

Real Estate Focus

2020



Editorial

Dear Reader,

Picture London in 1894. More than 50,000 horses transport people and goods across the city. As a result, 1.25 million pounds of horse manure land on the streets every day. The *Times* claims there is a horse manure crisis and predicts that in 50 years every street in London will be buried under three meters of horse manure. But things turned out differently. History proved the newspaper's prediction wrong.

When forecasting the future, people tend to place too much weight on the recent past. This has been the subject of in-depth scientific research. Social sciences speak of "recency bias" and psychology of "availability heuristic", which means that the most recent information is always considered the most relevant when assessing or evaluating a situation, as it is the most easily remembered.

Assuming that trends will continue can therefore lead us up the wrong path. Nevertheless, investors rely on supposedly eternal trends. This is the case in the real estate sector, since in the current investment crisis they are hoping for higher returns compared to the traditional, now overpriced real estate segments. They often overlook the fact that trends can end abruptly and that any additional returns are generally associated with higher risks.

In this year's edition of UBS Real Estate Focus, we show, among other things, that trend knowledge can degenerate over time into a mass commodity with little added value, leading to investments that sooner or later culminate in overcapacity.

We hope you find it interesting and informative reading.

Claudio Saputelli

Head Global Real Estate

Daniel Kalt

Chief Economist Switzerland

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Residential

UBS Real Estate Focus 2020

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A look into the crystal ball

Katharina Hofer

Nowadays the word trend is often used as a synonym for shortterm fashion. In fact, it refers to a long-term development. Predicting trends is difficult, and they can only be spotted when they have been under way for a while.

Investors have been following the advice to "Cut your losses and let your profits run" since the early 19th century, when the famous English economist David Ricardo revealed the secret of an investment strategy that had been highly successful for him personally. The first part of the saying "cut your losses" suggests that stocks losing money should be sold as soon as possible. The second part "let your profits run" recommends staying calm and not selling profitable positions too soon during a bull market. In other words, follow the positive trend.

Trends in statistics and society

It took a while for the term "trend" to come into general use. The first people to use it were time series analysts, to indicate the progress of a variable in the same direction over an extended period. Trend analysis plays a key role in modern technical analysis of stock prices, which was founded by Charles Dow at the end of the 19th century. Even today, for example, we talk of trend growth in economic performance.

But the term as it is most commonly used today really hit the big time in the 1980s with John Naisbitt's best-seller Megatrends. In it he described ten tendencies, or indeed trends, that were going to shape life in the future. At this point, the trend established itself as a social term as much as a mathematical one, describing the direction of a future development.

Well founded futurology is rare

People have always been fascinated by what the future will bring. The ancient Greeks consulted the Delphic oracle, in the Middle Ages seers made prophecies and fortune tellers interpreted the stars to predict the outcome of a battle or how good the harvest would be. Nowadays studies of the future are most frequently commissioned by companies and government institutions hoping for a reference point for taking long-term strategic decisions.

Specialized institutions sketch out different scenarios for the future, for instance using statistical analyses or expert interviews – interestingly, this latter approach is known as the Delphi method. The aim is to spot niches at an early stage and identify the potential they have for more fundamental future developments. But futurologists often face the criticism that their methods are unscientific.

The only thing that's certain are the losers

Forecasts of long-term trends and the consequences they will have on the economy are often based on distinctly shaky foundations. Frequently, trends are only identified as such once they are already well under way. When the trend towards saving and viewing increasingly longer videos started to take off in the course of digitalization in the 1990s, for example, it was unclear whether the format that was going to



win out would be multimedia CDs or super density CDs. Ultimately a single format came out on top – the DVD. Its successor the Blu Ray disk managed to take some market share off the DVD, but never fully triumphed despite its clear technical superiority. The losers of a new trend are generally much easier and quicker to spot than the winners: video cassette revenues plummeted after the launch of the DVD.

Even megatrends are uncertain

Trends can vary in duration and impact; there is no consistent categorization in the literature. But the catch-all term is the megatrend. This lasts for years or even decades and can be seen in social, economic and political life in numerous different parts of the world. Current megatrends which will remain relevant in the near future include the ongoing aging of society, digitalization, globalization, individualization and urbanization. What these megatrends all have in common is that they have been with us for some time already.

Spotting the megatrends of tomorrow is difficult, though. Futurologists can only identify what already exists, at least in outline. Many great hopes turn out to be short-term hype or passing fashions. As Ricardo realized, it's therefore worth not getting on board until the train is well under way. But even this strategy offers no guarantee of reaching the desired destination.

Trends en vogue

Matthias Holzhey

During investment crises, investors increasingly follow trends. In urban centers especially, trend-based niche investments are offering attractive higher returns. But the risks are greater than in the overall market.

We are currently in the late stage of the cycle, where the broad market is not very promising for direct investments. Negative interest rates on safe investments have driven a disproportionate amount of capital into the real estate market, so the attainable yields have fallen steeply over the past few years. Hence a great deal of attention is being paid just now to niche investments, as these offer higher yields. However, their smaller market size and lower liquidity mean these involve greater risk than investing in traditional residential, office or retail properties. Niche investments also require a great deal of expertise.

Investors are particularly keen on niches related to global megatrends such as aging, digitalization, individualization, globalization and urbanization. These exploit the fact that in future, more and older people will be living in smaller residential units in cities, flexible forms of renting will be increasingly popular and the importance of the last mile to the client will rise. Properties deliberately designed for these rapidly growing demand segments offer investors the prospects of long-term income growth.

Seven key real estate trends that direct investors are focusing on

Microapartments

Drivers: Individualization, urbanization
One-person households have become thecommonest form of household at present in
Switzerland, accounting for more than onethird. People who are on their own prefer to
live in the city center. However, high rents

mean the amount of space required has to be limited. Microapartments that have been reduced to the minimum but are fully equipped are therefore likely to be increasingly in demand. On the other hand, these need more expenditure because overall more wetrooms, kitchens and pipework are needed. Also, the percentage of single-person households has stagnated for around two decades.

Student accommodation

Drivers: Globalization, individualization
Student apartments target the sharply rising
number of international students. The most
attractive locations are university towns with a
shortage of apartments and where students'
willingness to pay is correspondingly high. But
renting these out is cost-intensive, demand is
seasonal and not-for-profit providers keep rents
down. One success factor, apart from the right
location, is to combine with business apartments
and possibly also short-term tourist lets.

Retirement homes

Drivers: Aging, individualization
The rising need for care with age, coupled with
the demographic trend, indicates that a rapid
rise in growth in the demand for retirement
homes seems almost inevitable. However the
market is splintered and contains many not-forprofit organizations, which makes it harder for
investments to be profitable. Also, care costs are
likely to rise steeply in the long term, so pressure
on costs from the public purse will increase.
Attractive options for investment are restricted
to the privately financed upper price segment.

Short-term tourist rentals

Drivers: Digitalization, globalization, individualization

In popular tourist cities with heavily regulated rental markets, using apartments as hotels in disguise is a way of generating considerably higher rental income than with conventional tenants. But the barriers to market entry are low and the risk of government intervention is growing; making alternative use of residential space is increasingly restricted to just a few months per year.

Co-working

Drivers: Digitalization, individualization, urbanization

The amount of co-working space available is leaping ahead. In a flexible world of work with a growing number of small digital companies and start-up entrepreneurs, demand for office space that can be rented flexibly is rising. However, demand is subject to major cyclical fluctuations and there are almost no barriers to entry, which places a question mark over excess returns in the long term.

Self-storage

Drivers: Globalization, individualization, urbanization

Demand for guarded storage units of varying sizes rises with the level of urbanization. Small urban apartments tend to have little closet space. Temporary storage facilities are also needed when people go abroad or when inheritances are being divided up. Customer willingness to pay is limited though, so investment profit is driven by low land and operating costs.

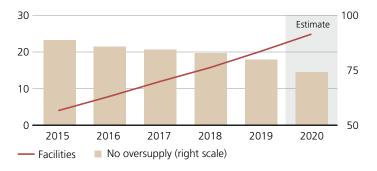
Logistics facilities

Drivers: Digitalization, globalization
Online retailing is growing at 10 percent per
year and customers expect ever faster deliveries
to either their homes or a collection point. This
is pushing up the demand for large logistics
facilities and distribution centers close to metropolitan areas. The appeal of locations can deteriorate quickly, however, if traffic congestion
increases. Logistics investors also have to deal
with (hidden) legacy contamination issues and
the need to make substantial investments.

Risky niche investments, because...

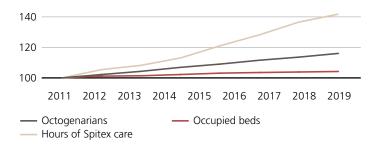
... supply is growing too quickly

Number of co-working establishments worldwide, in thousands and share of operators that are not seeing an oversupply in the local market, in percent



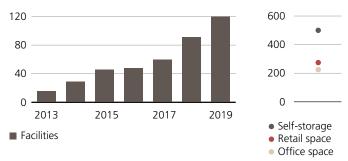
... supply is lagging expectations

Trend in the number of octogenarians in Switzerland, hours of Spitex (home) care provided and the number of beds occupied in care homes, index 2011 = 100



... revenues are (still) too high

Number of self-storage facilities in Switzerland (left-hand chart) and annual rents for commercial space, by type of use in CHF/m² (right-hand chart)



Sources: FSO, Deskmag, Fedessa, MyBox, placeB, Wüest Partner, UBS

Trends with no excess return

Katharina Hofer and Matthias Holzhey

Not every real estate trend should be seen as an invitation to invest. Even if higher returns are obtained initially, this is a temporary state of affairs. In the case of niche investments, performance depends largely on the respective real estate cycle.

When investing in real estate, using megatrends as an orientation is an attractive idea. Demand which is expected to rise steadily over a long period, or disproportionately, offers a sense of security. But real estate trends derived from megatrends and investment strategies based on these seldom offer any excess return over the long term.

Firstly, trends, especially ones where the impact is felt for a long time, can eventually become the normal state of affairs and the additional margin vanishes. Secondly, trends often provoke countertrends that (partially) reverse developments again, or they turn out to be nothing more than hype and vanish as quickly as they emerged. Thirdly, many real estate trends only affect a small part of the overall market. If too much capital is invested, the supposed strength of demand quickly turns into excess supply.

New doesn't stay new

Sustainability is a good example of how hard it is to make money by investing in real estate trends. Even back in the early 1970s, increased environmental sensitivity at the height of the oil crisis resulted in numerous technological achievements that reduced building energy consumption. Double and triple-glazed windows provided better insulation and heat pumps have knocked oil-fired heating off the top spot as the most prevalent source of energy in new buildings. But tenants' or buyers' willingness to pay more for a property with Minergie certification, for example, is only just enough to cover the higher construction costs.

There is also the risk that a trendy property becomes hard to sell. At the design stage for real estate projects the investor has no choice but to follow the latest architectural vogue – be it terraced houses in the 1950s, or cubic shapes in the early 2000s. It's best though to steer clear of major artistic experiments. An uncompromising concrete house built in 1960 will be hard to sell at the desired price decades later.

From rural exodus to a rush to the suburbs to reurbanization

The most significant post-war trend in the Swiss real estate market has probably been immigration. This, along with the many births in the babyboomer generation, has seen the country's population double since 1945. At the peak of the immigration wave in 1961, about 100,000 people needed a new home within a year. Cities in particular faced a huge trend towards urbanization at that time.

But anyone who thought that made urban real estate a sure thing was proven wrong. Land prices did indeed shoot up, but that made residential property less affordable. As car ownership expanded, demand in the 1960s shifted towards the much cheaper conurbations. The urban populations of Basel and Bern have still not fully recovered from this counter-trend. In Zurich, the figure is getting back towards its old high.

The success of niche investments depends on the cycle

Especially when investing in niche segments like luxury real estate and retirement homes, the real estate cycle is more significant for the success of an investment than the trend component. New York luxury property, for example, was long seen as a safe investment thanks to its reputation as a superstar city and the steady rise in the number of wealthy households all over the world. But high margins enticed large numbers of developers into the market and (courtesy of skyscrapers) there were almost no limits on luxury newbuilds.

There was a great deal of construction but not enough demand. Now, according to StreetEasy, one-quarter of all apartments built in the luxury segment in New York since 2013 are empty. It was a similar picture in the USA with retirement homes. Twenty years ago there was so much

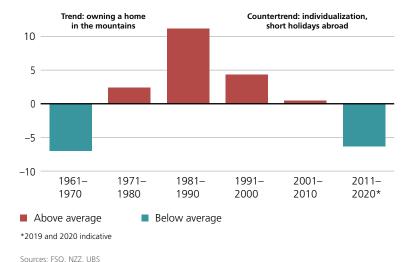
hype about the expected aging of society that investments in retirement homes shot up. As a result, growth in supply exceeded demand by almost 8 percent per year between 1998 and 2002, and many firms went bankrupt.

Normalization is inevitable

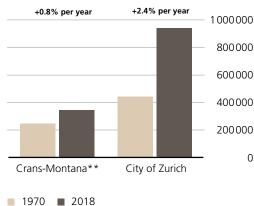
Blind trust in trends is not a recipe for success. But anyone who gets on board a new real estate trend early on has a good chance of making an excess return on their investment. However, investors can only ride the wave of success for a limited period. The more capital that pours into the market, the stiffer the competition and the faster returns normalize. Also, the longer lasting and more extensive a trend is, the harder it is to generate an excess return. Ultimately, what counts with niche investments is success in jumping off the moving train in good time – before the trend weakens or a transaction becomes loss-making.

Countertrend erodes value appreciation

Estimated construction activity in tourist communities compared with Swiss average by construction period, difference in percentage points



Price of two-room apartment (at 2019 prices), in Swiss francs and average annual change in prices, in percent; indicative based on individual supply prices



**Lower Valais had the biggest second-home construction boom of all tourist destinations

Illusion of shortage

Matthias Holzhey and Maciej Skoczek

Lower mortgage costs increase the willingness to pay more for owner-occupied homes in central areas. From the investor's perspective, selling condominiums is becoming increasingly attractive compared to renting. Hence the supply of owner-occupied apartments will probably rise again in the medium term.

On average, the prices of Swiss owner-occupied homes across all available indices rose by around two percent last year. This is the highest annual growth rate since the capital backing requirements for mortgages were tightened in 2014. While initially the rise was mainly in prices of single-family houses, last year owner-occupied apartments appreciated equally rapidly.

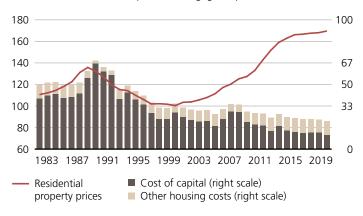
The increase in the prices of owner-occupied homes was broadly supported across the regions. Around three-quarters of the total population live in districts that saw prices rise. The prices of owner-occupied homes rose the most in the urban areas with strong economies around Lake Geneva and in the Zurich and Basel conurbations. According to Wüest Partner, transaction prices here rose by more than four percent in some cases.

Central locations gain from low interest rates

The main driver behind this trend was mortgage rates, which fell to a new record low last year. This allowed owners to enjoy (even) lower financing costs, giving a considerable cost advantage overall to owner-occupied apartments compared to rental apartments. With current purchase prices, rent and interest rates, annual accommodation expenses for new owners are about 15 percent lower than for tenants in an equivalent apartment. The gap between the two segments may widen even further if interest rates go down. If mortgage rates fell to zero, for example, the cost advantage of owning an apartment rather than renting one would climb to as much as 40 percent.

Living cheaper despite rising prices

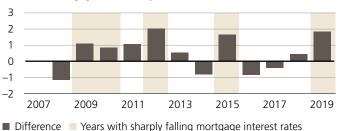
Real home prices, index 2000 = 100 and housing cost share of gross household income with 80 percent mortgage, in percent



Sources: FPRE, IAZI, SECO, SNB, Wüest Partner, UBS

Mortgage interest rates drive up prices in center

Difference in the annual rates of change of supply prices between centers (average of the 20 most populous municipalities) and average of all municipalities, in percentage points; mortgage interest rates on new loans (fixed-rate mortgages five to 10 years)



Sources: SNB, Wüest Partner, UBS



Château de Prilly | Keystone/Gaetan Bally

Right now, in prime locations the cost of capital (mortgage costs plus the opportunity cost on equity) accounts for about half of the occupancy cost of an owner-occupied home. In peripheral areas it is just one-third, and is much less significant compared to maintenance, depreciation and taxes. Owner-occupied homes in central locations have therefore seen a much more considerable gain in attractiveness over the past year than those in the peripheral regions. However, buying a home requires sufficient equity and income, so there is a question mark over further increases because prices are already high, especially in central areas.

Retirement savings to the rescue

Prices for an average apartment in a central area in German-speaking Switzerland have risen by around one-fifth since 2012. The level of salaries in the service sector has only gone up by half as much. The price increases would hardly have been possible if the affordability rules had been enforced strictly. But deviations from the rules are permitted and common: statistics from the Swiss National Bank indicate that occupancy costs assuming a 5 percent interest rate exceed one-third of household income for more than half of new mortgages. In 2012 the equivalent figure was 40 percent of new mortgages.

Even so, despite the higher prices and stretched affordability criteria the proportion of high loan-to-value ratios amongst new mortgages remained stable. To make up the missing equity, many households have used their retirement savings. Pension fund withdrawals were used for more than one new purchase in three, with the average amount being CHF 75,000 – almost half the equity needed. It is even more common to take capital from pillar 3a pension savings, as this can be offset against hard equity; the average amount withdrawn is much lower, though, at CHF 35,000. The bottom line is that mortgage regulations have not prevented price rises, they have only dampened them.

Rising ownership premium

Rising prices were helped last year by low supply of new residential properties compared to rental apartments. At the moment some 40 percent of building applications are for own use or for sale, compared to 50 percent in 2012.

Developing and selling condominiums is worthwhile if a premium can be achieved compared to selling a property to be rented out. This is the case, firstly, if the buyers anticipate rising home prices, as in expensive central locations, and secondly, if rental apartments become less attractive because there is a high risk of vacancies or rents are expected to fall. Ownership premiums rose in many regions last year for both these reasons. Depending on the price segment and the region a rental market may not exist, as with expensive single-family homes.

Supply to rise in the medium term

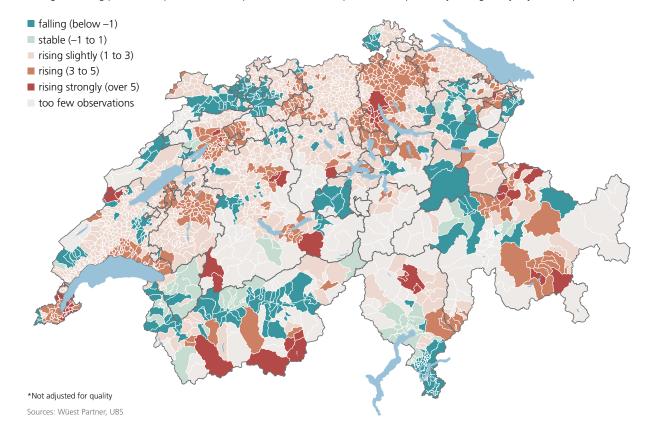
To date the focus has been on renting, even in areas where there is an ownership premium. There has been no increase in the construction of condominiums, not even in the regions with the highest selling prices. There are signs that the trend is changing, though, in regions where apartments can only be let with a large discount on the rent. The rise in owner-occupied homes on offer last year was almost 10 percent, largely due to owner-occupied apartments, and was especially strong in the cantons of Ticino,

Freiburg and Neuchâtel, where vacancy rates are moving up.

Whether this marks a turning point and a shortage of owner-occupied homes is about to become an excess, depends partly on the demand for buy-to-let properties. At the moment more than 15 percent of condominiums sold end up being rented, about 50 percent more than ten years ago. This extra demand has been a significant support for the residential property market. But the returns that can be achieved are generally lower than in the market for multi-family homes. The gross return in attractive locations on buy-to-let properties which are successfully rented out is only 2–3 percent, and just 1 percent after tax. Once you allow for the risks of renting, such investments are frequently only economic if you assume apartment

Expensive municipalities with highest price increases

Change in asking prices*, 3rd quarter 2019 compared with the same quarter of the previous year, regionally adjusted, in percent



prices will rise gradually. If confidence in the ability to achieve a stable resale value, at least in the long term, vanishes and the number of vacant apartments rises, demand for buy-to-let properties can be expected to be much lower. The result would be a rise in the number of owner-occupied homes available.

The pendulum will swing back

In the current year prices of owner-occupied homes are likely to rise by another 1 percent, driven by stronger demand for residential property in the regions with strong economies. However, a shortage of property caused by high demand for buy-to-let and excessive investor focus on rental apartments, plus the high absolute price level, bring risks. There is no sharp price correction imminent. Firstly, a renewed global economic slowdown would bring even lower interest rates and secondly, building applications show no sign of the trend changing to move away from rental apartments. In the medium term, though, as the supply of residential property grows, prices will likely come under pressure across the board.

No sign of scarcity

Increase in housing stock and vacancies between 2014 and 2019, average per year, in percent



Sources: ARE, BFS, Docu Media, UBS

The fourth pillar of retirement provision

The cost advantage of ownership compared to renting increases funds that are freely available and so can be otherwise invested. If planning starts early, the combination of residential property and retirement savings creates the ability to save taxes. Both aspects will take on increasing importance in future. Secure alternative investments are in short supply, so implicit returns like those from saving tax and accommodation costs become more significant. Also, the increasing redistribution from workers to pensioners and lower conversion rates for pension funds make it

more attractive to withdraw capital. Therefore over the next few years we can expect to see increasing amounts of capital withdrawn from retirement savings for residential property. However, when buying, thought needs to be given to affordability in retirement. If income in retirement from the first and second pillars is half as much as income was at the time of purchase, for example, the mortgage has to be reduced by half before retirement too.

Strong franc, strong prices

Katharina Hofer

Swiss luxury property is among the most expensive in the world. The modest prospects for the global economy will probably keep a lid on the highest incomes and assets in Switzerland as well. The result would be a weaker price development.

The positive trend in prices in the luxury segment¹ continued for the third year in a row. In the first three quarters of 2019 transaction prices were up at an annualized rate of 7 percent, well ahead of the 4 percent seen last year. This rate of increase is three times as high as for the Swiss owner-occupied market on average.

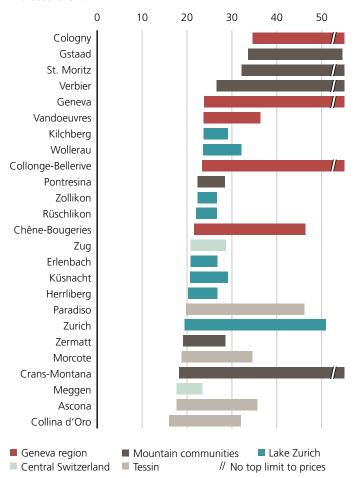
Recovery in mountain regions

On the first home market, communities near Geneva are among the most expensive locations in Switzerland. The leader of the pack is Cologny, where luxury properties were on offer for over CHF 35,000 per square meter on average between 2016 and 2018. On Lake Zurich and in central Switzerland, luxury properties were advertised from just under CHF 20,000 per square meter. Last year, transaction prices in the Geneva area and around Zurich probably increased at a rate in the high single digits, as they did the year before.

In the market for second homes, the traditional tourist communities of Gstaad and St. Moritz were up among the leaders, starting at around CHF 32,000 per square meter. On average, prices in the mountain regions rose slightly last year after staying flat in 2018. The situation was different in Ticino, where prices were down for the second year in a row. The persistently difficult market environment for property in general had an impact on the luxury market there too.

Geneva region and mountain communities most expensive

Range of prices in the luxury segment in selected municipalities, five percent of the most expensive advertised properties, average 2016–2018, in thousand CHF/m²



Sources: FPRE, UBS

¹ We concentrate on 25 communities in the Swiss luxury real estate market and examine the 5% of most expensive properties in each one

Also, the high level of prices and corresponding margins provided a false incentive to increase the development of new build projects, putting prices under further pressure.

Boom in transactions flattening out

The current boom in the luxury segment was preceded by a period of weakness caused by three main factors. Firstly, the highest incomes (the top one percent), which are regarded as the main driver of demand for luxury property, shrank between 2012 and 2015. Secondly, net assets rose less than average in 2015, reinforcing the weakness at that time. And thirdly, the abandonment of the floor on the euro-franc exchange rate in early 2015 made Swiss real estate about 20 percent more expensive in a flash for buyers whose equity was denominated in euro. This dampened demand, since most buyers of Swiss luxury properties hold a foreign passport, even if the majority of them are probably residents in the country.

Weaker prices had consequences: in 2014 and 2015 the number of transactions fell by just under one-quarter, well below the average since 2011. Anyone who wanted to sell had to be patient – although the opportunity costs were minimal, given the negative interest rates. The transaction backlog was unwound between 2016 and 2018; substantially more properties than average changed hands, and prices went up. The backlog is likely now cleared. The number of transactions last year probably declined slightly year-on-year, but still remained well above the nine-year average.

Mixed outlook

The increased perception of the franc as a safe haven last year probably boosted willingness to pay in the luxury market, which would partly explain the large number of transactions and the price increases. For foreign investors, investing in Swiss holiday homes in particular probably also helped diversify their currency risk. If the franc were to appreciate significantly once again though (not something we are expecting at present), Swiss luxury properties would rapidly become more expensive for buyers based in foreign currencies and demand would decline sharply.

From the standpoint of domestic investors, opposing forces are at work in the luxury market. On the one hand, the sustained negative interest rate environment creates an ongoing incentive to flee cash and encourages asset price inflation. As long as long-term capital value is expected to be maintained, this will support the Swiss luxury segment. On the other hand, the current weaker economic outlook will likely weigh on demand in this cyclical segment, as we are already seeing on average in global luxury real estate markets. Taking this global trend as the benchmark, the price frenzy is coming to an end this year.

Commercial

Logic comes second

Maciej Skoczek

Prices of holiday apartments have risen year-on-year. However, uncertain price prospects and high occupancy costs militate against buying a holiday home. Renting to tourists only offers limited attractions.

The highest prices per square meter for holiday apartments at the upper end of the market are in St. Moritz and Gstaad, at just under CHF 16,000. Popular destinations like Verbier, the Jungfrau Region and Zermatt also see holiday apartments on offer at prices over CHF 10,000 per square meter. The biggest price rises have been in top destinations. The year-on-year increase in Gstaad, Davos/Klosters and Samnaun was around 10 percent. Only in two out of 15 destinations where the price is over CHF 8,500 have prices corrected within a year.

By contrast, holiday homes in Disentis/Mustér, Evolène and Leukerbad are much more affordable at about 5,000 per square meter. Unlike top destinations, holiday properties in cheaper destinations fell slightly in value. The sharpest corrections over one year were just over 6 percent in Breil/Brigels and Leysin.

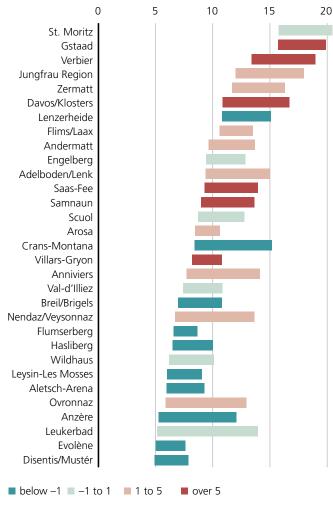
Slight price increase despite vacancies

The average across all Swiss holiday destinations in the third quarter of last year was a 1.3 percent increase over the previous year. The strong economy in Switzerland and Europe in 2017 and 2018 boosted demand for holiday apartments. As a result, practically all the losses between 2013 and 2017 were recovered, on average.

But the price recovery is on shaky foundations. Despite historically low construction activity in the mountain regions, the average vacancy rate in tourist destinations remained stubbornly at just under 3 percent, where it was the previous year - around four times as high as for Swiss owner-occupied homes as a whole. In some resorts in the Valais and Vaud, up to 10 percent

Expensive destinations with biggest price increases

Bars show the range of prices for vacation apartments in the high-priced segment in the 3^{rd} quarter of 2019, in thousand CHF/m²; colors show the price trend compared to the previous year, in percent



Sources: Wüest Partner, UBS

of the stock is vacant. Properties built in the 1960s and 1970s in particular are almost unsellable without accepting a big discount or investing a great deal in renovation.

Not an ideal investment

The idea of stability in value plays a role when buying a holiday apartment. Growth in prosperity tends to support this. However, stability is being undermined by the trends to make short trips to different destinations and not always to spend vacations at the same place, so the younger generation are less interested in taking on a holiday apartment. The risk of a further price correction looks manageable, given the low level of construction in mountain regions. But the prices of second apartments will probably underperform the overall market in the medium term

The occupancy costs of a holiday apartment have fallen in the last decade because of the low cost of capital. A holiday apartment for own use competes directly with a hotel vacation, though. Allowing for the effective annual occupancy, one week in a holiday apartment currently probably costs CHF 3,000 on average, making it generally more expensive than a one-week stay in a superior hotel. A holiday apartment for a two-person household only becomes cheaper than a hotel for stays of over two months per year.

Renting makes the sums better

The relatively high occupancy costs can be partly offset by renting out a holiday apartment. Booking platforms have made this much easier. According to the Valais Tourism Observatory, the number of properties booked online in Switzerland has risen by a factor of ten in the last five years alone. In places that are very popular with tourists, like Zermatt, Engelberg and the Jungfrau Region, or where there is a shortage of hotels, such as Evolène and Aletsch-Arena, even after deducting rental costs it is possible to generate attractive annual yields of up to 8 percent.

For all Swiss resorts as a whole, though, the expected yield is only half that – and even then only if rented out during the high season. Most owners want to use their holiday apartments themselves in the high season, though. Renting them out off-peak does not provide much yield, with occupancy of roughly 20 percent. Even these returns mean you have to be willing to hand over your own apartment to strangers.

Soft factors are what determines a purchase

Below-average price performance and high occupancy costs militate against buying a holiday apartment. From a subjective viewpoint, however, the non-monetary advantages of a holiday home often win out. A second apartment is always available for spontaneous breaks and can be used as a main residence after retirement, for example. An owner-occupied second apartment is also a way of allowing households that live in rented accommodation to realize the dream of having their own four walls. Ultimately, the love of a resort can be what drives an investment.

¹ The average Swiss holiday apartment costs about CHF 1 million. Allowing for interest payments, amortization and maintenance, annual occupancy costs are around CHF 21,000. Given seven weeks of use, weekly occupancy costs are CHF 3,000.

Commercial

The right timing

Maciej Skoczek and Matthias Holzhey

On purely cost grounds, money market financing should be favored over a long-term mortgage. But in some situations, fixed-rate mortgages still make sense. What is driving demand for fixed-rate mortgages now is not a desire for protection but a hunt for the best time to get on board.

A money market mortgage is generally the cheapest form of financing. With a fixed-rate mortgage you have a risk premium on top of the interest rate expectations over the term. At the moment, on a ten-year fixed-rate mortgage this additional amount adds up to around one-quarter of the interest cost of a money market mortgage.

This extra cost has to be weighed up against better financial predictability and protection against rising interest rates. Even if interest rates are unlikely to rise in the medium term, an unexpected increase some time in the next ten years cannot be ruled out. When a mortgage is issued, the affordability check uses a rate of up to 5 percent. According to the Swiss National Bank, however, on one-fifth of new advances to buy a home an interest rate of 3 percent would be enough to push the ongoing costs of the property above one-third of household income.

Bargain hunting among fixed-rate mortgages

Over the last ten years, on average 15 percent of all new mortgage advances have had a term of seven years or more. But rising interest rates have not been the trigger for the "flight" into fixed-term mortgages. In fact, demand for long-term mortgages leaped when interest rates fell sharply

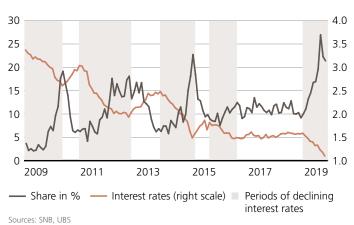
Following the considerable decline in interest rates from the end of 2018, fixed-rate mortgages as a percentage of new business rose from 15 percent to as much as 25 percent for a while. The record-low spread of under 35 basis

points between a ten-year fixed-rate mortgage and a three-month money market mortgage in 2019 meant that the additional cost of fixing the interest rate was negligible.

But once borrowers have readjusted their interest rate expectations to the lower level of the market, demand for fixed-rate mortgages can be expected to return to the former level, as in the past. Hence, it is not fear of higher interest rates that is driving the additional demand for fixed-rate mortgages, as much as the fear of missing the best timing.

Increase in long-term mortgages with a sharp drop in interest rates

Fixed mortgage share (term over seven years) of total mortgages agreed and interest on fixed mortgages with a term of more than seven years, in percent



Fixed-rate mortgages are not risk-free

Regardless of the interest rate environment, the optimal combination of long-term and short-term financing depends on the borrower's risk capacity and risk tolerance. In general, the less risk a household is able or willing to bear, the higher the percentage of long-term financing recommended.

However, a long-term mortgage brings with it an increased risk of prepayment. If an agreement has to be terminated early, in case of divorce, for instance, high costs can be incurred. There is also the danger of having to roll over a mortgage at a time when interest rates are unfavorable. This refinancing risk can be reduced by dividing borrowings into two or three long-term mortgages with different maturities.

How much fixed-rate mortgage?

The starting point is full financing by means of a money market mortgage. Depending on personal circumstances, a portion can be replaced by a long-term fixed-rate mortgage. The stated fixed-rate mortgage shares (in percentage points) are added up (see calculation example).

Risk capacity	Actual value	Fixed-rate mortgage share	Calculation example
Burden on disposable	0–30%	0	
income according to affordability guidelines	30–35%	+10	+10
	35–100%	+25	
Proportion of own capital derived from own assets for house purchase (excluding pension fund, loans)	90–100%	0	
	50–90%	+10	+10
	0–50%	+20	
Age of main earner in the household	< 40	0	
	40 to 50 years	+10	+10
	> 50 years	+30	
Amount of liquid financial reserves (liquid assets that can be used at any	> 150% of gross income	-20	
time to repay the mortgage), taking into account significant expected income and expenses (inheritance,	100-150% of gross income	-5	-5
car purchase, etc.)	0-100% of gross income	0	
Risk tolerance			
Willingness to accept interest	Yes	0	
rate fluctuations	Partly	+20*	
	No	Up to 100**	
Fixed-rate mortgage share (calculation example)			25

^{*}If the fixed-rate mortgage share is not already high (e.g. 40 percent)

Source: UBS

Calculation example

For the affordability calculation, the burden on household income is 33 percent, one-third of equity comes from early pension withdrawal, the main earner is 45 years old and liquid reserves amount to 125 percent of household gross income.

The recommended fixed-rate mortgage share is therefore:

+10 +10 +10 -5

= 25 percentage points

If the household wishes to reduce interest rate fluctuations, the fixed-rate mortgage share can be increased from the calculated 25 percent to, say, 45 percent.

 $[\]ensuremath{^{**}\text{If}}$ the risk capacity is high, additional advice is recommended

Commercial

Exceptions give false incentives

Matthias Holzhey

Political resistance against the reform of residential property taxation launched in summer 2018 is growing. The draft proposal encourages evasion and results in a shortfall in tax revenue. Once again, changing the system looks set to remain just a pipe dream.

Taxes on non-monetary income like imputed rental value are generally unpopular. In practice, setting the imputed rental value is not always an exact science, and estimating it quickly and at market encounters resistance in many communities. Distinguishing between maintenance costs that preserve value and those that enhance value also requires a great deal of administrative effort. Furthermore, the current ability to deduct debt interest from tax encourages a high loanto-value ratio and indirect debt financing of other assets. Even so, four attempts to reform or entirely abolish the taxation of imputed rental value have been rejected at referendums since 1999 alone.

The illusion of a simple solution

In principle, there is a political and legal consensus that abolishing taxation of imputed rental value also requires doing away with tax deductions for maintaining property and debt interest. Any other reform proposals have always failed.

But the problem goes deeper than that: if tax deductions are abolished, renovations and improvements become more expensive. Tradesmen might do more work without declaring, so tax revenue would fall. Also, it would no longer be possible to promote higher-level objectives like energy efficiency of buildings or conservation by means of tax deductions.

An expensive time for reform

The biggest stumbling block to reforming the taxation of property is the scale of the shortfall in tax revenue. With mortgage rates currently under 1.5 percent, abolishing the taxation of imputed rental value would create a tax hole of one to three billion francs at federal, cantonal and local level. Average mortgage rates would have to be over 3 percent for a reform to be tax revenue-neutral.

Mountain cantons in particular are nervous about losing their revenue from taxing imputed rental value and are keen to be granted an exception. Sticking to the current taxation of second apartments would mean having to leave maintenance and interest costs tax-deductible. And that creates false incentives.

A complex exception for second homes

People who own a main residence and a second home would be able to optimize their taxes. Temporarily switching main residence to the holiday home and registering the former primary address as a second home would make renovation work on the latter eligible for tax deductibility. A series of court cases to determine the actual main place of residence would be inevitable.

People who own two properties would have an incentive to transfer as much debt as possible to the holiday home to benefit from the tax deduction. This means that even with a special rule for second homes, communities with many second homes see their current income from imputed rental value taxation fall.

Other tax privileges

Owners of investment properties would have similar opportunities for optimization. They could shift the mortgage on their own home to the rental property to retain the tax deduction. The current proposal draws no distinction between mortgage borrowing for property for own use and for investment.

Potential reforms are also being discussed that would allow mortgage interest to continue to be deductible from income on movable assets such as stock dividends. This would benefit wealthy

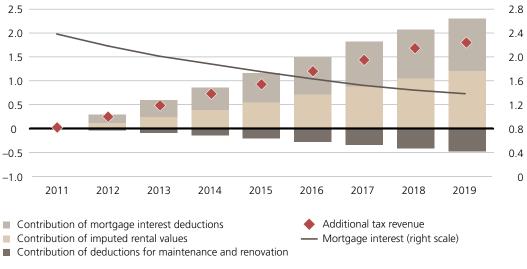
owner-occupiers, because they would still be able to deduct their debt interest. The mooted deductibility of debt interest for first time buyers would also lead to unequal treatment. What's more, the administrative effort required by the authorities running the scheme would increase as the number of permitted exceptions rises.

Every attempt at reform encounters resistance

The taxation of imputed rental value may survive despite its drawbacks, because those who benefit from it like it so much. In periods of low interest rates the tax authorities enjoy high tax revenue. When rates are high, property owners benefit from the deductibility of interest. The mountain cantons are generally keen to preserve the status quo, as alternatives like additional property taxes are even more unpopular. The current system appears to be too well balanced to be sacrificed.

Rising tax revenues thanks to falling mortgage interest rates

Estimated change in federal, cantonal and municipal tax revenue from imputed rental value taxation by components, in CHF billion and average mortgage interest paid, in percent



Sources: FOH, UBS

More cranes around city centers

Maciej Skoczek and Matthias Holzhey

Rents have fallen for the fifth year in a row, which explains the sideways trend in the prices of multi-family homes. There are signs of a clear switch in construction activity away from the periphery and towards city centers. Even so, the number of vacant apartments seems likely to rise.

Prices of multi-family homes have been treading water since 2016, even as discount rates have fallen. Any increases have largely been in prime locations, as elsewhere rising vacancies have dampened investors' willingness to pay. Just under 70,000 rental apartments or 2.8 percent of the stock were probably vacant at the end of 2019, roughly a doubling within five years.

Rents fall again

Rising vacancies are pushing down asking rents. These fell by about 1 percent last year and are now 5 percent below the peak seen in mid-2015. The correction in rents on new builds has probably been twice as great. The sharpest declines have been in regions with an oversupply of rental apartments. Asking rents are only higher than they were five years ago in regions where there are shortages, such as Zurich, Geneva, Bern and Basel.

Existing rents have been spared the negative trend for the time being and likely kept pace with inflation last year. Adjusted for inflation, though, the current year will probably see a decline, as falling asking rents spill over. Also, the reference interest rate will probably fall one-quarter of a percent over the year, giving tenants the right to a 2.9 percent rent reduction (adjusted for inflation).

Up to two months' loss of rent

The advertising period (number of days to rent) rose with the vacancy level and reached 40 days on average last year, some 10 days more than in 2014. An advertising period of this duration does not tend to increase the loss of rental income in a property portfolio, though. Rental losses only become likely once the average regional advertising period exceeds 60 days. On that measure, one apartment in two along the Jura and at least one-third of all apartments in large parts of the Valais and Ticino, central and eastern Switzerland will likely see a loss of rental income over the course of the year.

Vacancy rate weighs on profitability

Change in the number of building applications in 2019 compared with 2014 to 2016 (average) and the average annual rent loss rate, by regional rental housing vacancy rate, in percent



■ Change in building applications

Rent loss (right scale)

Sources: FSO, Docu Media, annual reports of various real estate funds and limited liability companies as well as investment foundations, UBS



These are the regions most affected by vacancies in rental apartments, and here on average each apartment will generate no income one month per year. For one apartment in six, the figure is twice as high. In the urban districts around Zurich, Zug and Geneva, by contrast, apartments are still rented out within days of being advertised. Average loss of rental income here is just ten days per year.

Too much, but in the right place

So far the excess supply has only reduced investors' interest marginally. Last year about 44,000 apartments received construction approval, over 14 percent down on the previous year, of which roughly 60 percent are probably intended for rental. But there is no sign of a clear fall in applications for construction permits. The result is an increase of around 1 percent in the stock of apartments, again well ahead of the estimated 0.7 percent growth in the population, which will cause residential vacancies to rise once more.

However, apartment construction is shifting towards regions without vacancies. In 2019 the largest number of applications for construction permits, more than 1.5 percent of the stock of apartments, was in the metropolitan areas around the economic centers of Zurich, Geneva and Lucerne. The cantons of Schaffhausen and Freiburg also remain popular with investors. On the other hand, the number of applications in those parts of the country with high vacancies like the cantons of Argau and Thurgau, the hinterland of Vaud and the lower Valais, was down sharply.

In the short term this will probably lead to a slight rise in vacancies in the major metropolitan areas. In the medium term, though, the supply of apartments close to the city center will weaken demand for those on the periphery, as long as rents are not set too high. Overall, then, vacancies will probably rise more in the periphery than in the centers and metropolitan areas.

Based on a review of professionally managed property portfolios owned by Swiss real estate funds, real estate companies and investment foundations.

Self-regulation having some effect

Mortgage rates have tumbled since the end of 2018, increasing the appetite for borrowing. Last year alone, the volume of outstanding mortgages for investment properties (from the construction, real estate and financial sectors) grew by over 7 percent. That growth rate is double what it was just four years ago. At the urging of the Swiss National Bank, the start of this year saw the launch of self-regulatory measures to calm the trend, in view of the high level of valuations. New advances for investment properties now require 25 percent equity rather than the 10 percent of the property value previously. It must also be possible to amortize the mortgage debt down to two-thirds of the collateral value within ten years rather than fifteen as before.

It is estimated that these measures affect around half of all new mortgages in the investment segment, but the impact should be limited. In the lower price range (around CHF 3 to 10 million), which is where highly geared private and commercial investors are mostly found, demand for multi-family homes is likely to fall somewhat and willingness to pay will tend to weaken. Institutional investors (pension funds, insurers, real estate funds, etc.) will likely make up at least

part of the potential shortfall in demand. In the upper price range, self-regulation can be expected to have less effect because this end of the market is dominated by institutional investors who use little debt.

Investments remain attractive

In our reference scenario, asking rents should fall by about 1 percent this year, so the purchase prices of multi-family homes will probably not increase. But with interest rates set to stay low, no major correction in prices is on the cards. Assuming population growth is at least stable, vacancies will fall by 2022 at the latest, which will stem the downward trend in rents. Even so, prices of multi-family homes will likely decline over the next five years. The total return (the sum of income and capital gains) over the next few years will therefore be driven by the income yield and amount to just under 2.5 percent per year. A loss (negative total return) over the forecast period is very unlikely.

Total returns of this magnitude are low historically. Adjusted for inflation, though, returns were even lower between 1973 and 1978 and between 1990 and 1995. Comparing the expected returns on residential property and 15-year Swiss government bonds puts the

Multi-family houses beat bonds

Trend in rental income and returns on residential properties in the reference scenario, per year, in percent



Estimating the returns on multi-family homes requires a forecast of the trends in interest rates and rents. We estimate interest rates based on current market expectations and the historic trend. We derive rental income from the trend in demand (population growth) and vacancies.

Sources: FSO, Bloomberg, MSCI, SIX, Wüest Partner, UBS

^{*}Estimate with 15-year federal bonds

situation in perspective: the income differential over a five-year period is about 4 percent, which is above the historic average.

By region, the prospects vary depending on the level of vacancies and how these are expected to change. In the metropolitan areas with relatively low and stable vacancies, for instance around Zurich and Lake Geneva, above-average total

returns of up to 4 percent per year can be expected. In Ticino, and from Olten to La-Chaux-de-Fonds, where vacancies have risen considerably, investors can expect returns of below 1.5 percent. The risk of steep price corrections (over 15 percent within the next five years) also cannot be ruled out in these regions either.

Commercial renting offers excess returns

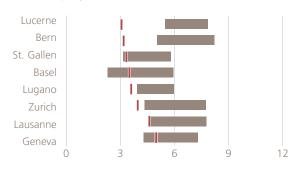
According the Valais Tourism Observatory, outside the mountain cantons and Ticino some 16,000 properties are available on booking platforms – almost ten times as many as five years ago. In the canton of Basel-Stadt the increase in apartments let to tourists is about equivalent to one-third of the growth in the stock of apartments over the past five years, and the figure for Geneva and the city of Zurich is estimated to be 15 percent. Greater use of apartments as hotels in disguise has exacerbated the shortage of residential accommodation in many cities, and politicians have got involved. For instance, the canton of Geneva has limited renting to a maximum of 90 days per year, and the city of Bern is planning to ban it entirely in the old town.

Rising regulatory restrictions on short-term rentals would bring about a considerable increase in supply on the traditional market. If all the apartments rented out short-term in the cantons of Zurich, Basel-Stadt and Geneva were advertised on the "normal" market for rental apartments, the vacancy rate in these centers would double and put downward pressure on rents.

But the short-term rental business is still booming, because on average in the major cities net income after deducting costs is three times as much as from permanent renting. In Geneva the multiple is just under 2.5 because of the highest rents in the country in the traditional market, while in Lucerne it is much higher at 4. Ultimately, whether shortterm renting is better than traditional renting depends on the occupancy rate. In Geneva, an apartment rented out on a booking platform has to be occupied for more than five months to be more profitable than permanent renting. In Lucerne the figure is only three months.

Profitable business with short-term leasing

Required occupancy rate for additional profit compared with traditional permanent leasing (2019/20) and estimated range of actual occupancy of Airbnb properties (2017/18), in months per year



Required occupancy rate

Actual occupancy rate

Sources: Airbnb, AirDNA, UBS

Too much and too expensive

Katharina Hofer and Matthias Holzhey

Retail sales are stagnating at best, despite the healthy economy. With online sales leaping ahead, demand for retail space is set to erode further. The stock of sales space is increasing though, so rents and purchase prices will come under increasing pressure.

The long awaited respite in the retail space market has yet to materialize. Stagnant retail sales last year prevented any rent increase. The number of empty shops is stable, as the official vacancy count for the cities of Zurich and Bern and the cantons of Geneva and Vaud demonstrate. However, the national rate of properties on offer is just under 2 percent, which is low by international standards according to Wüest Partner.

Sales are only growing online

In the last five years, retail sales have declined by almost 3 percent. Not even shopping centers have been spared the downtrend; their revenues were down 2 percent between 2017 and 2018. The efficiency of space in terms of sales per square meter is up slightly because space has fallen, but is still 12 percent lower than in 2010.

Online retailing, by contrast, continued its triumphant march ahead at the expense of bricks and mortar. According to GfK, online sales grew by 50 percent between 2013 and 2018, and by 10 percent per year in each of the last two years. One franc in ten of Swiss retail revenue is now spent online.

Food solid as a rock

Clothing and electronics stores have seen the greatest declines, with city center malls the worst affected. Just since 2010, the efficiency of space has fallen by about one-fifth as space has grown significantly while sales have stagnated. In city centers the number of stores being advertised is relatively high, at least away from the high street. But so far the over-supply has not affected the rents being sought.

In food retailing, online has been a niche business so far, especially for perishables. For many shopping centers food retailers are anchor tenants, because their regular footfall makes sites attractive for other stores. Expansion by the large German discounters has also supported demand for retail space in recent years. Stiffer competition between retailers will make them more cost-sensitive, though. Given their high reliance on these anchor tenants, store owners will increasingly be obliged to grant concessions on rent as leases expire.

Retail is dead, long live retail

But despite online sales and all the negative forecasts, the demand for space is not about to collapse. Online retail will grow further in this country; in the United Kingdom, for example, it currently accounts for over 20 percent of retail sales, twice as much as in Switzerland. Digital stores beat the city department store thanks to their inexhaustible range, permanent opening hours, the benefit of home delivery and, above all, lower prices. The number of Internet natives for whom technology is not a barrier is also rising.

Bricks and mortar shops do offer customers benefits online shopping cannot replicate, though. Products can be inspected and tried before buying. You also don't have to wait for delivery. Additionally, online trading is not suitable for products that have to be consumed immediately, such as food and services. Train station and airport malls, which have a large food offering, have increased their revenue and space efficiency considerably since 2010.

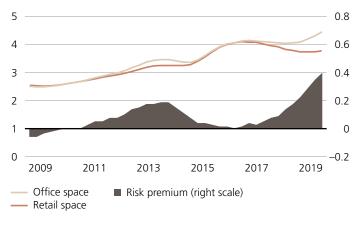
Lower income per unit of space

Even so, income per unit of space can be expected to continue to decline. If bricks and mortar shops are to keep sales steady while online sustains the same level of growth, total retail sales would have to grow at a rate of 1 percent annually – an unlikely scenario. At the same time, the stock of retail space is growing because many shops are created as part of new mixed-use office or residential developments. Shopping center space will also continue to grow, with four each exceeding 5,000 square meters due to be completed in the cantons of Geneva and Vaud by 2021.

This does not bode well for investors. Anyone buying retail space can expect a higher initial yield than for residential or office property. However, rents are still too high and a decline is inevitable. Vacancies will also likely rise sharply. Investments are mainly attractive where there is a chance of changing use in the medium or longer terms or bringing in more service providers. Well located shopping centers can be partly used for food, healthcare services or office rentals, generating higher income than using them just for stores. With the value of retail space set to fall on average, it is too early to get into the market.

Investors avoid retail space

Willingness to pay for CHF 100 net rent in prime locations for office and retail space, average for Zurich and Geneva, in CHF thousands; difference in prime yields for retail versus office space (risk premium), in percentage points



Sources: Wüest Partner, UBS

Central locations increasingly risky

Matthias Holzhey and Katharina Hofer

Lower employment growth is bringing a brief phase of rising rents and falling vacancies to and end. At present, any market imbalances are only regional. But the risks are moving towards city centers.

The strong economy two years ago drove growth in office jobs, making investments in properties in secondary locations more attractive. Thanks to lower risk premiums, valuation-based total returns on office property in 2018 were well ahead of previous years and likely relatively strong last year too. The good economic environment meant that new supply was absorbed rapidly and in some city centers the vacancy rate even went down. In the cities of German-speaking Switzerland it is fair to speak of an end to the oversupply of office space.

End of the recovery phase

But the boost to employment is threatening to come to an end. On a year-on-year basis up to the middle of last year the finance, IT and communications, corporate services and public administration sectors created over 12,000 new jobs (up 1 percent), only around half as many as a year ago.

The lower momentum will likely continue this year, causing vacancies to rise slightly again. Since the number of construction permits stagnated last year, the stock of office space will probably grow at the same speed as in previous years. Like last year, only in exceptional cases will it be possible to push through higher rents. Across Switzerland as a whole, rents will probably even weaken slightly.

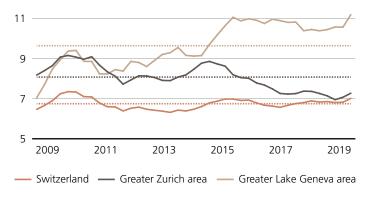
Market close to equilibrium

The pressure on rents is only very modest on a national average and the percentage of properties on offer is relatively close to the 15-year average of just under 7 percent. This indicates that the overall office market in Switzerland is not far off equilibrium. Regional vacancy rates vary widely, between 2 and 20 percent.

But a high figure is not necessarily a sign of an imbalance. For example, if employment growth is strong then a relatively high vacancy rate can be sustainable as a way of meeting the additional demand. Structural vacancies, i.e. space that cannot be rented because it does not meet market standards, hardly impact on the trend in

Market close to equilibrium

Availability rate and respective average, in percent



Sources: CSL, Wüest Partner, UBS

rents. The high vacancy rates in the Glattal and Limmattal and in the canton of Zug have to be seen in the context of the strong local economy. Conversely, the relatively low supply in the Basel and St. Gallen regions are a reaction to moderate growth in employment over the long term.

A comparison of vacancy rates over time shows that it is mainly city centers that have profited from the boom in demand in recent years. The number of office properties advertised declined last year in all major cities. In the metropolitan areas around Zurich and Geneva, however, the figures continued to rise faster than average. The picture is similar in central Switzerland, Ticino and Aargau.

Central locations benefiting from the boom in co-working

Offices in central locations were a better investment than peripheral properties last year. City locations benefited strongly from growth in employment driven by small companies, including many startups. Companies that are small and relatively new need both small, flexible space and short-term leases.

This is reflected in the booming demand for premises from shared office providers. The figures available indicate that up to one-third of new office space is rented out in this new submarket. The share of the market rented out flexibly is less than one percent of total office space, but the trend is rising. If you take foreign cities as a benchmark, there is scope for the current amount to more than quintuple. This should support demand for offices in city centers, but it comes partly at the expense of renting out conventional offices.

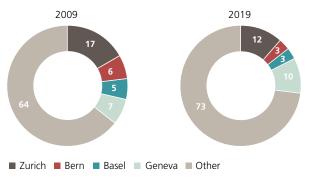
Over-optimistic valuations

This structural change in demand has negative aspects too. Growth in employment at smaller companies reacts much more strongly and quickly to economic fluctuations than it does among large companies. The co-working business is particularly cyclical and would be hit accordingly in the event of an economic crisis. In addition, a sharp downturn would also likely increase the pressure on companies to optimize space and costs once again. As in the period from 2008 to 2012, a shift in demand away from city centers towards cheaper metropolitan areas would drive down office rents in prime locations.

Given the economic weakness anticipated this year and next, the risk of impairments in city centers comes to the fore. Offices in prime locations are valued as low-risk real estate comparable to residential investment property. In the event of a recession (which is not something we are currently assuming), they would suffer larger price falls than conservatively valued properties in the peripheral regions.

Fewer empty office spaces in the cities





Sources: CSL, Wüest Partner, UBS

Commercial

Crumbling facades

Maciej Skoczek

Premiums on real estate funds rose sharply last year. Only part of these premiums can be justified on fundamentals. There is also a question mark over the sustainability of distributions, given the weaker market environment.

Last year the investment crisis and increasing uncertainty about the domestic and global economy drove investors into Swiss real estate securities. Prices of real estate funds rose by more than 17 percent and the total return was 21 percent, the highest level seen in the last 20 years. Distribution yields therefore were below 3 percent at the end of last year, putting them one percentage point below their ten-year average.

Too much priced in

On average agios (premiums to net asset value) for the largest funds at the year-end hit a new record of 35 percent, up 15 percentage points on the previous year. Whether the current level of agios is justified depends mainly on three factors: deferred liquidation taxes (mainly property profit tax), the discount rate used to value real estate portfolios and the structural and diversification benefits of investing in funds (e.g. liquidity).

Firstly, deferred liquidation taxes explain around 10 percentage points of agios. These are deducted from the values of the properties when calculating net asset value and are only owed in the event of a sale. Since only a few properties are sold each year, reported net asset values are too low. Hence the lower rates of profit tax as part of the TRAF tax reform which came into effect at the start of this year will reduce deferred liquidation taxes. As a result, net asset values will rise and agios fall by around 3 percentage points across the market on average.

Secondly, prices on the stock exchange react to trends in the transaction market more quickly than book values do. Discount rates have declined much less than financing costs in the past few years. The low interest rates the market expects to persist over the coming quarters indicate a further reduction in discount rates, and thus a further rise in net asset values. If the discount factor is cut by 10 basis points, the agios fall by 2 to 3 percentage points. The slow alignment of discount rates with financing costs probably explains a total of 10–15 percentage points of the agios. Thirdly, roughly 5 percent-

Agios again at record level

Agios* (premiums to net asset value) and total annual returns for Swiss real estate funds (SWIIT Index), in percent



*Market capitalization-weighted average of the funds: Interswiss, Schroder Immoplus, Siat, Sima, Solvalor 61, Swisscanto, Swissreal

Sources: Bloomberg, UBS

^{**}As of 30 November 2019



Kunstmuseum Basel | Keystone/Gaetan

age points of the agios can be attributed to the structural and diversification benefits of investing through a fund.

The bottom line is that on average across the market, agios of an estimated 25–30 percent can be explained in the current environment. The current average level of 35 percent therefore indicates overvaluation.

Distributions are uncertain

Although this overvaluation has already existed at the end of August 2019, prices had not corrected by the end of the year. Current distribution yields are relatively attractive compared to the zero or even negative rates on offer in the bond market, and are likely to remain so if interest rates stay low. This stimulates demand for real estate funds. Also, the implementation of the TRAF will have a positive impact on the amount of post-tax distributions.

There is a question mark over the sustainability of distributions in the medium term, however. Funds are losing an increasing share of their potential rental income, now around 5 percent per year. To keep distributions at least stable, some funds are paying out more than their

rental income (adjusted for renovation provisions). This strategy can only work if it is possible to increase rental income in the foreseeable future by improving the portfolio, for example by renovating, increasing the intensity of use or selling less profitable properties. Buying more properties at current high prices, on the other hand, risks diluting the yield.

The increase in the average rental default rate across the largest funds is likely to continue. Construction activity is too high relative to population growth, so vacancies will rise further. In addition, weaker expected economic performance will squeeze demand for commercial space. Funds with above-average exposure to properties in the periphery will be hit harder by this than those invested primarily in central locations.

Caution is appropriate

The sharp rise in the prices of Swiss real estate funds is not without risk. After the last steep increase in valuations in 2015, investors suffered losses of 10 percent within five months. When valuations are high a prolonged lean period can be expected, so a negative capital return is probable over the next few years.

Key figures of the largest listed Swiss real estate funds

Funds with a market capitalization of at least CHF 1 billion as of 30 November 2019; unless otherwise stated, all figures are in percent

Name	Region	Sector	Market share ¹	Esti- mated agio	Distribu- tion yield	Rental default		Debt financing ratio ²	Total return¹	
							` ,	idilo	1 year	3 years ³
UBS Sima	German CH	Mixed	17.8	40.5	2.5	6.6	3.2	23.0	24.1	11.2
CS Siat	German CH	Mixed	6.4	39.7	2.5	4.6	3.6	18.2	18.0	5.8
CS Livingplus	German CH	Residential	6.2	39.1	2.3	5.2	3.7	19.4	24.2	6.2
CS Green Property	German CH	Mixed	5.7	28.9	2.4	3.6	3.5	17.5	25.2	9.9
UBS Anfos	German CH	Residential	5.3	32.5	2.3	6.7	3.4	16.8	26.4	10.0
UBS Swissreal	German CH	Commercial	3.6	27.9	3.2	5.3	4.1	23.3	27.6	11.6
CS Interswiss	Diversified	Commercial	3.6	15.4	3.7	4.3	3.9	26.7	22.5	8.0
Immofonds	German CH	Residential	3.2	49.9	2.6	4.2	3.9	24.2	28.8	8.5
La Fonciere	French CH	Residential	3.2	52.7	2.6	1.4	4.3	18.4	32.2	9.7
Schroder ImmoPLUS	German CH	Commercial	3.1	31.7	2.6	3.1	4.2	17.7	19.7	6.8
Fonds Immobilier Romand	French CH	Residential	3.1	48.8	1.9	2.3	3.9	10.9	23.4	9.1
Swisscanto IFCA	Diversified	Residential	3.0	30.4	2.3	4.6	3.9	22.6	19.4	5.3
UBS Foncipars	French CH	Residential	2.9	38.1	2.1	3.8	3.5	21.2	31.5	11.7
Ed de Rothschild Swiss	Diversified	Mixed	2.7	28.1	1.7	2.8	3.8	25.2	27.4	7.6
Solvalor 61	French CH	Residential	2.6	48.4	2.3	1.6	4.3	5.8	21.5	8.7
SL REF Swiss Properties	German CH	Mixed	2.4	23.1	1.9	3.1	3.0	20.6	-	-
Immo Helvetic	Bern	Residential	2.1	28.9	2.8	8.5	4.4	25.4	24.5	3.1

¹ As of 30 November 2019 ² Last figure available ³ Annualized This table is a reference list and does not constitute a recommendation list

Sources: Bloomberg, companies, UBS, as of 30 November 2019

Focus on core competence

Stefan R. Meyer and Alexandra Bossert

Companies are increasingly counting on their strengths to achieve operational improvements. Better use of the property portfolio and prudent project development support value preservation and moderate growth. Ensuring that dividends are sustainable remains key.

After a mixed start to 2019, Swiss real estate stocks put in a very positive performance once again, with solid price gains from spring to late summer. This put them ahead of the market as a whole. In addition, as in previous years, dividends were respectable. Swiss Prime Site had the best performance, which was driven by the announcement to sell its retirement homes. Flughafen Zürich, which moved sideways, was one of the weaker stocks in the sector. The reason behind this was a new, less favorable ordinance on airport fees issued by the Federal Council.

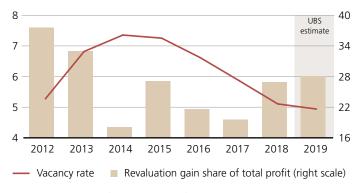
A great deal of preliminary work on new projects

The real estate market environment has become more difficult, with financing interest rates on debt likely at a low and a slowing trend in both net immigration and economic growth. This limits the potential for price rises. Even so, last year real estate companies again managed to generate around one-quarter of their profits from revaluations, in line with the average over the last twelve years. This was achieved by an ever tighter focus on optimal location for new projects and high advance lettings before starting construction, reducing the risk of vacancies and rental losses. Avoiding vacancies also counteracts price pressure on own buildings rented out in the vicinity. Although all real estate companies covered have projects planned for the next few years, some of them very extensive, the percentage of profits coming from revaluations is set to decline over the medium term.

They are currently using the persistent strong demand for investment properties to sell selected assets and realize capital gains. Operating performance is also solid, as the average vacancy ratio shows; at the nine firms covered this was over 7 percent in 2015, at least 5 percent two years ago and probably fell under the 5 percent mark last year. PSP Swiss Property achieved a significant improvement in occupancy, reducing the vacancy level from over 8 percent in 2017 to around 4 percent last year. Overall, the improvement is slowing down though and the vacancy rate this year will likely remain steady.

Declining vacancy rate and robust revaluation gains

Average of the companies examined, in percent



Sources: Company reports of Allreal, Zürich Flughafen, HIAG, Intershop, Mobimo, PSP, SPS and Zug Estates; UBS, as of 6 November 2019

Lower financing costs and dividend yields

The average cost of debt has come down from 2 percent in 2015 to just under 1.4 percent two years ago and to under 1.3 percent last year. PSP Swiss Property, HIAG and Investis have the lowest financing costs, at less than 1 percent on average. PSP Swiss Property, Allreal, Mobimo and Intershop have managed to cut their financing costs the most. The reductions were achieved thanks to shorter maturities, but these probably stabilized last year at just under four and a half years. Only modest potential remains to cut the cost of debt, not least because the average equity ratio of just over 52 percent in 2016 had fallen to just under 48 percent by the middle of last year. Real estate companies still have robust balance sheets, therefore. The most solid accounts are at PSP Swiss Property,

Flughafen Zürich and Zug Estates, which boast an equity ratio of over 50 percent.

The average dividend yield has also come down steadily from just under 5 percent in 2009 to slightly over 3 percent now. The average payout ratio remains above 80 percent, but valuations on stocks have risen. Investors are paying premiums to net asset value, sometimes very high ones.

Focus on core business

In the search for optimization potential and new opportunities, many real estate companies have brought back in house parts of the value chain they had previously outsourced, such as technical maintenance, janitor duties and services for third parties. Some have also moved into new

Key financials for the largest listed Swiss real estate stocks

Unless specified otherwise, all figures are percentages

	SPS	PSP	Flughafen Zürich	Allreal	Mobimo	Zug Estates	Intershop	Investis	HIAG
Market capitalization ¹	7,785	5,931	5,333	3,071	1,839	1,369	1,024	975	869
Vacancy rate									
2017	5.2	8.2	1.5	2.6	4.9	1.5	11.0	3.5	14.3
2018	4.8	5.0	1.2	2.0	2.9	2.9	9.8	2.9	14.4
2019 ²	<5	~4	1.2 ³	~2	4.3 ³	2.3^{3}	~9	2.1 ³	14.3³
Dividend growth									
2013–2018	1.1	1.5	28.1	3.4	1.0	11.2	1.9	-	_
2018–20214	0.4	2.1	-8.7	3.7	0.7	10.2	0.0	3.4	-2.6
Payout ratio									
Dividend policy ²	≥CHF 3.8	>70	35-45 ⁶	~1007	≥CHF 10	≤66	≥CHF 22	≥CHF 2.35 ⁹	4 ⁸
2018	109	91	89	89	70	46	41	84	144
20194	84	79	72	87	124	52	73	87	0
Average 2013–2018	98	89	66	83	79	41	67	-	113 ⁵
Dividend yield									
20204	3.7	2.8	4.0	3.5	3.6	1.5	4.1	3.1	0.0
20214	3.7	2.8	3.0	3.6	3.6	1.6	4.1	3.3	3.2
Equity ratio ³	44	53	54	47	44	52	49	46	43

¹ In million CHF as of 6 November 2019 ² According to company sources ⁶ Plus current special dividend ⁷ Of the profit excluding general contractor This table is a reference list and does not constitute a recommendation list

Sources: companies, UBS, as of 6 November 2019

¹ In million CHF as of 6 November 2019 ² According to company sources ³ As of 1H19 ⁴ Consensus forecasts as of 6 November 2019 ⁵ 2014–2018

⁸ As a percentage of net asset value ⁹ "Attractive, steady payout"

businesses outside the core areas of developing, managing and running properties – with varying degrees of success. Swiss Prime Site has become the market leader in retirement homes. Selling the operating part of this business will strengthen the balance sheet and provide financing for the extensive project pipeline. But activities outside the core business can bring above-average risks. HIAG was obliged to dispose of a majority stake in its start-up providing infrastructure for digital solutions and take a write-off.

Prefer those paying the most attractive dividends

Given the more challenging market environment and increased equity valuations, scope for price gains is limited. Distribution yields have moderated, but remain attractive and sustainable. Priority should be given to companies with robust operating performance, prudently planned development projects and sensible equity valuations. These will be able to preserve or even increase their net asset value per share – and also their dividends.

Real estate bonds: defensive securities preferred

Over recent years real estate companies have increasingly used the bond market to finance their projects and expand their portfolios. At the end of 2019, bonds issued by Swiss real estate companies with a nominal value of over CHF 7 billion were listed on the Swiss stock exchange, making up about 2 percent of the domestic segment.

The total return on the corporate sector within the SBI Swiss Bond Index (SBI Corporate Domestic) last year was just under 3.2 percent, after being flat the previous year. Given the weaker economic prospects, defensively positioned companies with conservative financials ought to be well positioned. Real estate bonds trade at a slight discount to corporate bonds with a similar rating. This is due to the narrower investor base, as institutional investors prefer to put their money into direct real estate.

A key ratio for the credit rating is the loan to value ratio (net debt as a percentage of the value of the property portfolio); this should be below 50 percent in the medium term for an investment grade rating. The lowest level of debt at the companies we follow is held by PSP Swiss Property, where it was 35.7 percent at the end of June 2019. Swiss Prime Site, Mobimo and Allreal all have ratios below 50 percent. Structural subordination also has to be taken into consideration. Once again, PSP stands out in this respect for having no financial liabilities secured on mortgages.

Correction phase under way

Matthias Holzhey, Maciej Skoczek and Katharina Hofer

The risk of a bubble has risen in all major cities examined, due to low interest rates. Globally, however, prices are stagnating on average for the first time since 2012. The divergence between house prices and local incomes makes for a gloomy outlook.

The biggest risk of a real estate bubble is currently in Munich, ahead of Toronto, Hong Kong and Amsterdam. Frankfurt and Paris are also now in the bubble danger zone. In London, by contrast, the bubble risk has declined after further price corrections, so that the city now only ranks as overvalued. Much lower valuations can be found in Vancouver, San Francisco, Stockholm, and Sydney. Bubble risk has gone down in New York and Los Angeles too, while Singapore is almost unchanged.

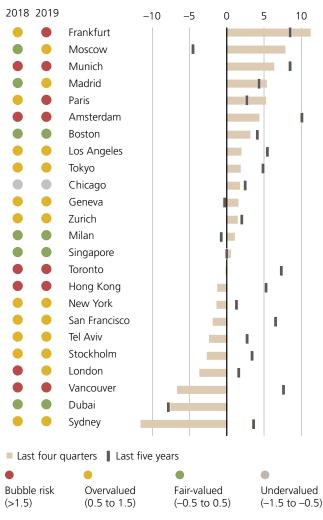
Regulation and economic weakness preventing price growth

Average inflation-adjusted price growth across the markets we cover has virtually come to a standstill over the past four quarters. Residential property is only still posting price increases in cities in the Eurozone, plus Moscow and Boston. Double-digit price rises were common in the past, but with the exception of Frankfurt have now vanished. Sharp corrections of more than 5 percent year on year have been seen in Sydney, Dubai and Vancouver. Firstly, many cities have recently brought in regulatory measures to put a stop to runaway house prices in city centers. Secondly, the slowing global economy has put a dampener on demand.

The negative trend in house prices is likely to persist despite the worldwide fall in interest rates. In many cities the level of mortgage interest rates has no longer been the obstacle to buying a home for several years now. Rather, it is the fact that many households do not meet banks' financing criteria – specifically, they lack the necessary equity. Also, amortization payments are more of a burden on the household budget that mortgage interest. What's more, the

End of the boom

Growth rates of inflation-adjusted prices, annualized in percent





economic uncertainty in a recessionary environment more than outweighs the positive contribution to growth in demand from falling interest rates.

Investors with patience have been rewarded

Anyone who bought residential property in the last 40 years, even at the peak of a local price bubble, has still made capital gains over the long term in most central locations. There are three main reasons for this. Firstly, the technology-driven economic upturn in many major centers has caused demand for homes to explode. Secondly, the national and global growth in wealthy households has generated persistent excess demand for prime locations. Thirdly, real estate stocks profited from a fall in real interest rates from the mid-1990s onwards. Where robust demand did not trigger a local construction boom, e.g. due to local restrictions, land prices and rents shot up.

Where this was not the case, home prices stood still at best over the cycle. For instance, because of poor economic performance, real prices in Chicago or Milan are at the same level as about 20 years ago. Dubai has posted the strongest population growth of all cites in the study, but the steady expansion in supply has kept real prices currently just above where they were in 2000.

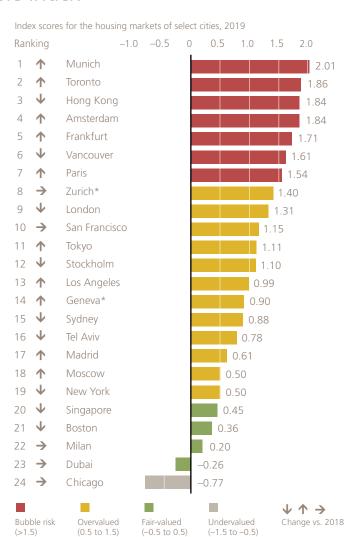
Urban apartments no guarantee of capital gains

So the general trend towards urbanization and rising demand for top locations are no guarantee of capital gains. The divergence between house prices and local incomes also makes for a gloomy outlook. Lack of affordability makes many cities less attractive over the long term and encourages jobs to shift to areas on the outskirts. In addition, it increases the likelihood of political intervention in the housing market, with negative consequences for investors.

Anyone buying a city apartment at current high valuations has to be braced for an extended lean period. Historical evidence suggests that over the long term, adjusted for inflation, capital value can be expected to at least be preserved. But what ultimately matters for capital gains is the economic performance of the region.

UBS Global Real Estate Bubble Index

Price bubbles are a recurring phenomenon in real estate markets. The term "bubble" refers to a major and sustained mis-pricing of an asset, the existence of which can only be proven after it has burst. Historical data provide patterns of excesses in real estate markets, though. Typical indicators include a divergence between prices and local incomes and rents, plus imbalances in the real economy and excessive lending and construction activity. The UBS Global Real Estate Bubble Index quantifies the risk of a real estate bubble based on these patterns.



^{*} Index altered due to data source revision

Source: UBS

No clear winners

Thomas Veraguth and Nena Winkler

A strong price correction is not currently expected in global real estate markets. The residential and logistics/industrial sectors offer stable income streams due to sustained demand. Opportunities to invest are limited, however, in the current late phase of the cycle.

High market liquidity and low interest rates all over the world have pushed up the prices for core real estate – prime properties in very good locations with secure rental income. As a result, capital gains have made up around two-thirds of the total return over the last five years, twice as much as the long-term average. High prices mean that initial yields have fallen to record lows in almost all segments. We do not expect a major correction at the moment, at most a gradual erosion in value driven by an emerging overhang of supply.

Defensive positioning

At the moment, professional real estate investors are increasingly paying more attention to quality than to higher yields. In the current environment only highly-leveraged active management strategies like valued-added (refocusing properties, reducing vacancies: high-risk) and opportunistic investments (repositioning properties that need renovation: very high-risk) are able to generate capital gains. Private real estate investors are trying to exploit valuation differences between individual properties that have repositioning potential and market prices. They are also buying buildings due for renovation that have vacancies and correspondingly high operating risks, which they then modernize to generate value.

Global real estate sectors

Office properties in central locations with modern space are in demand in all major cities, mainly from institutional buyers. A rising need for co-working space and flexible office concepts has stimulated the market, but with a share of just under 5 percent this remains a niche. According to CBRE, the average vacancy

rate in major European cities more than halved from about 11 percent at the end of 2010 to just over 5 percent at the end of last year. The expansion in new supply is modest in most cities, so peak yields on high-quality properties have hit a record low of almost 3 percent. Highly leveraged investors tend to look to secondary and tertiary locations and either renovate or build new. However, the slowing global economy is a risk for this cyclical sector.

Retail remains under pressure from changing consumer behavior and the growth in online sales. The gap between modern and obsolete buildings is widening. The disruption in retail has been clearly felt both in markets where the online share is high, like the UK, and in those with a great deal of retail space per head of population, like the USA. The capital values of retail properties are already correcting and initial yields are rising. According to MSCI, at the end of last year capital values had fallen from their peaks by 17 percent in the UK since December 2015, and by 5 percent in the USA since June 2017. Further capital losses are likely.

Residential real estate is coming under increasing regulatory pressure, because in most cities rents have risen faster than incomes thanks to increasing urbanization and lack of supply. Lower interest rates have also pushed up prices for these relatively defensive investments. Residential properties provide stable income streams, so even in a low interest rate environment investor demand remains firm.

Logistics/industrial continues to benefit from structural change. As risks fell, peak yields for logistics/industrial properties declined from just under 8 percent in 2010 to around 5 percent in 2018. According to Prologis, the size of the range and processing returns mean that online retailers need three times as much logistics space as bricks and mortar ones do. What matters when selecting a location for logistics properties are traffic connections, the level of wages, flexibility of use and barriers to entry. There is strong demand for properties close to consumers, which make it possible to deliver quickly and efficiently. Landlords often have to invest considerable amounts in fitting out and automation for logistics/industrial properties, so tenants can be tied in for longer, ensuring sustainable income streams.

Key markets in focus

In *Europe* transaction volumes are declining despite sustained strong demand owing to cheap financing and the lack of alternatives to invest in. With core real estate no longer providing an attractive return, there is an increasing need for strategies that require active management.

Paris has interesting investment opportunities associated with the "Grand Paris" major infrastructure project that will create new transport options between 2017 and 2030, opening up new sub-markets for office, retail and residential properties. In Madrid and Barcelona, where rent levels are still below the 2007 peak, the recovery in the office market offers potential for further rental growth, which should increase yields slightly. Barcelona, and to an extent also Madrid and Milan, are still laggards in online retailing and as logistics and industrial centers they benefit from large demand and supply that has to be date been relatively restricted.

In the *USA* real estate investments remain relatively attractive, especially in logistics and residential, due to lower market interest rates, which have widened the spread between rental income yields and ten-year government bonds. *Brazil*, in particular São Paulo, offers a balanced risk/return profile thanks to the improving macro-economic environment and structural reforms.

Australia, mainland China and Hong Kong offer relatively unattractive initial yields because of slower economic growth. The Hong Kong real estate sector, especially at the luxury end, is suffering from unfavorable market conditions, while a sharp fall in tourist numbers is hurting retail sales. The regional beneficiary is the relatively stable market in *Singapore*. Buying fully rented properties is expensive in *Japan* and how Tokyo and Osaka perform from here depends very much on interest rates.

Residential and logistics/industry still relatively attractive

Risk/return ratio, by market and segment, 2019

	Total	Office	Retail	Residential	Logistics/ Industry		
Europe				ششش	إسا إسا إسا		
Germany			6	然 的 然 的 然 的	إسا إسا إسا		
United Kingdom				۲ñ ۲ĥ	[hy]hy		
Switzerland			=	۲ñ Thì	[hy]hy		
Brazil				٣'n٣'n	[hy]hy		
Canada			冊	۲ñ ۲ñ	[hy]hy		
USA			#	然 的 然 的 然 的	إسا إسا إسا		
Australia				۲ñ ۲ĥ	[luy [luy		
China				۲ñ ۲ĥ	[hy]hy		
Hong Kong			#	آ رُأُ	[hy]hy		
Japan			(##) 1	۲ñ ۲ĥ	[hy]hy		
Singapore				然i 然i	[hy]hy		

Unfavorable

■ ■ Balanced

■■■ Favorable

Source: UBS

Berlin: market vs. politics

Nena Winkler and Thomas Veraguth

In many large cities the rising cost of housing is leading to government restrictions on the freedom to set rents. The forthcoming Berlin rent cap puts previous regulations in the shade, though. But it will not help to increase the amount of "affordable" housing.

The ongoing trend towards urbanization and the rising number of small households are driving up the demand for residential space in many cities. At the same time, increasingly complex regulations and higher construction costs are making it more difficult to put up new buildings to meet the growth in demand. The sustained excess demand is pushing up rents and purchase prices. Low and declining financing costs and interest from foreign investors are also fueling prices. As a result, politicians are coming under increasing pressure to put a stop to this trend.

Learning from the experiences of others

Limiting the freedom to set rents is popularly seen as a cure-all, but tends to bring unwanted consequences. San Francisco restricted rent increases at the end of the 1970s, for instance. Large numbers of rental apartments were promptly converted into condominiums, reducing supply by around 15 percent and making the accommodation shortage even worse. New buildings were not covered by the regulations and attracted increasing numbers of highincome households, with the result that rent levels in San Francisco rose despite the rent controls.

In Geneva, investments in the stock of residential property declined from the late 1970s onwards as a result of state intervention and rent controls, since it was not possible to compensate for maintenance and modernization work through higher rents, or at least not in full. The result was a gradual deterioration in the condition of rental apartments.

Out of the frying pan into the fire

Berlin is set to bring in far stricter regulation. With rents having more than doubled in ten years while average incomes only rose by one-third over the same period, politicians have responded with a new draft "Mietendeckel" bill. This would freeze rents for five years at the level of summer 2019 and also set upper limits on rents.

The proposed rent freeze would likely lead to a further shortage of supply in Berlin. Firstly, if conditions in the market are worse, then the incentives to build rental apartments vanish. Secondly, with positive inflation and income growth real housing costs will fall, which would probably further stimulate demand for city living space. As urbanization continues, this will increase the already large excess demand. It will

Key measures in the Berlin rent cap

- ▶ Rents frozen for five years at the level on 18 June 2019
- ▶ Upper limits on rents, depending on the age of the building and the standard of fittings
- Rents that exceed the set level by more than 20 percent to be capped
- ► Modernization costs can be passed on to the tenant at a rate of EUR 1 per square meter
- ▶ Fines of up to EUR 500,000 for flouting the law
- ▶ Does not apply to housing built with public subsidies or new buildings (ready for occupation after 1 January 2014)

become more attractive for existing tenants to stay in their apartments, so those looking for a place to live will be faced with a market that has dried up. This would most likely hurt financially weak home seekers the hardest. In addition, the complexity of the Berlin rent cap will involve high administrative costs; these in turn will fall on the taxpayer.

The rent cap will turn into an investment cap

The first effects of the law were already being felt at the end of last year. Investors were sitting on their hands waiting for clarity on how precisely the measures will be structured, and as a consequence transactions in the property market came to an almost complete standstill. This is likely to continue. Even though new builds are not covered by the rent cap, investors may have doubts about the profitability of their investments, with fear of further state intervention spreading.

The effects of the Berlin rent cap will also spill over outside the city limits. New construction activity is likely to focus outside Berlin, along the main transport corridors. This is expected to drag on for years, however, as the construction sector is working at the limits of its capacity.

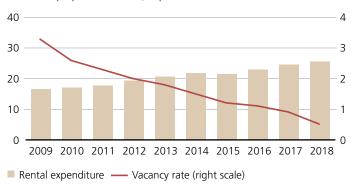
City planning, not restrictions

In recent years rents in Berlin have risen more than in other large German cities. However, average expenditure on rent in Berlin is only 25 percent of income, which is low compared to other large German cities – in expensive Munich about one-third of income goes on rent. So in a free market, growth in rents in Berlin would have plenty of upward scope, with the trend in income setting the limits.

Ultimately rent caps just tackle a symptom and are not a sustainable solution. If the aim is to create more "affordable" housing, the problem has to be tackled at the root. The long-term response to the housing shortage is new construction and greater population density in the inner city, combined with faster processing of construction permits. And all city planning has to cover the surrounding areas too.

Scope for rental growth

Rental expenditure as percentage of gross income and vacancy rate for residential properties in Berlin, in percent



Sources: JLL, Statista, Statistik Berlin Brandenburg, UBS

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MARKET OVERVIEW



REAL ESTATE PRICES



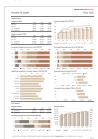
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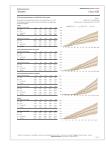
POPULATION



INCOME



TAXES



Unless specified otherwise, all figures are percentage changes year-on-year

		10 years ¹	2013	2014	2015	2016	2017	2018	2019 ²	2020 ³
Environment	Economy and income									
	Gross domestic product, real	1.8	1.9	2.5	1.3	1.7	1.9	2.8	0.8	1.1
	Gross domestic product per capita, real	0.8	0.6	1.3	0.2	0.6	1.1	2.0	0.0	0.3
	Wages, real	0.6	0.9	0.9	1.5	1.1	-0.1	-0.4	0.0	0.3
	Inflation and interest rates									
	Average annual rate of inflation	0.0	-0.2	-0.1	-1.1	-0.4	0.5	0.9	0.4	0.5
	SNB benchmark interest rate ^{4,5}	-0.3	0.0	-0.1	-0.8	-0.7	-0.7	-0.7	-0.7	-1.0
	Yield on 10-year Swiss federal bonds ⁴	0.4	1.3	0.4	0.0	-0.1	-0.1	-0.2	-0.6	-0.7
	Population and employment									
	Population	1.0	1.3	1.2	1.1	1.1	8.0	0.7	0.8	0.8
	Unemployment rate	3.0	3.2	3.0	3.2	3.3	3.2	2.6	2.5	2.5
	Employment, full-time equivalents	1.1	1.3	0.9	0.8	0.1	0.6	1.8	1.2	0.5
	Owner-occupied homes									
	Asking prices for condominiums	2.0	3.4	2.2	1.5	1.0	0.2	-1.9	-1.6	0.0
	Asking prices for single-family houses	2.6	4.7	1.3	2.3	1.3	2.4	1.1	0.5	0.5
	Growth in mortg. lending to individuals	3.7	5.1	3.5	3.4	2.8	2.6	2.6	2.8	2.5
	Rental apartments									
_	Asking rents	0.8	2.9	2.2	1.0	-1.3	-1.0	-2.1	-1.3	-1.0
ıtia	Asking rents for new build	-0.6	1.3	5.8	-1.5	-3.4	-3.3	-2.3	-1.1	-1.5
Residential	Existing rents	0.8	0.4	1.2	0.9	0.2	1.2	0.7	0.5	0.0
esi	Reference mortgage rate ⁴	2.0	2.0	2.0	1.8	1.8	1.5	1.5	1.5	1.3
~	Net cash flow yield ⁶	4.0	4.1	4.2	4.0	3.9	3.5	3.5	3.5	3.5
	Capital return ⁶	3.1	2.8	1.9	4.3	4.3	3.1	3.5	3.5	2.5
	Total return ⁶	7.2	7.1	6.2	8.4	8.3	6.7	7.1	7.0	6.0
	Vacancies and construction									
	Vacancy rate	1.3	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.8
	Building permits, relative to housing stock	1.2	1.4	1.4	1.3	1.2	1.2	1.2	1.0	1.1
	Office space									
	Asking rents	1.0	5.4	0.2	3.0	1.2	-1.0	-2.2	-0.1	-0.5
	Availability rate	6.7	6.3	6.6	6.9	6.6	6.7	6.8	7.0	7.0
	Net cash flow yield ⁶	4.2	4.3	4.4	4.2	3.9	4.0	3.7	3.5	3.5
cia	Capital return ⁶	1.7	0.8	0.0	0.8	1.0	2.0	2.7	3.0	2.0
Commercial	Total return ⁶	5.9	5.1	4.4	5.0	4.9	6.0	6.5	6.5	5.5
틸	Retail space									
ŭ	Asking rents	0.5	1.5	-3.3	-1.1	-3.2	0.3	0.1	0.9	-0.5
	Net cash flow yield ⁶	4.1	4.2	4.2	4.1	3.6	3.8	3.7	3.7	4.0
	Capital return ⁶	1.5	2.3	1.1	1.2	1.1	0.7	-0.2	0.0	-0.5
	Total return ⁶	5.6	6.5	5.3	5.3	4.8	4.5	3.5	3.7	3.5
	Real estate equities									
Listed	Total return	11.6	-6.9	13.6	9.6	11.7	10.1	-2.1	37.0	_
	Average daily trading volumes (CHF millions)	27.0	21.9	20.5	30.1	27.2	29.0	32.2	42.6	_
	Estimated premiums ⁷	16.4	8.2	5.6	12.5	17.7	25.3	22.7	29.5	_
	Volatility	9.7	10.1	8.0	13.0	11.8	8.7	8.7	7.9	_
	Real estate funds									
	Total return	6.4	-2.8	15.0	4.2	6.8	6.6	-5.3	20.7	_
	Average daily trading volumes (CHF millions)	22.8	20.8	19.3	25.4	22.6	27.9	25.4	30.6	_
	Estimated agios ⁷	24.5	17.5	19.2	28.9	27.2	28.0	22.6	28.9	_
	Volatility	8.4	8.4	7.6	12.1	9.2	8.8	8.9	9.1	_
	Benchmark									
	Total return real estate investm. foundations	5.5	5.7	5.1	5.8	5.8	5.4	4.9	4.2	_
	Total return Swiss Performance Index	9.4	24.6	13.0	2.7	-1.4	19.9	-8.6	30.6	_
	Volatility Swiss Performance Index	13.4	12.8	10.6	18.4	15.5	8.8	12.7	11.1	_
	Total return Swiss Bond Index (AAA)	2.6	-3.3	8.5	2.4	1.6	-0.1	0.3	3.5	_
	¹ Average: 2010 to 2019					s: FSO, Bloomb				Partner, UBS

Average: 2010 to 2019
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End of year
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Premiums to net asset value on real estate stocks and funds (agios)</sup>

