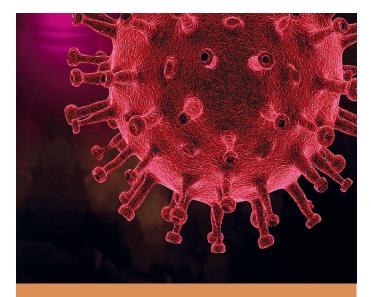


Catella: Implications COVID-19 on the Real Estate Markets



Preliminary remarks

Looking at many sectors, the global economy is currently breaking down into three main status quo elements:

- There are industries that have been directly and massively affected by the operational events of the last 3 months these include, for example, personal services in the consumer goods industry, the entertainment industry or the aviation industry.
- There are also brownfields which directly benefit greatly from the market distortions. Examples are the IT sector, the manufacturers of health products or parts of the logistics value chains.
- And there are industries which are currently in a holding pattern. These include the real estate sector or the engineering sector.

What the latter industries have in common is that there is currently no evidence of a price change based on market activities. But at the same time, it is obvious to many that the deepest global recession since the end of the Second World War will of course leave its mark. At least if you look in the rear-view mirror. Especially the real estate industry, coming from a nearly 10-year upswing phase, seems to be rather indifferent about the fundamental effects of COVID-19.

But how strongly will the individual segments really be affected? Even more: in the investment universe of multi-asset companies, real estate traditionally plays the "stabilizing" role. So how do market participants behave when the other asset classes are more volatile? We will pursue this question in this Market Tracker.

I This time everything is different - also the risk?

In the following we would therefore like to give you some aspects in an economic situation that most of you have never experienced in this form before. In this particular case, for the first time, a rational-economic mode of behaviour always assumed in the market, decisively characterised by a strong social and societal aspect, is being adopted.

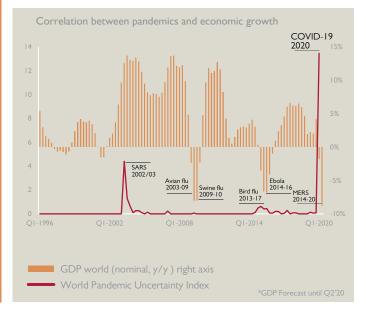
To put it more simply: social distance meets a global standstill. Productivity meets a maximum reduction in consumption, a supply crisis meets a demand crisis. It is therefore clear that the future can hardly be predicted with conventional models and behaviours.

Even more: are real estate markets really affected in a way that goes beyond a "normal cycle"?

The lockdowns and social distancing policies are slowing down the spread of the virus sufficiently and allow a gradual easing of restrictions in some European countries. But the economic recovery, which can begin in May with the gradual easing of some of the lockdown measures, will be much slower than the contraction.

We currently identify two main risks for the coming weeks: A second wave of infection due to easing restrictions and the risk of flaring up euro crisis due to an ongoing dispute of EU leaders: Bond and CDS spreads are widening again in Italy.

2 Pandemic and Economy – correlation to uncertainty



Source: Catella Research, Oxford Economics, Stanford mimeo



Uncertainty is usually defined as a consciously perceived lack of safety or (in the scientific context) of reliability and validity. An actual lack of safety is also called a danger.

- The global uncertainty related to COVID-19 at record high: it is three times the size of the uncertainty during the 2002–03 SARS epidemic and about 20 times the size during the Ebola outbreak.
- A high uncertainty historically coincides with periods of lower growth and tighter financial conditions, uncertainty could lead to an 34.5% reduction of global supply chains.

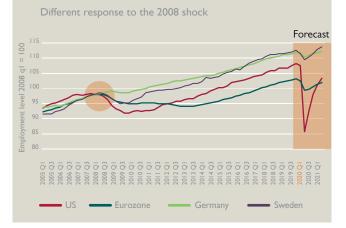
ECONOMIC IMPACT

- Flattening the curve is the first step to economic recovery
- Money Markets still not working properly, but we may have passed the peak in tension
- Economic data for March and April are the worst ever
- The collapse of EM growth will likely be the greatest in 30 years
- World Trade declined 1.5% m/m in February
- GDP impact: In most advanced economies, GDP looks set to contract by 5-10% in Q2 2020
- We expect for every month of lockdown a 2.5 % GDP reduction in 2020 and 1.5% growth in 2021 due to base effects and rebound
- Dollar strength since the crisis struck has increased EM stress

LABOUR MARKET

- Since mid-March, more than 30 million Americans have applied for unemployment benefits US Congress expects an unemployment rate of 14-16%.
- No clarity to which degree the US unemployment figures are attributable to "fire and hire" corporate policies vs parts of the "gig" economy claiming the dole.
- Lessons from financial crisis: German employment fell due to "Kurzarbeitergeld" by 1% during GFC 2008/2009 despite a 7% plunge in real GDP. US employment fall 5.4% while GDP contracted only 4%.
- COVID-19: Germany, UK, France and other European countries expanded employment subsidy schemes and limit the risk of a demand shock by high unemployment.

Labour market response to crisis: advantage Europe



Source: Catella Research, Oxford Economics

KEY POLICY RESPONSES

Coordinated and synchronized global fiscal and monetary stimulus is the key for providing stability and prevent spill overs from real economy over commercial real estate to financial markets. Policy makers in EU and US boosting up fiscal and regulatory response as required.

In response, the following measures are currently being implemented to control the risks at the finance Market to support an economic recovery:

- Policy makers continue to do "whatever it takes" to prevent a financial crisis.
- FED provides \$4.3 trillion in loans to support the economy and more than \$3 trillion for asset purchases and has increased its balance sheet by more than half since it started the liquidity measures in September 2019.
- Trillions are also coming from Europe and many smaller central banks are also pulling in QE this time. Within only 6 weeks, more than \$10 trillion in liquidity has probably been made available by now, this is more than 12% of global economic output.

Basic scenarios and the expected effects on the market

| Shape of the Recovery | Virus containment | Economic Background |
|--------------------------|--|--|
| ٧ | The distribution of COVID-19 curve successful flattened which creates an environment for relaxing lockdown and eventually relaxing social distancing measures. Minor subsequent outbreaks of COVID-19 are successfully dealt with. | Severe GDP contraction in Q2 2020 with weakness continuing in first part of Q3, but from the end of Q3 economic growth picks up. |
| U | Lockdown continues towards the end of May, perhaps well into June. Strict social distancing is implemented until serum/vaccine are available. Once con- tained, minor subsequent outbreaks of COVID-19 are successfully contained. | It takes longer for economy to pick up due to extension of restrictions. This valley could last until mid 2021. |
| W | It initially appears that COVID-19 is contained hence restrictions get lifted but virus infection rebound in autumn/winter. | Weakness spells well into 2021 with economy additionally troubled by credit markets and unemployment rates. |

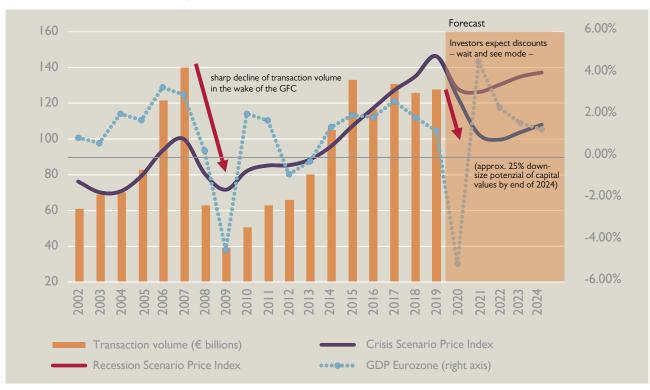


3 COVID-19 & Real Estate Market

In the current status quo, risk provision positions in particular are reflected in expectations for the real estate markets: the increasing probability of default of commercial and residential rental income can affect all participants in the value chain and ultimately reduces the earnings prospects on the real estate investment market. Private or commercial tenants and landlords are just as affected as project developers or (institutional) investors.

- Rental deferrals result in **higher payment** obligations in the future for the currently favoured tenants. The extent to which these can be serviced depends on future economic conditions.
- Lack of **liquidity**, **interrupted cash flows** and **continuing costs**: the longer the interruption lasts, the greater the negative effects.
- Rents may fall & risk premiums rise:

- It can be assumed that a more intensive differentiation between the types of use will be necessary in the future. More attention will be paid to crisis stability and flexibility of the property. **Risk spreads** between individual types of use will therefore increase.
- 2) The valuation parameters are subject to increased uncertainty. As soon as changed income situations can be identified in a stable manner and "normal business transactions" can be depicted, the current crisis will influence the determination of market value.
- One thing is certain: devaluations of individual products and types of use will occur, but the extent cannot be estimated ex ante.
- Long run profiteer: Real estate could benefit from the crisis due to safe haven status (public debt/inflation expectations) and massive fiscal and monetary stimulus (Investors portfolio rebalancing and decreasing bond yields).



Eurozone: Prime Office Capital Growth Index vs. Transaction Volume & GDP

Source: Catella Research, PMA, Oxford Economics

Given the aggressive fiscal and monetary stimulus, the recession scenario and a V- or U-recovery is more likely than a longlasting crisis. Therefore, we expect that significant disruptions (like debt wave spill overs) from real economy to commercial real estate will be softened. Investors are in a wait and see mode and hope for more favourable conditions. The crash on stock and bond markets, in addition to liquidity problems, leads to real estate ratios above the target quotas of Multi-Asset-Investors. We expect investment volumes, cross-border deals and rents to decrease while risk premiums may rise. But potential value changes offer the "buying opportunity of the century", especially for opportunistic investors. Global RE dry powder capital has increased to more than \$300 bn in 2019 of which a large part can be allocated to opportunistic and distressed asset funds. As soon as they become more active in the market, we see a rising dynamic which will spread to core investors.



4 Outlook for the coming months – what we should expect

We are currently seeing that the extent to which all property market segments are affected is becoming increasingly differentiated. It is clear that there will be different degrees of efficiency. The following is our initial assessment of the submarkets.

| Expected implications for asset classes from the demand side | | | | |
|--|------------|-------------|--|--|
| Asset class | Short term | Medium term | | |
| Healthcare | | | | |
| Food Retail | | | | |
| Logistic/Industrial | | | | |
| Residential | ⇒ | | | |
| Office | | | | |
| Hotel | • | | | |
| Co-Working | • | | | |
| Serviced Apartements | • | | | |
| Leisure | • | - | | |
| Retail/Shoppingcenter | • | - | | |

Source: Catella Research

- Office: The office real estate market reacts cyclically, expected insolvencies and falling demand will put pressure on rents, although the extremely low vacancy rate in many European cities will have a stabilising effect. The long-term nature of commercial leases also has a stabilising effect on the portfolio, which are quite suitable for bridging market downturns with the appropriate remaining term. However, this stabilising factor does not apply to new lettings or the default of a tenant.
- **Residential:** The traditional housing market is relatively insensitive to exogenous shocks and is more likely to be determined by long-term trends, such as local population growth as a demand factor and local offer, than by short-term economic distortions. Against this background, we do not expect any significant value changes in the short term.
- **Developments:** Construction activity freezes in recent market downturns. Not only are ongoing projects slowing down due to existing restrictions (especially those of social distance) and the interruption of supply chains. We also know from past downturns that planned but not yet started construction projects are being partially halted. In addition, speculative developments will meet with very little approval from financing conditions.

About Catella

Catella is a leading specialist in property investments and fund management, with operations in 15 countries. The group has assets under management of approximately EUR 16 billion. Catella is listed on Nasdaq Stockholm in the Mid Cap segment.

- Logistic/Industrial: High demand boost at E-Commerce, decline of global supply chain will affect market. Noticeable effects on demand behaviour, supply chains, production processes and logistics. The logistics industry must adapt to fewer goods due to production downtimes and disrupted supply chains, and on the other hand to more demand for everyday goods.
- Hotels: Empty hotel rooms, closed borders, cancelled company events - hotels and restaurants are particularly hard hit by COVID-19 and many companies are in a real existential crisis. Assuming that the economy recovers over the summer, summer tourism and the catch-up effect of events etc. should ensure a strong increase in the second half of the year. However, we see the opportunities more in domestic tourism than in long-haul travel and cruises. The precarious situation of many companies will also make itself felt in landlords' cash flow in the form of rent deferrals and rent losses. The strong rejection of this property class by many investors will result in interesting opportunities in the medium term.
- Retail: The stationary retail sector has been under pressure for some time now. Consumer uncertainty and restrictions on public life are acting as a fire accelerant for parts of the already ailing retail sector. Due to the ordered closures of shops for non-essential business, this turnover has almost completely collapsed, but it can be assumed that after this crisis the consumers' pent-up demand will find a changed supply. We know from previous crises that, once the crisis has subsided, private consumption will rise sharply, in some cases even above the pre-crisis level.

Summary

Catella Research is aware of the fact that there is hardly a less favourable time to make a forecast for the real estate markets that is not influenced by daily news "from the economy". Nevertheless, it is obvious to us that the European real estate markets are by no means strongly linked to the pandemic. What is clear, of course, is that there is currently little activity at the operational level. However, the price function, which is made up of the three main variables of supply, demand and financing conditions, is still functioning. It may be that a new price tag will be attached to individual properties or segments in the short term. If no guests come to the hotel, there is no reason to assume that positive building values will be achieved But in terms of time, these will be the exception rather than the rule. Megatrends such as urbanisation or digitalisation are shaping the market too strongly. In the coming months, the market will also experience a new efficiency dynamic. We dare to assert that a relatively rapid recovery will set in again on the central real estate markets.

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