

Pandemic slows urbanization

Swiss Real Estate Market 2022 | March 2022



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Pandemic slows urbanization

Not only is the COVID-19 pandemic preoccupying us for longer than expected, it is probably also changing our living and working habits more strongly than might have been assumed at the start of the coronavirus crisis. Boundaries are starting to become blurred – be it home and work, digital and analog, city and country.

Residential

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Spatial shift in demand structure

There are an increasing number of indications that the COVID-19 pandemic could shape the spatial development of Switzerland in a lasting way. The blurring of the line between place of residence and place of work is stimulating a re-evaluation of individual housing situations, increasing the search radius of home-seekers. Various real estate market indicators such as property search registrations, vacancy figures, and duration of advertising periods confirm a shift of demand toward less central locations and larger apartments. In particular, the cities are losing their pulling power against a backdrop of changed living habits. Although the urban centers are continuing to benefit from international immigration, the number of domestic migrants moving out of the centers doubled already in 2020. According to the first available figures, this trend gathered further steam last year. This higher domestic migration away from the centers benefited all other spatial types; primarily the agglomerations of the large and mid-sized centers, but also the periurban communities that are situated in the catchment areas of these agglomerations but in some cases have a more rural feel. For these locations, the new worlds of working and living open up new opportunities, particularly as they can bring their cheaper price structures to bear in the competition to attract newcomers and additional contributors to the local tax base. As a result of this development, the divide between city and countryside is likely to shrink somewhat in the real estate market. So does this herald the end of the urbanization trend? We would venture our skepticism in this regard. That said, the urbanization trend should slow in the longer term, which will facilitate a welcome cooling of the market in large centers and – from an investor perspective – open up new opportunities in the suburban and rural areas.

Owner-occupied housing

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Own home becomes luxury item

Owner-occupied housing remains highly coveted. Demand appears to have permanently settled at a significantly higher level than prior to the pandemic. Medium-sized and large residential properties are particularly in vogue. In addition to low mortgage interest rates, the home working trend and negative interest rates are also fueling the purchase of residential property. Nor is there any help from the supply side at the moment: Scarcity of supply remains a feature of the market, as the new construction of owner-occupied residential property is continuing on its downward trajectory and is now only a shadow of its former self. Only in the area of single-family homes is any kind of increase in construction activity over the next few quarters likely. Supply rates, which in the case of owner-occupied housing have fallen by around a third since the end of 2019, make the scarcity of supply all too apparent. Vacancies will therefore decline in 2022 too, and price growth will continue. Strong price rises are putting the acquisition of residential property further out of reach for an increasing number of households, even though buying remains cheaper than renting. Accordingly, the proportion of residential properties affordable to an average-income household has declined from 34% to 31% of all properties advertised on websites within the space of a year. As affordability is becoming a problem in an increasing number of regions, households are focusing their gaze more strongly on peripheral regions in their quest for a home.

Second homes

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Second homes make a comeback

The COVID-19 pandemic has given the second homes market a kiss of life. After years of stagnating or declining prices, a dramatic price surge is currently evident that even surpasses the price dynamism of the owner-occupied housing market. The current price growth is being driven by the noticeable increase in demand for vacation apartments. Over the last two years, more Swiss have been holidaying in their own country than ever before, (re)discovering the beauty of Switzerland's vacation destinations. This is likely to have prompted many a Swiss to look around for a vacation apartment of their own. An additional factor is the breakthrough of home working models. The latter work very well with second homes, as it means that these vacation dwellings can be used for more than just the odd weekend or holiday period. The strong rise in demand since the beginning

of the coronavirus crisis now contrasts with a sharp fall in supply – a delayed consequence of acceptance of the Second Homes Initiative. The number of housing units in tourist areas advertised online has almost halved since 2018/2019. The absence of newbuild activity can be expected to leave its mark on the second homes market over the next few years too. An increase in the scarcity of supply is therefore a given. As we are anticipating the heightened interest in second homes to persist, we are expecting prices to continue their upward march and exceed nationwide price growth in residential property prices.

Second homes

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The Second Homes Initiative ten years on – a review and an outlook

Ten years ago, in March 2012, the Second Homes Initiative was accepted by the Swiss electorate. This turned the real estate markets of the Swiss Alpine region on their heads overnight: In municipalities where second homes accounted for more than 20% of existing housing stock, no new second homes could be built. What were the consequences? The causal effects are not easy to determine, as no one knows how things would have developed in the absence of the Second Homes Initiative. However, some light can be shone on this situation through the creation of a “synthetic control group” of municipalities. This shows that property prices in the affected municipalities developed much less dynamically than in the control municipalities from 2014 onward. Indeed, prices were some 16% lower on average over the period 2014–2019. Three causes in particular can be identified as the drivers of this relative price slump: the flood of last-minute construction projects that led to oversupply in the Alpine second homes market, the legal uncertainty until the Second Homes Act was formally passed in 2015, and the difficult economic situation due to the undeniable sales slump in the construction sector, which weighed on local demand for homes. The price divide has since narrowed, and further price rises – including for local residents – look likely due to the frozen supply of second homes. Whether or not the objectives of the Second Homes Act will be achieved is therefore highly questionable.

Rental apartments

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Rental apartment market gets its act together

Rental apartment demand has essentially shrugged off the pandemic. Thanks to persistently high net migration and a strong economic recovery, landlords can be expected to enjoy brisk demand in 2022 too. In the past, immigrants coming to Switzerland focused heavily on the large centers and their agglomerations. More recently, however, international migration streams are mirroring developments in domestic migration, i.e. immigrants are focusing less on the urban centers and spreading themselves more evenly across the country. Another contributor to the robust demand is the age group of seniors, who are remaining in their apartments for longer and delaying the move to a retirement or care home for as long as possible. On the supply side, planning activity in connection with new rental apartments has been declining for years. Subdued construction activity and brisk demand ushered in a trend reversal in the rental apartment market in 2021, which is reflected in declining vacancies and shorter marketing periods. The change in vacancy figures and in the time-on-market of advertised properties points to a clear shift of demand toward larger apartments situated in less central locations. The recovery of the rental market will persist in 2022 with a further decline in vacancies, and is likely to increasingly feed through into rental prices too.

Digital real estate

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Machine learning – valuation by algorithm

Residential property in Switzerland has been valued using algorithms for more than 20 years now. Over this period, hedonic models for the valuation of owner-occupied housing have emerged as the Swiss standard. These models have been continuously improved since they were first introduced, to the point where computer-based valuation methods are nowadays increasingly applied even to smaller investment properties. The real estate market price indices that have resulted have given further impetus to real estate market research in Switzerland, as well as noticeably improving transparency in the Swiss property market. The focal point of research is currently shifting toward machine learning algorithms. Modern machine learning methods can improve the valuation accuracy of traditional models slightly. However, this improvement comes at a cost. A major advantage of conventional hedonic models is their ease of interpretation, i.e. the effect of an explanatory variable on a property price can be easily described in these cases. This is not the case with machine learning procedures, which remain something of a “black box” – a characteristic that is anything but helpful in discussions with clients or supervisory authorities. A further drawback of such models is that they tend to exhibit greater volatility when used over several quarters compared to traditional hedonic regression models. For that reason, the current focus is on hybrid approaches that try to combine the benefits of both methods.

Office property

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Home working slows space requirements only temporarily

Switzerland's office property market cannot avoid the repercussions of the COVID-19 pandemic. Demand for office space remains hesitant, as companies are holding back from renting new premises and looking at how they can make long-term savings on office costs through home working. For this reason, the supply rate recorded a year-on-year rise in 2021, from 5.5% to 5.8%, although this increase was less than feared. Demand has held up much better in Switzerland than in foreign office property markets. However, the market for office space is likely to face another few difficult quarters due to the home working phenomenon. In the long term, by contrast, developments in the working world will lead to significantly higher demand for modern office properties. Why? Because although home working will reduce the need for office space in the medium term, the increasing digitalization of all areas of life and work will increase the proportion of office-based workers in all sectors, creating additional office space demand. This effect is likely to outweigh the space-reducing trend of home working over time, generating significantly higher demand for office space in the long term. The impact of home working therefore needs to be viewed in the context of this very different long-term picture.

Retail property

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Grace period for stationary retail set to expire

Just as it had the year before, the pandemic helped Swiss retailers in 2021 to record a sales increase of a magnitude not seen for many a year. The retail sector therefore emerges as a clear winner from the pandemic. However, unexpected sales increases have only masked the seismic structural shift in retailing, which has been given a fresh boost by the pandemic. After all, the twists and turns in the COVID-19 saga to date have played into the hands of agile online retailers. The online trade was therefore able to not just maintain its high sales level of 2020 last year, but even expand this by an estimated 11%. The prospects for bricks-and-mortar retailers are therefore poor. The future normalization of consumer behavior and shopping tourism, as well as saturation tendencies affecting consumer durables, can be expected to make a sales decline unavoidable in 2022 – for the most part at the cost of stationary retail. The slow creep of the downsizing trend in the form of numerous closures of businesses by specialist retailers is therefore likely to continue. The downsizing of retail premises is primarily coming at the cost of the non-food area, where various retailers are improving their commercial viability by reducing existing locations and investing in the online channel instead. Given the sharp growth in the supply of available space, no end to this structural change is yet in sight. The renewed wave of downsizing triggered by the pandemic is first and foremost affecting the large and mid-sized centers and their wider urban areas.

Direct real estate investments

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Pressure on yields persists

Direct Swiss real estate investments have once again proved to be crisis-resistant, and the ongoing economic recovery is additionally strengthening the base for their returns. Even the latest rises in interest rates are unlikely to scare investors, who continue to face a dearth of alternatives. Where discount rates are concerned, the trend of downward adjustments still has some way to go. Moreover, with barely any attractive investment alternatives available, we are expecting further rises in the prices of residential investment properties. For investors, the question is how real estate portfolios should be adjusted for the post-COVID-19 era, particularly as the return outlook has shifted both between and within the individual segments.

Indirect real estate investments

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Little upside left for residential real estate funds

Investors are prepared to pay a high price for the stable income streams of residential real estate funds. Given the high current premiums, there is not much potential for further valuation increases for residential real estate funds, despite an expected improvement in fundamental data. By contrast, real estate shares and commercial property funds offer better opportunities. For example, at 3.4%, the latter offer significantly higher dividend yields than residential property funds (2.1%). As an additional aspect, the premium difference between these two segments – amounting to over 20 percentage points – has now reached a level we do not believe is justified. In our view, this was a good buy signal as far back as 2017.

Ten questions answered

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Ten questions – ten answers

By way of a conclusion, we give a short and snappy answer to what we consider to be the ten most intriguing questions in respect of the Swiss real estate market.

Pandemic slows urbanization

If initial indications are correct, the COVID-19 pandemic could shape the spatial development of Switzerland in a lasting way. The consequences for the real estate market? A welcome cooling of the market in large centers and – from an investor perspective – new opportunities in the wider urban municipalities and rural areas.

Pandemic as game changer?

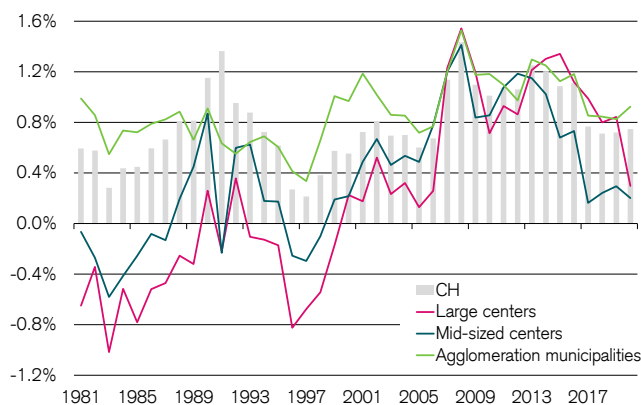
The pandemic has left a significant mark on our lives over the last two years. For example, we have modified our shopping and mobility behavior, and the distinction between living and working environments has become blurred. Sooner or later, however, coronavirus will become endemic and the numerous measures to combat this pandemic are likely to be gradually rescinded. That said, some of the fundamental changes in behavior that COVID-19 has triggered should linger on. The greater prevalence of home working, for example, is music to many an office worker's ear. Although this form of working also has its drawbacks, employers competing for the best available personnel can no longer ignore the desire for flexible working models in which a greater proportion of time is spent at the "home office".

Blurring of spatial distinction between home and work ...

A number of surveys confirm the popularity of working from home. In a survey carried out by consultancy firm Deloitte in March 2021, no less than 63% of participants stated that they would like to spend at least half of their working week based at home in the future. Just 12% were in favor of a full return to the office, a figure that declined to just 9% for the under-30s.¹ Furthermore, demographic and socio-economic developments are also shifting in favor of a greater proportion of home working, as are changes in sector structures. Due to these and other factors, researchers at the Federal Office for Spatial Development (ARE) estimate that the proportion of workers spending at least a proportion of their working week at home could rise from 28.1% in 2015 to 37.3% by 2030.² This estimate is conservative, particularly as the pandemic factor remains wholly excluded from these calculations.

Fig. 1: Population growth of large centers slumps

Annual growth in permanent residential population, 1981–2020

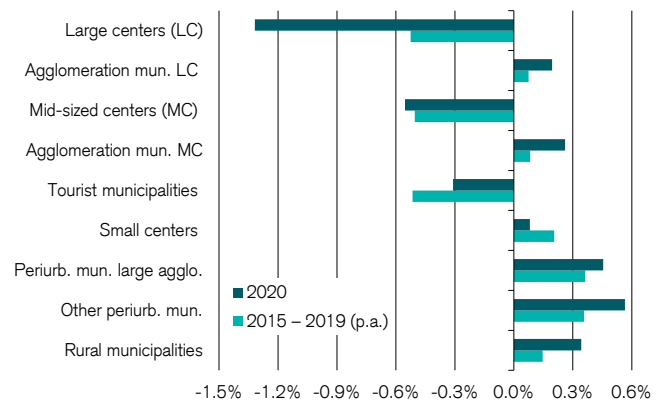


Source: Federal Statistical Office, Credit Suisse

Last data point: 2020

Fig. 2: Acceleration of domestic exodus from major centers

Net domestic migration by municipality type, as % of permanent residential population



Source: Federal Statistical Office, Credit Suisse

Last data point: 2020

... can be expected to influence spatial development in a lasting way

The blurring of the divide between home and place of work is likely to leave a lasting mark on spatial development in Switzerland, and therefore also on its real estate market. In last year's real estate market study we showed how the greater prevalence of home working was prompting many people to re-evaluate their living situation and expand their search radius when looking for a property. Various real estate market indicators – e.g. online search registrations, vacancy rates, and

¹ Deloitte (2021): Remote working survey 2021 – Where will Switzerland be working after the COVID-19 pandemic? (<https://www2.deloitte.com/content/dam/Deloitte/ch/Documents/about-deloitte/deloitte-ch-survey-results-remote-working.pdf>)

² Danalet, A., Justen, A. and Mathys, N. (2021). Working from Home in Switzerland, 2015–2050, 21st Swiss Transport Research Conference.

the time-on-market of advertisements – confirm a shift of demand toward less central locations and larger apartments (see owner-occupied housing section, pages 12 et seq., and rental apartments section, pages 26 et seq.). Based on the population statistics of the Federal Statistical Office, which are available up to 2020, the first spatial consequences of the COVID-19 pandemic can now be analyzed in detail.

Pandemic shapes structure of domestic migration

Cities lose pulling power

Thanks to a sharp fall in emigration, the Swiss residential population rose by 0.75% in the first pandemic year (2020) – slightly more than in the previous two years (Fig. 1). By contrast, there was a clear decline (from 0.8% to 0.3%) in the population dynamism of the large centers, which had previously recorded above-average growth since the reurbanization trend set in at the turn of the millennium. At 0.2%, population growth in the mid-sized centers was also slower in 2020 than in the previous year. By contrast, population growth in the suburbs of the large and mid-sized centers accelerated (+0.9%), as did the populations of tourist and rural municipalities.

More people turning their backs on large centers than ever before, ...

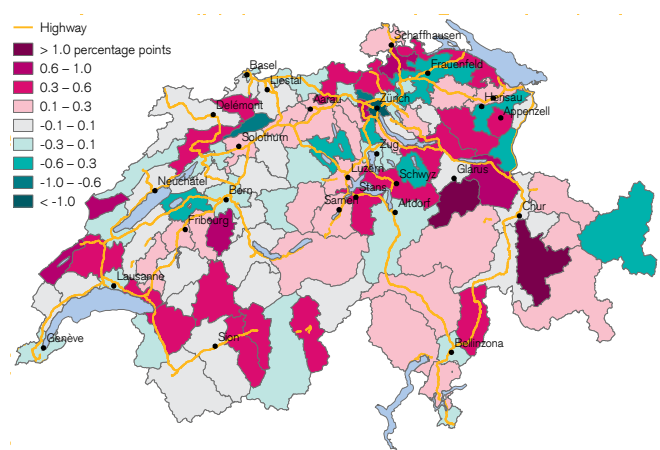
That the population of the major centers grew at all is attributable solely to foreign immigration. Immigrants have a clear preference for large centers, which accounted for 28.5% of all net immigration between 2015 and 2020 (despite being home to just 12.4% of the residential population). By contrast, the net domestic migration of the large centers has been negative for decades. In other words, the large centers are growing mainly due to immigration from abroad, while at the same time continuously losing citizens to surrounding areas or other Swiss regions. In 2020, this net domestic emigration was greater than at any point in the last 40 years. A net total of almost 14,200 people turned their backs on the five large centers, equivalent to 1.3% of the population (Fig. 2).

... with an increasing preference for the urban periphery and rural areas

The relative decline in the appeal of the large centers, which to a lesser extent is also true of small and mid-sized centers, has been to the benefit of all other types of living environment. Thanks to net migration from other regions, the biggest winners since 2020 have been the periurban municipalities that lie in the catchment areas of the urban environment but have a more rural feel, and often position themselves more as a place to live rather than work. Suburban municipalities (wider urban areas of the large and mid-sized centers) have likewise experienced strong domestic immigration, as have rural communities outside of urban areas. Net domestic migration in tourist municipalities remained negative in 2020, though not to the extent of previous years (Fig. 2).

Fig. 3: Focus of migration shifts to less central regions

Change in net domestic migration as % of population, 2020 compared to average for period 2015–2019

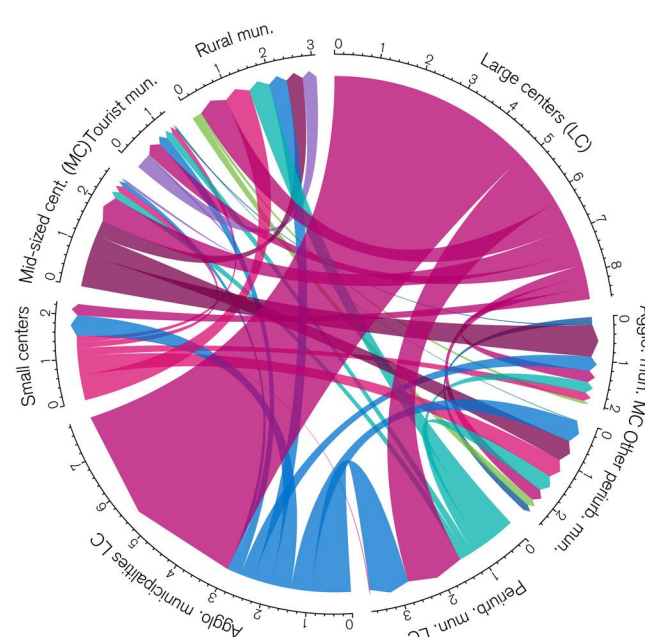


Source: Federal Statistical Office, Credit Suisse, Geostat

Last data point: 2020

Fig. 4: Urban centers lose pulling power

Change in net domestic migration between the nine municipality types, 2020 compared to average for period 2015–2019, in thousands



Source: Federal Statistical Office, Credit Suisse

Last data point: 2020

Tourist regions also an attractive place to settle

Viewed regionally, a number of regions close to urban centers – such as the Limmattal, Zurich Unterland, and the Vevey/Lavaux region – have been among the beneficiaries of the new migration pattern (Fig. 3). So too have numerous regions that have a less urban feel but nonetheless fall in the catchment area of major urban areas, such as La Vallée, Gros-de-Vaud, Laufental, Brugg-Zurzach and Zurich Weinland. But many rural and tourist regions also recorded a much higher net domestic migration rating in 2020 than in previous years. These include large parts of the Valais, the Glarner Hinterland, the Sarganserland, the Lake Constance region, and Mittelländern.

New opportunities for suburban municipalities and rural areas

Significant price divide prompts shift from center to outskirts

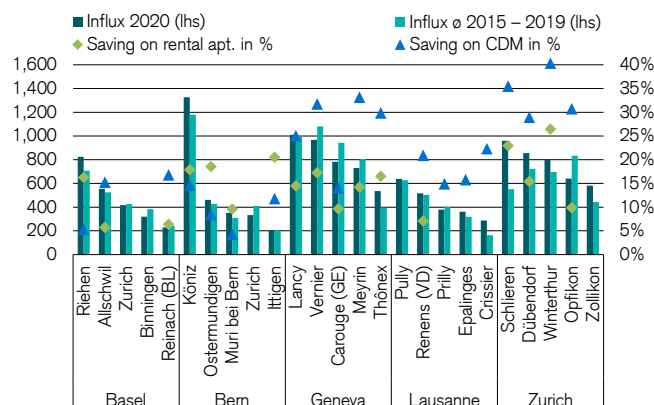
A look at the change in net migration flows between the various types of living environment also makes it very clear that the large centers have lost some of their pulling power against a backdrop of the COVID-19 pandemic (Fig. 4). Compared to all other locality types, the net domestic migration rate of the large centers deteriorated in 2020 compared to the average recorded over the period 2015–2019. The major beneficiaries of these changed migration flows have been the suburbs of these centers. Figure 5 shows the most popular target destinations for people moving out of the five large centers. The majority of these are located in the immediate vicinity of a large center or in a directly adjoining area. Due to the significant price gap, a move of just a few kilometers can result in significant savings in living costs. For example, the rental price of a new four-bedroom apartment in Schlieren, Winterthur, or Ittigen will be more than 20% lower than in Zurich or Bern. The price gap in the case of owner-occupied housing is even greater: A condominium new-build with four rooms in the Geneva suburbs of Vernier, Thônex or Meyrin will be between 30% and 33% cheaper than in the heart of the city. At 36% and 40% respectively, the price differences between Zurich and Schlieren or Winterthur are even greater. For many households, savings of this magnitude are what make it possible to acquire residential property or rent a larger apartment with the right setup for home working.

More frequent changes of abode, ...

However, particularly for a clear majority of the inhabitants of Zurich or the two large centers on Lake Geneva, owner-occupied housing is likely to remain unaffordable even outside of the agglomeration core, despite much lower price levels (cf. owner-occupied housing section, page 14). This is likely to be one reason why net migration away from the centers was to the benefit of peripheral regions in 2020, with inhabitants of suburban municipalities increasingly choosing to settle in periurban or even rural regions (Fig. 4). After all, prices are even lower here, which either makes the acquisition of residential property possible or makes an extra room and/or greater outside space for a rental apartment affordable. This kind of re-evaluation of living situations by households had the effect of increasing the number of domestic moves in 2020 by 3.8% compared to the average for the period 2015–2019 (Fig. 6). In absolute figures, this equates to almost 20,000 more households switching municipality in 2020.

Fig. 5: Outskirts tempt with lower housing prices

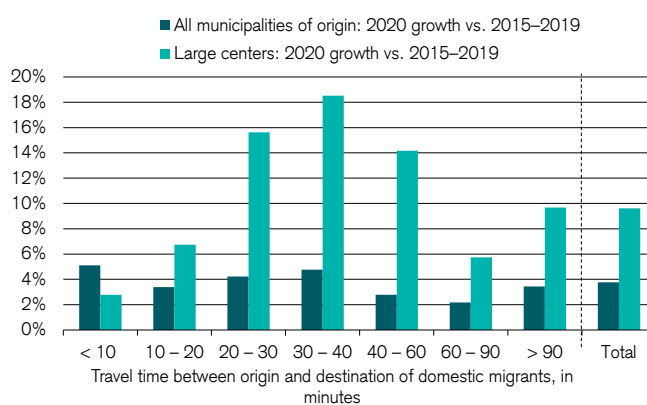
Most popular destinations for people moving out of large centers (no. of people moving)



Source: Federal Statistical Office, Wüest Partner, Credit Suisse
Last data point: Q3/2021

Fig. 6: More changes of abode – particularly away from large centers

Increase in migration movements between municipalities by travel time between origin and target, in minutes



Source: Federal Statistical Office, HERE, Credit Suisse
Last data point: 2020

... but no increase in relocation distances

The average distance (driving time) between place of origin and target destination for Swiss households changing their abode has remained very stable in recent years, namely around 27 minutes/31 kilometers. Household moves away from the large centers have increased particularly sharply (+9.6%, Fig. 6) – although again without any average increase in the distance of the move. The majority of these movers settled within 20 minutes' drive of their former home. However, 28% of households who left a large center in 2020 moved more than 30 minutes' drive away, and around half of that number moved more than 60 minutes away.

Remote working opens up new horizons

When changes of abode involve crossing cantonal borders or even large regions, explaining this phenomenon purely on the basis of cheaper accommodation/living costs is insufficient. The blurring of the spatial distinction between home and work gives households additional ways of optimizing their place of residence in line with their preferences. From academic literature on household migration behavior, for example, we know that moves to peripheral regions are more likely if a household already has a connection to this region – for example, if one household member grew up in that region.³ Even taking over the parental single-family home can suddenly become an option if the increased commuting distance to the office no longer has to be tackled on a daily basis.

Location matters on the periphery too

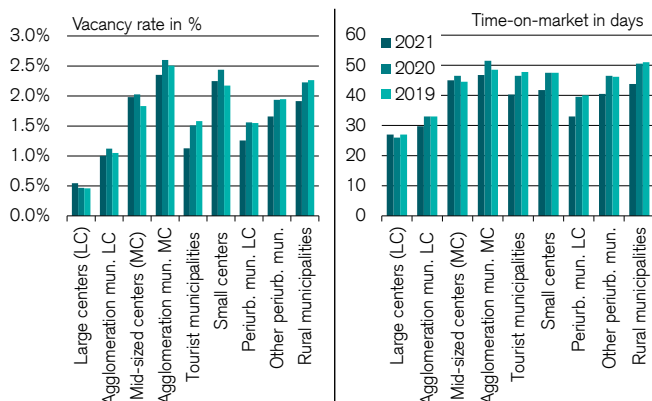
The greater possibilities open to households with regard to the choice of geographical location present new opportunities to rural and tourist regions. Many of these regions have suffered from the urbanization trend in recent years. For example, between 2010 and 2019 the population declined on average in around a half of tourist municipalities and 35% of rural municipalities. In 2020 this was the case in just 31% and 32% of these municipalities respectively. The municipalities that attracted the most new inhabitants were those that are relatively easily accessible and/or offer a modest tax burden. The 10% of rural and tourist municipalities with the highest net domestic migration figures include the likes of Egerkingen (SO), Brig-Glis (VS), Muri (AG), Stansstad (NW), Schmerikon (SG), Estavayer (FR), and Leysin (VD).

New opportunities for peripheral and tourist regions

Although regions can hardly change their accessibility and can influence the tax burden they impose only to a limited degree, peripheral and tourist regions undoubtedly have ways of increasing their appeal to domestic immigrants. Indeed, the strategic toolkit of the locational policy of peripheral regions includes targeting returning emigrants. Numerous regional initiatives – some funded by the private sector – also aim to create better parameters for remote working. These include the emergence of numerous co-working spaces in remote areas and in the Alpine region in recent years. Such initiatives can increase the appeal of these destinations to a young and mobile urban clientele, particularly workers with a passion for mountain sports.

Fig. 7: Spatial shift in housing demand

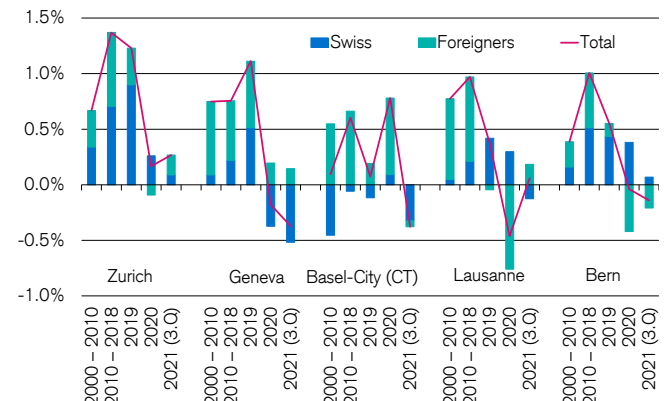
Vacancy rate (all apartments) and time-on-market (rental apartments)



Source: Federal Statistical Office, Meta-Sys, Credit Suisse.
Last data point: Q4/2021

Fig. 8: Demographic dynamism of large centers remains weak

Growth in residential population of large centers, annualized



Source: Official statistical sources, Credit Suisse
Last data point: Q3/2021

³ Vgl. Zäch, C., Schulz, T., Waltert, F. and Pütz, M. (2015): Landscape and Amenity Migration: Die Rolle von Landschaft für Wanderungsbewegungen in den ländlichen Raum der Schweiz. WSL Report 22: Federal Institute for Forest, Snow and Landscape Research (WSL), Birmensdorf.

City and countryside becoming less divided

Urban-rural divide in the real estate market narrows somewhat

The first repercussions of the changed location preferences of households as a result of the COVID-19 pandemic are already evident in the real estate market. For example, higher net migration rates and a lower level of construction activity outside of the large centers has led to a significant decline in vacancy rates and the time-on-market of property advertisements, particularly in periurban, rural, and tourist regions (Fig. 7). These consequences are discussed in detail in the sections on owner-occupied housing (pages 12 et seq.) and rental apartments (pages 26 et seq.). Overall, we have ascertained that the city-country divide in Switzerland's housing markets has narrowed somewhat as a result of the pandemic. We are therefore expecting risk premiums on the yields of properties located outside of the centers and their agglomerations to decline generally.

"Urban peak"?

The lower pulling power of Switzerland's urban centers in the first year of coronavirus as discussed above was also apparent in 2021. Figures for the first three quarters of 2021 indicate further weak demographic dynamism, with population declines in three of the five large centers (Fig. 8). In all five cities, the native Swiss population has declined further since 2020. So has the coronavirus pandemic heralded the end of the urbanization megatrend? Is the already apparent trend of moving out of the centers the precursor of a mass city exodus in due course? Questions of this kind are now cropping up outside Switzerland too – a survey of residents from 15 global cities in October 2021 highlighted an increasing desire of residents to turn their backs on urban dwelling.⁴ Around 30% of respondents were pondering such a move, a significantly greater number than in the first survey in May 2020. In our view, however, to conclude from this that the urbanization trend is over would be premature. Cities remain the national hubs of economic, social, and cultural life. As such, many people will want to be living in cities – and taking advantage of everything they offer – in the future too.

Urbanization likely to be slowed in the long term

Accordingly, urbanization can be expected to continue – albeit at a reduced tempo – thanks to immigration from abroad and a significant increase in quality of life. Although the extent to which companies will embrace home working and flexible working models in the future remains unclear, it does appear to be the case that a shift away from the commute to a less mobile working day will receive support from the political establishment too, not least because it could make a decisive contribution to reducing Switzerland's environmental footprint.⁵ The rise in commuter traffic in recent years has shown that it has not been possible to concentrate households in the large centers to the same extent as workplaces, despite the urbanization trend. Although growth through densification became something of a mantra for urban planners, its actual implementation met with considerable resistance. As a result, the supply of housing in the large centers struggled to keep up with demand. A decentralization of work is therefore perhaps the more practical alternative for reducing transport volumes and therefore also CO₂ emissions. According to the national energy statistics produced by the Federal Office of Energy, the share of total energy consumption accounted for by transport recorded a year-on-year decline in 2020 – the first year of the pandemic – from 37.6% to 32.8%. Furthermore, decentralization is a better fit with the heterogeneous residential preferences of Swiss households.

⁴ Gensler Research Institute: City pulse survey 2021.

⁵ Cf. also Schneeberger, P. and Van Wezemael, J. (2021): *Dezentral Schweiz: Wie uns Corona sesshafter macht und was das für unsere Lebensräume bedeutet*. Edition Hochparterre, Zurich.

Extra room for “home office”

Property owners typically have at least one additional room at their disposal for working from home. Accordingly, demand has barely changed with regard to the number of rooms.

Separate working room increasingly desirable

Accommodation needs have changed due to the COVID-19 pandemic: Home working has firmly established itself, and will remain part of working life going forward. As a consequence, the home has now at least partly regained its function as a workplace – home working having once been widespread in Europe prior to industrialization. At the start of the pandemic, it was often the dining room table in the kitchen or living room that served as a workplace, but a separate room is increasingly likely to be a key criterion for home seekers in the future.

Property owners typically already have an extra room

Property owners are well placed for the era of enhanced home working. In Switzerland, 76% of households in condominiums (CDM) and 86% of households in single-family homes (SFH) have at least one extra room at their disposal (Fig. 9). This emerges from an analysis of working households with two persons or more by number of additional rooms that these homes contain in addition to bedrooms and living room. By contrast, just 59% of rental apartment households have at least one additional room.

Virtually no shifts in demand regarding number of rooms

In other words, buyers were already seeking large apartments with additional rooms even prior to the pandemic. An evaluation of search engine registrations between 2019 and 2021 therefore shows almost no shifts in demand in this respect (Fig. 10). The higher proportions of registrations for small apartments compared to the average can be attributed to the more frequent changes in accommodation in the small apartment area. It should also be noted that a minimum apartment size is always entered. This is often the absolute minimum – one room more is frequently desired.

Newbuild market focused on three/four-room apartments

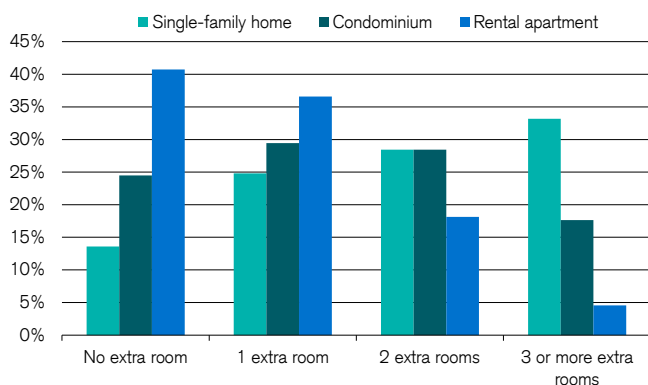
The last few years have seen a rise in the number of smaller apartments being built. The proportion of owner-occupied property units offering five and in particular six rooms has fallen noticeably since 2016 (Fig. 10). The sharp increase in the construction of 3-room apartments is probably attributable to the desire to create accommodation suitable for seniors, but also to service the demands of private investors, who are happy to buy such properties for rental purposes.

Excess demand for large newbuild properties

The shift in construction activity away from larger owner-occupied housing properties is something of a contradiction given the absence of any real change in demand. The premium put on an extra room is likely to make large apartments more attractive, and should be factored into considerations when planning new owner-occupied apartments.

Fig. 9: Majority of owners already have a room to work in

Living situation of working households with two persons or more

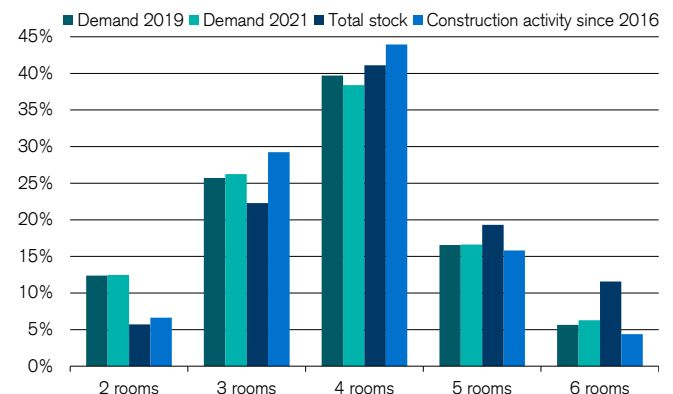


Source: Credit Suisse, Swiss Federal Statistical Office

Last data point: 2019

Fig. 10: The return of the smaller newbuild

Search registrations by room, existing stock and owner-occupied building activity



Source: Realmatch360, SFSO, Credit Suisse

Last data point: 11/2021

Own home becomes luxury item

Owner-occupied housing remains highly coveted. Although buying remains cheaper than renting, strong price rises have made the acquisition of owner-occupied housing an ever more remote dream for an increasing number of households with the passing of the years.

Unbroken longing for home ownership

The desire to own residential property remains extremely high. Between the end of 2019 and the end of 2021, the number of online search registrations rose by 16% for condominiums and by 18% for single-family homes (Fig. 11). While there was virtually no further rise in 2021 (CDM: +2%, SFH: +0%), and there was a decline in both segments in the second semester, it is notable that demand appears to have settled at a significantly higher level than prior to the pandemic.

Medium-sized CDM and large SFH most sought after

On the condominium side, interest has grown most strongly in the area of medium-sized and large properties (Fig. 11), whereas interest in small apartments has declined in relative terms. Where single-family houses are concerned, there has been a sharp increase in the search for large properties, as is clear from a 43% rise in the index since end of 2019. In the case of large SFH, there has also been virtually no decline in demand in recent months, in contrast to medium-sized and small properties.

Home working trend stimulates demand for home ownership

A key driver of the powerful urge to own residential property is the COVID-19 pandemic and its repercussions: On the one hand, the increased significance of a high-quality home has increased people's desire to possess their own four walls, while on the other the increasing proliferation of home working has allowed many households to widen their search perimeter to more affordable regions on the urban periphery and rural areas. The idea of acquiring residential property is therefore very much back in vogue.

Low mortgage rates and negative interest rates as key drivers

The principal fuel for this dream remains the very low level of mortgage interest rates, however. Although interest rates were slightly higher for new mortgages in 2021 than in the previous year, the current level of interest rates is only slightly above the historic lows. By contrast, interest costs have declined further for owners with outstanding mortgages. Actual annual mortgage interest costs declined by 4.8% in 2021, and now stand at an average CHF 4,452 per household – a record low (Fig. 12). Another key driver of demand in 2021 was the growing pressure from negative interest rates, with banks increasingly slapping minus interest rates on high cash holdings.

Owning financially more attractive than renting

Thanks to persistently low mortgage interest costs, owning remains financially attractive compared to renting. Our comparison is based on an advertised existing property with four-and-a-half rooms, a loan-to-value ratio of 80%, and a five-year fixed mortgage. In addition, we take into account maintenance and other costs such as tax aspects, opportunity costs and risks, as well as potential returns as a result of national price developments.

Fig. 11: Demand for owner-occupied property remains at high level

Demand indices for owner-occupied property; index: February 2014 = 100

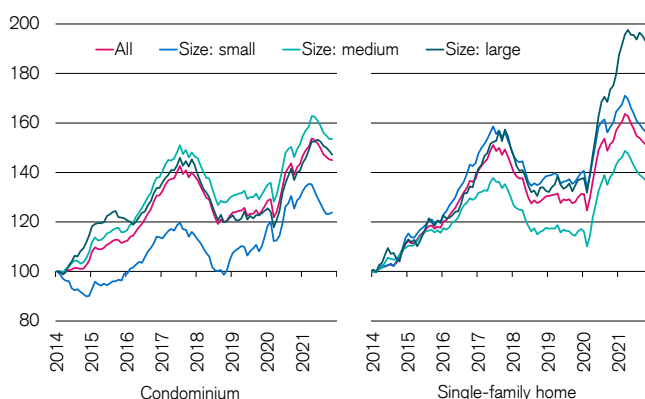
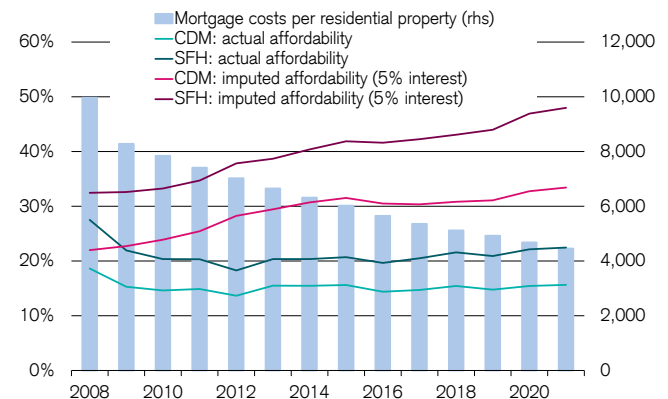


Fig. 12: Deterioration in imputed affordability

Imputed and actual burden of income in %, mortgage costs in CHF



Ownership discount still at 12.2%

As a Swiss average, the “ownership discount” currently stands at 12.2%. Of the total annual expenses involved in property ownership, interest costs now account for just 39%. Maintenance accounts for 44%, and other expenses 17%. Strong price rises have gradually reduced the ownership discount recently. At the start of 2020 it was still as high as 21.6%.

Financing guidelines remain a (too) high entry barrier

Despite the low level of actual financial expenses, the entry barriers to the acquisition of residential property are increasing. If affordability is calculated using an imputed interest rate of 5%, the imputed income burden for a newbuild owner-occupied apartment with a loan-to-value ratio of 80% now stands at 33.4% of the average household income (previous year: 32.7%); for a single-family home it is as high as 48.0% (previous year: 46.9%). Although the actual burden may be significantly lower at 15.6% (CDM) and 22.4% (SFH) respectively (Fig. 12), existing financing guidelines state that the imputed burden may not exceed one third of income, putting property ownership further out of reach for an increasing number of households with every year that passes.

Number of affordable properties shrinks further

Accordingly, the proportion of affordable advertised owner-occupied properties for a household with an average income of CHF 134,000 has fallen from 34% to 31% of all properties over the last year. The offering of affordable properties has shrunk most dramatically in regions close to a major urban center (Fig. 13). However, supply has also shrunk recently away from central locations.

Peripheral locations increasingly on radar of home seekers

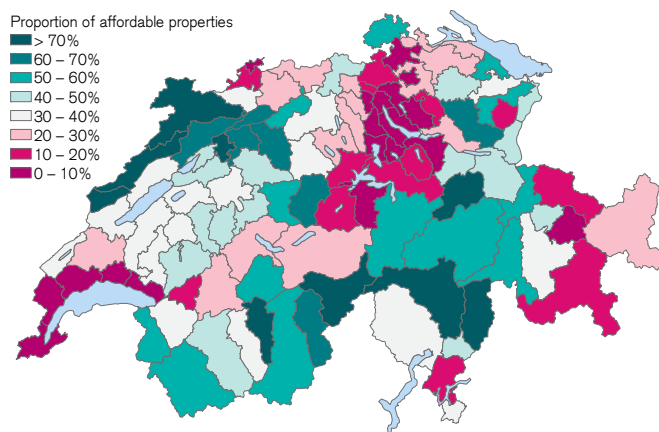
It is becoming increasingly common for home ownership to be feasible only if a household moves to a cheaper region. The rise of home working is facilitating the shift away from central locations toward more peripheral areas. For a number of years now, owner-occupied housing has been increasingly popular in the urban areas of the mid-sized centers and in rural areas. The pandemic has had the effect of strengthening this trend (Fig. 14). Whereas the number of online search registrations for condominiums in the urban areas of the large centers has declined by 2% over the last year, it has risen by 9% in the urban areas of mid-sized centers and outside of the agglomerations.

2022: no change to trend

Little will change in the development of demand in 2022. Despite slightly higher inflation, our main scenario anticipates the Swiss National Bank leaving key interest rates unchanged until at least the end of 2022. This will keep mortgage interest rates at very low levels, and hence the financing parameters for the acquisition of residential property will remain attractive. As a consequence of a further rise in property prices, the number of households being able to afford the ownership dream will decline once again. Actual demand will therefore be lower again this year than search registrations would suggest.

Fig. 13: Affordability a problem in an increasing number of regions

Proportion of affordable advertised properties (CDM and SFH) with four or more rooms for households with income of CHF 134,000 (average income)

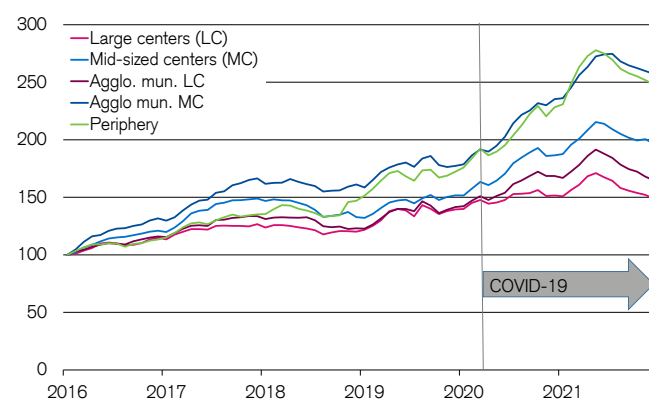


Source: Credit Suisse, Meta-Sys, Geostat

Last data point: Q4/2021

Fig. 14: Peripheral locations gaining popularity

Developments in the number of online search registrations for condominiums, index January 2016 = 100



Source: Realmatch360

Last data point: 12/2021

Not enough newbuild activity

Newbuild activity in connection with owner-occupied housing remains on a downward trajectory. We expect fewer new condominiums to be built in the coming year too. By contrast, there appears to be a trend reversal in the single-family homes segment.

Newbuild activity 40% down over last decade

Newbuild activity in the area of owner-occupied housing is only a shadow of its former self, having declined by 40% since 2011. According to our estimates, 12,500 new condominiums and 6,250 new single-family homes were put on the market last year. Whereas this equates to a 1.1% expansion of condominium stock, the equivalent figure for single-family homes is just 0.6%. For home seekers, therefore, the focus is increasingly on existing properties. As such, the latter accounted for 80% of all transactions in 2021.

Unbroken decline in construction of condominiums

2022 is likely to see an acceleration in the decline of newbuild activity in connection with condominiums. Over the last year, the number of building permits issued for newbuilds has declined by 12.7% (Fig. 15). As the volume of planning applications likewise declined by 2.4%, the downward trend is set to continue. The lower level of construction planning in the rental apartment segment has therefore so far not benefited owner-occupied housing production.

Trend reversal in construction of single-family homes

By contrast, there is evidence of a trend reversal in the construction of new single-family homes. The volume of building permit issuance here rose by 7.1% over the last year (Fig. 15). In addition, an 11.4% increase in planning application volumes suggests building activity will accelerate going forward. In absolute figures, however, the higher level of single-family home production cannot compensate for the decline in condominium construction.

No shift in weighting toward the periphery

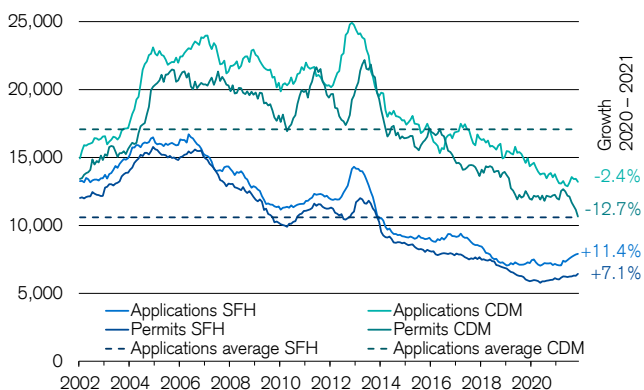
The increased focus of demand on peripheral regions is not yet reflected in newbuild activity. Although 54% of approved condominiums related to municipalities outside of the large and medium-sized centers and their agglomerations in 2021, that share is still lower than in 2019 (64%). A similar picture emerges for single-family homes: 76% of newbuilds in this segment relate to municipalities outside of the large and medium-sized centers and their agglomerations, but this figure too was previously higher at levels of up to 81%.

Greatest expansion in north-east Switzerland

We are anticipating an increase in the construction of owner-occupied housing in 41 of the 110 Swiss regions this year. The majority of new properties are being planned in individual regions of eastern Switzerland, as well as in Cantons Zurich, Lucerne, and Vaud (Fig. 16). We expect the highest construction activity to be recorded in the regions of Nyon (+2.0%) and Entlebuch (+1.8%). By contrast, in more than half of all regions the expected production level equates to less than 0.75% of existing housing stock.

Fig. 15: Planning of single-family homes on the rise once again

Planning applications and building permits in number of residential units, moving 12-month total

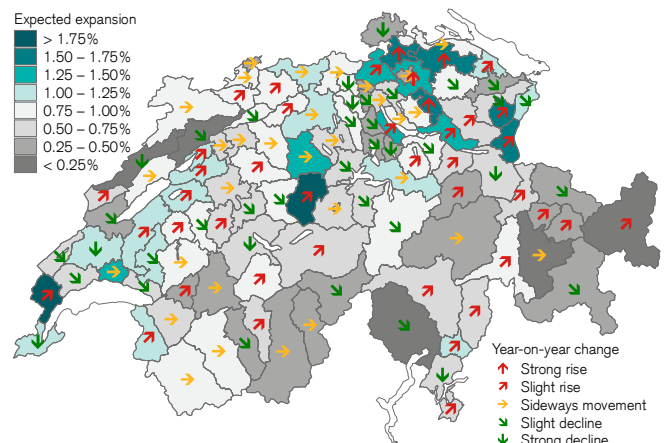


Source: Baublatt, Credit Suisse

Last data point: 11/2021

Fig. 16: Construction activity focused on Mittelland

Planned expansion of residential property 2022, as % of housing stock



Source: Baublatt, Credit Suisse, Geostat

Last data point: 10/2021

Scarcity drives up prices

High demand will contrast with low supply that is even set to decline further in 2022. As a result, we are expecting prices to keep rising and vacancies to keep falling.

Demand overhang will persist in 2022

Although Switzerland's strict financing requirements are increasingly limiting the number of households that can afford to buy property, actual demand is far in excess of the restricted supply. Given the expected development of both the demand and supply sides going forward, this constellation is unlikely to change any time soon.

Supply rate down by more than a third

The dynamism of demand has recently brought about a sharp decline in the available market supply. Since the end of 2019, the supply rate for condominiums has declined from 2.2% to 1.6%, while for single-family homes it has fallen from 2.4% to 1.4% (Fig. 17). The trend of decline was bucked in only 3 of Switzerland's 110 economic regions, and only in 17 regions is the supply rate currently above 2.0%. These include the whole of Ticino, large parts of the Valais, as well as certain parts of Cantons Vaud and Fribourg. By contrast, the supply rate in German-speaking Switzerland is lower than 1.0% almost everywhere.

Special effects exacerbating scarcity

We suspect the sharp decline in the number of properties on the market is down to owners choosing to delay the sale of their properties against a background of strongly rising prices on the one hand, and to older property owners wanting to delay their move to retirement/care homes for as long as possible due to the COVID-19 pandemic on the other. In 2020, for example, 7,000 fewer moves to retirement/care homes were recorded.

Time-on-market only slightly shorter

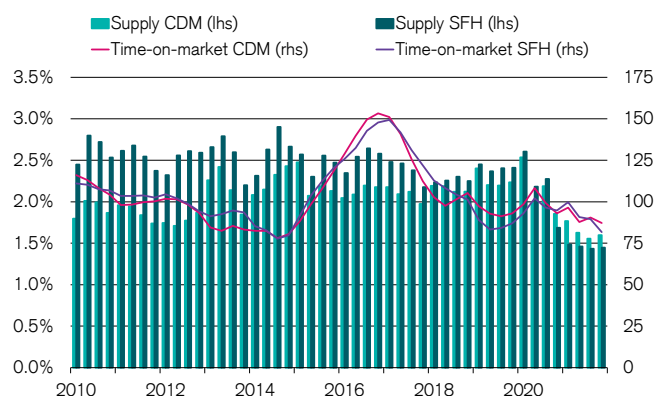
By contrast, the average time-on-market of a property has declined only slightly. Condominiums are advertised for 87 days on average, and single-family homes for 82 days. This negligible decline in the duration of advertising might look surprising against a background of strongly declining supply. However, the sale of a residential property cannot be executed just like that. As an additional factor, many sellers are not selling to the first attractive buyer, particularly as higher sale prices can be achieved if there are multiple interested parties.

Vacancies likely to decline once again in 2022

The ever-dwindling supply is reflected in falling vacancy figures. Over the last year, the vacancy rate for condominiums has declined from 0.55% to 0.48%, while for single-family homes it has fallen from 0.61% to 0.49%. In absolute figures, there were 770 fewer condominiums and 1,152 fewer single-family homes on the market than a year ago (Fig. 18). This represents the greatest decline in vacancies since data was first recorded in 2003, both in percentage and in absolute terms. Vacancies can be expected to decline once again in 2022. Given the already low level of vacancies, however, the potential for further declines of a similar magnitude is limited.

Fig. 17: Sharp decline in number of properties on the market

Existing properties, supply rate as % of existing housing stock, time-on-market in days

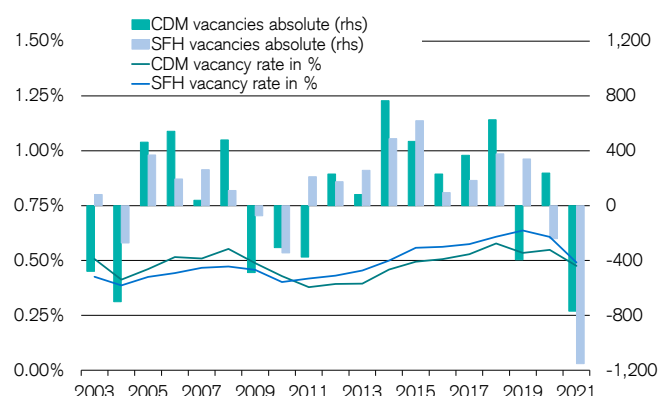


Source: Meta-Sys, Credit Suisse

Last data point: Q4/2021

Fig. 18: Significant fall in vacancies from an already low level

Vacancy rate in % (lhs) and absolute change in vacancies (rhs)



Source: Federal Statistical Office, Credit Suisse

Last data point: 06/2021

Vacancies lower across the board

Vacancies have recorded significant year-on-year declines in 54 of the 110 Swiss regions (Fig. 19). Only in six regions – Aigle, Pays d'Enhaut, Goms, Sierre, Martigny and Jura – do vacancies stand at more than 1.0%, and even here they do not exceed 1.84%. Vacancies have likewise fallen sharply in the majority of tourist regions, as new life has been breathed into the second homes market (see page 19 et seq. and page 22 et seq.).

Price rises unusually strong in 2021

Scarce supply is leading to strong price gains: Over the last year, the prices of condominiums in the medium price segment have soared by 6.7% (Fig. 20). In the case of single-family homes the rise was even stronger (8.3%). In both segments, these rises are far above the long-term average (CDM: 3.8%, SFH: 3.3%). Viewed regionally, we are now seeing growth rates of more than 2.2% across the board. This figure would probably be even higher but for strict regulatory financing requirements.

Strong price growth likely in 2022 too

The persistent demand overhang will keep prices buoyant this year too. However, given the strong growth last year and the strict regulatory regime, we are expecting price momentum to flatten off. We are expecting a rise of 5.0% for condominiums and 5.5% for single-family homes.

Bidding procedures driving price growth

As an additional factor, price growth is being driven by the growing number of bidding procedures. In a bidding procedure, a property is advertised with a minimum price, and interested parties can bid for the property in one or two rounds. In a market characterized by a demand overhang, this can have the effect of extracting the highest possible price. Up until a few years ago, bidding procedures were a relative rarity in Switzerland.

Increasing proliferation of bidding as sales tool

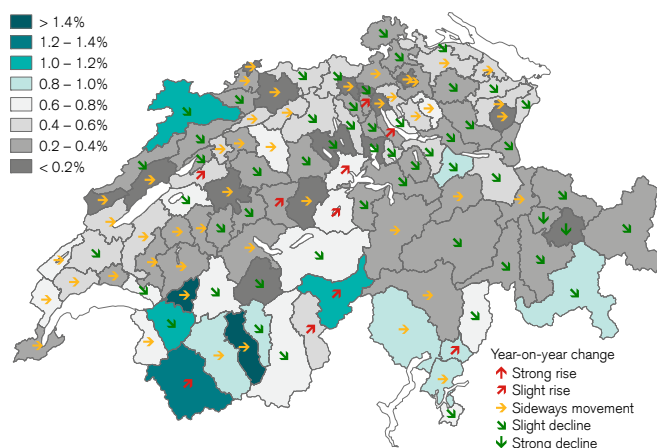
As a result of the greater demand overhang since the onset of the COVID-19 pandemic, however, this way of selling a home has become much more widespread. According to our estimates, between a tenth and a third of all existing properties (in some cases even more) are being sold this way in an increasing number of regions, and the spread of this phenomenon to the newbuild segment is also apparent. That said, the frequency of bidding procedures differs considerably from region to region and broker to broker. There are also differences evident between procedures themselves: Whereas a bidding procedure is often clearly structured and explained in the advertisement – or at the latest when interest is registered – in other cases potential buyers are only informed when they visit the property. But in some cases sellers can obtain a higher price for their property even without a formal bidding procedure, as the scarcity of supply means that interested parties will themselves offer more than the advertised price in order to secure a property.

Imbalances on the rise

Strong price rises have accentuated the imbalance between income and price development. This is likely to persist, hence pressure for additional regulatory measures is likely to increase. While additional measures would probably impact on price growth, only multiple interest rate rises by the Swiss National Bank (SNB) could be expected to noticeably cool demand and bring an end to the trend of rising prices.

Fig. 19: Vacancies very low almost everywhere

Regional vacancy rates for owner-occupied housing (CDM and SFH), as % of housing stock (owner-occupied housing)

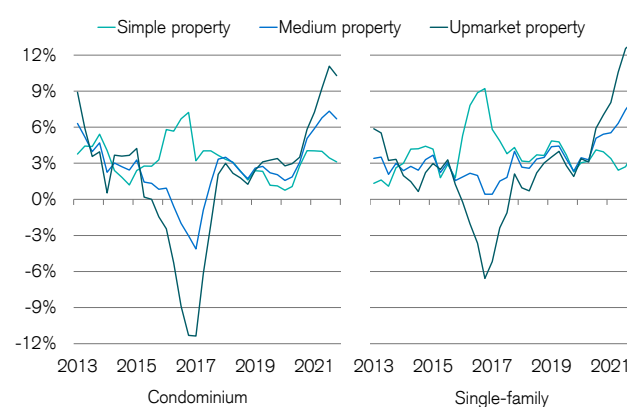


Source: Federal Statistical Office, Credit Suisse

Last data point: 06/2021

Fig. 20: Surge in prices of medium and upmarket properties

Annual growth rates by price segment

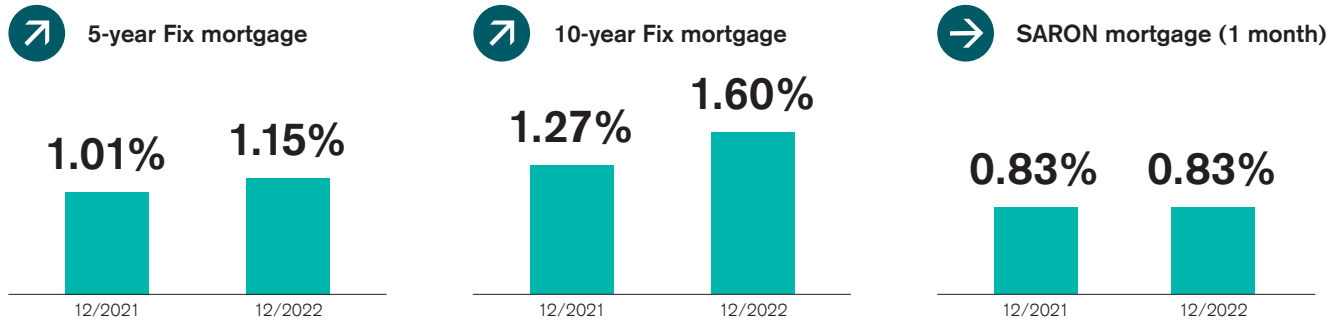


Source: Wüest Partner

Last data point: Q4/2021

Ownership high in demand

Mortgage interest rates (market average)



Demand

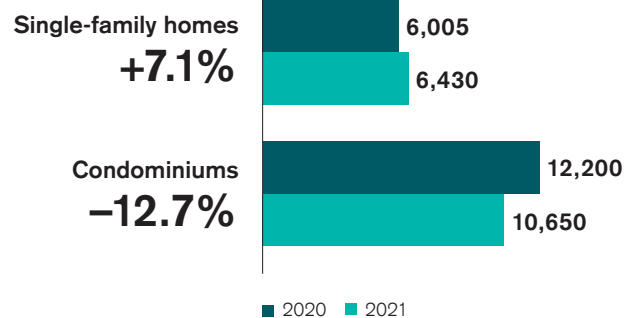


- Home working trend stimulates demand for home ownership
- Very low interest rates remain key driver
- Strict affordability requirements restrain demand

2022: Demand remains high

Supply

Building permits, in number of housing units

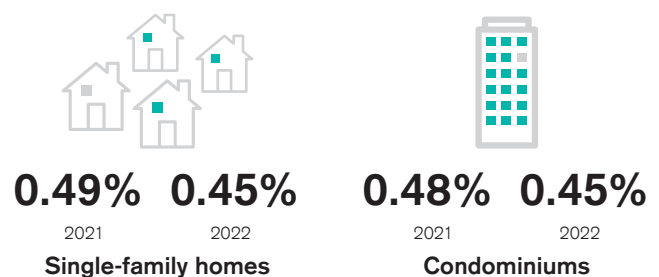


2022: Newbuild activity continues downward trajectory

Vacancies

- High demand contrasts with a supply level that is too low and dwindling even further
- Demand overhang increases

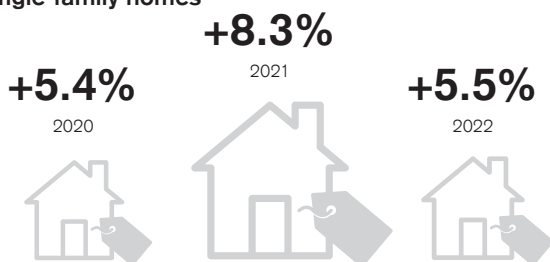
2022: Vacancies exhibit further slight decline



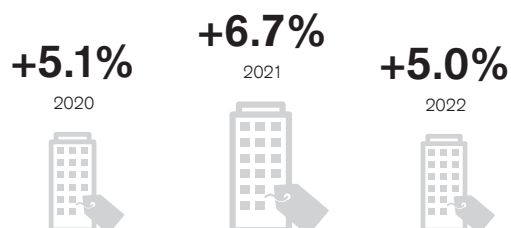
Price growth

Growth in transaction prices, in %

Single-family homes



Condominiums



2022: Price growth remains strong but less so than last year

Second homes make a comeback

The COVID-19 pandemic has given the second homes market a kiss of life. After years of stagnation or even decline, a dramatic surge in prices is now apparent. This is attributable to the strong rise in demand since the start of the coronavirus crisis, as well as a sharp fall in supply – a delayed consequence of acceptance of the Second Homes Initiative.

Second homes enjoy price surge

For a period of many years, the prices of second homes barely changed or even exhibited a decline. But the COVID-19 pandemic now appears to have changed certain key drivers of the vacation home market, with the result that the prices of second homes in Switzerland have been rising noticeably for several quarters now (Fig. 21). In the fourth quarter of 2021, the prices of condominiums (CDM) used as second homes in tourist municipalities recorded a steep year-on-year rise of 12.8%. At 18.4%, the appreciation of single-family homes (SFH) was even greater. In other words, we are currently seeing much greater price dynamism in connection with second homes than with first homes. The equivalent price rises for the latter across Switzerland were still remarkable at 6.7% (CDM) and 8.3% (SFH), but are clearly much lower than in the vacation home market.

Catch-up effect

In addition to a better market situation, which we explore in detail below, the impressive current dynamism of prices of second homes is at least partially attributable to a catch-up effect. Since the acceptance of the Second Homes Initiative by the electorate in 2012, the prices of second homes have clearly lagged behind national owner-occupied property prices. However, a long-term view of price growth from 2000 onward shows that the prices of second homes have recently made up the deficit, with the result that aggregate price growth is now at the same level as the national average for condominiums (Fig. 21).

Price boom in all observed major regions

Due to the restricted number of transactions, it is not possible to make any statement on the price development of second homes in the individual economic regions. But at least in the case of the major Alpine regions that are home to significant tourist activities, certain findings do emerge. We are currently seeing a clear increase in the prices of second homes in all the regions covered (Fig. 22). Compared to last year, condominium price growth in the fourth quarter of 2021 amounted to between 10% (Central Switzerland region) and 14.6% (Graubünden region). The corresponding figures for single-family homes lay between 13.4% (Graubünden) and 22.1% (Central Switzerland). Statements on other regions with second homes such as Cantons Ticino and Vaud are not possible.

Fig. 21: Strong increase in prices of second homes

Price indices for condominiums (CDM) and single-family homes (SFH), average property

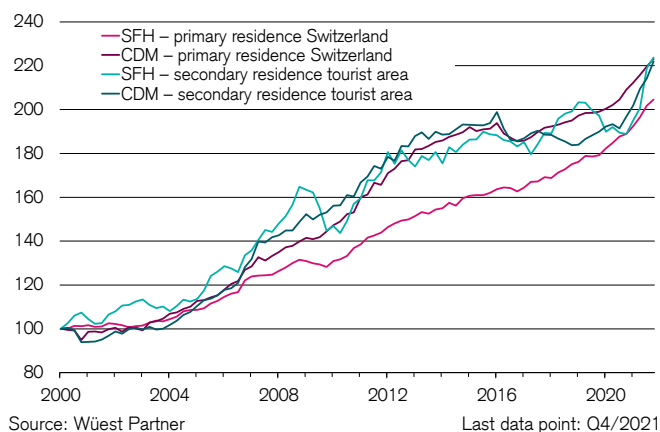
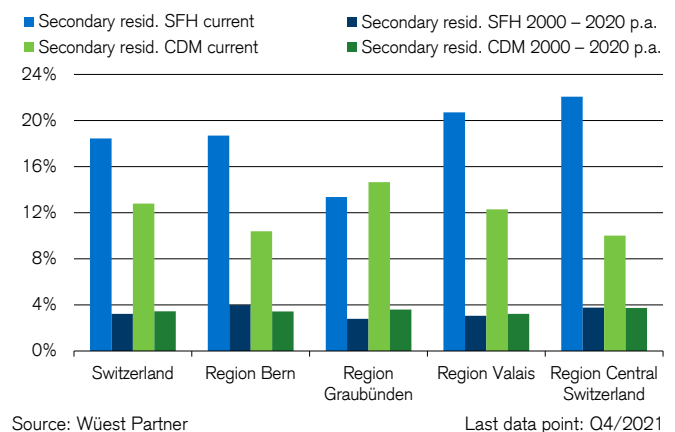


Fig. 22: Significant price reaction in all observed major regions

Annual growth rates in the major Alpine regions, average property



Demand for second homes rises strongly

The current price growth is being driven by the noticeable increase in demand for vacation apartments. An analysis of search registrations on the various online platforms throws up a number of interesting findings. While it is not possible to discern whether people are looking for first or second homes, in regions where tourism plays a significant role in the local economy the owner-occupied housing market is first and foremost determined by the second homes sub-market. Accordingly, the development of search registrations in these regions can provide valuable pointers on the development of demand for second homes.

Strong increase in search registrations in tourist regions

In the Upper Engadine, for example, searches for condominiums are 88% up on the figure recorded in January 2020 (Fig. 23). A similar picture can be found in the likes of Surselva (Laax, Flims) with an increase of 48% and in Mittelbünden (Lenzerheide) with an increase of 38%. Moreover, property searches are enjoying a similar rise in popularity in the tourist regions of Cantons Bern (e.g. Oberland-Ost: +54%) and Valais (e.g. the Visp region with Saas-Fee and Zermatt: +69%). Although we are also seeing a significant rise in search registrations for condominiums across Switzerland generally, the average national increase (+15%) is less pronounced than in the country's traditional tourist regions. Over the course of 2021, the number of search registrations for owner-occupied housing declined somewhat in many tourist regions, as well as nationally. The level of search activity remains very high, however.

COVID-19: one of several demand drivers

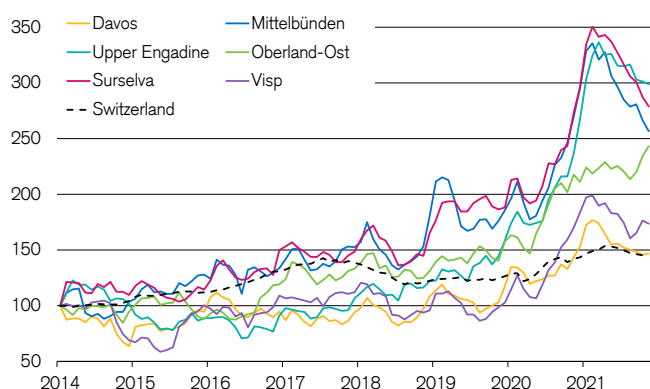
A key driver of the high demand for vacation apartments has been the COVID-19 pandemic. Over the last two years, more Swiss have been holidaying in their own country than ever before, (re)discovering the beauty of domestic vacation destinations. This is likely to have prompted many people to look around for a vacation apartment of their own. An additional factor is the breakthrough of home working models. The latter combine very well with second homes, as it means that these vacation dwellings can be used for more than just the odd weekend or a holiday period. Vacation apartments have therefore become much more appealing. What's more, now that the phase of price stagnation is at an end, second homes also offer affluent savers looking for robust assets an investment alternative that allows them to diversify their wealth and avoid the growing pressure of negative interest rates.

Supply of second homes declines sharply

Moreover, the high level of demand is now contrasting with reduced supply. In Switzerland's tourist areas, some 42% fewer condominiums and single-family homes were being advertised on the various online platforms in the fourth quarter of 2021 compared to the average recorded in 2018/2019. Both types of property exhibited similar declines. Even the supply rate, which encompasses all homes being offered for purchase or rent, has declined in tourist areas from its all-time high of 4.5% in the first quarter of 2020 to 2.5% most recently (Fig. 24). Over the same period, the national supply rate only declined from 4.4% to 3.5%. A similar picture is apparent on the vacancy front, with the vacancy rate in tourist areas having peaked in 2017 at 1.91% (Switzerland: 1.45%). Vacancies have been declining ever since, with the decline being extraordinarily great last year in particular: As per June 1, 2021, the vacancy rate in tourist areas stood at just 1.13%, far below the overall Swiss average (1.54%).

Fig. 23: Strong rise in demand in tourist regions

Demand indices for condominiums; index: 02/2014 = 100

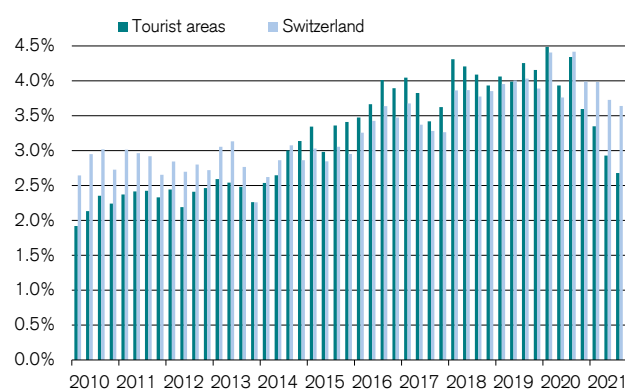


Source: Realmatch360

Last data point: 12/2021

Fig. 24: Sharp decline in supply in tourist areas

Supply rate in % of existing stock (owner-occupied and rental property)



Source: Meta-Sys, Credit Suisse

Last data point: Q4/2021

Consequences of Second Homes Initiative becoming more apparent

The increasing scarcity of supply is not just attributable to higher demand. Another important factor is the consequences of the acceptance of the Second Homes Initiative in March 2012 (cf. section “Ten years of the Second Homes Initiative” on page 22 et. seq.). As a result of the initiative and its subsequent entry into force, it is now not possible (or only possible in rare situations) to build unmanaged second homes. In other words, potential buyers of second homes have to focus almost exclusively on existing properties in the market. Up until a few years ago, the situation was very different: Following acceptance of the Second Homes Initiative, there was a last-minute construction boom in many areas as the initiative left only a small window open for the realization of second-home projects. However, the initial legal uncertainty and the strong appreciation of the Swiss franc acted as a hindrance to the absorption of the newly built second homes, resulting in a supply overhang. This in turn resulted in the supply rate almost doubling between the end of 2013 and 2018 (Fig. 24). But even before the onset of the pandemic there was evidence of a certain uptick in demand, which helped to bring down this supply overhang. COVID-19 has now accelerated this process noticeably.

Marketing once again a much less prolonged exercise

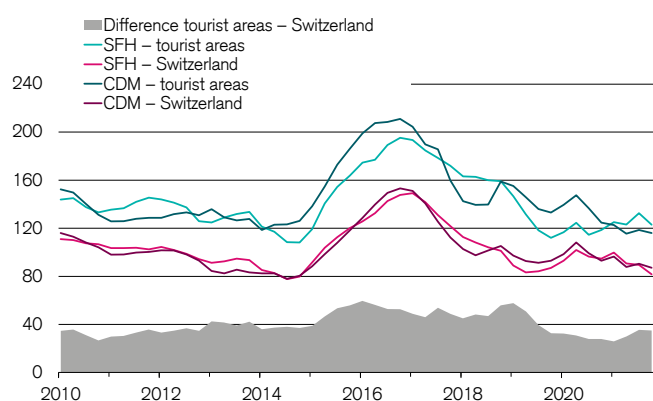
The sharp decline in supply is also reflected in the more rapid marketing of owner-occupied property in the tourist areas. In the case of condominiums, the average time-on-market has almost halved since 2016, and now stands at just 116 days (Fig. 25). A similar pattern of development is evident for single-family homes, where the average time-on-market has declined from 195 to 123 days. That said, marketing is a lengthier process in both segments compared to the national average. This is nothing new, however. The marketing process has always taken longer in tourist areas due to the many second homes there, which has to do with the considerable spatial distance between potential buyers and properties available to purchase, among other things. However, the difference in the duration of marketing is now once again back at usual long-term levels.

Prices of second homes likely to rise further

The absence of newbuild activity can be expected to leave its mark on the second homes market over the next few years too. Figure 26 shows how greatly construction activity has declined in the main second home regions. An increase in the scarcity of supply is therefore a given. Only the fact that the properties of the baby-boomer generation will increasingly come onto the market or be passed on to the next generation within the family over the next few years can be expected to alleviate this supply shortage somewhat. Given that we are expecting the heightened interest in second homes to persist, we are also expecting an increasingly arid market for second homes – at least for as long as the low interest environment persists. Price rises in these tourist regions can therefore be expected to remain relatively strong, outstripping the wider Swiss growth of residential property prices.

Fig. 25: Second homes selling more quickly again

Time-on-market, moving average over four quarters

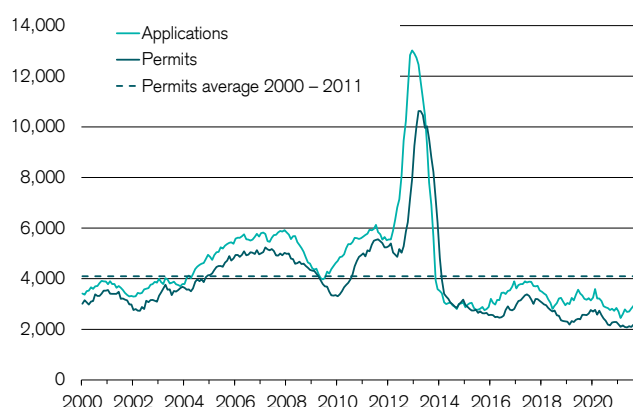


Source: Meta-Sys, Credit Suisse

Last data point: Q4/2021

Fig. 26: Low construction activity in second-home municipalities

Planning applications and building permits for first and second homes (12-month totals)



Source: Baublatt, Credit Suisse

Last data point: 11/2021

The long-term causal effect of the Second Homes Initiative

Ten years ago, in March 2012, the Second Homes Initiative (“SHI”) was accepted by the Swiss electorate. Dr. Daniel Steffen has grappled intensively with the consequences of this event. In this guest article⁶ he shares the findings of his research work and ventures an outlook for the coming decade.

Fateful referendum in March 2012

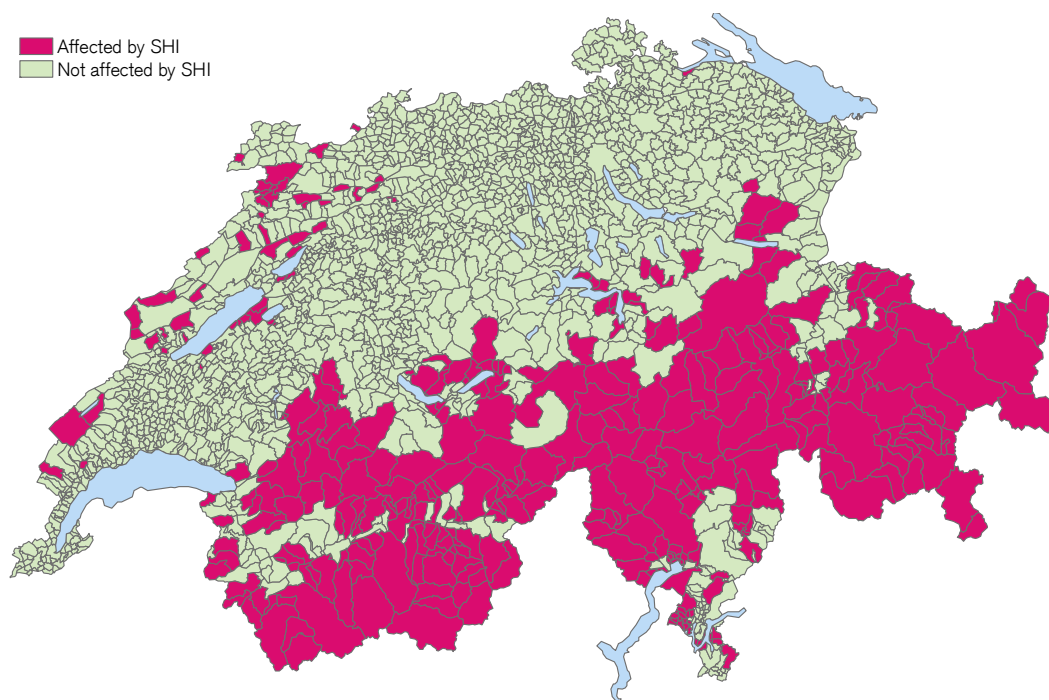
Almost exactly a decade ago, the real estate markets of Switzerland’s Alpine communities were turned on their heads almost overnight: In municipalities where second homes accounted for more than 20% of existing housing stock, no more new second homes could be built. Such was the intention of the initiative. The ban strongly affected the mountain cantons first and foremost: In Cantons Ticino, Valais, and Graubünden, 59%, 70%, and 75% respectively of all municipalities fell within the scope of the Second Homes Act (Fig. 27). In these regions, second homes were a key driver of the real estate market and the local economy. In Canton Graubünden, for example, almost every other home is used as a secondary residence. But second homes are a significant factor across Switzerland generally, accounting for 16% of housing stock. Accordingly, the SHI had the potential to upset regional real estate markets and trigger turbulence in other areas of the local economy. It is therefore important to analyze in detail the repercussions of such drastic regulation.

How can the consequences of the initiative be determined?

However, it is also reasonable to ask how the causal effect of such regulation can be measured at all. Ultimately, no one can observe what would have happened in the affected municipalities if the SHI had never existed. This fundamental challenge is one faced by economists all the time. One possible solution is the statistical method of causal inference, which attempts to arrive at quantitative causal relationships by using empirical data. Here the aim is to create a hypothetical situation with this data to replicate what would have happened without any intervention. Such a construct is known as a “counterfactual”. But how can such a counterfactual be created?

Fig. 27: Alpine municipalities most affected by the Second Homes Initiative (SHI)

Municipalities according to second home status



Source: Federal Office for Spatial Development, own illustration

Last data point: 2021

⁶ Some of the research results set out herein were published in November 2021 in the Swiss Real Estate Journal no. 23.

Non-affected Alpine municipalities as source of data

Elaboration of synthetic twin municipalities

Price development of replicated municipality as indicator of quality

Synthetic control municipalities serve as counterfactual

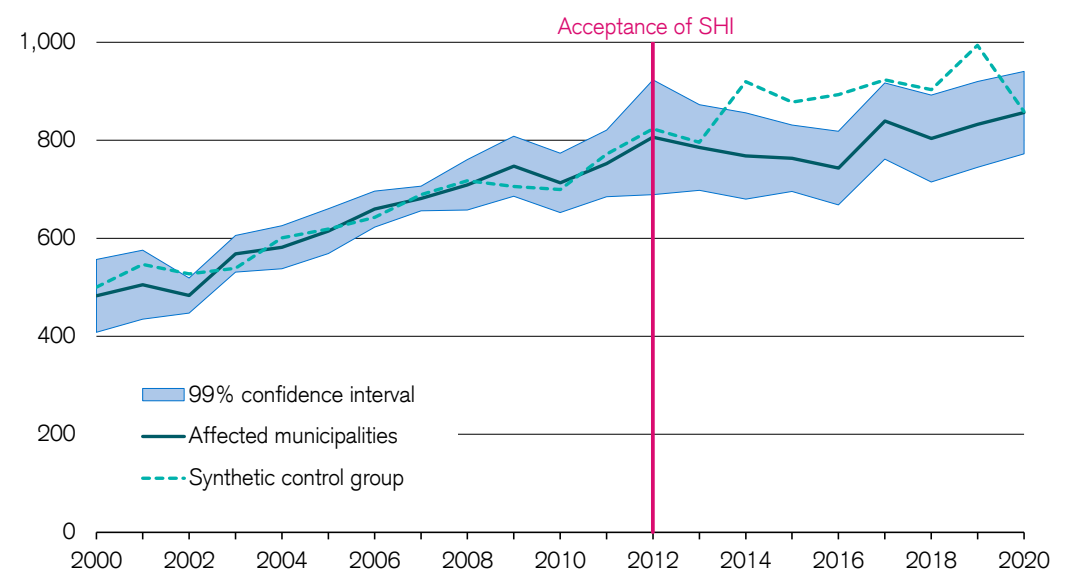
At first glance, a logical idea would be to use the municipalities not affected by the SHI (green in Fig. 27) as a control group to serve as a counterfactual. But a look at Figure 27 shows that the areas affected by the SHI are almost exclusively rural Alpine municipalities with a strong tourist industry, whereas the non-affected municipalities are predominantly located in Switzerland's "Mittelland". As this area is home to the largest Swiss cities, it cannot fulfill the function of a reliable control group in its entirety, and is therefore not a reliable counterfactual for the Alpine municipalities. That said, many individual municipalities not affected by the SHI have real estate markets that nonetheless possess similar characteristics to the second-home municipalities.

A statistical approach known as the "synthetic control method" is designed for precisely this kind of situation. For each second-home municipality, the closest possible match is constructed on a purely data-driven basis from the pool of non-affected municipalities – a so-called synthetic control municipality. This synthetic control municipality consists of a weighted combination of non-affected municipalities, and reflects the real estate market characteristics of the second-home municipality in the closest possible way – with the key difference that the synthetic controlled municipality is not itself affected by the SHI. The idea here is that the synthetic control municipality should provide information as to how the real estate market of affected municipalities would have developed had the SHI never existed. For example, 96% of the synthetic control municipality for Zermatt consists of the two (at least partly) tourism-influenced municipalities of Ingenbohl (Brunnen) and Interlaken, along with Martigny and Geneva.⁷

From these individual synthetic control municipalities, a weighted Swiss-wide control municipality is calculated. The replication is deemed successful if the (price) developments of the affected municipalities and the synthetic control municipalities prior to acceptance of the initiative are extremely similar. Figure 28 shows that the price development of the synthetic control group was indeed extremely similar to those of the affected municipalities in the run-up to the SHI referendum. The objective of creating a valid counterfactual (i.e. a valid control group) was therefore successful.

Fig. 28: Sharp temporary price slump

Price development in CHF thousand



Source: Swiss Real Estate Datapool, own illustration

Last data point: Q1/2021

⁷ As Switzerland's second-largest city, Geneva would appear rather an unlikely candidate for a comparison with Zermatt. However, Geneva's role is likely to be above all to lift the price level of the synthetic municipality to that of Zermatt.

Repercussions of Second Homes Initiative

Second Homes Initiative triggers sharp decline in prices

Accordingly, the difference between the two groups *after* the acceptance of the SHI in March 2012 represents the causal effect of the initiative. Figure 28 illustrates that at first nothing happened in the immediate aftermath of the referendum in 2012. Up until 2013, the prices of both groups continued to develop very similarly. However, things clearly changed from 2014 onward: The prices in the affected communities quite clearly developed less strongly than those of the synthetic control municipalities. In other words, the SHI resulted in price underperformance in property prices in the affected municipalities between 2014 and 2019, namely of between –20% and –10%. On average, prices over the period 2014–2019 were some 16% lower than they would have been (according to the model) if the SHI had never come about. On average, this works out at around CHF 127,000 per residential unit.

Three causes of price slump

This relative slump is statistically significant: Between 2014 and 2019, the prices of the synthetic control group consistently moved outside of the 99% confidence interval (see blue shading in Fig. 28). In other words, the probability of a coincidental price difference of the magnitude actually recorded between 2014 and 2019 is extremely low. Three possible channels of influence can be identified as reasons for the price difference: First, the panic-like flood of last-minute construction projects, which then fed through into a supply overhang in the Alpine second homes market (see also page 19). Second, the legal uncertainty in place until the Second Homes Act was definitively passed in 2015 and entered into force at the start of 2016. This uncertainty led to a decline in the number of transactions, with sales due to a shortage of money being more prevalent. Properties affected by this phenomenon are typically of lower quality and in relatively poor condition, and thereby fuel the decline in prices. Third, the cessation of second home construction, which triggered painful declines in sales in the construction sector in the affected communities, and in combination with the fall in asset values of property owners weighed on the local economy. All this led to higher unemployment and lower local demand for owner-occupied housing.⁸

Price gap closes

One striking aspect is that the resulting price gap was eliminated in 2020. According to the model, prices are now back at exactly the level they would have been in the absence of any SHI. On the one hand this is hardly surprising: After the adverse effects from 2014, the scarcity of supply will have become an increasingly powerful factor with the passage of time, while as an additional factor there was a sharp increase in demand for second homes during the pandemic (see page 19). On the other hand, the price slump in the synthetic control group in 2020 was unexpected. It is possible that this was also a one-time effect. The municipalities of Ingenbohl, Interlaken, and Unterseen together account for 28% of the synthetic control group, but only account for a restricted number of observations in the 2020 dataset. Accordingly, individual outliers in this pandemic year may have had a disproportionately skewing effect. In addition, Interlaken and Unterseen were particularly badly hit by the absence of travel groups during the pandemic (while the second-home municipalities are likewise predominantly geared around tourism). Furthermore, the picture only reflects data fed into the model up to the first quarter of 2021. Only later batches of data will give a precise idea of whether the price gap really has already closed.

Outlook for next decade: Aims of SHI can hardly be fulfilled simultaneously

Fixed supply coming up against solid demand

How will prices in the affected municipalities develop over the next ten years? Can the key aims of the SHI – more affordable accommodation for local residents and the prevention of housing sprawl – really be achieved? There has been a notable rise in trans-regional demand since the onset of the coronavirus pandemic, which is now also reflected in rising prices in second-home municipalities. On average, living space is now just as expensive as it would have been without the SHI. In the event of demand for second homes persisting in the Alps – a likely phenomenon given the increase in home working potential and the need for more living space and vacation time in Switzerland – prices in the affected municipalities can be expected to rise further. After all, the supply of residential properties that can be used as second homes was frozen by the SHI.

Rising prices a given – for locals too

As a result, local residents are increasingly having to compete with affluent trans-regional demand or switch to the (cheaper) market for homes covered by the new law. These homes were only constructed after the acceptance of the SHI, and may only be used as primary residences. However, the new-law market is still very small, and could not possibly meet a surge in local demand. If local residents increasingly switch to the new-law market, the following two (not mutually exclusive) scenarios cannot be ruled out: Either this still modest new-law housing stock will be expanded through newbuilds, which in turn will trigger greater housing sprawl, or prices will start to

⁸ For a detailed discussion of the causes of the price slump, see the research paper: Steffen, D. (2020): *The Effect of a Second Home Construction Ban on Real Estate Prices*, SRED Discussion Paper.

rise in the new-law market too. Due to the revision of the Spatial Planning Act, many areas – and particularly in the Alps – are unlikely to have enough construction land on which to dramatically increase the stock of new-law homes. It is therefore more likely that local residents will be competing with international demand in the old-law market and having to stomach price rises as a result.

Aims of SHI unlikely to be fulfilled

Either way, it appears unlikely that both aims of the SHI – affordable housing for local residents and an end to urban sprawl – can be simultaneously achieved given a backdrop of persistently solid demand over the coming decade. Indeed, the legislative loophole that allows locals to sell on their old-law primary residences as more expensive second homes and then simply channel these funds into a (supposedly) cheaper additional home covered by the new law actually constitutes an incentive to create further urban sprawl.⁹ In view of the undesirable side-effects¹⁰ entailed by the SHI, it is only fair to ask whether the politically legitimate desire of society to ensure affordable housing and end urban sprawl in second-home municipalities might not have been achieved through alternative and more efficient/effective instruments. For example, one possibility would be a tax on second homes that dampens demand on the one hand while giving these municipalities something back in the form of tax revenues on the other. Moreover, this approach would have a certain flexibility – unlike the existing rigid ban that fails to take specific local parameters into account.

⁹ The initiators of the SHI did seek to avoid this legislative loophole, but any such measures would in turn have given rise to far-reaching side effects.

¹⁰ The results of various studies suggest that the SHI led to an economic downturn with higher unemployment in the affected municipalities, among other things. Furthermore, construction land on which only primary residences may be devalued.

Resilient rental housing market

Rental apartment demand has essentially shrugged off the pandemic. Thanks to persistently high immigration and a strong economic recovery, landlords can be expected to benefit from brisk demand in 2022 too.

Immigration continues to support demand for accommodation

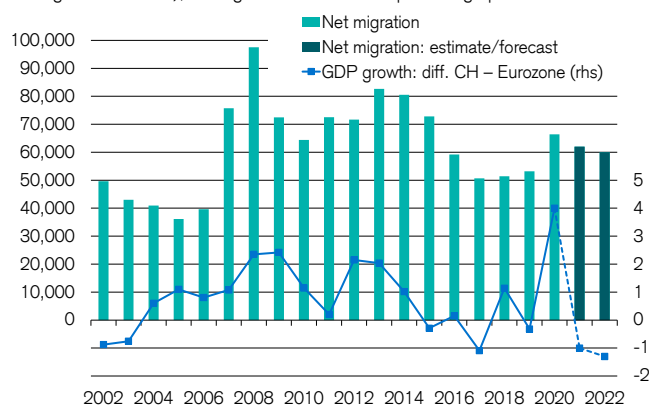
Rental apartments remained sought after even in the coronavirus pandemic – primarily due to persistently high net immigration. Switzerland's comparatively stable labor market, and possibly also its relatively moderate COVID-19 restriction measures, resulted in some 15,300 fewer registered moves abroad in 2020 compared to the year prior to the outbreak of the pandemic. Including the movements of Swiss citizens, this resulted in an increase in net migration of almost 25% to 66,400 in 2020. Net migration was buoyant in the second year of the pandemic too: While emigration bounced back, the number of immigrants was also higher. The resulting balance of migration in 2021 amounted to around 62,000 people, slightly down on the previous year but again exceeding the pre-crisis level (Fig. 29).

Eurozone once again more attractive to would-be emigrants

The slight decline in net migration at a high level coincides with a recovery of the economies of the key countries of origin and destination. The economic dip suffered by Switzerland due to COVID-19 in the first year of the pandemic resulted in a decline of 2.5% in gross domestic product (GDP) in 2020 – considerably more modest than in the Eurozone (–6.5%). Accordingly, the current recovery in EU countries is stronger and the Eurozone economy is making up ground on its Swiss counterpart (Fig. 29). In 2021, this led to a decline in the balance of migration with countries such as France and Italy, although a contributory factor here was also a lower number of status switches from the non-permanent to the permanent resident population. As there were far fewer short-stay residents arriving in Switzerland in 2020 due to the economic slump, there have also recently been fewer changes to the status of both short-term ("B permit") and long-term ("C permit") residents.

Fig. 29: Net immigration likely to remain above pre-crisis level

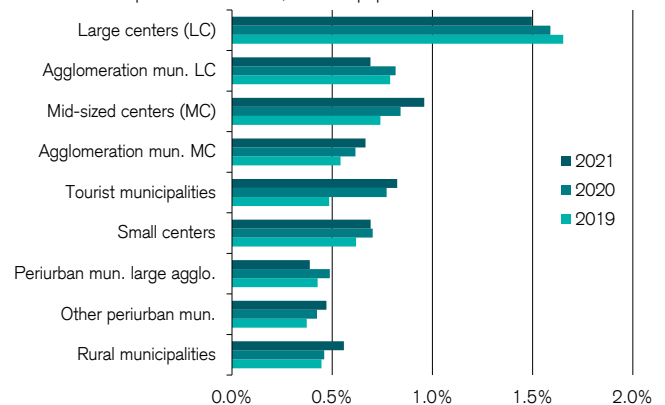
Net migration of permanent resident population (excluding registry corrections, including Swiss citizens); GDP growth: difference in percentage points



Source: State Secretariat for Migration, Federal Statistical Office, State Secretariat for Economic Affairs, OECD, Credit Suisse
Last data point: 11/2021

Fig. 30: Immigrants divided more equally across the country

Net migration of permanent resident population (excluding registry corrections): 12-month totals as per end of October, as % of population



Source: State Secretariat for Migration, Federal Statistical Office, Credit Suisse
Last data point: 10/2021

Immigration less focused on large centers

In the past, immigrants coming to Switzerland focused heavily on the large centers and their wider urban areas, making them one of the key drivers of the urbanization trend of the last 20 years. In 2019, for example, Switzerland's large urban areas accounted for a 49.4% share of total net migration, whereas these centers and their agglomerations accounted for just 30.5% of the overall Swiss population. During the pandemic, however, net migration was spread much more evenly across the country, with the equivalent share of the large urban areas amounting to just 41.7% in 2021. The mid-sized centers have caught up, as have rural and above all tourist regions (Fig. 30). In other words, where the development of international migrant flows is concerned, we can see a similar spatial pattern to the movements of domestic migrants (cf. section "Pandemic slows urban-

ization”, page 7 et seq.), even though the main focus remains on the centers. A striking development is the strong increase in net migration to tourist municipalities, particularly in Cantons Valais and Graubünden. Increasing arrivals of remote-working foreigners wanting to avoid the more rigorous coronavirus rules in their native countries could be a factor here. Moreover, a number of short-stay residents active in tourism and quasi-tourist sectors are likely to have “sat out” the crisis in Switzerland due to a lack of short-term job prospects in their native countries (or in other foreign tourist destinations).

2022: stable immigration ...

For 2022, we are anticipating a similar net migration figure, namely around 60,000 people (Fig. 29). The economic recovery can be expected to continue in Switzerland, and employment growth should pick up again (2022 forecast: +1.2%). This in turn will increase demand for labor, hence recruitment from third countries should also rise once again. However, the Eurozone is likely to recover even more strongly, which will probably result in more foreigners returning to their home countries as well as more Swiss deciding to move abroad. All in all, these effects should balance each other out. In the medium to long term too, immigration should remain a prop of demand for housing in Switzerland – not least due to a demographic effect. The populous baby-boomer generation is retiring, which is why many exits from the labor market are anticipated over the coming years. These exits will leave a gap that new entries from the younger generation will no longer be able to fill. By the end of this decade, indeed, this gap could amount to more than 10,000 economically active persons annually. The gap is unlikely to close again until the mid-2030s (Fig. 31).

... and persistently strong demand for rental apartments

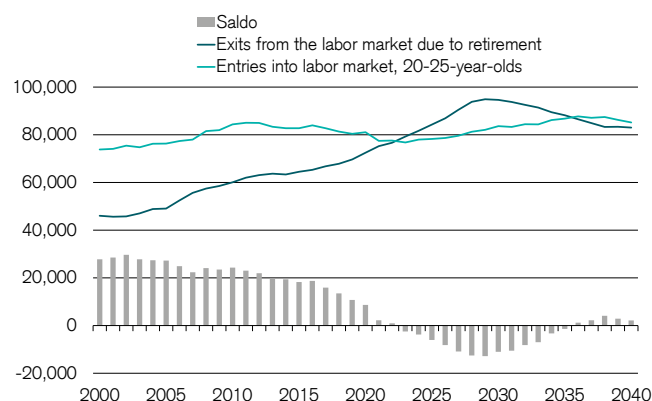
Domestic demand for rental apartments likewise has essentially shrugged off the pandemic. Following a slump in the first months of the crisis (Fig. 32), a recovery then set in rapidly and persisted in 2021. One pandemic-related special effect is also likely to have strengthened demand for rental apartments, and is probably still having an impact on the market: Due to the heightened risk of infection and limited freedoms, the number of new entries into retirement and care homes in 2020 declined by some 7,000 persons. Many senior citizens are probably choosing to remain as long as possible in their own apartment and take up social/medical care offerings in their own home. In 2021, a total of some 27,000 additional rental apartments can be expected to have been absorbed by the market – a figure likely to be matched in the coming year too.

Further evidence of shifts in demand

In last year's edition of this study we presented the first evidence that demand is shifting – due to the pandemic and the increased phenomenon of home working – toward larger apartments outside of the urban centers. This development was further accentuated last year (cf. section “Pandemic slows urbanization”, page 7 et seq.). This is borne out by demand indices based on property search registrations, among other things (Fig. 32). Furthermore, the proportion of rental apartment households with two or more inhabitants that do not have an extra room to work in stood at a hefty 40% in 2019 (cf. section on owner-occupied housing, p. 12). It therefore appears likely that the observed changes in the structure of demand will remain in place even after the pandemic.

Fig. 31: Exits from labor market will soon outstrip entries

Number of economically active persons (From 2021: Credit Suisse estimate); retirement = reaching of statutory AHV retirement age

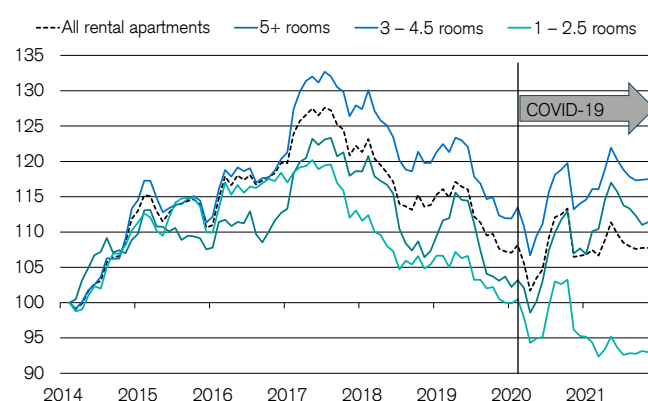


Source: Federal Statistical Office, Credit Suisse

Last data point: 2020

Fig. 32: Shift of demand toward larger apartments

Rental apartment demand indices: 02/2014 = 100



Source: Realmatch360, Credit Suisse

Last data point: 12/2021

Newbuild activity lags demand

New rental apartment construction activity continues to decline in a clear majority of regions, and is increasingly focused on the urban centers and their surrounding areas. However, such activity is often at the expense of existing properties, as well as being subject to rigorous official regulations, which limits the effective net increase.

Construction activity continues to decline, ...

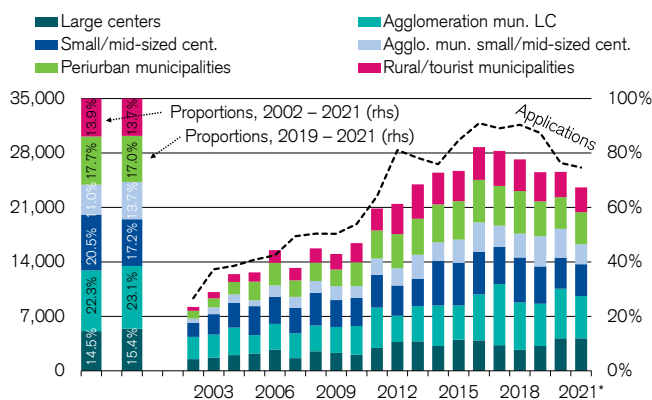
In 2021, the number of rental apartments approved for construction across Switzerland stood at 23,800, a figure almost 2,000 residential units lower than in 2020 (Fig. 33). Annually approved newbuild volumes have therefore declined by 17.7% since peaking in 2016. However, the actual decline in construction activity over the last two years is likely to have been even more severe than these figures suggest. This is due to the COVID-19 pandemic: As a result of hygiene and social distancing measures, construction site productivity is likely to have declined in some cases, and various building materials have become much more difficult to source recently.

... but could pick up in the medium term

Bottlenecks in global supply chains can be expected to persist for a while. Although a temporary resurgence of construction activity due to the backlog of orders cannot be ruled out once the situation improves, the overall trend for the next two years looks to be still pointing downward. On the other hand, various factors point to this trend not persisting in the longer term: The number of newly planned residential units has stabilized last year (planning applications, Fig. 33), and a combination of vibrant demand for apartments and the dearth of investment alternatives due to the persistent low interest rate environment should continue to fuel investor interest in apartment buildings. A further decline in rental apartment production down to the level of 20,000 or fewer residential units annually is therefore unlikely in the absence of a trend reversal in monetary policy in Switzerland too. Particularly away from the urban centers, in areas where demand for housing is currently rising and a trend reversal appears to have established itself, rental apartment construction activity could pick up again in the medium term.

Fig. 33: Building permits at lowest level since 2013

Building permits for rental apartments by municipality type (* 2021: 12-month total as per November 2021)

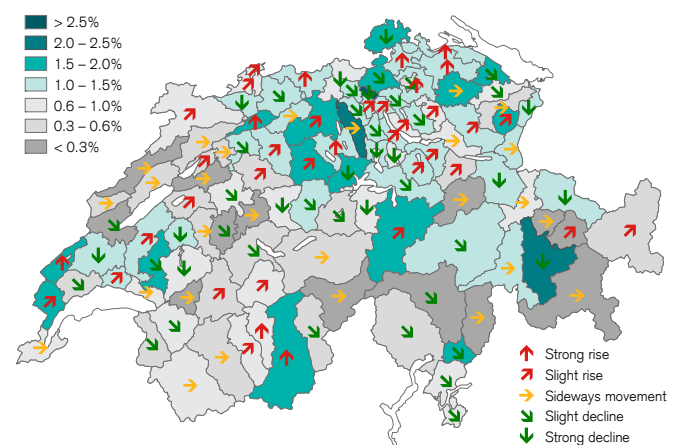


Source: Baublatt, Credit Suisse

Last data point: 11/2021

Fig. 34: Rental apartment construction slows in most regions

Anticipated expansion of rental apartment stock in 2022; arrows: YoY change



Source: Baublatt, Credit Suisse, Geostat

Last data point: 10/2021

Focus likely to remain on large urban areas for now

The slight decline in oversupply outside of the urban centers last year is not just attributable to a shift in demand – on the development side too, the focus of construction activity is once again rather stronger on the large centers and their wider urban areas (Fig. 33). Last year these accounted for 40.7% of the approved newbuild volume (long-term average: 36.9%). However, we are expecting a year-on-year expansion of activity in just 38 of Switzerland's 110 economic regions in 2022 (Fig. 34). That said, these also include certain regions that have exhibited oversupply tendencies for quite some time, such as the Thal, Oberaargau, Leuk, and Appenzell Inner-rhoden regions. By contrast, in Ticino, which is likewise characterized by oversupply tendencies, there is evidence of a gradual slowing of construction activity.

Refurbishment projects result in additional apartments

A growing number of newly built residential units are springing up not on greenfields but on existing residential land – be it through refurbishment, vertical or horizontal expansion, or demolition and replacement newbuilds. In 2019, 13.2% of the total net increase¹¹ of almost 51,000 residential units was generated by refurbishment projects (Fig. 35). Eight years earlier, the corresponding proportion was less than a half of this figure. The key driver of the refurbishment boom is likely to be the scarcity of building land, particularly in an urban setting. Accordingly, the share of refurbishments in the net increase in stock in the years 2015 to 2019 was highest in the large and mid-sized centers, at 15% and 16% respectively. However, with the implementation of Switzerland's new Spatial Planning Act, building land is likely to increasingly become an elusive resource in more rural regions too. Furthermore, many refurbishment projects are likely to be implemented for energy-saving purposes, as greater environmental awareness and various subsidy instruments have been fueling such activity for quite some time now. An increasing number of refurbishment projects have also been realized in tourist regions recently. As Switzerland's Second Homes Act prevents the new construction of second homes in these areas, plenty of capital is flowing into housing stock not covered by this law. However, as the construction of additional apartments in the context of refurbishment or replacement newbuilds is only permissible if the overall floorspace remains the same or if primary residence apartments are built, the net increase of apartments resulting from refurbishment projects has risen only slightly in these areas.

More demolition in the urban centers ...

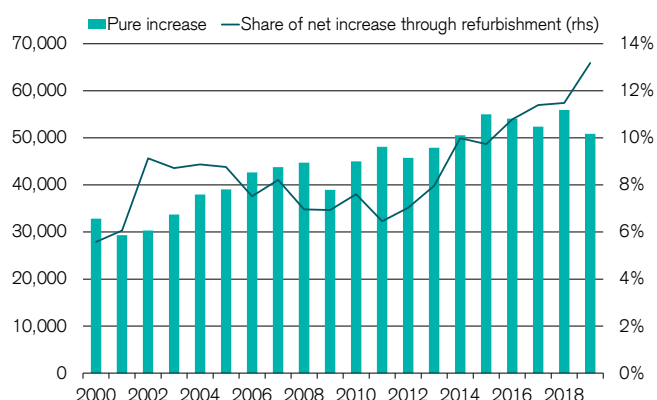
Replacement newbuilds are often preferred to renovations or refurbishment projects, particularly if there are sufficient utilization reserves available and the condition of existing building structures would require significant investment. Accordingly, the volume of apartment demolitions has also risen in recent years. In the large urban centers, for every 100 newbuild apartments coming onto the market between 2015 and 2019, 18.5 followed on from apartment building demolitions, whereas the equivalent figure in rural and periurban municipalities was just 3.5 to 4.0 demolitions (Fig. 36). Focusing solely on newbuild projects therefore results in an overestimation of the anticipated expansion of existing stock in the urban centers. This finding places the shift in building activity in the large urban areas in a rather different light.

... and resistance from local authorities is acting as counterweight to strong planning activity

As an additional factor, many large projects in urban centers have been confronted with strong resistance in recent years. In the city of Zurich, for example, several projects have currently had to be shelved due to Switzerland's rigorous noise protection regulations. The rulings of the Federal Supreme Court over the last few years have made such regulations more enforceable. In summary, despite demand-side shifts and brisk planning activity, the apartment markets of Zurich and the two large centers on the shores of Lake Geneva are likely to cool only slightly.

Fig. 35: New apartments increasingly the result of refurbishments

Annual net increase in apartments (including owner-occupied segment, in residential units) and proportion of net increase attributable to refurbishment projects

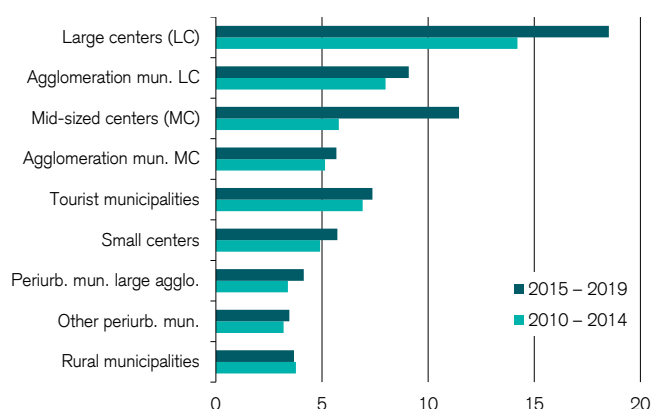


Source: Federal Statistical Office, Credit Suisse

Last data point: 2019

Fig. 36: More demolitions in urban centers

Number of apartment demolitions per 100 newbuild apartments



Source: Federal Statistical Office, Credit Suisse

Last data point: 2019

¹¹ Increase in residential units attributable to newbuild and refurbishment, minus units lost through demolition and refurbishment

Rental apartment market gets its act together

A combination of subdued construction activity and brisk demand ushered in a trend reversal in the rental apartment market in 2021, which is reflected in declining vacancies and shorter marketing periods. This trend can be expected to continue and increasingly feed through into rental prices.

Trend reversal brought forward

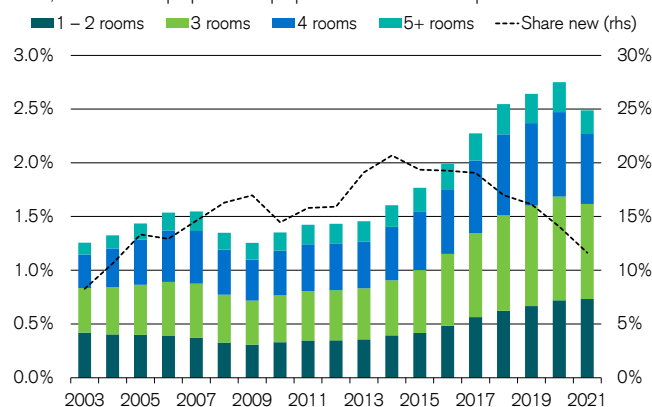
The rental apartment market has so far emerged from the pandemic largely unscathed. Nowhere is this better illustrated than in the vacancy rate, which (to the surprise of most market observers) declined last year for the first time in 12 years, and markedly so – from 2.75% the previous year to 2.49% most recently (Fig. 37). This fall was facilitated by a combination of robust demand and declining construction activity. In addition, coronavirus effects are likely to have temporarily exacerbated the weakness of the latter.

Vacancies shifting from large to small and from non-central to central apartments

The structure of vacancies is also revealing, as it reflects the trend evident on the demand side toward larger apartments in less central locations. For example, the number of vacant rental apartments in the large centers rose by 17.3% in 2021, albeit from a low level, whereas the vacancy rate declined in all other municipality types. This phenomenon was particularly pronounced in peri-urban municipalities surrounding the large centers (–17.1%) and in tourist municipalities (–28.1%). The former benefited from the increased number of people moving away from the heart of the large urban areas, whereas tourist municipalities are likely to have benefited from greater demand from abroad as well. A shift in demand toward larger apartments is also apparent (Fig. 37). The vacancy rate for small apartments with a maximum of two-and-a-half rooms rose by a further 3.1%, whereas it declined for larger apartments. Compared to the previous year, there was a decline in vacancies of 16% for 4-room apartments in 2021, and a decline of as much as over 20% for apartments offering five or more rooms. Moreover, the proportion of total vacancies accounted for by newbuild apartments declined to 11.6%, its lowest level for 17 years. In addition to the popularity of new properties, this is also attributable to declining construction activity.

Fig. 37: Fewer vacancies for larger and new apartments

Vacancy rate for rental apartments (by number of rooms), as % of rental apartment stock, and newbuild properties as proportion of total vacant apartments

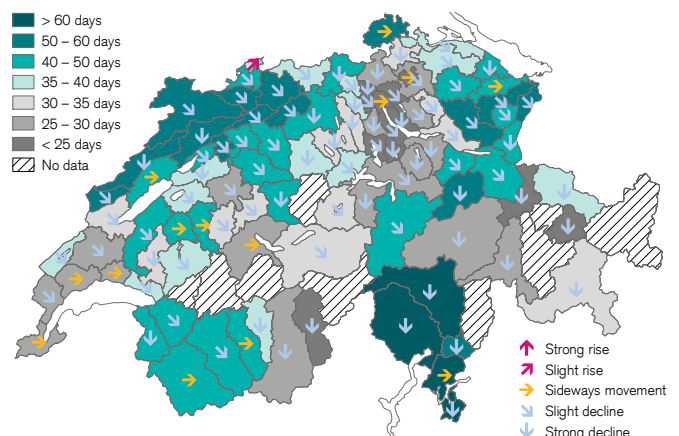


Source: Federal Statistical Office, Credit Suisse

Last data point: 01.06.2021

Fig. 38: Marketing gets a little easier away from the urban centers

Time-on-market of rental apartments, 2021 (arrows: year-on-year change)



Source: Meta-Sys, Credit Suisse, Geostat

Last data point: Q4/2021

Time-on-market declines away from the urban centers

The development of “time-on-market”, i.e. the length of time that an apartment is advertised for rent, backs up the above finding. Across Switzerland as a whole, the time-on-market of a rental apartment declined from 42.5 days to 37.5 days between 2020 and 2021 (annual average). A year-on-year decline of at least two days was evident in 86 of the 101 regions for which we were able to calculate time-on-market (Fig. 38). Rises of more than two days were recorded by just one

Indicators point to recovery

➔ Demand

Net immigration



- Net immigration still above pre-crisis level
- Stabilization in centers below pre-crisis level

2022: Demand remains stable at a high level thanks to ongoing economic recovery

↘ Supply

Planning applications



Building permits

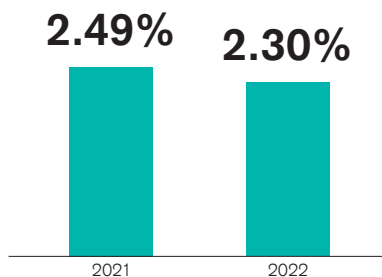


- Number of rental apartments approved for construction declines further
- Stabilization in newbuild planning applications

2022: Only slight decline in expansion; order backlog in places due to COVID-19 pandemic

↘ Vacancies

As % of rental apartment stock

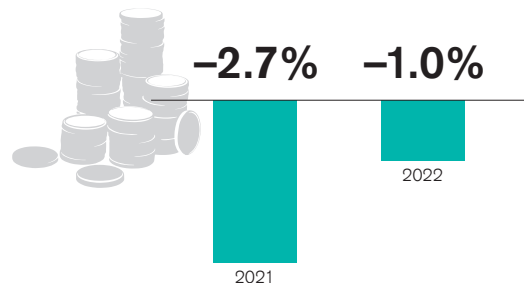


- Decline by a further 3,000 to 4,000 apartments
- Slight increase in vacancies in large centers

Vacancies fall at reduced tempo

↘ Rental prices

Growth in advertised rents, in %

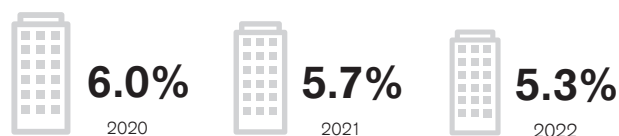


- Price growth declines in centers
- Fewer regions affected by price declines

Pressure on advertised rents falls sharply

↘ Supply rate

as % of rental apartment stock



- Fall in supply rate to 5-year low
- Marketing periods decline outside of the centers

Strongest decline in supply for larger apartments on urban periphery and in rural areas

↘ Performance

Total return on residential investment properties



- Slightly lower risk premiums outside of large centers
- Average net cash flow yield declines to 3.0%

Investment pressure remains high and likely to rise further

These forecasts are not reliable indicators of future developments.

Valuation by algorithm

Residential property in Switzerland has been valued using algorithms for more than 20 years now. Modern machine learning methods can improve the estimation accuracy slightly. But this comes at the cost of both transparency and stability.

The inexorable rise of machine learning

In many areas of our lives, machine learning has increased in significance greatly over the last decade. The key driver of this development has been the strong increase in the processing power of modern computers. Nowadays, computers can beat the world's best human players at board games such as chess and Go, can easily identify faces in social networks, while algorithms in the medical world can identify tumors more reliably than doctors. Since 2014, the world has become much more familiar with the term "machine learning" (ML): In internet searches, it is now entered more than twice as frequently as the broader term "data analysis" (Fig. 41).

Supervised and unsupervised machine learning

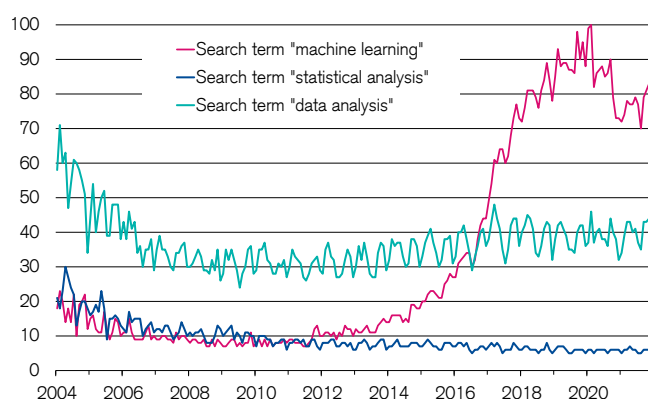
But what exactly is machine learning? Machine learning is a sub-area of artificial intelligence, and aims to derive findings based on an algorithm that uses automatically identifiable patterns in data. This involves the analysis of (typically) large volumes of data in order to solve forecasting, clustering, and classification tasks. The algorithm continues to learn on the basis of the data made available to it, and can thereby improve its accuracy.¹² To put it in technical terms, a loss function is minimized, e.g. the overall difference between a price forecast and the actual price. A distinction can be made between supervised and unsupervised methods. In unsupervised learning, algorithms find patterns in data without any output variable being predefined. By contrast, both input and output variables are defined in supervised learning. With this approach, the algorithm tries to derive the output in the best possible way on the basis of the given input variables.

Machine learning has been around for decades

Despite a surge in popularity in recent years, many ML methods are anything but new. A number of the approaches established in this field have been around for decades, but for a long time were used barely at all in practice – or only in a very restricted way – due to the lack of available computing power. However, over the last decade, improved hardware solutions and above all those specifically tailored to machine learning have allowed great advances to be made in this area.

Fig. 41: Machine learning has surged in popularity

Frequency of search terms in global internet searches, index: 100 = maximum value

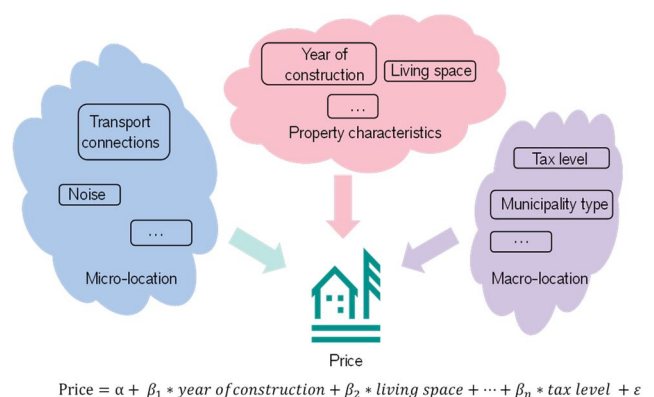


Source: Google Trends

Last data point: 11/2021

Fig. 42: Visualization of a hedonic price model

Schematic representation



Source: Credit Suisse

Hedonic models rank among the supervised methods

However, other ML methods have been successfully used in the real world for decades – and have long been established in real estate valuation, for example. As multivariate regression models, hedonic price models likewise fall under the category of supervised ML methods. A hedonic real estate price model explains the price of the property using a combination of its features, as

¹² There are many definitions of machine learning. With regard to the economic questions, see for example: Athey, S. (2019): The Impact of Machine Learning on Economics. In: Agrawal, Gans & Goldfarb (eds.) The Economics of Artificial Intelligence: An Agenda. University of Chicago Press.

well as the micro-location and macro-location. Here the algorithm optimizes the modeling in order to keep the estimation error as low as possible. In contrast to many other ML methods, however, it is unusual for the algorithms of hedonic models to be blindly trusted in practice. In order to optimize the models for their real-world application, theoretical findings with regard to the interplay of the individual real estate market indicators are incorporated directly into the model along with human expertise (Fig. 42).

Switzerland – a pioneer in the development of hedonic models

When it comes to the practical application of hedonic models in the valuation of real estate, Switzerland has played a pioneering role. In the mid-1990s, the company IAZI, which was founded in 1994, developed the first-ever hedonic model for the valuation of owner-occupied housing together with six banks, including Credit Suisse. This model was then widely applied. The trigger for this development was the real estate crisis of the 1990s, which highlighted the potential value of systematically prepared data on the real estate market. At that time, a huge amount of data was not yet in a form that could be machine-read, and first had to be converted into the desired format. After a development period lasting some 18 months, the model could then be applied by the banks in practice from 1996 onward.

Hedonic price indices improve transparency

Accordingly, from 1996 it was increasingly computers – rather than human beings – that would take on the task of valuing residential property in Switzerland. It is hardly surprising that this approach was initially scorned by many established real estate appraisers and associations. However, the use of hedonic models in the valuation of residential property has now become the market standard, with valuers resorting to computer-based valuation methodologies for even smaller investment properties. What's more, these models have been continuously improved in the meantime and are currently offered by a growing number of providers. Thanks to this development, price indices on regional and national level are now published on a quarterly basis. This has noticeably improved the transparency of the Swiss real estate market.

Research now focused on new machine learning algorithms

The success of hedonic models and the greater availability of real estate data have given a further boost to real estate market research in Switzerland. However, the focal point of research is shifting toward new ML algorithms. For example, the authors Mayer et al.¹³ have compared the random forest and gradient boosting ML methods as well as neural networks with traditional regression models using a dataset on single-family homes in Switzerland. Meanwhile, Walthert and Sigrist¹⁴ have based their comparison of deep learning and gradient boosting models on the one hand and conventional regression models on the other on Swiss condominium data.

Decision trees as classification tool

The random forest and gradient boosting ML methods are based on decision trees. With both these approaches, an explanatory variable is used to classify the dataset into two groups. This variable and threshold value for the classification are selected by the algorithm in such a way that the observed properties can be optimally classified to the greatest extent possible in terms of their price. This procedure is repeated multiple times.

How decision trees work

Figure 43 illustrates a decision tree with a depth of two “splits”. In this simple example, single-family homes are classified on the basis of the “living space < 220 m²” criterion in an initial step. As a second step, the algorithm applies the criteria “driving time to nearest town ≥ 30 min” and “living space < 382 m²”. The figures given in the oval shapes correspond to the average price of all observations in the relevant “nodes”. To give a hypothetical example, consider a single-family home with living space of 155 m² located in the town of Regensdorf near Zurich. In reality this property would cost CHF 1.7 mn. According to the decision tree in Figure 43, the property takes the path indicated in green. Our simple decision tree model with just two levels would assign the property in question a value of CHF 1.2 mn. The poor forecasting quality in this example is attributable to the very simple and short decision tree.

Trained models need to be validated

The more complex and comprehensive the tree, the more accurate the forecast for all properties in the training dataset. In an extreme case, the model could be so comprehensive that only one property price would be assigned to each endpoint. Although this allows each price to be predicted exactly in the training dataset, this is hardly expedient. The key determinant of the quality of the algorithm is how well it can predict the price of a property that is not known to it. For this reason, the quality must be reviewed using a validation dataset. In order to prevent over-specification of the model, a minimum number of observations can be assigned to each endpoint of the decision tree, for example.

¹³ Mayer, M.; Bourassa, S.C.; Hoesli, M. & Scognamiglio, D. (2018): Estimation and Updating Methods for Hedonic Valuation. Swiss Finance Institute Research Paper Series, Nr. 18-76, Swiss Finance Institute, Zürich.

¹⁴ Walthert, L. and Sigrist, F. (2019): Deep learning for real estate price prediction.

Random forest – multiple complex decision trees

One individual decision tree typically does not generate any better predictions than a conventional regression model, but a combination of many decision trees can often deliver astonishingly accurate results. The random forest procedure uses many complex decision trees that differ from one another in their modeling approach. In this case, only one randomly drawn sub-sample of all explanatory variables is used for each split as possible classification criteria. Moreover, only a proportion of the training dataset is used for each tree. In their random forest model, Mayer et al. used no less than 500 decision trees.

Gradient boosting: learning from estimation errors

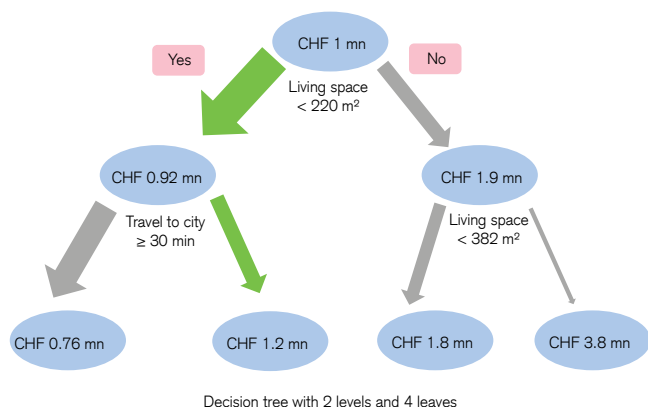
The gradient boosting algorithm is likewise based on many decision trees. These are derived in a different way, however. For the first decision tree, all observations are considered with the same weighting. The estimated error of each observation is then incorporated into the weighting of observations in the second tree. Here observations that were poorly predicted in the previous tree are given a higher weighting. The error is therefore reduced in stages. This process is repeated multiple times until the model can no longer be improved. Mayer et al. put their algorithm through 1,400 rounds, and limited this to a maximum tree depth of 127 “leaves”. Gradient boosting models currently deliver the highest accuracy with tabular data, and therefore typically generate better results than random forest models.

Complex modeling with neural networks

Decision trees are not the only tool for modeling real estate prices using ML methods. Artificial neural networks based on the functioning of the human nervous system and its numerous neural connections are becoming increasingly common. Figure 44 provides a schematic illustration of how such a network might look. A decisive feature here is the incorporation of so-called “hidden layers”, which allow complex combination of explanatory variables and interactions between these. The algorithm assigns a weighting to each connection. The signals that appear in a node are aggregated with their weightings and transferred to an activation function. Once a threshold is breached, the signal is passed on in the network. The algorithm reviews the received result and learns from its errors by adjusting the weightings iteratively so that it can generate the most accurate results possible. Deep learning networks that possess several hidden layers are a special example of neural networks.

Fig. 43: Visualization of a simple decision tree

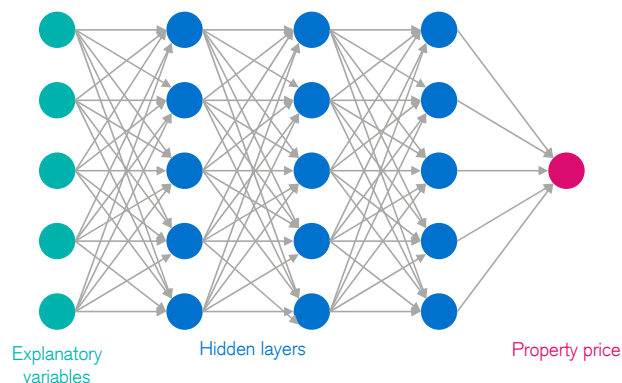
Schematic representation using the example of single-family homes



Source: Mayer et al., Credit Suisse

Fig. 44: Visualization of a neural network

Schematic representation



Source: Credit Suisse

Better results – but models remain a “black box”

The work described above shows that real estate valuations can be improved slightly by using modern ML methods such as gradient boosting and artificial neural networks (Fig. 45). However, this improvement comes at a cost. A major advantage of conventional hedonic models is their interpretability, i.e. the effect of an explanatory variable on a property price can be easily described. This is not the case with modern ML procedures. Although methods have been developed in recent years that allow statements to be made about the importance of the input variables used, easily interpretable effects are still difficult to derive. In other words, ML models to a certain extent remain something of a “black box”, which is hardly helpful in client discussions or dialogues with supervisory authorities, for example.

Additional drawback: greater volatility over time

The authors Mayer et al. also explore a further drawback of modern ML procedures. As part of their work, they tested the various models over time. Here it became apparent that modern ML methods tend to exhibit greater volatility when used over several quarters compared to traditional

hedonic regression models. As a consequence, the value of an individual property will fluctuate more greatly from quarter to quarter when these models are applied (Fig. 46). Mayer et al. conclude that mixed-effect models represent the best compromise between accuracy, volatility, and interpretability. Mixed-effect models are related to conventional regression models. By adding random effects, they can capture the various spatial dimensions in the model in an appropriate way. This enables them to reduce the estimation error in the modeling of locational parameters.

Special cases remain more difficult to appraise

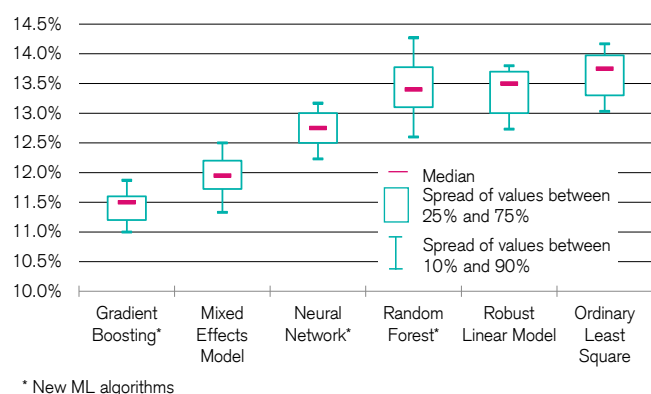
Furthermore, modern ML methods have the same weaknesses as conventional hedonic models. They are particularly well-suited to valuing properties with features they are familiar with from the modeling phase. But algorithms still find the unknown a stumbling block. Luxury properties, properties with a special "character", or properties from municipalities with no data in the training dataset are therefore more difficult to value, irrespective of the algorithm selected. In addition, neural networks, random forest, and gradient boosting fall down completely when it comes to extrapolations, whereas regression and mixed-effect models can calculate such cases without any problem. For example, ML techniques are no good in a situation where a house with 5,000 m³ of living space is to be valued if the training dataset only contains houses with up to 4,999 m³.

Data quality the key for all models

As an overarching point, the quality of data is always key. Property prices are the classic example of this. Transaction data is not in the public domain in Switzerland, and can therefore only be obtained laboriously. Prices advertised on the internet are hardly suitable as a substitute. This is clear in the current situation for owner-occupied housing: Due to the scarcity of residential property for sale, an increasing number of properties are either sold at a higher price than was advertised, or are auctioned to the highest bidder.

Fig. 45: Modern ML methods are more accurate

Distribution of absolute forecasting errors, in %

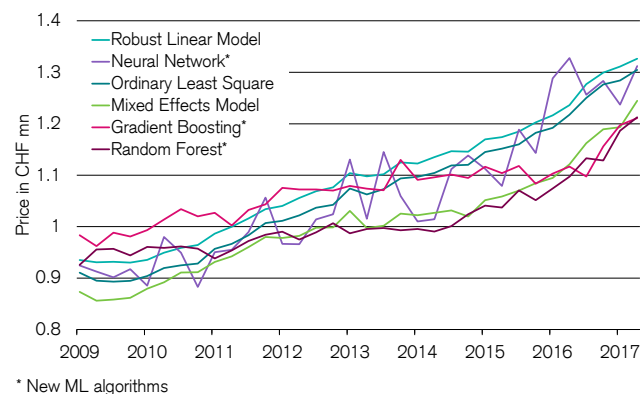


Source: Mayer et al.

Last data point: 2017

Fig. 46: Traditional models involve less volatility

Development of the price of a sample property with valuations over time



Source: Mayer et al.

Last data point: 2017

Time lag – a persistent phenomenon

An additional factor not to be ignored is that all models are subject to time lags. The transaction data used for the modeling process will date from the prior quarter at best – irrespective of the algorithm used. No model can therefore replicate current market price changes. Due to the low number of transactions, the switch from quarterly to monthly data is hardly an option for quality reasons. As a consequence, time lags between model and market reality will remain a problem going forward.

Further optimization potential in input process

Irrespective of the selected algorithm, there is still scope for optimization, particularly on the data input side. The valuation process could be accelerated further and be more strongly automated. As things stand, many algorithms still have to be fed "by hand". For example, although the micro-location is automatically determined in most models on the basis of the address entered, the fit-out standard and the condition of the building have to be evaluated by a human being. There is potential here to make the data input process more automated through machine learning. Indeed, great progress has already been made in recent years in areas such as image classification and property recognition through ML algorithms, for example.

**Conclusion –
machine learning is
interesting but no
magic formula**

In summary, it may be concluded that modern machine learning methods can add an extra level of forecasting quality when it comes to real estate valuations. However, this comes at the cost of lower transparency and greater volatility over time. In other words, for the time being modern ML methods will probably only be used with restraint in areas such as real estate financing on the part of banks, for example. A “door opener” here could prove to be hybrid approaches that combine conventional hedonic models with modern ML methods. Mayer et al.¹⁵ recently presented such an approach in which the micro-location and macro-location are determined using ML methods, whereas the remaining part of the modeling process is based on robust regression. This can combine the benefits of both methods, while the characteristics of the property remain directly interpretable.

¹⁵ Mayer, M.; Bourassa, S.C.; Hoesli, M. & Scognamiglio, D. (2021) Structured Additive Regression and Tree Boosting. Swiss Finance Institute Research Paper Series, Nr. 21-83, Swiss Finance Institute, Zürich.

Hesitant demand

Due to persistent uncertainties, the trend of office space demand is lagging behind the upward trend of employment figures. Compared to other countries, however, demand for office space has generally held up quite well.

Labor market recovery

Thanks to fiscal measures generally and compensation for short-time working in particular, the coronavirus crisis has left less of a mark on the labor market in Switzerland than elsewhere. Despite the pronounced economic slump, the unemployment rate peaked at just 3.7% in January 2021. Between then and the end of the fourth quarter, it fell steadily to 2.6%, while also short-time working was scaled back considerably. Overall employment, which declined by 0.3% in 2020, recorded a year-on-year rise of 1.1% (+45,000 jobs) as per the end of the third quarter of 2021. In particular, sectors with a traditionally high proportion of office workers were relatively unscathed by the pandemic, as these workers were able to switch to home working (Fig. 47).

Decoupling of labor market trend from demand for office space

The traditionally close correlation between office employment growth and office space demand has been partly eliminated by the pandemic. Despite relatively robust development of office employment, many sources of demand for rental space have been sitting on the sidelines. Space absorption is proving difficult as mastering the pandemic is taking a long time and the home working trend is becoming more entrenched as a result. According to a survey by Deloitte, the proportion of employees working from home for at least half a day a week has doubled from 24% in 2018 to almost 50% in the most recent data as a result of the pandemic. We still consider our forecast made in June 2020 – namely that the phenomenon of home working should reduce demand for office space by roughly 15% in the medium term – to be a decent ballpark figure.

Demand less hesitant than supposed

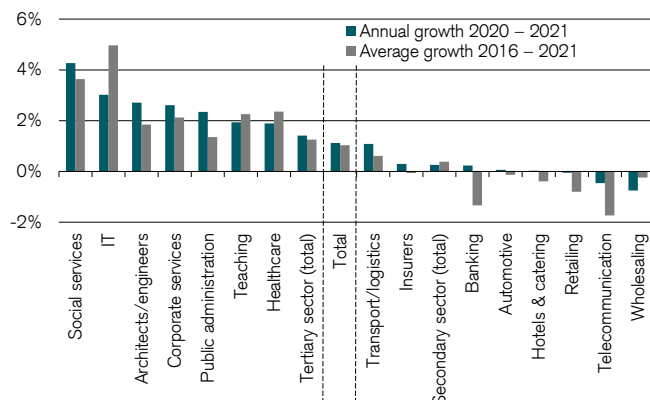
Even if there is great uncertainty among many office tenants over the future need for office space, we still observed some rental contract extensions and new agreements – particularly for workforce concentration purposes – in the market. Hence, despite numerous half-empty office buildings, demand for office property is not as weak as many people believe. So far, there has been virtually no sign of structural change in the market. Ultimately, the current uncertainty also means that only a handful of tenants are actively relinquishing premises or deciding not to extend their contracts.

Demand trend pointing upward, but still weak

Furthermore, as the world continues its slow journey back to normalization, the key role played by a central office for communication and interaction within the company is becoming increasingly apparent. This is particularly true of innovation. In time, the disadvantages of home working should become more evident, with the attendant likelihood that the office will again be a more valued environment. Overall, we expect additional demand this year to decline by around 260,000 m², whereas next year it should recover to a growth of around 360,000 m² (Fig. 48).

Fig. 47: Employment growth recovers impressively

Employment growth (annual growth per end Q3 2021) of selected service providers on a full-time basis

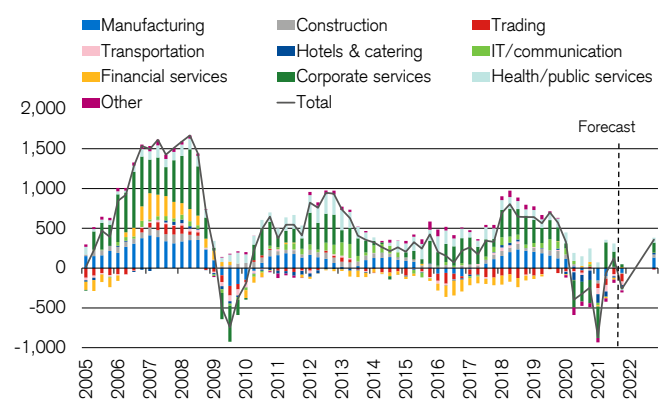


Source: Swiss Federal Statistical Office, Credit Suisse

Last data point: Q3/2021

Fig. 48: Surplus demand for office space lags behind

Estimated additional demand compared to prior-year quarter in 1,000 m²; Forecasts for Q4 2021 and 2022



Source: Swiss Federal Statistical Office, Credit Suisse

Last data point: Q3/2021

Home working slows space requirements only temporarily

The medium-term decline in demand for office space due to the rise of home working will be overlaid by a strong digitalization trend in the long term. This will convert many jobs into office-based activities and can therefore be expected to generate significant additional demand for office space over a long-term horizon.

Long-term demand for office space to be influenced by contrary trends

Over the last few years, employment growth and the increasing digitalization of the labor market have led to a significant increase in the number of office-based jobs in Switzerland, thereby fueling demand for office space. Between 2000 and 2019, the average proportion of office-based activities measured across all workplaces (proportion of office-based jobs) rose from 34% to 45%. At the same time, the proportion of office-based employees working at least partly from home was growing already before the pandemic. COVID-19 strengthened this trend, which is why we are expecting the phenomenon of home working to reduce demand by 15% by 2030. The contrary development of these trends therefore raises the question of how the development of employment will translated into demand for office space going forward.

Basis: forecasts for employment up to 2060

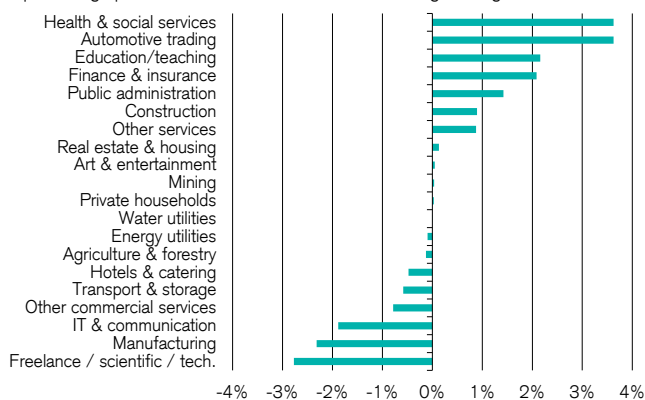
For this analysis, we have drawn on the Swiss Economic Scenarios 2060 produced by Ecoplan and KPMG, according to which Swiss employment growth by 2060 should amount to 10%.¹⁶ Without taking into account the above-mentioned trends, this employment growth translates into an increase in office space of about 6% by 2060, although the sector-specific contributions vary strongly (Fig. 49). By contrast, when the estimated decline in demand for office space of 15% by 2030 as a result of home working is factored in, the demand for space falls by 10% by 2060. Due to the differing nature of regional economic structures, cities with a high density of office-based jobs are most strongly affected by this development. Whereas home working reduces the need for space, according to our models, the phenomenon of digitalization will increase the proportion of office-based workers to an average of about 60% across all sectors by 2060. This alone would entail an increase in demand for office space of 42% (Fig. 50).

Positive long-term demand for office space

Considering all three developments together, the resulting additional requirement for office space in Switzerland should work out at 23% by 2060. Accordingly, the home working trend should reduce the need for space tangibly only over the next few years. As soon as the balance between home working and presence in the office has reached its new equilibrium, the strong digitalization trend can be expected to become the determining growth factor¹⁷.

Fig. 49: Sector contributions to long-term office space growth of 6%

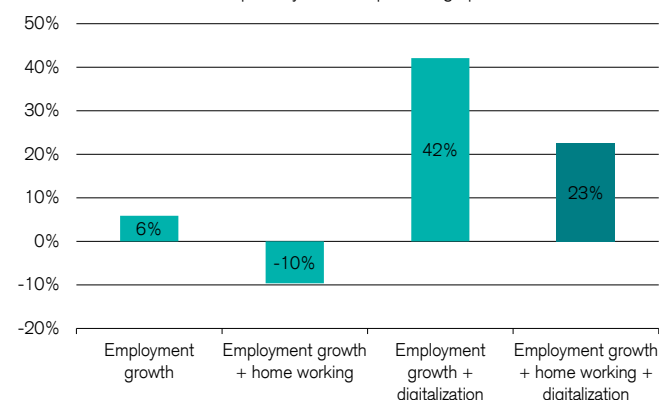
In percentage points, 2019 to 2060, excl. home working and digitalization trends



Source: Ecoplan, KPMG, Swiss Federal Statistical Office, Credit Suisse

Fig. 50: Digitalization increases long-term demand for office space

Growth in demand for office space by driver, in percentage points, 2019 to 2060



Source: Ecoplan, KPMG, Federal Statistical Office, Rützer & Niggli¹⁸, Credit Suisse

¹⁶ Ecoplan, KPMG (2020): Scenarios by industry sector and their regionalization, final report.

¹⁷ See also our study "Credit Suisse Swiss office property market 2022" of December 2021.

¹⁸ Rützer, C. & Niggli, M. (2020). Corona-Lockdown und Home Office in der Schweiz. CIEB, Basel.

Supply of space back on the rise

The volume of Swiss office space being advertised is currently on the rise once again, although more modestly than in other countries. Hesitant demand is prompting an increase in supply in all sub-markets, without exception. We are therefore expecting the commercialization of office premises to remain difficult over the next few quarters.

Supply of office space on the rise again – but more modestly than in other countries

The robust demand for office space evident prior to the pandemic did not reverse the long-term trend of rising supply in Switzerland, but it did at least halt it temporarily. The demand weakness triggered by the pandemic ended this brief phase of consolidation and the volume of advertised office space is now rising once again (Fig. 52). In 2021, the supply rate increased from 5.5% to 5.8%. This increase in available space in Switzerland is quite modest when compared to certain foreign markets such as those of the US or UK. Premises therefore continue to be absorbed by the market, primarily for reasons of location optimization, but also to consolidate a company's workforce at a single location.

Broad-based increase in supply

All sub-markets are contributing to the increase in space. The advertised supply of space is increasing not just in Switzerland's five large office property markets, but also in the mid-sized and small centers, as well as in the rest of the country (Fig. 51). In absolute terms, the increase in supply in the office markets of the large centers is strongest in the outer conurbation surrounding the city centers (outer business district). In percentage terms, by contrast, supply has risen most strongly in the inner city. Sub-markets with high volumes of new space coming onto the market are particularly affected by this increase. The anticipated expansion of space in Basel, for example, is a key driver of the rise in the supply of space in the inner city.

Space increasingly advertised outside of real estate search engines

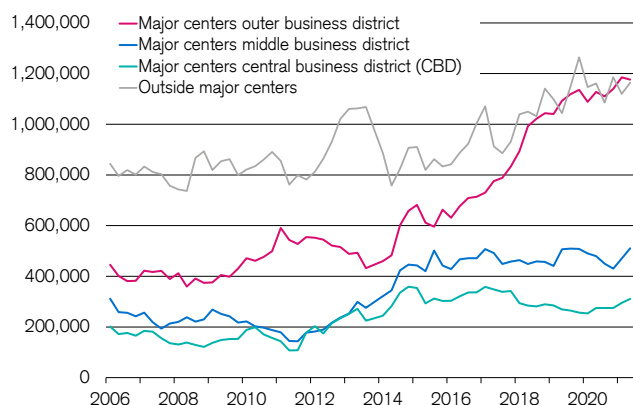
Given the current reservation of tenants who are often postponing the decision to rent additional premises, landlords are becoming reluctant to advertise vacant or soon-to-be vacant spaces on the big real estate search engines. The proportion of space being advertised only through brokers or individual property websites has roughly doubled over the last year. This may be interpreted as a response to the weak absorption of office space.

Outlook mixed

Despite strengthening employment growth, absorption of space is likely to continue to be difficult and below normal levels. A further increase in the supply of space is therefore possible, particularly as, so far, there have only been few cases of companies that are giving up larger premises or are downsizing due to the pandemic. Such plans do exist, however. On the other hand, there is also likely to be a certain amount of pent-up demand. We are expecting the supply of space to rise in particular for large premises as well as premises based on the urban periphery.

Fig. 51: Supply of office space rises in all sub-markets

Total of quarterly (online) advertised space (existing stock and newbuilds), in m²

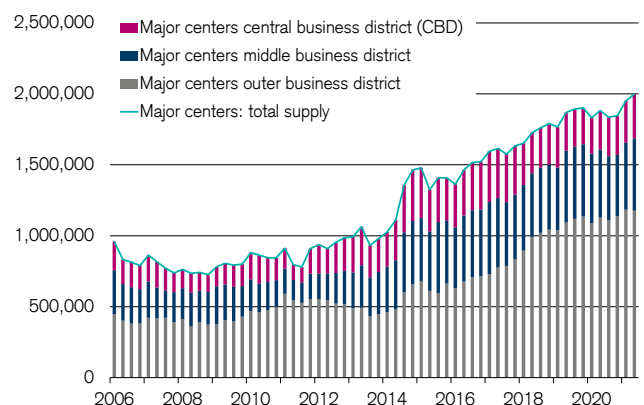


Source: Credit Suisse, Meta-Sys

Last data point: Q2/2021

Fig. 52: Supply of office space increases once again

Total of quarterly (online) advertised space (existing stock and newbuilds), in m²



Source: Credit Suisse, Meta-Sys

Last data point: Q2/2021

Restrained building activity

According to building permit data, construction activity in respect of office property in Switzerland should remain well below the long-term average. This is particularly true of the large centers, despite differences from city to city.

Construction activity currently determining market situation

The pandemic has greatly accelerated the transition to new ways of working and modern working practices. The resulting uncertainty about companies' future office space needs has weakened demand. In this situation, it is the supply side that automatically becomes the point of focus, because if new premises now add to the available market supply in significant numbers, this could rapidly lead to imbalances in regional markets.

Investors showing restraint

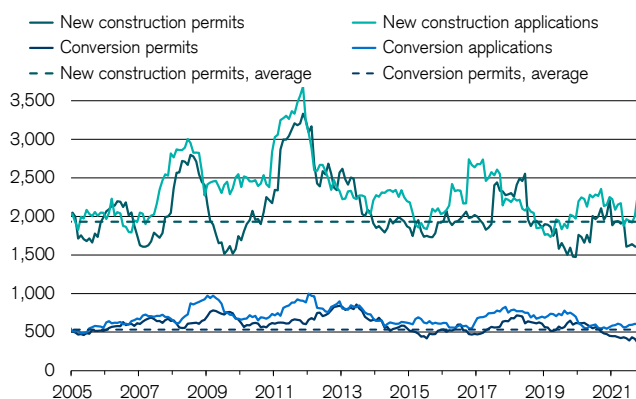
In 2021, the investment volume of building permit issuance for office space amounted to around CHF 1.6 bn (Fig. 53). This is well below the most recent peak recorded in November 2020, and as much as 17% below the long-term average since 1995. As a consequence, investors have become rather more cautious about investing in office construction projects, and have been delaying the launch of new projects until uncertainties over their future need for space subside. By contrast, planning application volumes have increased, with special effects being the primary cause here as an increasing number of data centers or other special properties that will include office space are currently being planned. A planning application for a new police station for the Canton of Bern in Niederwangen has recently been submitted, for example. In a long-term comparison, the volume of building permit issuance for office renovations in 2021 is very low. Replacement newbuilds are typically preferred over renovations at the moment.

Low construction activity in majority of major centers

The relatively intact market situation in the Zurich office property market has a strong correlation with the well below-average level of construction activity. In Figure 54, we have selected average approved investment volumes over the last five years as a measure of the expansion of office space supply, as many projects are only started when the expiry of the building permit looms after a few years. By contrast, the significant expansion of office space in Basel makes it clear why the advertised supply of space in the city on the Rhine has been rising continuously to the point where the supply rate now stands at 8.8%. A comparison of Geneva and Lausanne yields interesting results: whereas in the former it has mainly been weakening demand that has seen the supply of space rise to 12.3%, the latter has benefited from relatively robust demand despite higher construction activity such that the supply of space has expanded much less sharply here. Overall, the pipeline in the majority of large and mid-sized centers is only three-quarters full. This restraint on the part of investors is likely to be one reason why no dramatic imbalances are likely to build up in most office markets over the next few quarters.

Fig. 53: Expansion of office space expected to be low

Building permits and planning applications, moving 12-month total, in CHF mn.

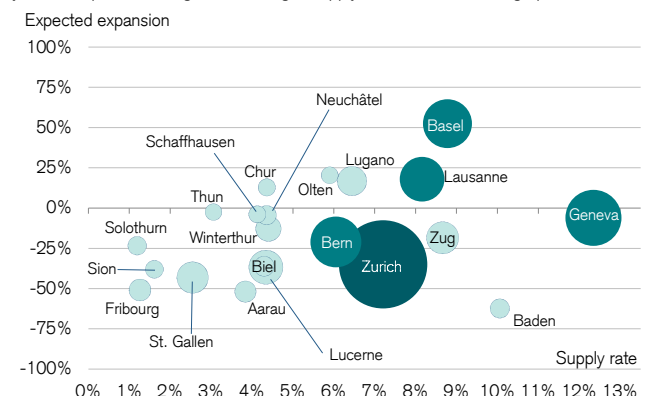


Source: Baublatt, Credit Suisse

Last data point: 10/2021

Fig. 54: Strong increases drive up supply rates

Circle size: existing office space; expansion (y-axis): building permits over last five years compared to long-term average; supply rate as % of existing space in 2018



Source: Credit Suisse, Meta-Sys, Baublatt

Last data point: 09/2021

Office market holds up well

The pandemic-related weakness of demand has been feeding through into rising supply rates and vacancies. Moreover, rental prices are coming under pressure. Compared to foreign markets, however, the Swiss office market is holding up better than expected.

Repercussions of the pandemic so far manageable

Whereas both the volume of advertised office space and official vacancy figures surged in the wake of the coronavirus pandemic in London and New York, the situation in Switzerland has so far remained manageable. The supply of space has admittedly risen in Switzerland too, as have overall vacancies, but the dislocations have so far been much less pronounced than feared. Overall, the officially measured vacancy rate for Switzerland – which covers around 44% of the market – has risen by a modest 13%. This development has almost completely reversed the decline in vacancies recorded in the two prior years (Fig. 55).

Vacancy rates on the rise once again

Although vacancies were up by 18% in the city of Zurich as per mid-2021, they are still at their third-lowest level of the last 20 years. In Bern, where the office space conversion trend is already widespread, vacancies even declined by a third. A similar picture can be found in Canton Geneva, where the vacancy level remains close to the all-time high recorded two years ago. By contrast, vacancies have risen sharply in the urban centers where construction activity has been most vibrant. Vacancies have more than doubled in both the city of Basel and the Lausanne region, whereas the increase in Canton Basel-Country has amounted to less than a third.

Rental prices still trending sideways

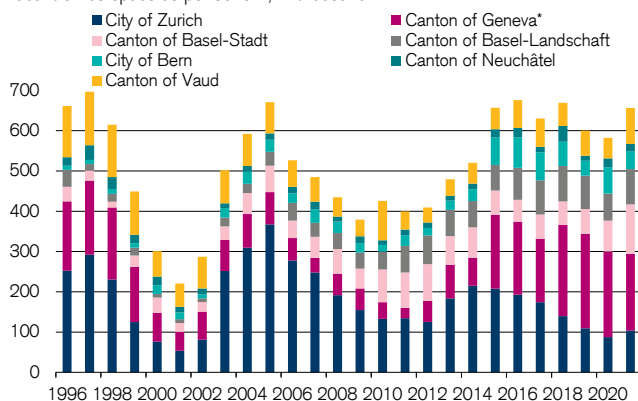
Rental prices have been giving out conflicting signals: as per mid-2021, these had declined slightly year-on-year by 0.1%, while they had risen by 1.3% on average every year over the preceding decade (Fig. 56). Declines were recorded by both the Bern region (–1.2%) and the city of Zurich (–0.6%). However, initial contractual rents probably paint an incomplete picture. Specifically, it must be assumed that incentives are increasingly being granted – particularly at locations outside of the inner city – in order to be able to attract tenants in the first place.

Subdued outlook

On the one hand, powerful employment growth and eventually declining COVID-19 infection rates can be expected to invigorate the demand for office space over the next few quarters. On the other hand, we are expecting to see a certain amount of space rationalization when rental contracts expire, particularly in the case of large companies. We thus expect a lower need for space per employee in the future. In other words, the commercialization of office property can be expected to remain difficult. Despite the economic recovery, we expect supply and vacancies to remain stubbornly high, along with a further slight decline in rental prices.

Fig. 55: Office vacancies on the rise once again

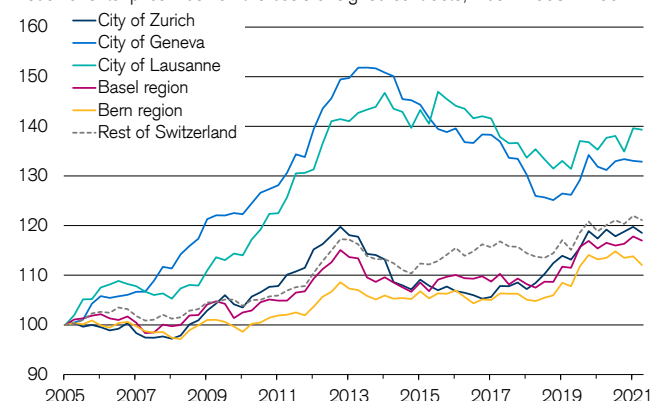
Vacant office space as per June 1, in thousand m²



Source: Various government statistical sources, Credit Suisse
Last data point: 06/2021

Fig. 56: Office rents mainly trending sideways at the moment

Hedonic rental price index on the basis of signed contracts, index: 2005 = 100



Pandemic leaves its marks

↘ Demand

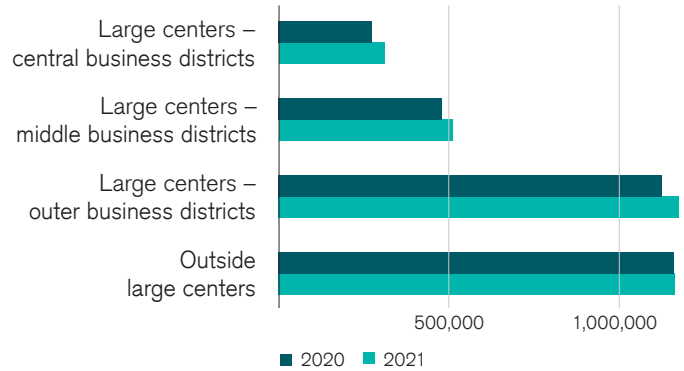


Uncertainty caused by home working trend weighs on demand

2022: Demand for space recovers but lags behind employment growth

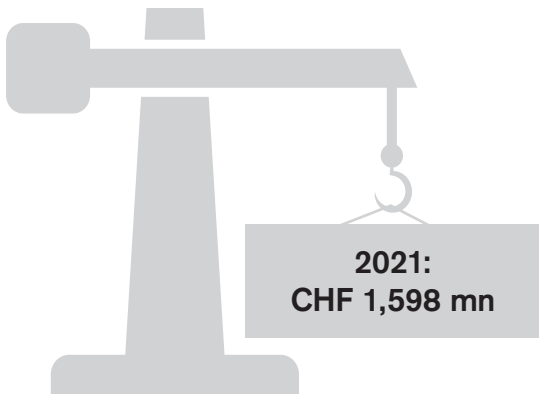
↗ Supply

Advertised supply of space, in m²



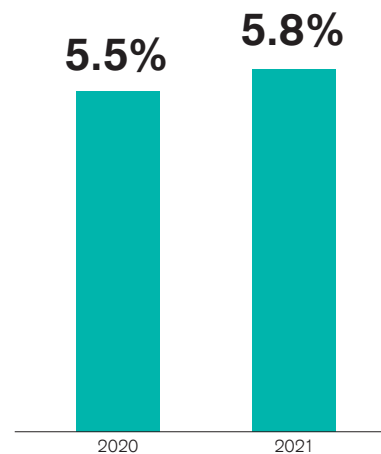
2022: Absorption of space remains sluggish

↘ Office space approved for construction



Approved office space 17% below long-term average

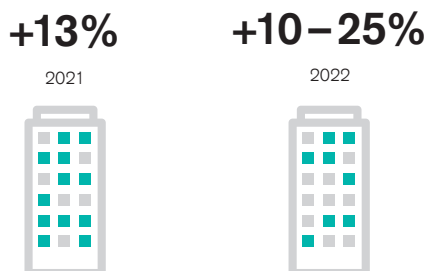
↗ Supply rate



Supply rates growing more strongly in regions with high recent expansion

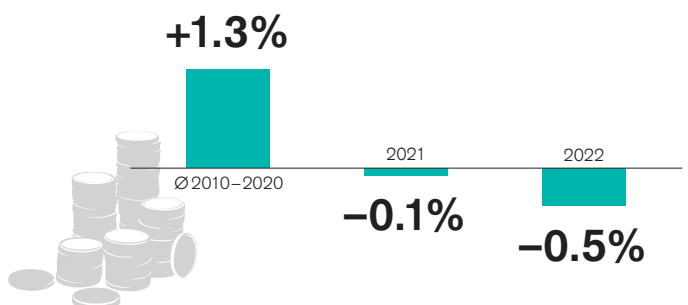
2022: Investor restraint on production side prevents build-up of major imbalances

↗ Vacancies



2022: Vacancies rise further

↘ Rental prices (contractual rents)



2022: Pressure on rents persists

Temporary grace period

Unexpected sales increases have only masked the seismic structural shift in retailing, which has been given a fresh boost by the COVID-19 pandemic. The downsizing trend is thus continuing stealthily and there is no end in sight.

Forced domestic spending

Too much dispersion, too much choice, and too many alternatives for those looking to spend money tend to be bad for Swiss retailers. This is all too clear from the unexpected surge in sales recorded by Swiss retailers during the pandemic. Limited in their mobility to Switzerland – and at times even to their own four walls – households spent more money on goods through both online and stationary channels. This was money that would otherwise have been spent on travel, eating out, concerts, or other leisure activities. Due to the limited holiday and travel options available, the Swiss came to appreciate the plus points of their own country again. So will this trend prove an enduring one for domestic retail? Hardly. The rich sales increases booked by domestic retailers were due to the prevailing coronavirus restrictions. It thus rather reflects enforced domestic spending than an increase in the appeal of Swiss stores and shopping malls.

Respite for stationary retailers

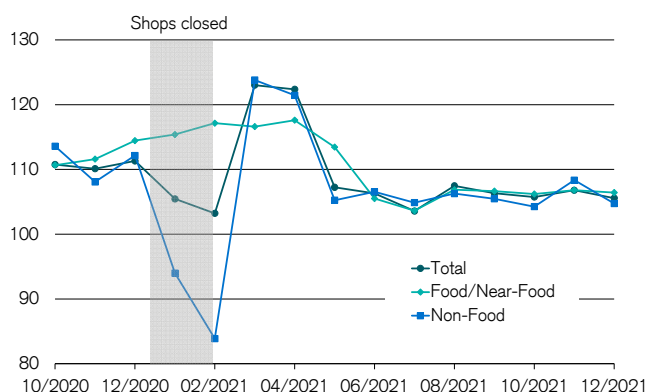
As a result, the pandemic helped Swiss retailers in 2021 to record – as in the year before – a sales increase of a magnitude that had not been seen for a long time previously. According to figures published by GfK, the Swiss retail trade recorded growth of 1.3% in 2021 (Fig. 58). The retail statistics published by the SFSO, which cover not just the major players but also specialist retail trade, put the sales increase as high as 3.3%. The unexpected boon, which enabled even bricks-and-mortar retailers to record an increase in sales (+3.0%), has given retailers a welcome respite from the seismic structural change affecting society as we increasingly shift from location-based shopping to shopping without spatial limitations. Retailers would be well advised to use this grace period to adapt its structures accordingly. After all, the pent-up desire to head off to holiday locations, to shopping trips on city breaks abroad, or go across the border for the weekly money-saving shop will probably become obvious sooner than Swiss retailers would like.

Review of 2021: retail the clear winner from the pandemic

The pandemic had a similar impact on sales development in the Swiss retail trade in 2021 as it did in 2020. Above all, the closure of all stores selling goods not essential to daily needs between January 18 and the end of February 2021 had a profound impact on non-food retailers (Fig. 57). By contrast, the food trade profited from reduced competition as shopping tourism and catering outlets were taken out of the game for several months. In the first half of 2021, the volume of spending on shopping tourism was about 23% lower than before the pandemic.¹⁹

Fig. 57: Normalization of retail sales as the year progresses

Nominal retail sales, seasonally adjusted and indexed (2019 = 100)

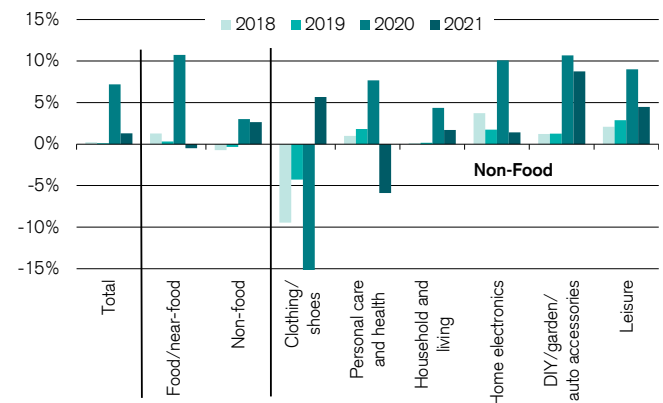


Source: GfK, Credit Suisse

Last data point: 12/2021

Fig. 58: Food remains at high level, non-food posts further increase

Nominal retail sales growth (seasonally and number-of-sales-days adjusted)



Source: GfK, Credit Suisse

Last data point: 12/2021

¹⁹ Hunziker, T. (2021): Shopping tourism has yet to get back to its pre-crisis level, Credit Suisse Economics Alert, 21.07.2021.

Food maintains high prior-year level

However, with the opening-up of both borders and catering in the second quarter, Swiss food retailers once again faced greater competitive pressures, which was also reflected in a decline in sales (Fig. 57). At the same time, shopping tourism began to recover, though initially still lagging behind 2019 levels. The ongoing recovery of shopping tourism then led to a normalization of sales in the food area too as the year progressed. Due to the persistent pandemic and the home working trend, food sales, however, remained above pre-coronavirus levels until the year-end.

Every cloud has a silver lining: even non-food posts an increase

In the non-food area, which suffered badly from store closures in the winter of 2020/2021, the reopening of stores from March 1, 2021 onward led to a surge in catch-up spending that remained largely limited to Switzerland. As a result, sales in the non-food area were again slightly higher last year than before the pandemic. Once again it was the clothing and shoes segment that suffered (Fig. 58). Although this business recorded a year-on-year increase, the recovery was pretty feeble given the catastrophic 15% sales slump of the previous year. A base effect was also apparent in the personal care & health segment, which could not repeat the strong sales figures of 2020 in 2021. By contrast, decent rises were again recorded by the household and living (+1.7%), home electronics (+1.4%), DIY/garden/automotive accessories (+8.8%), and leisure (+4.5%) segments. Viewed as a whole, the non-food segment posted a year-on-year sales rise of 2.7%. By contrast, the food segment could only just maintain the high level of sales recorded the previous year, posting a decline of 0.5%. Overall, the situation in retailing appears to be slowly normalizing at a level some 6% above pre-coronavirus sales. That level will take some defending.

2021: positive surprise for many a retailer

Last year turned out to be more positive than many retailers had expected. As they had formulated their sales and profit targets rather defensively, no doubt influenced by a difficult 2020, 50% of retailers managed to surpass their budgeted sales, in some cases by quite some margin. Profits were higher than expected for as many as 51% of retailers, with just 10% missing their targets. In the non-food sub-market, results were above-average in more cases than in the food area. Furthermore, the year-on-year comparison was impressive. 54% of retail decision-makers surveyed by Fuhrer & Hotz for the Retail Outlook²⁰ were able to record year-on-year increases in sales in 2021. Only 30% did not manage to match the previous year's figure. Retailers in the food/near-food sub-market were affected disproportionately badly by sales declines. This was probably due to the fact that an increasing number of workers returned to the office and thus consumed less foods at home. As a consequence, purchases of food for domestic consumption have continued to decline.

Outlook for 2022: decline in sales likely unavoidable

A combination of economic recovery and an improved labor market situation should support retail sales in 2022. Another plus is persistent population growth, which is heavily influenced by positive net migration. This should remain above pre-crisis levels in 2022 too. Furthermore, due to the closure of stationary businesses at the start of 2021, the base effect will have a positive impact on sales growth in 2022. Nonetheless, it will be difficult for the industry to repeat the very high, pandemic-boosted, sales figures from 2021 as other base effects will impact negatively. The absence of catering restrictions and mandatory home working this time around can be expected to weigh on food sales. Furthermore, as the world continues to normalize, alternative spending options will make it difficult for Swiss retailers to hold on to their higher shares of consumer spending. These options include shopping tourism, which should once again take a greater slice of the pie. Signs of a normalization of shopping behavior were already evident in the second semester of 2021. Footfall in the stationary retail trade reached levels just below those recorded in the weeks prior to the outbreak of the coronavirus pandemic (Fig. 59).

Saturation tendencies likely to push pendulum in other direction

Saturation tendencies in the sale of consumer durables such as bicycles, cross-country skis, furniture, computers, and tools for household and garden can be expected to weigh down on sales in the corresponding non-food segments. By contrast, we are expecting catch-up spending to boost sales in the clothing segment, but without lifting them back to anywhere near pre-crisis levels. Overall, we are expecting a nominal sales decline of around 4% in 2022. The annual change will differ considerably from segment to segment though. By contrast, the retail industry itself is more optimistic. Two-thirds of surveyed retailers and manufacturers of retail goods are expecting sales to rise in 2022.

Agile online trade wins further market share

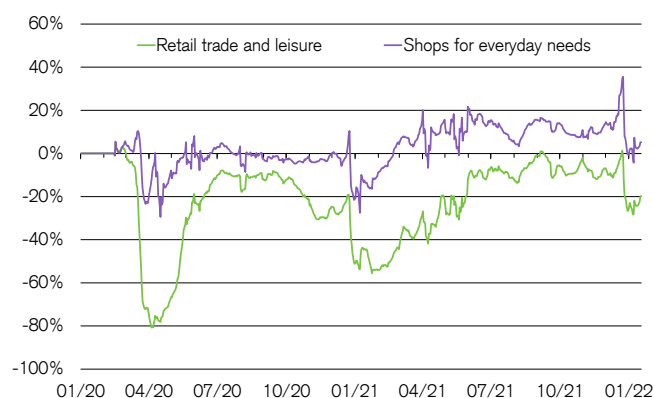
The online trade was able to build on the sharp sales increase recorded in 2020 and even expand it further in 2021 (Fig. 60). The twists and turns in the COVID-19 saga have played into the hands of agile online retailers. The latter were able to deliver product range changes, promotional alterations, and price adjustments more easily and swiftly than their stationary counterparts. The marked shifts in consumer demand – e.g. away from elegant shoes for going out in favor of

²⁰ Credit Suisse Retail Outlook 2022: "Special Days" are polarizing the Swiss retail trade.

household slippers – posed challenges to retailers. Here the advantage was with traders who were able to supply the goods that were suddenly in vogue. Accustomed to shorter cycles, online traders found it easier to secure and distribute the right goods than stationary traders, who typically buy in their products long in advance and then manage them statically throughout the whole season. The big beneficiaries of the huge demand in the online channel were the providers who were already established in the market, had functioning processes as well as comprehensive logistical infrastructures, or were able to procure these externally. These market players were able to fully exploit the economies of scale that come with higher sales volumes.

Fig. 59: Normalization of footfall in H2 2021

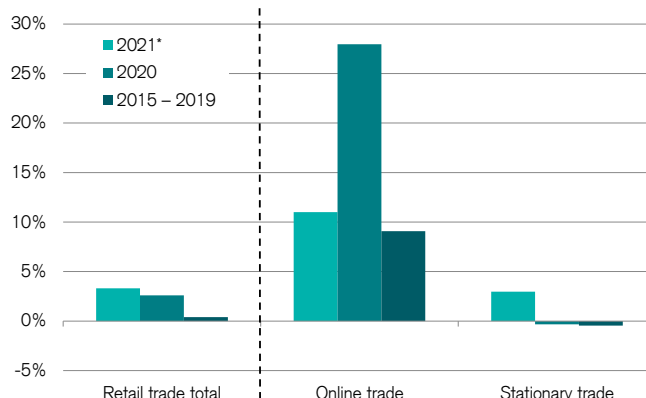
7-day average, 0% = baseline value between January 10 and February 29, 2020



Source: Google
Last data point: 17.01.2022

Fig.60: Diverging sales development of online and offline trade

Nominal sales growth in retailing (*estimate)



Source: GfK, Fed. Statistical Office, Association of Swiss Commerce, Credit Suisse
Last data point: 2021

Major discrepancies within the online sector

It is therefore also clear that there were considerable discrepancies in the sales increases between the various online retailers. Almost all benefited from the pandemic-related boom, but some recorded only single-digit growth rates. By contrast, others enjoyed sales increases that were almost literally off the scale. One striking development is that foreign providers have largely missed out on this bonanza, for the most part recording sales declines in 2020. This is likely to have been the case in 2021 too. Overall, the online trade can be expected to have grown by around 11% last year. As of mid-2021, it was already 15% up on what had been a strong prior year. However, the online trade is unlikely to have maintained this growth trajectory, as stationary competitors were able to make up ground in the second semester. At the end of September, sales growth according to GfK had declined to 13%. The first online traders have now published their sales figures for the full 2021 year. For example, Migros reported online retail growth of 15.6%, to which Digitec Galaxus contributed growth of 17.7%. The Competec Group, which owns brack.ch among other brands, unveiled growth of 9.0%. Coop reported growth of 7.6% in the pure B2C (business-to-consumer segment), while Farmy stood out with a sales increase of 23%.

Online trade broadly on former growth trajectory in 2021

The anew strong growth of the online trade last year was more or less in line with the trajectory recorded prior to the pandemic, which suggests that sales volumes that have migrated from stationary trade to the online channel have typically been lost by the former, never to return. The coronavirus crisis has changed the shopping habits of many households. Consumers became more savvy in the world of online shopping over the course of the pandemic, and now turn to the internet for a much wider spectrum of products. Indeed, many consumers who ordered online for the first time during lockdown will not be forsaking this channel going forward.

Changes in footfall

The shifts between the various shopping channels may well mean that the expected sales declines will predominantly come at the cost of bricks-and-mortar retailers. As another factor, the pandemic has turned existing shopping habits upside down. Given our expectation that hybrid forms of working – involving both a home and an office presence – will dominate in the future, changed daily regimes are likely to permanently change shopping routines. Particularly affected by this phenomenon are highly-frequented sites at transport hubs, for example. These have already seen significantly lower footfall as a result of the pandemic and now see themselves exposed to the risk of this footfall not returning to former levels for a very long time. By contrast, stationary stores and local shopping malls in residential districts are benefiting. A decline in footfall should generally be

anticipated, as mobility levels are likely to be permanently subdued – as we flagged up in our Retail Outlook 2021.²¹

Downsizing of stationary retail trade

The changed environment as well as their own online experiences will force Swiss stationary retailers to respond. Generally speaking, retailers continue to underestimate the potential of the online sphere. How else can one explain the fact that 69% of the decision-makers surveyed by Fuhrer & Hotz who sell products other than those for everyday needs exceeded their budgeted online sales in 2021 in many cases by 10% or more? National and international chains can therefore be expected to continue their strategy of reducing the number of branches and of investing in the online channel. At the same time, the requirement for retail space is declining, as stationary retail is increasingly struggling to offer full product ranges. In the majority of cases, it is the online shop that can deliver here. Moreover, many specialist retailers are slowly heading for the door, not because they are going bankrupt, but because they are giving up their businesses – due to lack of a successor or lack of prospects for a rosy future – before they are forced to do so. The total number of sales outlets in Switzerland has therefore been declining for years. Bakeries, butchers, clothing and shoes stores, stationers, furniture stores – the list goes on – are all disappearing. Only in a very few retail segments, the number of sales outlets is on the rise. These include stores that sell bicycles, glasses, and pet products, as well as specialist retailers that sell medical or cosmetic items.

Axe wielded most heavily in non-food segment

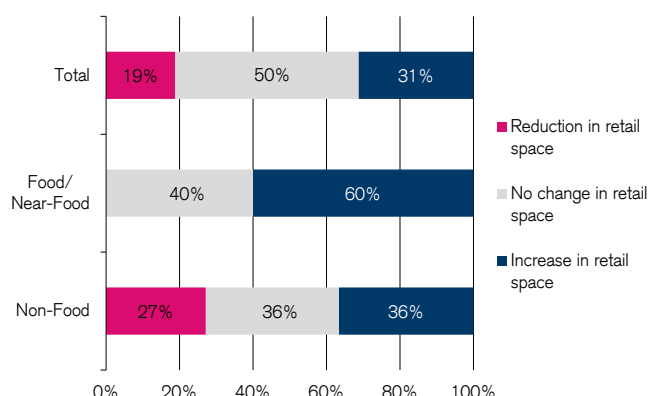
The food/near-food area is likely to record an increase in sales outlets too. The rediscovery of local stores and continuing population growth should underpin this trend. This is also apparent from the responses of retailers on their premises plans (Fig. 61): Of the retailers operating in the food/near-food area, almost none were thinking of downsizing, compared to 27% in the non-food area. While the focus in the food/near-food area is therefore on expansion, various traders in the non-food segment want to improve their commercial viability by closing existing sites.

Large and mid-sized centers (including wider urban areas) most affected

The ultimate question is where the downsizing trend will leave the deepest scars. One answer can be obtained by looking at the websites that advertise vacant retail premises (Fig. 62). This reached an initial high in 2016 when structural change had started to weigh on the market for retail space. Since the beginning of 2020, the volume of advertised retail space has been rising once again. COVID-19 appears to have triggered a new wave of restructuring. Switzerland's large and mid-sized centers, which have so far been the strongest affected by structural change, and their wider urban areas are most concerned by this development. By contrast, small centers as well as periurban, tourist, and rural communities have not been affected at all recently. Shop density is much lower at these locations, while demand has suddenly strengthened dramatically due to the greater proliferation of home working.

Fig. 61: Planned change in retail

Planned change in retail space share as a proportion of total space; in %; n=16

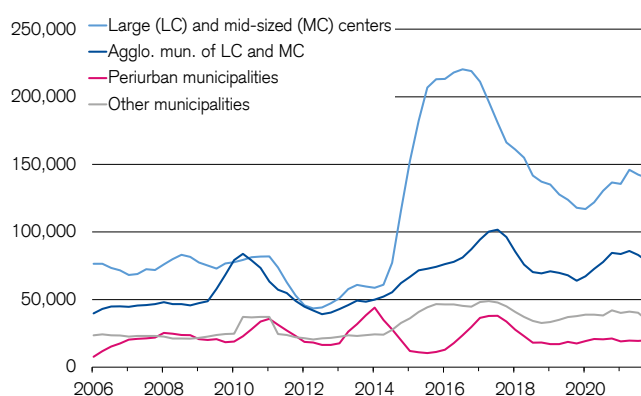


Source: Fuhrer & Hotz

Last data point: 2021

Fig. 62: COVID-19 triggers a new wave of restructuring

Retail premises advertised on websites in m² (rolling quarterly average)



Source: Meta-Sys, Credit Suisse

Last data point: Q4/2021

²¹ Credit Suisse Retail Outlook 2021: COVID-19 pandemic and Swiss retail.

Pressure on yields persists

Direct Swiss real estate investments have once again proved to be crisis-resistant, and the ongoing economic recovery is further strengthening the base for their returns. Even the latest interest rate rises are unlikely to scare investors, who continue to face a dearth of alternatives.

Investors positioning themselves for the post-pandemic era

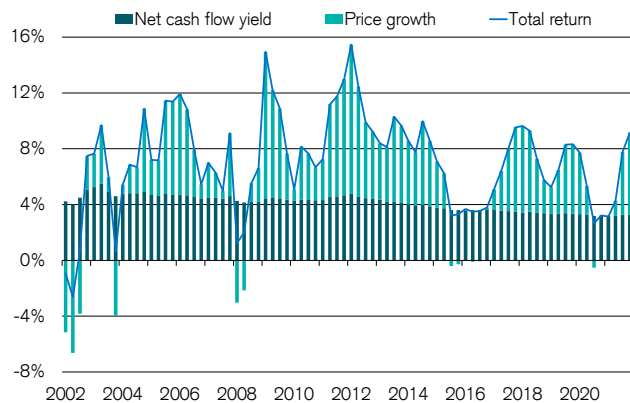
The powerful economic recovery that kicked in last year is likely to persist. Moreover, the evolution of the coronavirus pandemic raises hopes of a far-reaching removal of the remaining restrictions as the year progresses. For this reason, investors are once again focusing on the long-term outlook. One question that needs answering is how real estate portfolios should be adapted for the post-COVID-19 era. On the one hand, income prospects have shifted both between and within the individual segments. For example, the location of office premises is becoming even more crucial, rental apartment blocks outside of the large centers are enjoying a tailwind, and both logistics space and data centers should continue to enjoy value increases. On the other hand, resurgent inflationary tendencies in the US and the Eurozone are reminding investors that the era of ultra-low interest rates must end at some point.

Unbroken demand for “concrete gold”

But that point has not yet been reached in Switzerland. Although Swiss capital market yields did drift upward at the start of the year and those of 10-year Confederation bonds broke through the zero-percent mark for the first time in some three years, given an average net cash flow yield of 3.3% (Fig. 63) for residential and mixed investment properties the yield premium for real estate investors remains high, even in a long-term comparison. The persistently strong demand for “concrete gold” is also apparent from the extremely high number of capital market transactions last year involving real estate funds and real estate investment companies (cf. page 51), as well as from strong growth in outstanding corporate mortgages, which were up to 6% higher than in the prior year.

Fig. 63: Accelerated price growth of investment properties

Transaction-based total returns of residential and mixed investment properties, annualized



Historical performance data and financial market scenarios are no reliable indicator of future results

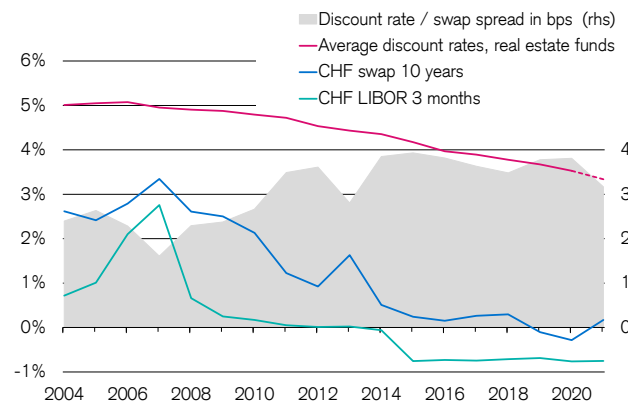
Source: IAZI, Credit Suisse
Last data point: Q4/2021

Compression of residential yields likely to persist

This impression is supported by the recent transaction data for residential and mixed investment properties (Fig. 63). According to the SWX IAZI Investment Real Estate Performance Index, which is believed to cover around a half of arm's-length transactions in Switzerland, price growth accelerated again over the course of last year. In the fourth quarter of 2021, transaction prices were 5.9% up on the prior-year period, with the total return amounting to as much as 9.1%. Residential investment properties are likely to have been the main prop of this price growth. These continue to be viewed by many investors as a quasi-bond instrument – i.e. with a low risk of capital loss and

Fig. 64: Valuation “reserves” are shrinking

Development of average discount rates based on properties held by Swiss real estate funds (2021: provisional) and development of interest rates



Historical performance data and financial market scenarios are no reliable indicator of future results

Source: Annual reports of real estate funds, Datastream, Credit Suisse
Last data point: 30.09.2021

reliable income streams. By contrast, there is some uncertainty over the future profitability of office and retail properties situated away from the best locations. This uncertainty is due to prospective tenants holding back on concluding rental agreements for new premises until their future need for space – against a backdrop of structural change – can be assessed more accurately.

Discount rates have further to fall

Although capital market yields have passed their nadirs, the support for the valuations of investment properties from the interest-rate side is likely to persist for some time yet. Since 2004, the average discount rates used for the appraisal of the properties held by Swiss real estate funds have declined from 5.0% to 3.3% (Fig. 64). The spread between discount rates and the risk-free interest rate, in this case measured using the 10-year CHF swap, briefly rose to around 400 basis points. Due to the rise in long-term interest rates, this spread had narrowed to just under 320 basis points by 2021, hence there is still further scope for downward adjustments of discount rates.

Improved yield prospects of residential investment properties, ...

The outlook for residential investment properties has recently brightened on the income side. There was a trend reversal in the vacancy rate last year, and a stabilization of rents is now evident (cf. rental apartments section, page 26 et seq.). When measured against the portfolio of the data pool of the Real Estate Investment Data Association (REIDA), vacancy-related rent income losses declined from 3.6% of target income in 2019 to 2.4% in 2021 (Fig. 65).

... but tenants still retain the upper hand in many places

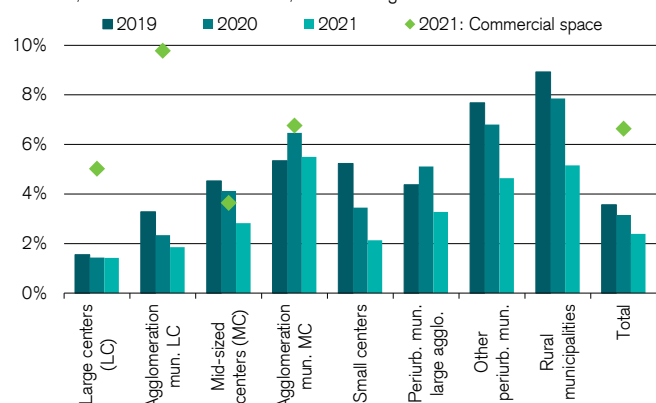
Viewed regionally, however, there are still signs of significant oversupply. For example, the rent income loss rate in the wider urban areas of the mid-sized centers remains a high 5.5%. Competition for tenants remains fierce in such an environment. Properties need to be positioned in the market as favorably as possible to counteract the combination of falling yields and significant rental income loss risks. Particularly away from central locations, both the residential mix and floor plans need to be optimally aligned with potential demand. A crucial factor here is the fit-out of properties, which can be modified even for existing properties without the need for comprehensive renovation measures. For example, the existence of a washing tower in the apartment itself can be a clincher for many apartment-seekers nowadays. Accordingly, the proportion of apartment advertisements that highlight such a washing tower has risen from 15% to around 25% over the last decade.

Exploiting the boom in e-mobility

One theme that is growing in importance is e-mobility. Over the last few years, the number of new electric vehicle registrations has all but exploded. They accounted for 29.8% of all registrations (plug-in hybrids included) in the fourth quarter of 2021 (Fig. 66), and this figure looks set to increase further. As a consequence, the availability of an electric vehicle charging station or a parking space with a wallbox charger is likely to be an increasingly crucial criterion for would-be tenants. Although the number of rental apartments that can offer such a feature is rising, it is still very low: In the fourth quarter of 2021, just under 0.5% of all rental apartment adverts highlighted access to a charging station or the opportunity to install a wallbox. There is therefore a good opportunity for “early movers” to react to this growing need – with cost subsidies from energy promotion programs being a further possibility in some cantons. Newbuilds should therefore increasingly incorporate at least the possibility of wallbox installation for individual parking spaces at a later date. Another option for developers is to seek to collaborate with an electric vehicle charging station operator or an electrical company with a view to having individual shared charging stations installed (and thereby possibly even generate additional income streams).

Fig. 65: Declining rent income losses on residential property

Residential rent income loss rate due to vacancies, in % of target income, in each case Q3; data basis: more than 120,000 rental agreements of institutional investors

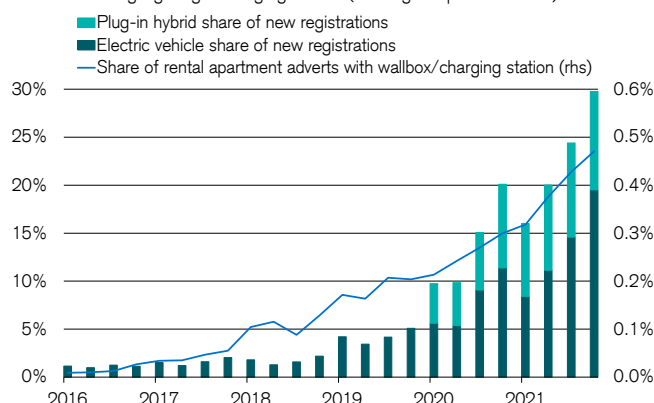


Source: REIDA, Credit Suisse

Last data point: Q3/2021

Fig. 66: Charging stations still the exception with rental apartments

Electric vehicles as proportion of new car registrations and proportion of rental apartment adverts highlighting a charging station (existing or option to install)



Source: auto-schweiz, Meta-Sys, Credit Suisse

Last data point: Q4/2021

Little upside left for residential real estate funds

Investors are prepared to pay a high price for the stable income streams of residential real estate funds. By contrast, they are still wary of real estate shares and commercial property funds, despite the ongoing recovery.

Real estate funds surge ahead of real estate shares

In the second year of the pandemic too, Swiss real estate funds displayed their defensive qualities and their bond-like character. And while their total return of 7.3% last year (Fig. 67) may have lagged – unlike in 2020 – well behind the broad equity market (SPI: +23.4%) and global real estate equity indices (MSCI World Real Estate: +32.1%) they easily outperformed both Swiss real estate shares (SXI Real Estate Shares: +4.4%) and their European counterparts (+3.8%).

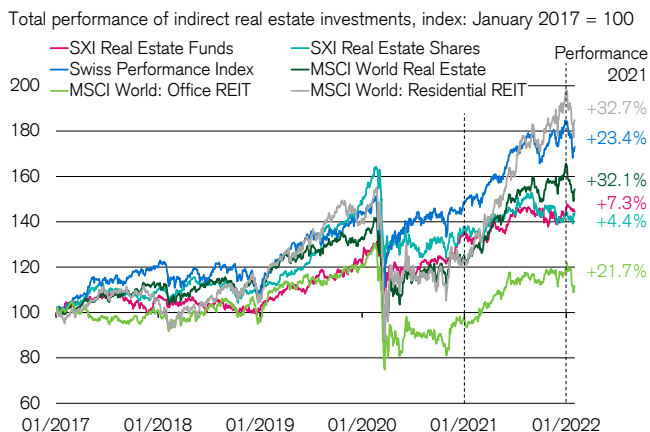
Residential property preferred

Pandemic-related structural effects such as the reduced need for office space as a result of greater home working and the steepening of the upward trajectory of online trading have continued to act as a drag on the performance of commercial property. And although global real estate investment trusts (REITs) with an office or retail focus performed strongly last year, just like Swiss real estate shares (for which commercial premises account for three-quarters of all portfolio holdings), they have yet to fully recover from the slump recorded at the start of the pandemic. By contrast, listed Swiss real estate funds have an average of more than 50% invested in residential investment properties.

Rent loss rates decline

Real estate funds are gaining growing support from their fundamental data. The rent loss rate declined in 2021 for the first time in four years – from 6.0% to 5.7% (Fig. 68). This decline is entirely attributable to commercial property funds. The improvement is due not so much to changes in vacancy levels, but rather the decline of pandemic-related losses as a result of rent waivers and debtor losses, some of which were also added to rent loss rates. As the financial year of some funds also encompasses the entire second semester of 2020, such temporary effects are likely to still be skewing the figures; hence a further reduction in rent loss rates should result in 2022 too. In the case of real estate funds with a residential focus, however, another slight rise in the rent loss rate to 5.1% was recorded. Quite clearly, the decline in the rental apartment vacancy rate has yet to feed through into the rental loss rate here. This is likely to be attributable to financial year demarcation on the one hand, but also to the strong focus of these funds on the large urban areas, the cores of which recorded no decline in vacancies.

Fig. 67: Underperformance of Swiss real estate shares

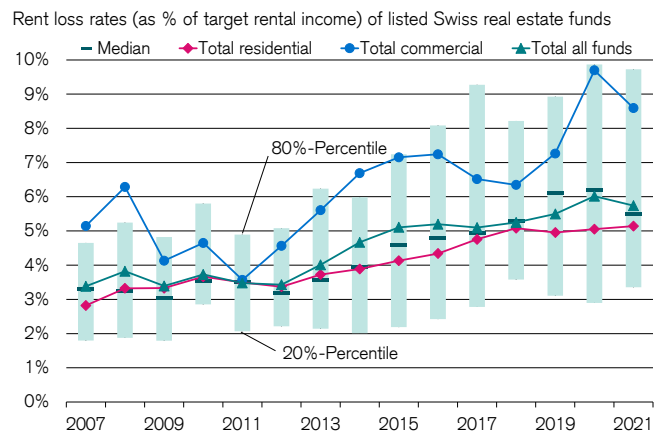


Historical performance data and financial market scenarios are no reliable indicator of future results

Source: Datastream, Credit Suisse

Last data point: 31.01.2022

Fig. 68: Trend turnaround in rent loss rates



Source: Annual / semi-annual reports of real estate funds, Datastream, Credit Suisse
Last data point: 30.09.2021

Investment vehicles building up cash pile for further transactions

Strong investor interest in indirect real estate investments is reflected in high capital inflows (Fig. 69). The total volume of funds invested in capital increases and new launches amounted to CHF 3.65 billion in 2021, again exceeding the already high volume of the previous year. In other words, real estate funds are increasingly emerging as one of the key players in the transaction market for investment properties, a phenomenon that is likely to ensure continued high demand. Moreover, three funds have been newly listed on Zurich's SIX Swiss Exchange and incorporated into the SXI Real Estate Funds Index, which now has a total capitalization of more than CHF 64 billion. In addition, real estate investment companies have also been active in the capital market, placing bonds with a volume of CHF 1.71 billion.

High premiums for residential real estate funds ...

The pronounced focus of investors on residential property is feeding through into the premiums of real estate funds. The premiums to net asset value at which residential real estate funds are traded on the stock market stood at a high 46.4% as per the end of January 2022, having at one point during the year broken through the 50% mark (Fig. 70). The highest premiums of all – in some cases up to 60% and beyond – are typically those of large, liquid funds that have been around for decades. In addition to existing revaluation reserves, the high deferred taxes with these funds that are taken into account when calculating net asset value (NAV) are likely to constitute the principal reason for the high premiums. Particularly in the case of older funds that purchased their underlying properties at cheap prices, the estimated liquidation taxes push down the NAVs excessively and thus exaggerate the corresponding premiums. Without subtracting liquidation taxes – which work out lower for longer periods of ownership – NAVs would be higher and premiums less inflated.

... compared to funds and shares that focus on commercial property

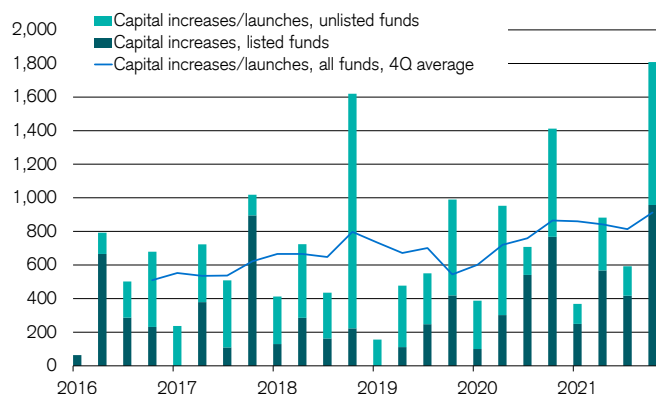
The average premium paid for residential real estate funds compared to those focusing on commercial property has risen sharply since the start of the pandemic, and stood at over 20 percentage points at the end of January 2022. The valuations of commercial property funds with a strong focus on special segments – such as logistics or self-storage – are higher, whereas a few funds are even trading at no premium at all or even at a slight discount to net asset value. These are typically investment vehicles with a higher proportion of office and commercial property situated away from the top locations, with a stronger focus on growth and in some cases high vacancy risk. The premiums of real estate shares, which most recently stood at an average 18.9%, are ultimately more modest than those of funds, but remain higher than their long-term average.

Profit-taking opportunity

The income security of residential real estate funds therefore comes at a price. Not only must these products be acquired at high premiums, their dividend yields are also low at an average 2.1%. By contrast, commercial real estate funds still offer dividend yields of 3.4%. Furthermore, while the security of residential real estate fund cash flows should still be considered high, interest rate rises bring the risk of significant price corrections, as there is a strong long-term correlation between premiums and the level of interest rates. Current valuations should therefore be viewed as steep given the background of recent rises in capital market yields, hence there should be little upside potential on the valuation side. For more growth-oriented investors with longer investment horizons, we therefore think it reasonable to consider taking profits on a certain proportion of positions in residential real estate funds, and investing the corresponding proceeds in domestic or foreign commercial real estate.

Fig. 69: Swiss real estate funds enjoy high capital inflows

Capital increases and fund launches, in CHF mn

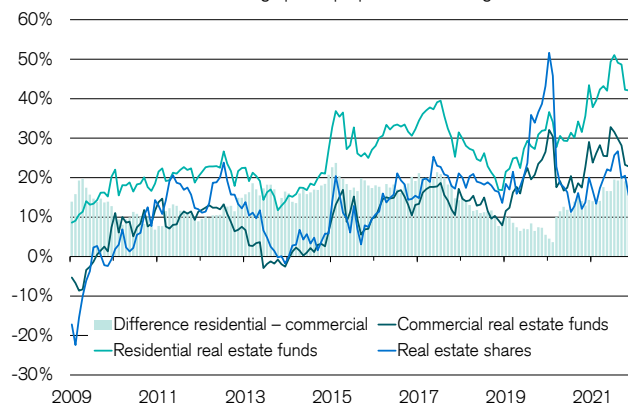


Source: Credit Suisse

Last data point: 31.12.2021

Fig. 70: Record-high premiums for residential real estate funds

Premiums of real estate funds and real estate shares, as % of net asset value; commercial real estate funds including special properties, excluding mixed funds



Historical performance data and financial market scenarios are no reliable indicator of future results

Source: Datastream, Credit Suisse

Last data point: 31.01.2022

Align investment strategy with the post-COVID-19 era

Improved income prospects, rising interest rate risks

It is above all the residential property market that is benefiting from the powerful economic recovery, which is likely to continue in 2022 (anticipated GDP growth of 2.5%). However, the COVID-19 pandemic is leaving scars on the real estate market that will not simply disappear, as the pandemic has triggered shifts in demand both within and between the various segments of the market. At the same time, the pandemic has stoked inflationary tendencies via expansionary monetary and fiscal policy and disruptions to global supply chains. That said, these appear to be still manageable in Switzerland, so that a change in the Swiss National Bank's monetary policy stance is not imminent. Nonetheless, investors should brace themselves for further modest rises in long-term interest rates. Even for liquid indirect real estate investments, such rises do not yet appear to have been priced in if the high premiums of real estate funds are anything to go by.

Rethink traditional strategies

In the long term, the classic buy-and-hold strategy is unlikely to remain a guarantor of reliable returns, in contrast to the last 20 years. At prime locations, the compression of yields is now so pronounced that any future interest rate rises would bring with them significant value correction potential. This raises a major question mark over the risk/return ratio of what have traditionally been considered conservative strategies – e.g. a focus on core residential property in urban centers. It is thus all the more important to design an investment strategy that relies on good regional and sectoral diversification, but also includes properties with higher return potential and takes real estate development projects and investment in foreign real estate into consideration.

Our preferred real estate investments in 2022

Summary assessment of individual real estate segments and preferred properties

Segment	General appraisal	Strongest conviction
Residential property	Thanks to vibrant demand on the part of tenants and declining construction activity, income prospects have improved overall, particularly in suburban/rural regions. Oversupply risks remain in some places, and in the event of interest rate rises major value corrections are possible due to heavily compressed yields.	<ul style="list-style-type: none"> - Properties in easily accessible municipalities in the suburban to rural area - High proportion of apartments with three or more rooms - Flexible floor plans that are suitable for home working, generous outside space/balconies - Micro-apartments, student housing, co-living in large centers - Senior-friendly apartments (demographic change, falling numbers of new retirement and care home residents)
Office property	The marketing situation will remain difficult due to home-working-related uncertainties. Despite the economic recovery, we therefore expect supply rates to prove stubborn and vacancies to remain high, along with a further slight decline in rental prices.	<ul style="list-style-type: none"> - Properties in central locations with a high density of points of interest - Flexible floor plans that allow adjustment to hybrid working models with offices as communication zones - Urban co-working premises with a popular operator
Retail property	The sales shift to the online channel accelerated during the pandemic. The structural change is not yet that far advanced in Switzerland, and retail properties are at risk of corrections on both income and price side.	<ul style="list-style-type: none"> - Top high streets in the large centers - Urban shopping centers with strong catering and services component - Smaller retail centers with a strong food anchor - Specialist centers (particularly garden centers / DIY stores)
Logistics	Logistics is benefiting from the growing online trade and urbanization. The offering in Switzerland is limited due to scarcity of land, which makes further valuation gains likely in the longer term.	<ul style="list-style-type: none"> - Parcel and distribution centers on the main transport axes with high third-party usage - Small-unit city logistics premises
Hospitality	Both catering outlets and hotels with a vacation guest focus can be expected to recover relatively quickly and fully when the pandemic ends. The latter is likely to once again attract both European demand and then – with a slight time lag – demand from further afield. Hotels that focus on business tourism such as those near airports are threatened with lower revenues in the longer term too.	<ul style="list-style-type: none"> - Innovative city hotels with 3 to 4 stars that target a young and urban clientele of leisure travelers - Aparthotels/serviced apartments in the Alpine region with co-working offerings - "Dark kitchens", which are benefiting from the boom in food delivery services

Source: Credit Suisse

Ten questions – ten answers

Will residential property prices rise further?

We are expecting that, yes – anything else would come as a great surprise. One of the fundamental laws of economics is that scarcity of supply has the effect of pushing up prices. The production of owner-occupied housing has been declining for years, partly due to the increasing general shortage of building land reserves, but in particular because construction activity has focused on the rental apartment market. The first signs of scarcity were already apparent before the pandemic, but there is now also clear evidence of higher pandemic-related demand, whereas there are hardly any signs of an increase in production in the future.

Is there an upper limit to price growth?

Not really. There is nothing unusual about prices decoupling from fundamentally justified levels for long periods of time. This is particularly true against a backdrop of scarcity – and the demand overhang is leading buyers to make rapid decisions without scrutinizing the future value of their asset. In the current market environment, buyers are prepared to pay more than the latest valuations would justify. Moreover, with hedonic valuations individual properties are valued in the most apt way possible, i.e. on the basis of available transaction prices for the most recent period. As a result, prices keep going up almost automatically. This does not involve any scrutiny of whether the asset in question can retain its value over time. Hedonic valuations suggest a resilient price level, but this is only true if the upward spiral is turning with sufficient force – i.e. enough buyers are expecting prices to keep rising. If this belief gets turned on its head in the future due to certain developments, prices could start to slide and revert back toward fundamental values. This would be particularly dangerous if the market had reacted to the price spiral in the meantime and a supply overhang had built up. That said, there is no sign whatsoever of such a supply overhang building up in the near future.

Is there a bubble in the home ownership market?

Bubbles arise when there is a large amount of speculation and purchases are made solely with the purpose of rapidly reselling the asset in question. There is no sign of anything like this having happened in the residential property market in recent years. The very high prices in Switzerland can predominantly be attributed to ultra-low interest rates. This development has begun to concern us for a few quarters now, as the scarcity of supply and pressure on the demand side are leading to frenzied buying behavior. The prices of owner-occupied properties have only broken away from income-correlated levels in a few regions, such as Geneva, for example. Bubbles arise when phases like this last for several years. At any rate, buyers should be aware that we have now climbed a long way up the flagpole, and it's already looking like quite a height to fall from. As prices have risen strongly even in peripheral locations recently, almost every region would now be affected by a price slump.

Could a rapid rise in interest rates spell disaster for the real estate market?

We are fairly relaxed on that front for two reasons: First, Swiss homebuyers already have to be able to handle a steep imputed interest rate of 4.5% or 5.0% due to the strict affordability requirements. Second, more than four out of every five mortgage borrowers have concluded a fixed-rate mortgage. As a consequence, most owners would only be hit by a price shock after a certain time lag. That said, buyers should be aware that a rapid rise in interest rates would have a painful impact on property valuations. There would be some nasty write-downs, as well as problem cases for homeowners who had only bought into the market recently. But the real estate market wouldn't come crashing down. Not for nothing does Switzerland have one of the most strictly regulated property markets in the world.

Should buyers always hedge with a fixed-rate mortgage?

Empirical data shows that fixed-rate mortgages are almost always more expensive than money market mortgages when viewed over their full term. A switch from a variable to a fixed-rate mortgage should therefore be thought about carefully, particularly since the points at which such defensive behavior pays off are few and far between. But obviously a switch to a fixed-rate mortgage can be very rewarding at the end of a low-interest phase. For example, a household that concluded a 5-year or 10-year fixed mortgage between 1986 and 1989 will have done better than with a money market mortgage, as interest rates then rose and remained high for quite some time. Generally speaking, such hedging activity should be undertaken earlier rather than later. Once long-term interest rates have begun to rise, it's often too late. Whether or not the window for such a switch is still favorable will depend on how interest rates develop over the coming years.

We are not currently expecting the Swiss National Bank to raise key interest rates before the end of 2022. However, postponing the decision until money market rates start to rise is most unlikely to be the right strategy. Because by that point long-term rates will already have risen to higher levels. It is also important to factor the individual situation into this decision: For households with limited financial means or of a nervous disposition, fixed-rate mortgages are likely to be the right way forward in many cases. For these households, budgeting certainty is likely to be worth the premium that is typically paid on fixed mortgages.

Are real estate investments still attractive?

Although interest rates are starting to drift up from their absolute lows, the yield difference between 10-year Swiss government bonds and Swiss real estate funds – which stood at 230 basis points in mid-January 2021 – remains quite striking. So in that sense we would clearly respond to this question in the affirmative. Although this difference narrowed somewhat in the wake of interest rate rises around the year-end, it remains far wider than the long-term average since 1995, which amounts to 167 basis points. The yield difference between direct real estate investments and 10-year government bonds is even higher. From a yield perspective, therefore, real estate investments will remain attractive to investors in 2022.

Does real estate offer good protection against inflation?

Yes...and no. Although physical assets such as property do in principle offer greater protection against monetary devaluation than certain other asset classes, this protection is not complete. A strategy of holding real estate just for inflation hedging purposes is therefore not guaranteed success. Real estate offers a certain amount of protection against inflation insofar as rental agreements often contain adjustment mechanisms for dealing with inflation – from indexed rental agreements linked to inflation and partial pass-on rules such as those permitted under Swiss tenancy law through to pure turnover-linked rents. In market situations where there is evidence of a trend toward oversupply, however, rental price increases cannot always be pushed through. In phases of stagflation in particular, therefore, the inflation protection offered by rental properties is deficient. This makes hedging against inflation using real estate an incomplete strategy in the short term. However, long-term analysis shows that real estate does fulfill the task of protecting against inflation quite well over longer timeframes.

Will 2021 come to be seen as the turning point in the rental apartment market?

The decline in apartment vacancies in 2021 was not an overnight phenomenon. Rental apartment demand has proved to be very robust despite the COVID-19 pandemic – or perhaps because of it. Thanks to persistently strong demand and a declining level of construction activity, vacancy rates can be expected to fall further in 2022. We are increasingly discerning a lack of land on which to build as the cause of this decline in construction activity. Special effects such as delayed moves to retirement/care homes are additionally reducing the supply of accommodation, as are certain delays in construction as a result of pandemic-related hygiene and social distancing measures, along with supply shortages for certain construction materials. What's more, the value of the home has clearly increased as a result of the coronavirus crisis, and this is likely to be reflected in an increasing willingness of tenants to pay for the right apartment. Accordingly, we are anticipating an end to the decline in advertised rents in the medium term and a corresponding increase in rental income.

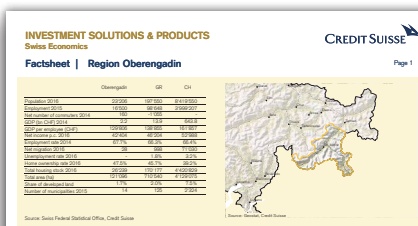
Will we need offices in the future?

Centrally-located office premises fulfill an essential function, as they are ideal hubs for employee interaction, the cultivation of corporate culture, and knowledge transfer. When innovation and productivity – which is a difficult thing to measure – start to fall short of expectations, the value of the office will rise once again, if not before. What's more, the megatrends of digitalization and tertiarization are contributing to an increase in the proportion of office-based activities in the Swiss economy. This is a phenomenon we have seen in the past too. So we anticipate a growing need for office space in the long term – irrespective of the home working phenomenon.

Is the worst behind us in the retail property market?

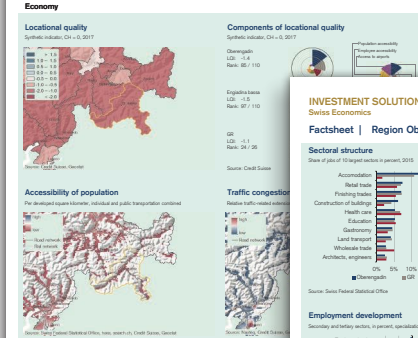
Online shopping is fundamentally changing the retail trade. Although the pandemic ultimately helped the retail industry as a whole to book more sales, the real winners were clearly the traders with online offerings. They were able to retain their dramatically increased market shares and expand these further in 2021. As we see it, online trading has yet to reach its maximum possible market share in any segment, hence structural change and the enforced downsizing of bricks-and-mortar retailing should continue. Many stores will gradually disappear as a result – a phenomenon that will have consequences for inner cities too. Ultimately there will be no preventing the downsizing of the stationary retail business. At best it will be possible to manage this in such a way that avoids the phenomenon of negative spirals. However, this will require extremely close cooperation on the part of all involved protagonists, including the city authorities.

Factsheets: Regional real estate markets at a glance



Periodically updated key indicators for the 110 economic regions

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



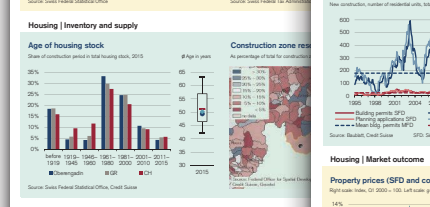
Regional economy and demographic developments

Are you planning to tap into new locations with your company or would you like to gain a picture of an economic region? The Credit Suisse Factsheets offer you up-to-date statistics on topics such as locational quality, accessibility and population developments.



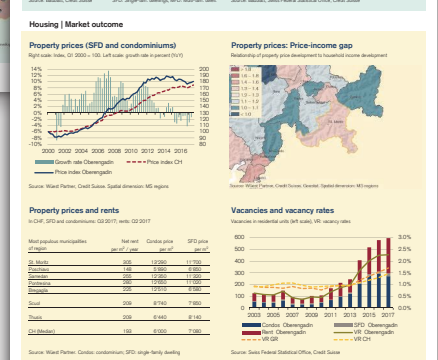
Regional housing markets

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House prices and rents

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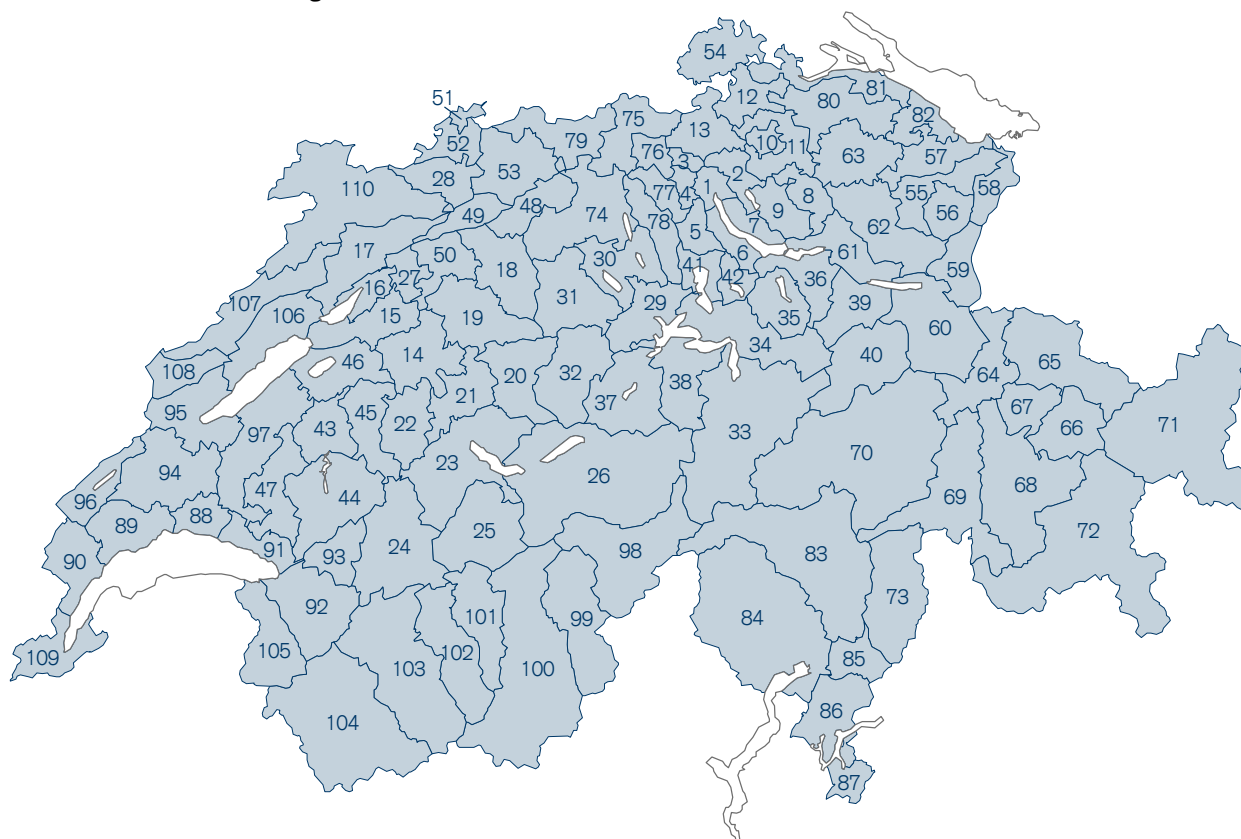
Please contact your Credit Suisse client advisor to order factsheets on the individual economic regions in your preferred language (English, German, French or Italian).

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

Appendix : Switzerland's economic regions

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

Switzerland's economic regions



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

Source: Credit Suisse

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Past performance is not an indicator of future performance. Performance can be affected by commissions, fees or other charges as well as exchange rate fluctuations.

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Historical returns and financial market scenarios are no reliable indicators of future performance. The price and value of investments mentioned and any income that might accrue could fall or rise or fluctuate. You should consult with such advisor(s) as you consider necessary to assist you in making these determinations.

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

Alternative investments

Hedge funds are not subject to the numerous investor protection regulations that apply to regulated authorized collective investments and hedge fund managers are largely unregulated. Hedge funds are not limited to any particular investment discipline or trading strategy, and seek to profit in all kinds of markets by using leverage, derivatives, and complex speculative investment strategies that may increase the risk of investment loss.

Commodity transactions carry a high degree of risk, including the loss of the entire investment, and may not be suitable for many private investors. The performance of such investments depends on unpredictable factors such as natural catastrophes, climate influences, hauling capacities, political unrest, seasonal fluctuations and strong influences of rolling-forward, particularly in futures and indices.

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

Private Equity

Private Equity (hereafter "PE") means private equity capital investment in companies that are not traded publicly (i.e. are not listed on a stock exchange), they are complex, usually illiquid and long-lasting. Investments in a PE fund generally involve a significant degree of financial and/or business risk. Investments in private equity funds are not principal-protected nor guaranteed. Investors will be required to meet capital calls of investments over an extended period of time. Failure to do so may traditionally result in the forfeiture of a portion or the entirety of the capital account, forego any future income or gains on investments made prior to such default and among other things, lose any rights to participate in future investments or forced to sell their investments at a very low price, much lower than secondary market valuations. Companies or funds may be highly leveraged and therefore may be more sensitive to adverse business and/or financial developments or economic factors. Such investments may face intense competition, changing business or economic conditions or other developments that may adversely affect their performance.

Interest rate and credit risks

The retention of value of a bond is dependent on the creditworthiness of the Issuer and/or Guarantor (as applicable), which may change over the term of the bond. In the event of default by the Issuer and/or Guarantor of the bond, the bond or any income derived from it is not guaranteed and you may get back none of, or less than, what was originally invested.

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