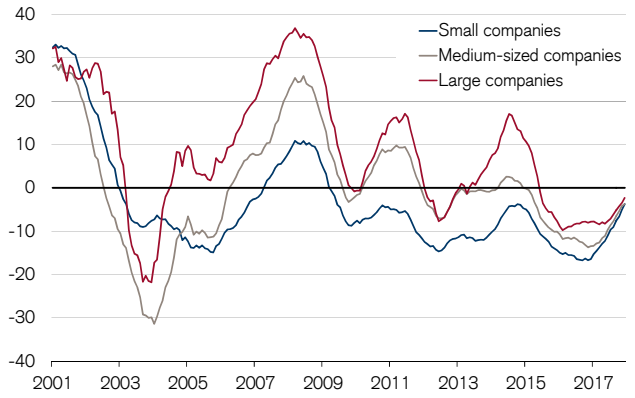
Some bankruptcy filings and branch closure announcements of larger companies, especially in the clothing segment, also found their way into the media in recent years. However, the vast majority of the 380 or so bankruptcies in 2015 and 400 in 2016 will primarily be attributable to small retailers that have remained out of the public eye. A glance at the KOF survey results on the business situation of Swiss retailers confirms the suspicion that the sentiment of medium-sized and above all small retail companies was more pessimistic in the last few years than that of larger companies. On a more positive note, however, the assessment of retailers – regardless of company size – is gradually improving again (Figure 57).

Outlook 2018 for the retail sector: Slight rise in sales

The expected slightly lower population growth compared with the previous year and the positive consumer sentiment are set to be the key growth drivers for the retail sector in 2018 (Figure 58). However, due to the prevailing structural change, the sector will only benefit to a limited extent from the economic impetus. Assuming that the franc continues to depreciate slightly against the euro, we expect somewhat lower price pressure in the retail sector compared with the previous years (2018: +0.2% compared with 2017). In the food/near-food segment we anticipate a slight growth in consumer prices (+0.3%), which in the non-food segment are likely to remain at their prior-year level (+0.1%). The economic upturn is set to support the recovery of demand in the more cyclically sensitive non-food segment. However, as some segments there benefited from weather-related special effects in the past year and the clothing retail segment in particular is set to continue to lose market shares to online providers abroad, we expect nominal retail sales to stagnate at +0.1%. However, we anticipate sales growth of 0.5% in the food retail segment driven strongly by the population growth. Weak sales growth of 0.3% results for the retail sector as a whole.

Figure 57: Sentiment gradually improving

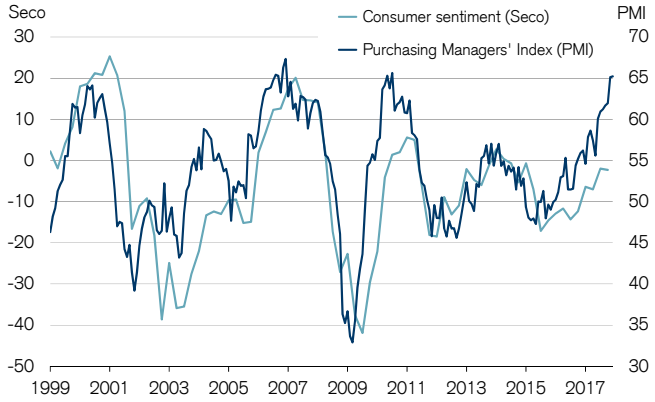
Assessment of business situation in the retail segment by company size,12-month average of balance in %



Source: KOF Swiss Economic Institute, Credit Suisse

Figure 58: Consumer sentiment and PMI

Purchasing Managers' Index (PMI) as leading indicator of consumer sentiment (index)



Source: State Secretariat for Economic Affairs, procure.ch, Credit Suisse

The future of shopping

Predetermined development

The shopping behavior of consumers is changing due to new retail channels. Sales are more or less stagnating but accruing elsewhere. More and more retail segments are getting caught up in the maelstrom of e-commerce. It is only the sluggishness with which many people adjust their behavior that is curbing the growth of online market shares. However, this sluggishness is merely providing bricks and mortar retailing with a temporary reprieve but not protecting it against the consequences of the structural change. The invention of e-commerce cannot be reversed. The development is slow but unstoppable, or perhaps it would be better to say it was predetermined. A glance at countries that already have higher shares of e-commerce offers some revealing indications as to how the development here in Switzerland could continue. The countries with the highest shares of e-commerce in the retail trade include the US, the UK and South Korea (Figure 59). China has recently made a big leap forward. Despite much less widespread internet

usage than in the Anglo-Saxon countries or South Korea, China has already taken the lead regarding its online share and grabbed the reins.

Wave of store closures in the US

Bricks and mortar retailing in the US is in the middle of profound upheaval. In no country is there so much retail space per inhabitant as in the US. However, consumers in this technology-savvy country are increasingly turning to e-commerce and turning their backs on department store chains (Figure 60). Above all the many shopping malls for which the department stores are anchor tenants are also suffering from this. There are still many shopping malls that are prospering and retail chains on course for growth, for instance in the discount segment. However, a downsizing of the sector seems inevitable as despite the promising economic growth an estimated 9,000 stores were closed in the past year. These include many branches of familiar department store operators such as Macy's and J.C. Penney or the retail chain Sears. Fifty retail chains have declared bankruptcy. According to Cushman & Wakefield, there could be up to 12,000 closures this year. Plans for 3,600 store closures were already known at the start of the year, including those of Walgreens, Gap and Gymboree. A further wave of closures could result in the downfall of hundreds of the 1,300 shopping malls throughout the country. Green Street Advisors has carried out a detailed analysis of 950 American shopping malls. Around 70% of the malls were affected in 2017 by branch closures of retailers operating nationwide. More high-quality malls were less affected by this although they too altogether sustained more closures than new openings as certain retailers closed all their branches regardless of the quality of the shopping mall. The publicly announced store closures only accounted for around half of all closures. The other half departed in silence simply by no longer renewing expiring rental contracts.

China leading in e-commerce

Bricks and mortar retailing was never as far developed in China as in the western world. The digital revolution in combination with the rapid growth of disposable incomes has therefore established e-commerce as the new standard in this giant empire. According to the most recent estimates, the market share of e-commerce already lies at 23%. It is growing about twice as fast as in the US and UK. China is also a pioneer in mobile commerce as most consumers have skipped the PC era and directly entered the digital world with smartphones. An estimated 74% of online shopping in China is expected to be carried out by smartphone by 2020, compared with 46% at the same time in the US. As a result, the world's leading digital market place has emerged in China, with Alibaba as a key player.

Two different online worlds in west and east

Interestingly, the two worlds are quite different. E-commerce is successful in the western world because it is a more efficient form of shopping. Amazon and other key players are continuously enhancing their platforms and pay much attention to logistics. By contrast, Alibaba does not have any warehouse and is also not a retailer. Instead it operates like a virtual mall and provides retailers with platforms. E-commerce of the Chinese sort is primarily about offering a more comprehensive alternative to bricks and mortar shopping. Consumers enjoy spending time online. Entertainment and shopping become indistinct. By means of high-grade personalized contents that are constantly undergoing improvements thanks to big data analyses, artificial intelligence and extensive data collections, ensnared consumers are taken on a voyage of discovery. Chinese consumers spend almost three times as much time on digital portals as American online consumers. The platforms of Alibaba are equipped with all kinds of tools to create a seamless shopping experience and make shopping as easy as possible. For example, Alipay guarantees smooth payment transactions. Various chat options also facilitate dialog with the consumer's own community as well as directly with the manufacturers of the products. A highly integrated, digital ecosystem has developed in all areas of shopping in China that in some cases can be controlled from just a single app, a kind of super app.

Shopping formats in a digital stress test

The aforementioned developments in the countries with leading e-commerce market shares obviously cannot be transferred one-to-one to the Swiss market. However, owing to the size of their markets, the experiences gained by the major players on these markets will also rub off on the retail sector in Switzerland. It is therefore worth establishing how the individual shopping formats, from convenience shops and department stores to shopping malls and shopping streets, are able to hold their own in a digital world.

Convenience shops: All the rage

The trend toward smaller households, the growing participation rate in the population and enhanced mobility are boosting out-of-home consumption. The food manufacturers have responded to this trend and expanded their range of ready-to-eat food. In parallel with this development, convenience shops emerged around the turn of the millennium and have significantly gained in

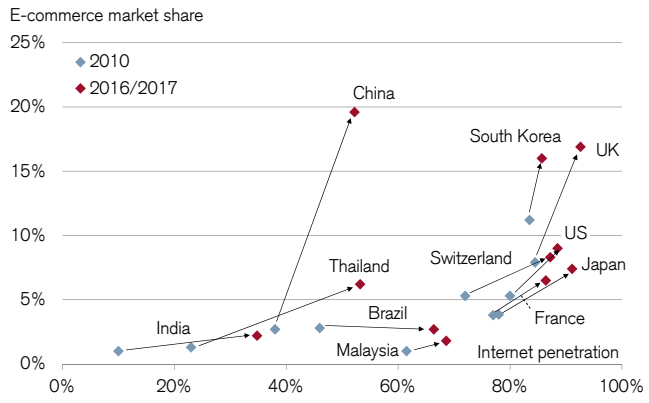
number in recent years. Today there are around 1,800 gas station stores and convenience shops in Switzerland. Their sales rose by 1.5% annually between 2010 and 2016, while in the food segment they stagnated. Convenience shops have good chances in a digital world as their product range not only comprises an area that is least threatened by e-commerce but also serves to complement e-commerce by incorporating more and more fresh products. The challenges of this shopping channel lie more in mastering the complex logistics of small volumes, long opening hours and a flexible product range.

Department stores: Doomed

Department stores, once temples of consumption, have lost their raison d'être in the digital world. There was a time when consumers automatically headed for a department store if they were lacking something. The internet has today taken over their role as a one-stop shop with a breadth and depth of assortment to satisfy almost every consumer need and where the consumer obtained product information. Today's generation of consumers obtains product information and makes purchases online. The internet is the new department store and is unbeatable in terms of its breadth and depth of assortment. A further drawback accompanies the loss of the raison d'être of department stores, namely the fact that department stores are essentially vertically organized. However, consumers much prefer moving horizontally than vertically. The price differences for retail space in the basement or on the first floor illustrate this correlation. Furthermore, over 90% of shopping malls are limited to no more than three floors. In recognition of this, many department stores have placed their restaurants on the top floors in order to entice passers-by there. But with the growing importance of the shopping experience, the catering facilities need to be incorporated much more into this experience, including on the bustling lower floors. Department stores are additionally coming under pressure because brand manufacturers are increasingly developing their own distribution channels and in some cases even competing directly with their own high street stores. They are doing this not least in order to gain valuable customer data as only those players in possession of their customers' data can utilize the benefits of digitalization.

Figure 59: Pioneer in the e-commerce trend

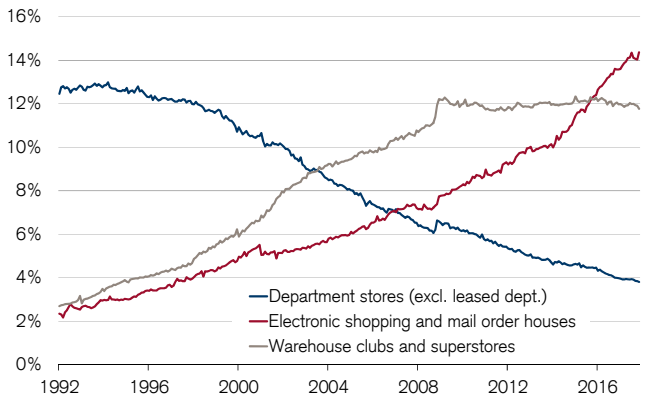
Share of e-commerce in the retail trade in %; internet penetration in %



Source: GfK, BAK Economics, diverse country-specific sources, Credit Suisse

Figure 60: Decline of department stores in the US

Share of different shopping channels as % of total retail sales



Source: U.S. Department of Commerce, Credit Suisse

Shopping malls: need for action

Since the strong growth of shopping malls after the turn of the millennium, Switzerland is considered in this regard to be 'overstored'. Despite frequencies being more or less upheld, the growing market share of e-commerce has also affected the sales performance of shopping malls. More than half of shopping malls have sustained a double-digit fall in sales since 2010, the sales climax of the Swiss retail business. The strong food anchor of many shopping malls has altogether prevented the situation from getting any worse but the differences between the shopping malls are great and some drops are threatening their survival. Sales at around 17% of shopping malls are down by more than 25%. The retail concept alone is outdated and shopping malls need to offer consumers more experiences and entertainment. However, shopping malls also have comparative advantages owing to their size and their uniform decision-making competence regarding the tenant mix as well as the venue of the location. The operators are increasingly recruiting service providers from healthcare, fitness, beauty and related areas. Services have the advantage of facing less competition from e-commerce. They also ensure frequencies

and longer stays. Shopping malls are therefore set to develop more in the direction of urban entertainment centers and emulate the beacons in this regard of Westside, Sihlcity and more recently the Mall of Switzerland.

Shopping streets: Opportunities at top locations …

Foot traffic was the currency in the analog world and it also remains so in the digital world. Physical presence remains important – also for online retailers. Almost all major online retailers have now also opened physical locations. And not just they but also top-class brands seek direct contact with the consumer. They wish to interact with their customers, to make their products tangible and to cultivate their brand image. However, such physical locations are increasingly comprising so-called touchpoints and less frequently points of sale. Such touchpoints are of core importance for the major brands and enable them to establish emotional customer retention. The high street stores at top locations will in future only have a subordinate sales function. They are flagship stores on the best shopping streets that largely serve marketing purposes. The space requirement will consequently be significantly lower and at most be compensated at top locations by an increased brand range. Above all international retailers will increasingly attempt to benefit from the high purchasing power in Switzerland. Thanks to digital channels, the establishment of a country presence is today considerably less expensive than in the world of bricks and mortar.

… but handicapped at B and C locations

The situation is more difficult for B and C locations not suited for flagship stores. They have already suffered from the disappearance of non-chain specialist retailers. While their market share in the 1960s amounted to 70%, it today only comes to 20%. Although shopping streets can deploy their strengths such as the authenticity of their locations and the diversity of their tenant mix, a number of retailers are likely to give up their stores here – especially in the small centers. Local and regional retailers that are well established in niche segments should be able to hold out. Service providers from sectors such as optics, healthcare, beauty, education, consulting etc. will increasingly dominate the streetscape. How well the different locations are able to hold their own will depend on how they deal with the typical handicaps of shopping streets. A uniform management is lacking to define the tenant mix, determine the location of the properties and ensure the optimum integration of catering facilities. This is resulting in disadvantages for shopping streets above all compared with shopping malls where everything is managed centrally and changing trends can be responded to swiftly.

Bottom line for demand for retail space

The growth of e-commerce is changing the environment and role of bricks and mortar retailing. Fashions, for instance, change much more quickly through the internet, as even the very successful Swedish clothing chain H&M recently had to acknowledge following an unexpected downturn in sales in the fourth quarter of the previous year. Because the future course of business has become much less certain, retailers are striving for more flexibility. They are therefore reducing the number of their locations and aim to expand their online business toward an omnichannel strategy. Many are also set to downsize their retail space since in a digital world they are able to make their product range accessible via touch panels and home deliveries, thereby reducing product pressure. The sales function of retail space is losing significance in favor of the marketing function. Some properties are even set to turn into distribution hubs (see special focus on urban logistics).

Supply: Mixed uses as the driver of expansion

Only few specialist stores and shopping malls still being constructed

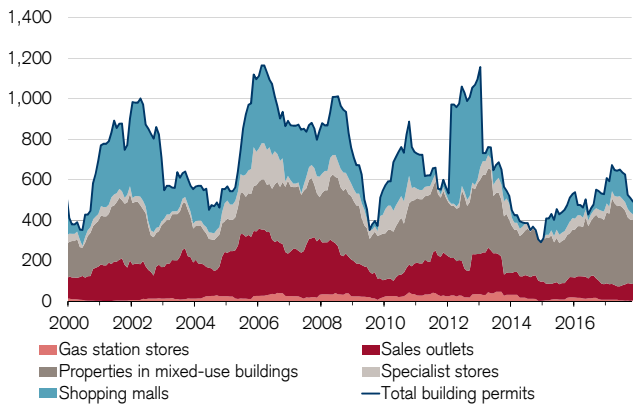
Because retail sales have for years no longer been able to keep up with the expansion of retail space, the latter has declined. Only one new shopping mall, the Lipopark in Schaffhausen, opened its doors in 2016 and is really more a specialist store. Last year one of the last major construction projects planned during the boom phase after the turn of the millennium, the Mall of Switzerland in Ebikon, was finally opened following several attempts. With the exception of a specialist store in Affoltern am Albis, no new additions of shopping malls are to be expected in the current year. Apart from the late arrival in Ebikon, the expansion of space among shopping malls has slowed down markedly and has recently been increasingly concentrated on the furniture sector, an area less suited to parcel shipping.

Growth of stores in new building complexes …

At 56% and 64% respectively, the building permits granted in 2017 for specialist stores and shopping malls are well below the long-term average recorded since 1995 (Figure 61). Above all the two leading supermarket chains in Switzerland remain active and are enhancing their locations with generally small units. The total volume of approved properties was last year 25% below the long-term average of CHF 650 million. As before, retail and commercial properties in

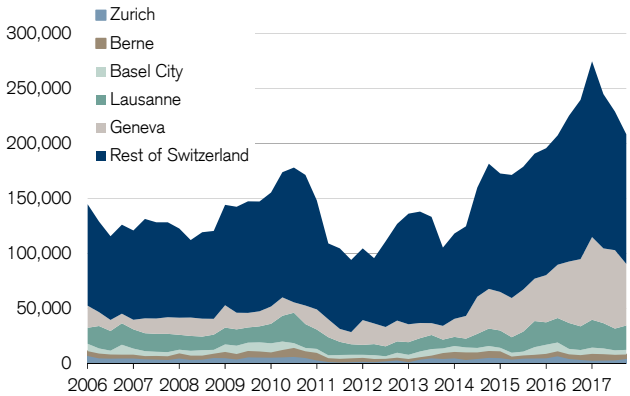
mixed-use buildings are preventing the expansion of space from falling below half the normal long-term level. Rental apartment construction has picked up strongly in the last three years and this has also boosted the construction of retail stores and commercial premises.

Figure 61: Expansion of retail space
Building permits, moving 12-month total in CHF mn., new construction/extension



Source: Baublatt, Credit Suisse

Figure 62: Advertised retail space
Retail space in m²



Source: Meta-Sys AG, Credit Suisse

… with limited success

The newly constructed stores are experiencing difficulties finding tenants. As well as existing properties struggling with tenants moving out, new properties in mixed-use buildings are particularly responsible for the fact that the advertised supply of retail space has for a long time risen sharply (Figure 62). In the border canton of Geneva the strength of the franc appears to be responsible for the increased volume of advertised retail space. Although the volume of advertised space has decreased somewhat in the course of the last year, we do not yet consider this to mark a turnaround. Landlords are in some cases interrupting excessive times on market in order to avoid the stigma of a slow-moving property. Other properties are disappearing completely and being given alternative uses.

Market outcome: (Re)letting a hard nut to crack

Higher vacancies, longer vacancy durations

Unlike office properties that have actually recorded a slight decrease in vacancies, retail property vacancies are continuing to rise and have reached their highest level since the end of the 1990s (Figure 63). Particularly striking is the sharp increase in vacancies in Western Switzerland. It is primarily the Canton of Geneva that has already contributed strongly to the growth in advertised retail space. We also know from the Canton of Geneva that the duration of vacancies for retail properties is increasing. At the start of the decade stores were on average relet again after fewer than ten months. Last year, however, reletting on average took longer than 19 months. By contrast, new leases in the City of Berne are achieved in fewer than 12 months. The amount of vacant retail space has likewise risen sharply in the City of Zurich. This development is not attributable to a small number of individual properties but to a range of small and medium-sized properties. Furthermore, the number of vacant retail properties has increased in ten out of twelve of the city's districts. The vacancies recorded will altogether be too low. Owing to the way the data is collected, vacancies in small retail properties are not recorded systematically enough and therefore underestimated.

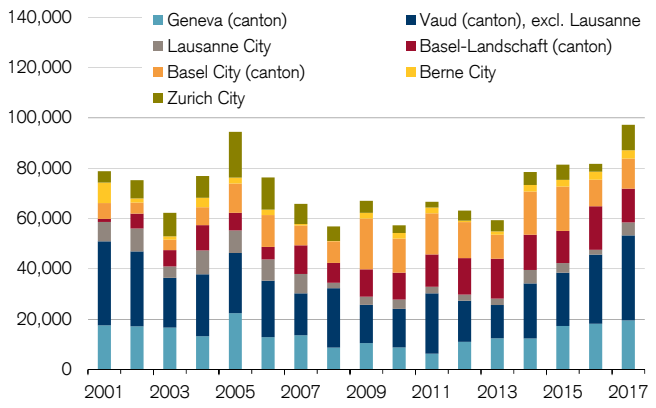
Vacancies lower in the major centers than in small and medium-sized centers

It is interesting to compare the distribution of vacancies over time. Vacancies in 2015 were encountered more in the medium-sized centers and the suburban urban area municipalities and the same is also true today (Figure 64). However, the picture is no longer equally clear. While vacancies in these areas had a somewhat lower share over the last year, those in the major centers have increased and their proportion has grown even more strongly in the small centers. Vacancies remain lowest at less than 2% in the municipalities outside the urban areas where the retail density is also low. Vacancies in the major centers remain below the threshold of 3%, while vacancy rates around 5% are the norm in small and medium-sized centers and urban area municipalities. As was the case two years ago, no correlation of the vacancy risk with property size

can be detected. As far as locational quality is concerned, even prime locations are not immune to vacancies. We know from Hamburg, for instance, that despite significantly higher foot traffic (tourism) there has been no increase in city center sales. And according to CBRE, even Fifth Avenue in New York is currently struggling with vacancies of 15%.

Figure 63: Vacant retail space

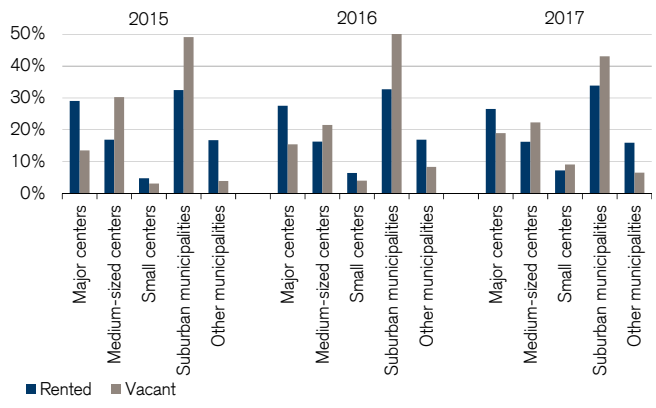
In m², on 1 June, partial survey of around 33% of the retail property market



Source: Various statistical offices, Credit Suisse

Figure 64: Structure of vacancies by type of municipality

Distribution of vacant/rented properties



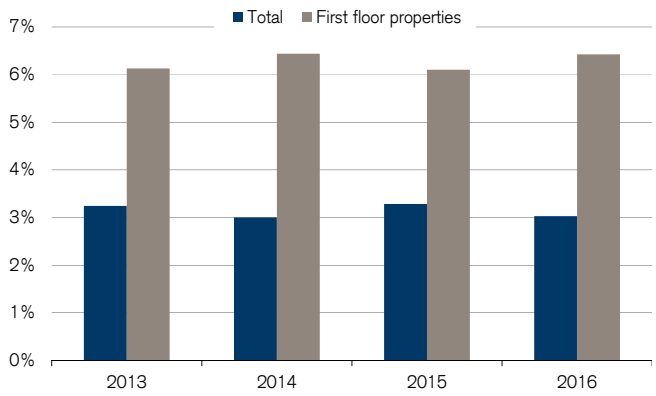
Source: Real Estate Investment Data Association, Credit Suisse

Challenges of first floor properties

Retail properties in mixed-use buildings pose a major challenge. As Figure 65 illustrates, retail properties on the first floor of such buildings sustain considerably greater vacancies and thus loss of rental income than retail properties as a whole. Even before the current structural adjustment there was already a major structural transformation underway owing to the strong growth in the number of shopping malls that above all non-chain specialist retailers fell victim to. The latter frequently occupied first floor properties in mixed-use buildings. Many such properties are situated at less good quality locations and there is also often a lack of synergetic opportunities. We anticipate even greater differences in the future that are set to entail even larger challenges, as first floor properties form sensitive interfaces between private and public urban spaces. Vibrant first floor uses serve to upgrade the urban space and contribute to improved interaction among the population. In view of the dwindling demand, the foremost target must be to pool the remaining forces and concentrate the high-profile uses in a focused manner at the locations best suited to this.

Figure 65: First floor vacancies of mixed-use buildings

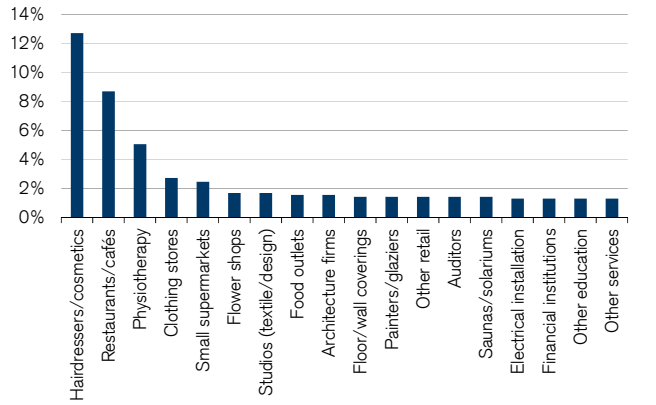
Loss of rental income of retail properties as a whole and first floor retail properties



Source: Real Estate Investment Data Association, Credit Suisse

Figure 66: New tenants of advertised first floor properties

Distribution of new tenants in %



Source: Meta-Sys AG, Credit Suisse

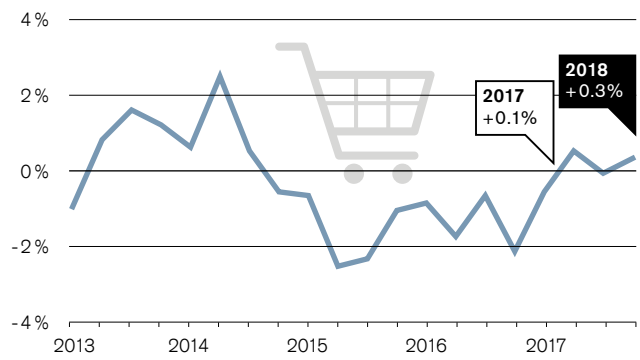
Which uses come into question at changes of tenant?

Based on an empirical analysis of first floor locations, we have investigated which uses can be encountered today of commercial properties formerly advertised on rental portals. Figure 66 shows that retailers occupy the property again only in just under a fifth of cases. Most important are services such as hairdressers, cosmetics etc. and those from the healthcare sector with a total of 26%. They are followed by catering uses at 10%. The range of possible uses is very broad. While the eight most frequent uses reach 66%, the next eight only account for 16%. The new tenants from the architecture, information technology, wholesale and freelance sectors are worthy of mention. These tenants use the premises as offices. Property suppliers therefore by all means encounter potential tenants from other sectors and/or with other intended uses. However, their willingness to pay will generally be considerably lower than was the case with the former use as a retail property. In view of the strong competition from other property suppliers, the negotiating position of landlords is also weaker. There is unlikely to be any rapid change in this situation in view of the still pending structural transformation.

Outlook for retail property in 2018

Retail sales

Nominal in %

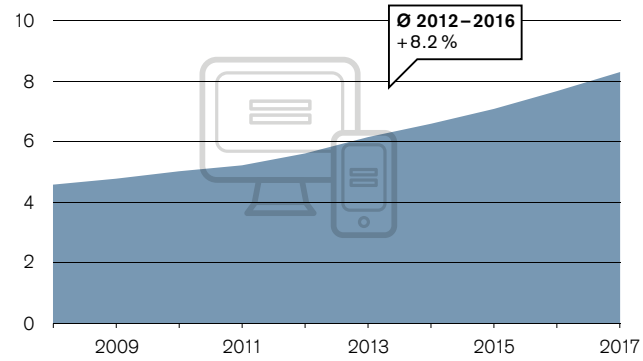


Improved sentiment in the retail sector:
- Rising consumer sentiment
- Franc depreciation reducing price pressure and shopping tourism
- But: strong online competition from abroad, less luck with weather

2018: Mildly positive sales growth

E-commerce

Sales in CHF bn.



Shift from bricks and mortar trading to e-commerce:
- Growing population share of digital natives
- Improved logistics, convenience catching on
- Growing online competition from abroad

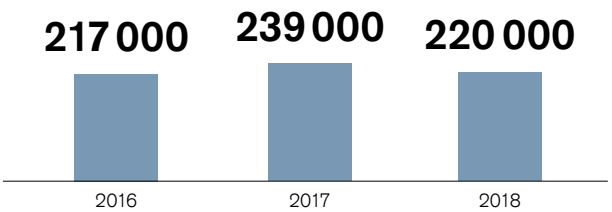
2017/2018: Continued market share gains of e-commerce

Shopping formats in digital stress tests

Convenience shop	Department store	Shopping mall		Shopping street (A location)	Shopping street (B/C location)
		Urban Entertainment Center	Other		
↗	↘	→	↘	↗	↘

Advertised retail space

In m²

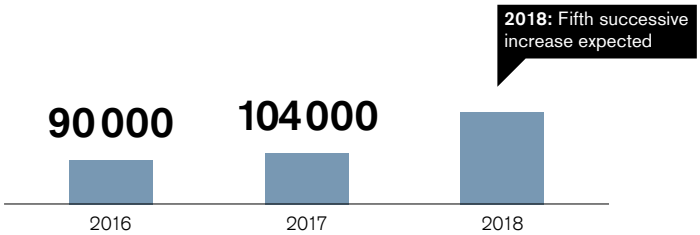


Structural change keeping advertised retail space high:
- Retailers reducing their branch networks
- Building permits 25% below long-term average
- But: sharp expansion of retail properties on first floor of new rental apartment complexes

2018: Advertised retail space to remain at a high level

Vacancies

In m²



Weak demand negatively impacting re-letting:
- Sluggish sales of new rental properties
- Challenging re-letting
- Sharply increasing duration until re-letting
- Major centers less affected but not immune

2018: Further rise in vacant properties, rents falling

Special focus: Behavioral economics

When psychology plays tricks on investors

Behavioral economics addresses irrational behavior in economic situations

Traditional economic models and theories are mostly based on the assumption that people's behavior corresponds to that of a rational utility maximizer (homo oeconomicus). In reality, however, human decision behavior displays a large number of in some cases systematic deviations from the rational economic behavior model. This is where behavioral economics comes into play: As a subdiscipline of modern economics, it aims by means of findings above all from psychology to explain irrational behavior by market participants and in doing so to improve the existing economic models and understand market inefficiencies. Real estate markets in particularly are considered to be inefficient due to their lack of transparency and their inertness. Various theories of behavioral economics can therefore be directly applied to the players on the real estate market.

Systematic cognitive illusions influence our decisions

A core theory of behavioral economics is the prospect theory introduced by Daniel Kahneman and Amos Tversky in 1979.[9] This describes economic decision-making under conditions of uncertainty, with behavior patterns frequently observed here that are not compatible with traditional expected utility theory. According to the theory, potential profits and losses play a greater role in decision-making than the average expected level of wealth that from a purely rational perspective ought to be the sole decisive factor. In 2002 Daniel Kahneman was awarded the Nobel Prize for his contributions to the field of behavioral economics.

Losses are weighted more strongly than profits

Loss aversion forms an integral part of prospect theory. Loss aversion means that individuals are more likely to get upset about a loss than to take pleasure in a profit of the same amount. The utility function of the prospect theory that assigns a utility to each event (e.g. the sale of a property) therefore displays a very specific trend that is steeper for losses than for profits (Figure 67). As a result, a loss, for instance, of CHF 20 is weighted more strongly than a profit of CHF 20. Furthermore, the utility function of individuals is convex for losses and concave for profits, which implies a tendency toward risk-taking behavior for losses and risk-averse behavior for profits. For example, it has been proven in lotteries and experiments that individuals generally prefer an uncertain loss to a certain loss even if the loss to be expected exceeds that of the certain alternative. This on average leads to a greater loss and hence to a deviation from what is generally considered to be rational profit-maximizing behavior. This is accordingly illustrated in the utility function in Figure 67. Based on the convex curvature, the additional frustration thus decreases continuously in the event of an additional loss.

Profits are realized too early and losses too late

Various behavioral economic effects can also be observed among players on the real estate market. One example is the disposition effect attributable to Hersh Shefrin and Meir Statman that is based on loss aversion.[10] This refers to the tendency among investors to sell securities too quickly after a price increase and to retain securities for too long after their price has fallen. This generally results in profit opportunities being seized too little (risk-averse behavior) and losses insufficiently avoided (risk-taking behavior). Applied to the real estate market, the disposition effect explains why managers of real estate investment trusts (REITs) tend to sell properties that have gained value rather than those that have lost value.[11]

Transaction prices (and rents) only adjust hesitantly in downturn

The existence of loss aversion among real estate investors has not only been confirmed on the basis of experiments but also validated by means of extensive data analyses.[12] The course of the utility function as postulated by prospect theory has thus been confirmed. This sometimes also explains why the actual transaction prices on the real estate market only hesitantly adjust to the lower equilibrium prices during phases of price corrections. The fact that significantly fewer

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[9] See Kahneman, D. & Tversky, A. (1979). *Prospect Theory: An Analysis of Decision under Risk.* Econometrica, 47(2), pp. 263–291.

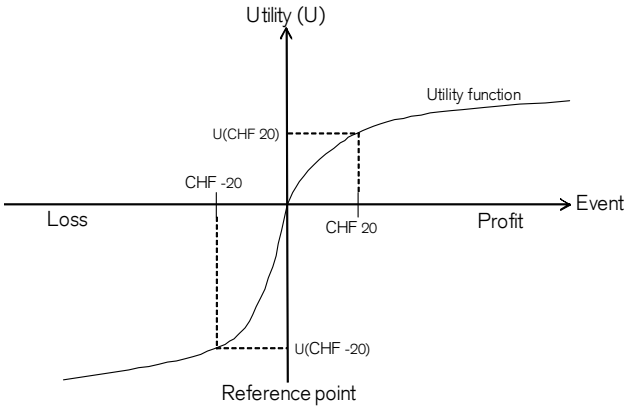
[10] See Shefrin, H. & Statman, M. (1985). *The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence.* Journal of Finance, 40(3), pp. 777–790.

[11] See Crane, A. & Hartzell, J. (2010). *Is There a Disposition Effect in Corporate Investment Decisions? Evidence from Real Estate Investment Trusts.*

[12] See Genesove, D. & Mayer, Ch. (2001). *Loss Aversion and Seller Behavior: Evidence from the Housing Market.* The Quarterly Journal of Economics, 116(4), pp. 1233–1260.

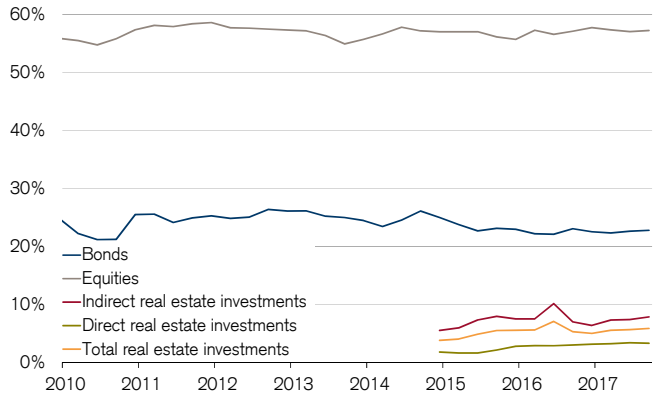
transactions take place during such phases can also be explained by the aversion toward incurring losses. While this behavior is more pronounced among private property owners, it is also displayed by professional real estate investors. The frequently observed preference for longer vacancies for rental apartments as opposed to a rent reduction can also partially be explained by loss aversion.

Figure 67: Loss aversion
Hypothetical utility function according to prospect theory



Source: Credit Suisse, Kahneman and Tversky (1979)

Figure 68: Home bias of Swiss pension funds
Foreign shares in the balance sheet of pension funds, by asset class



Source: Credit Suisse

Transaction prices (and rents) only adjust hesitantly in downturn

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Anchoring information has an excessively strong impact on decision-making

One effect likely to play a relatively important role for real estate transactions is the anchoring effect attributable among others to Amos Tversky and Daniel Kahneman. The anchoring effect refers to a cognitive distortion according to which decision-makers allow themselves to be excessively influenced by existing but incomplete information. Such information consequently serves as an "anchor". For example, it can be observed that individual home owners wishing to sell make use of both the original purchase price and the value-preserving investments that have been made as an anchor when setting the price. It is also the case among home owners that information from the media that frequently refers to new properties influences the value perception of their own property. Furthermore, a study from the US has found that excessive asking prices for single-family dwellings compared with the market actually result in higher selling prices.[14] The anchoring effect plays a major role particularly for real estate because the difficulty in determining the value of a property means that comparative figures are readily drawn upon. Such an anchoring role can very much be attributed to real estate valuations and there is evidence that selling prices are also influenced by this.

Preference for domestic properties

One effect that is repeatedly mentioned in the context of real estate investments is the home bias effect. This refers to the tendency of investors to invest disproportionately strongly in domestic securities. According to portfolio theory, foregoing international diversification leads to a higher risk with the same return. The tendency toward an overweighting of the domestic market will to a certain extent be explained both by transaction and information costs and by exchange

[13] See Genesove, D. & Mayer, Ch. (2001). *Loss Aversion and Seller Behavior: Evidence from the Housing Market.* The Quarterly Journal of Economics, 116(4), pp. 1233–1260.

[14] See Bucchianeri, G. W. & Minson, J. A. (2013). *A Homeowner's Dilemma: Anchoring in Residential Real Estate Transactions.* Journal of Economic Behavior and Organization, 89(6), pp. 76–92.

rate risks. There are many indications that the home bias is particularly pronounced in the real estate market. For example, it can be observed that REIT asset managers generally prefer domestic investments.[15] The same applies to the real estate portfolios of Swiss pension funds that to 96.7% consist of Swiss real estate (direct investments), while the foreign share of other asset classes is substantially larger. In the case of equities, for instance, it amounts to 57.3% (Figure 68). High transaction and information costs will particularly deter smaller institutional investors from acquiring foreign investment properties. Meanwhile, pension funds also only hold a small number of indirect foreign investments (7.9% of all indirect real estate investments) despite the fact that there is a broad range of products on offer that among other things also includes passive instruments (listed funds, ETFs), multimanager funds and instruments with hedging against exchange rate fluctuations. Having said this, the share of foreign real estate investments has risen somewhat since 2015. The high prices coupled with increasing marketing risks in the Swiss market and the downward trend of the franc will have prompted some portfolio managers finally to venture abroad for reasons of diversification.

The filter in our minds

The confirmation bias is considered the mother of all errors in reasoning. This refers to the tendency to select, favor and interpret information in such a way as to ensure it ties in with and confirms our preconceived opinion. Counter theories and arguments are therefore not even sought and are ignored if they should arise. For real estate investors and developers who are also exposed to this reasoning filter, this means that when making decisions they should deliberately look for reasons why an investment could deliver a poor performance. Or as the British writer Arthur Quiller-Couch once pointedly expressed it: “Murder your darlings.”

Ownership of an asset leads to a higher perceived value

Another behavioral anomaly that is relevant for property owners is the endowment effect attributable to behavioral economist Richard Thaler who was awarded the Nobel Prize in 2017.[16] According to this effect, individuals ascribe a higher value to an asset if they own said asset. For the real estate market this distortion implies that property owners will tend to ascribe their property an excessive value in comparison with the market.

Behavioral economics also play an important role in the real estate market

It can be concluded from the discussion above that a large number of behavioral economic effects are also at work in the real estate sector. Various studies suggest, for instance, that behavioral economic effects can partially explain the at times significant deviations between the market prices and net asset values of listed real estate investments. Players on the real estate or real estate investment markets are therefore well advised to be aware of these effects. If the corresponding awareness is at hand, the investment strategy and investment decisions can be optimized and a better performance can be achieved in the long term. Moreover, strategies can be developed to benefit from behavioral economic effects (e.g. funds based on behavioral finance).

[15] See Gibilaro, L. & Mattarocci, G. (2016). *Are Home-Biased REITs Worthwhile?* Journal of Real Estate Portfolio Management, 22(1), pp. 19–30.

[16] See Thaler, R. (1980). *Toward a Positive Theory of Consumer Choice.* Journal of Economic Behavior and Organization, 1(1), pp. 39–60.

Real estate investments

Negative interest rates dominating cycle

Despite a deterioration in the earnings situation due to a lack of demand on the end user markets, the yields on direct and indirect real estate investments remain impressive. The negative interest rates are to some extent dominating the classic property cycle and despite falling potential for rental income preventing a corresponding price adjustment to investment properties and products. This is evidenced by a continued yield compression of direct investments and persistently high agios and premiums for indirect investments.

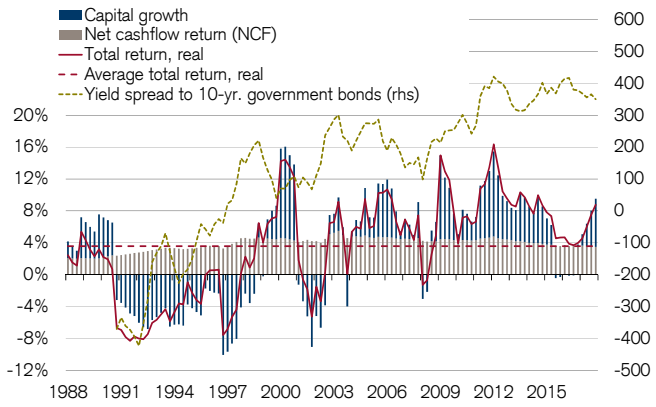
Direct real estate investments: Phase of growing prices about to end?

2017: Capital growth substantial again

Despite a partial decline in rental income, many investors invested directly in real estate can look back on a successful 2017. According to the SWX IAZI Investment Real Estate Index, thanks to a renewed upturn in transaction prices a real total return of 8.8% was achieved – the best result since 2013 (Figure 69). The average real total return over the past 30 years lies at 3.6%. The increasing capital growth reflects the high demand for investment properties. Unlike in previous growth phases, this is not being fueled by growing potential for rental income but solely by the scarcity of investment opportunities resulting from the negative interest rates. The yield advantage of direct real estate investments (net cashflow yield) versus ten-year Swiss government bonds still amounted to a high 350 basis points at the end of 2017. Unlike in the prolonged correction phase of the 1990s when the real net cashflow yields were even negative for some time, the risks assumed in the present market phase are offset by a premium. As long as this premium does not decline substantially due to rising interest rates or a strong erosion of rental income, a marked and sustained value adjustment for direct real estate investments is unlikely. At the same time, however, we are expecting a slightly upward trend in long-term interest rates and a slight fall in rental income so that further value appreciations will be subject to tight limits.

Figure 69: Total returns of direct real estate investments

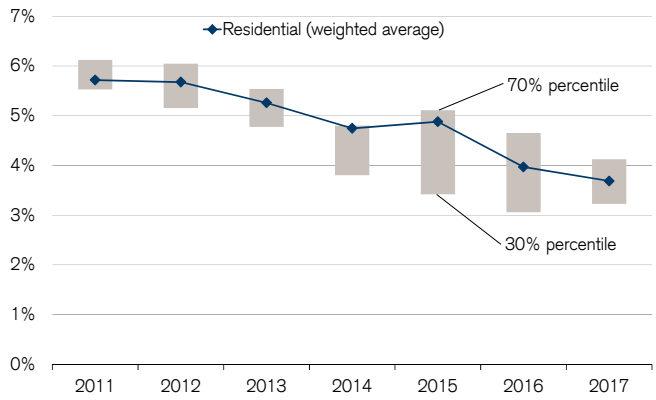
Transaction-based annualized yields, residential and mixed-use properties; difference between NCF yield and yield on ten-year Swiss government bonds



Source: IAZI, Swiss Federal Statistical Office, Datastream, Credit Suisse

Figure 70: Gross initial yields (residential)

Transaction-based initial yields of institutional investors, weighted average and distribution



Source: Real Estate Investment Data Association (REIDA), Credit Suisse

Turning point in initial yields not yet reached

Directly reflecting the positive performance, the initial yields of residential properties fell again in 2017. The weighted average of gross initial yields reached a low of 3.7% (Figure 70) and 30% of transactions were even executed at top yields of below 3.2%. The range between the yield levels has also decreased. This suggests that due to the lack of core properties available on the

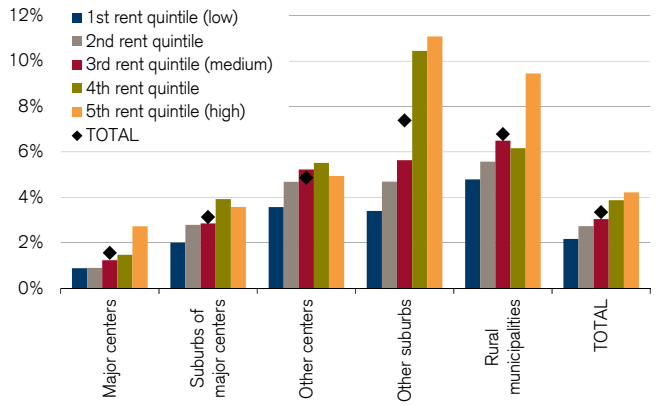
market, a further price increase was also recorded for residential properties outside the prime locations. However, for office properties, which are further advanced in the cycle, there were already signs of a gradual renewed upturn of initial yields away from the prime locations back in 2016.

Inexpensive rental apartments remain sought after

The market expertise of real estate investors and portfolio diversification are gaining importance again in the present environment. For example, the vacancy risk depends strongly on both the property location and various other property features. Based on a sample of almost 100,000 rental apartments from the portfolios of a range of institutional investors, we have examined how loss of rental income due to vacancies varies across municipality types and price segments (Figure 71). A very clear pattern emerges: Firstly, loss of rental income increases with decreasing urbanity of the property location. As is to be expected, it is lowest in the five major centers (1.6%), while the vacancy risk in the regions surrounding core urban areas (3.1%) is in turn lower than in small and medium-sized centers (4.9%). The highest loss of income is sustained by residential investment properties in the suburbs of the small and medium-sized centers (7.4%) and in rural and tourist municipalities (6.8%). Secondly, apartments in higher price segments (in relation to the average rent according to type of municipality) are more greatly affected by vacancies than inexpensive apartments. Viewed across the entire portfolio, the loss of income for apartments of the least expensive price quintile amounts to 2.2%. At 4.2%, it is almost twice as high for the highest price quintile. The demand situation for apartments of the high-price segment in a regional context is particularly critical in the surroundings of medium-sized centers and in rural municipalities where the loss of income lies at around 10%. Potential seekers of such properties will very often opt to acquire owner-occupied housing at such locations.

Figure 71: Vacancies by price quintile and location

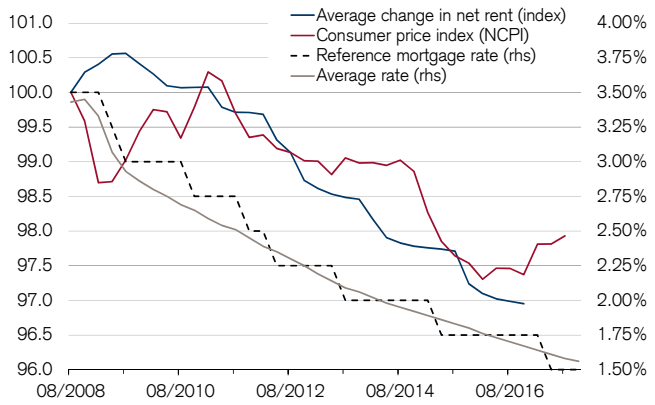
Loss of rental income at residential investment properties, as % of potential gross rental income per rent quintile and type of municipality, Q3 2017



Source: Real Estate Investment Data Association (REIDA), Credit Suisse

Figure 72: Rent price trend for ongoing contracts

Average change in net rent for ongoing rental contracts (index: Aug. 2008 = 100, lhs) and reference mortgage rate



Source: Swiss Federal Statistical Office, Federal Office for Housing, Credit Suisse

Reference rate: No change before 2020

While rental income is already burdened by vacancies and pressure on contractual rents, tenants with ongoing rental contracts are benefiting from the reduction of the reference mortgage rate carried out in June 2017. The reference rate has thus fallen in eight steps since its introduction ten years ago from 3.5% to 1.5%. The upshot of this is that rents in ongoing rental contracts have on average gone down by a total of 3% between 2008 and 2016 (Figure 72). This is equivalent to an average annual decrease of 0.4% during a period in which according to Wüest Partner rents for new contracts have risen by 1.2% annually. We consider a further reduction to be unlikely. However, a renewed increase of the reference rate before 2020 is equally inconceivable.

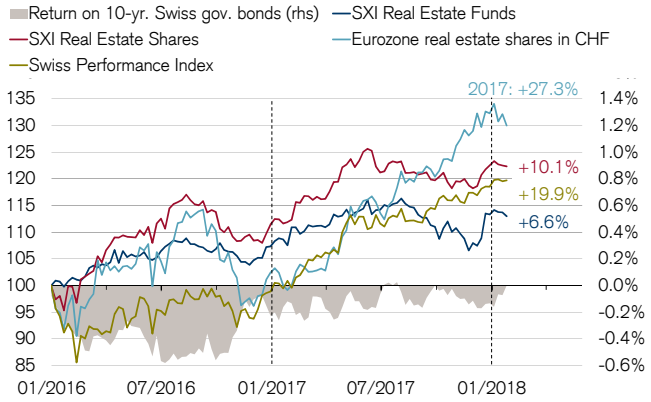
Indirect real estate investments: Tailwind subsiding

2017: Another successful year for real estate investors

Thanks to the end-of-year rally, investors in indirect Swiss real estate investments can look back on another successful year. With an overall performance of 10.1% (listed real estate equities) and 6.6% (listed real estate funds), the outstanding results of 2016 were only marginally fallen short of (Figure 73) despite the fact that the interest tailwind subsided somewhat and another high volume of capital increases and new listings (around CHF 3 billion) was recorded for funds. However, the performance was significantly down on the previous year in relation to foreign real estate investments and investment alternatives at home, with the Swiss Performance Index achieving a total return of 19.9% and real estate equities in the Eurozone performing even better at 27.3%. Equity prices were boosted by the depreciation of the franc in combination with an economic upturn. However, the upturn also entails an increased risk of higher interest rates that would curb real estate investments. The possibility of the Swiss National Bank (SNB) already carrying out an initial hike of base rates in the current year has increased due to the improved economic and exchange rate environment. However, we consider it more likely that the SNB will wait for an initial interest rate move by the European Central Bank and not take any action before 2019. The underlying macroeconomic and monetary conditions are thus set to support real estate investments for a further year and prevent a slump in performance despite the tense situation on the end user markets.

Figure 73: Performance of indirect real estate investments

Overall performance, index: 1 January 2016 = 100, return on ten-year Swiss government bonds

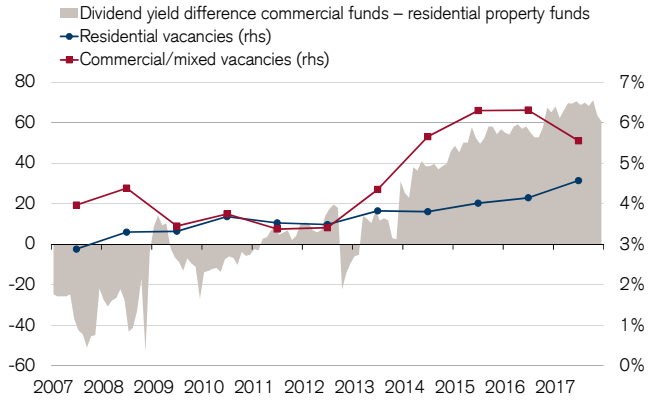


Past performance is no guarantee of future results. Performance can be impaired by commissions, fees and other costs as well as exchange rate fluctuations.

Source: Datastream, Credit Suisse

Figure 74: Dividends and vacancies by investment focus

Dividend yield difference in basis points and vacancies (rental income loss rate) of listed Swiss real estate funds (2017: provisional)



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

Source: annual and semi-annual fund reports, Datastream, Credit Suisse

Funds focusing on commercial real estate gaining attractiveness

There has been particularly strong demand in recent years for funds focusing on residential real estate. Their average premium paid on the stock exchange (agio) amounted to 33.6% at the end of 2017, while that of more commercially-oriented funds was 19.7%. Conversely, the dividend yields of commercial funds have developed significantly more positively than those of residential property funds. The yield premium of commercial funds in some cases amounted to more than 70 basis points in 2017. At the same time, the rising vacancies are also leaving their mark on residential property funds. While the rental income loss rate of funds focusing on residential real estate climbed to 4.6% in 2017, a decline was registered for funds focusing on commercial real estate for the first time since 2011 (Figure 74). In view of the high yield premiums for commercial property funds and the gradually converging vacancy losses, funds focusing on commercial real estate have gained attractiveness again. It can be concluded from the end-of-year rally in 2017 that investors have started to recognize this, as the agio difference between residential and commercial property funds has fallen from up to 20 percentage points in August 2017 to 14 percentage points at the end of the year. The fact that the commercial property market is further advanced in the cycle than the rental accommodation market should generally also serve to support real estate equities, which on average have a lower residential share than real estate funds.

Long-term interest rates, economic growth and capital increases influence agios

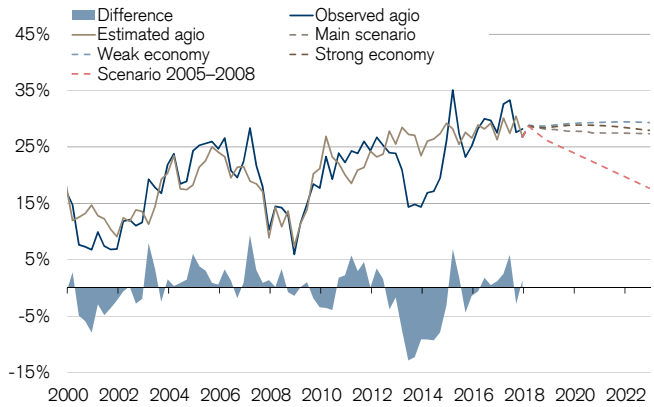
The core driver of the premiums (agios) paid on the stock exchange on the net asset values of real estate funds is the long-term interest rate that is negatively correlated with agios. The reason for this is that investors consider indirect real estate investments as an alternative to corporate and government bonds and reallocate their money via this substitute depending on the interest rate level. Economic growth also exerts an impact on agios. However, in this case the correlation is positive as the real estate earnings prospects also rise as the economy prospers. Finally, capital increases, new listings and launches also play a significant role as they bring about a redistribution of assets for instance from index-based funds and are therefore negatively correlated with agios.

Continued low long-term interest rates point toward stable agio performance in the longer term

Based on the above factors, we have developed a forecast model for the performance of the agios of real estate funds (Figure 75). We take the so-called Capital Market Assumptions reflecting the most likely scenarios from our point of view for the economy and the financial markets in the next five years as the basis for the longer-term assessment. The average agio level of 2017 (around 30%) is set approximately to be maintained in the next five years (27%–29%), although significant ups and downs are likely in the short term. The main determinant of the forecast development is the long-term interest rate that is on average also likely to remain at a low level over the next five years. The low long-term interest rate is in turn attributable to the potential growth of Swiss gross domestic product that is declining due to the decreasing immigration and the aging population.[17] The strong and the weak scenario lie very close to each other, which can partially be explained by contrary effects of the factors. According to the model, the highest agios result in the weak economic scenario shaped by low long-term interest rates and modest economic growth. We have additionally predicted a scenario in which long-term interest rates develop in a similarly dynamic manner to between 2005 and 2008 when the long-term interest rate went up from 1.9% to 3.3%. In this scenario to which we only attribute a low probability of occurrence, the agio would decline by around ten percentage points over the coming five years. There is therefore no further tailwind to be expected from the agios in any of the scenarios considered.

Figure 75: Agios of real estate funds incl. forecast

Estimated and observed agio, as % of net asset value (listed real estate funds); dashed: forecasts and scenarios

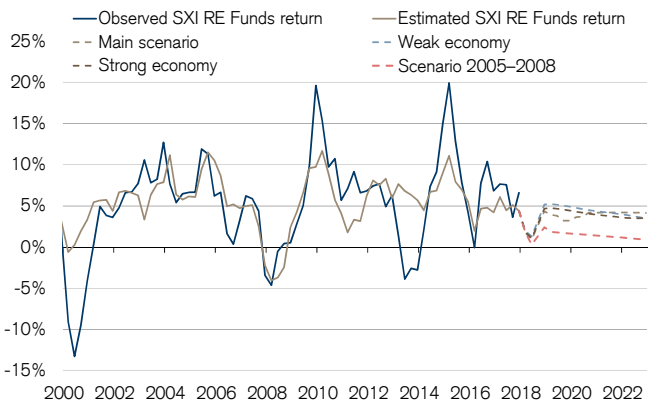


Past performance is no guarantee of future results. Performance can be impaired by commissions, fees and other costs as well as exchange rate fluctuations.

Source: Datastream, annual and semi-annual fund reports, Credit Suisse

Figure 76: Return on indirect real estate investments

Annual total return of SXI Real Estate Funds Index; dashed: forecasts and scenarios



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

Source: Datastream, annual and semi-annual fund reports, Credit Suisse

[17] See Gehrig, L., "Langfristige Wachstums- und Zinsperspektiven für die Schweiz". *Swiss Strategy and Relative Value* of 20 December 2017, pp. 6–8, Credit Suisse Investment Solutions & Products.

Outlook for real estate as an investment

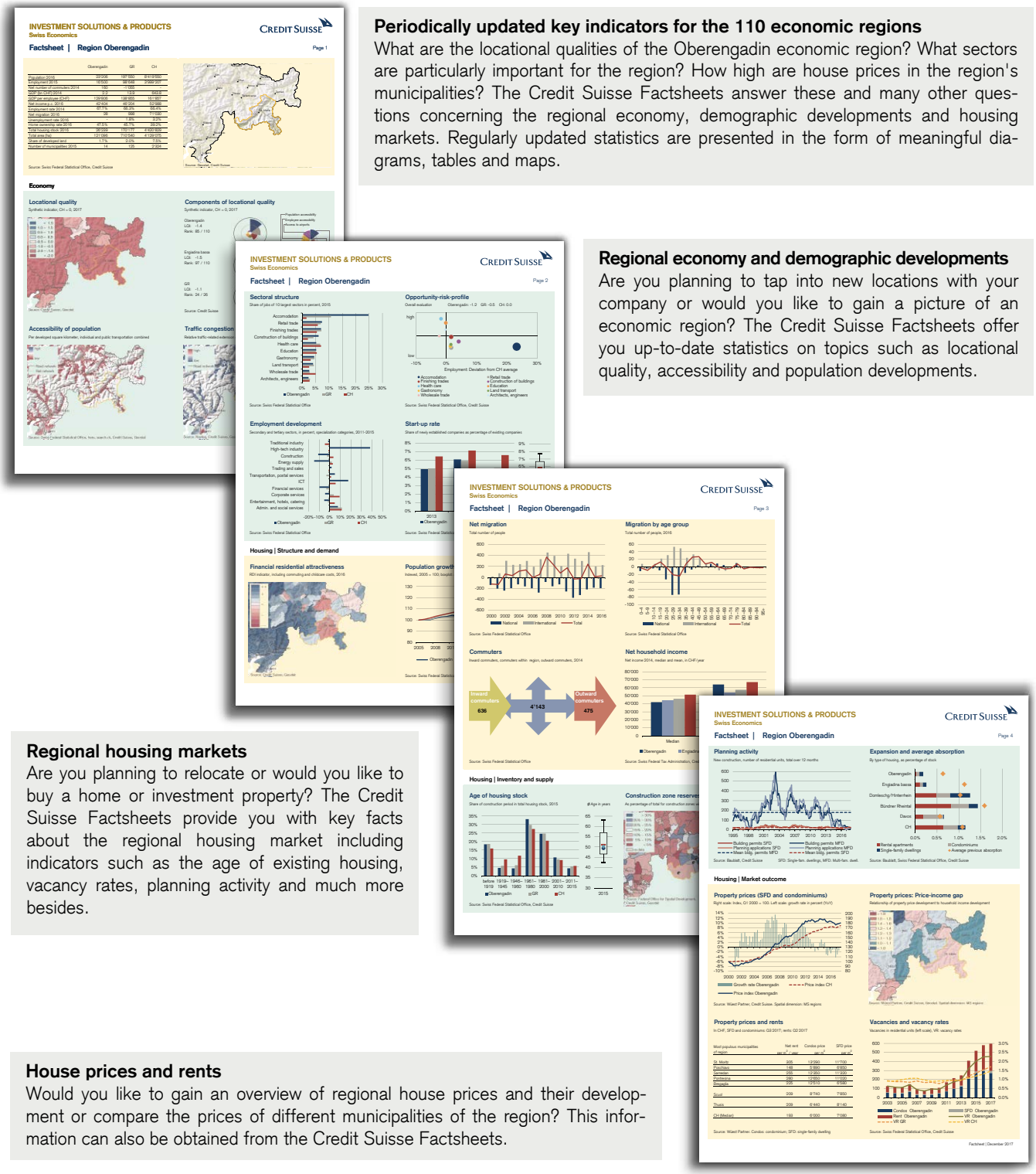
Indirect investments 2018: Lower total returns but no collapse

Apart from the agio, we must also include the two other core components, the dividend yield and the change in the net asset value, in determining the outlook for the total returns of indirect real estate investments. A slightly adapted model that alongside long-term also takes account of short-term interest rates has therefore been used to create a forecast of total returns. This model yields an average total return for the next five years of 3.5% to 4.0% (Figure 76), which would entail a clear decline compared with the previous five years (5.8%). Although the agios disappear as return drivers, they do not exert a negative impact as no major changes are expected for them in the main scenario. However, the net asset values are set to perform worse than in the recent past owing to the sideways trend for long-term interest rates and the slight upward trend in short-term interest rates. In the alternative scenario in which not only long-term interest rates rise sharply but the base rate is also hiked at a similar speed to between 2004 and 2008, we expect a considerably lower but nevertheless positive annual total return of 1.3%. Altogether we therefore anticipate a slight downturn in the performance of indirect real estate investments in the next few years but not a collapse of the market.

Direct investments: No turnaround in the current year

The question arises with a view to direct real estate investments as to whether anything will change in the fundamental underlying situation in the current year and if so what. We expect the underlying macroeconomic and monetary conditions to continue to support real estate investments in 2018. Productivity increases, e-commerce and latent labor market reserves are still curbing inflation for the time being. This is providing the Swiss National Bank with leeway to allow the European Central Bank to make the first move regarding initial base rate hikes. Altogether the global central bank balance sheets are unlikely to start contracting slightly before the third quarter of 2018. There will therefore barely be any change to the investment crisis situation and the intense quest for yields so that the drivers of performance to date will remain more or less intact. However, the tense situation on the end user markets is likely to get worse because even more apartments are being completed above all on the rental accommodation market. This alone will suffice only to curb performance slightly but not to turn it around. Real estate is therefore set in 2018 to build on the excellent performance of the past few years with at least an average return.

Factsheets: Regional real estate markets at a glance



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

Source: Credit Suisse

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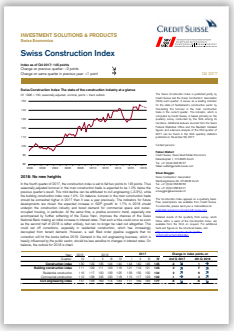

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