



ECONOMIC SITUATION AND STRATEGY September 21, 2018

Future of real estate: End of the line?

Real estate has always enjoyed great popularity. Besides the economic utility of housing owners, it is an asset class that belongs in any well-diversified portfolio in addition to stocks and bonds. There are different ways of investing in real estate. Besides directly purchasing property, one can invest indirectly and in smaller amounts through real estate funds, real estate investment trusts (REITs), and stocks related to real estate. Often cited, the concept of "concrete gold" stands for the durable value that investors assign to real estate as a source of returns. In fact, there has been a downright property boom in Germany in recent years, which has rewarded both direct and indirect investors. After years of significant price increases across all real estate segments, the question inevitably arises whether the economic environment for real estate is favorable going forward. Another question is what areas of the real estate market still have potential. Here, investors may choose among the housing, office, hotel, retailing, and logistics segments.

After growing strongly in the last few years, the German economy has been showing signs of mild fatigue since the beginning of 2018. The most important leading economic indicators have declined. The impediments are export, which has suffered from US tariffs, and falling new orders. The basic trend of the German economy remains positive despite these weak spots, and Germany will continue to be the economic engine in Europe for years to come. The labor market also reflects this. While the unemployment rate has recently fallen to 5%, the number of job vacancies has continued to rise. Disposa-

ble incomes have increased at the same time. As a result, consumer spending is now one of the most important pillars of the German economy. This should also positively affect and further stimulate the German real estate market. The continuing low interest rate environment is helping this trend. The European Central Bank will end its bond purchasing program at the end of 2018, but will continue its zero interest rate policy in 2019. So, financing costs for real estate will remain low, and high-rated bonds will remain unattractive to investors as an alternative. On the other hand, exceptionally high demand overhang associated with a scarcity of available properties exists in most market segments. The rise of real estate prices and the decline of returns already observed in recent years are therefore likely to continue.

To obtain a more precise picture of the situation on the German real estate market, we need to analyze the individual real estate segments in which investors can put their money.

The housing market has undergone a rapid upswing in the last ten years. According to real estate consulting firm Bulwiengesa, rents for existing housing increased in 2017 by almost 9% in A-class cities and by over 6% in B-class cities despite rent control. Rents for condominiums in existing buildings have more than doubled in the last ten years in A-class cities. The figures for multi-family dwellings that express at what multiples of annual rent (net of heating) a property is valued on the market have risen by about two-thirds in the same period.

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Housing multiples by city clusters*



Source: Bulwiengesa, "Die 5% Studie 2018," based on RIWIS data and forecast

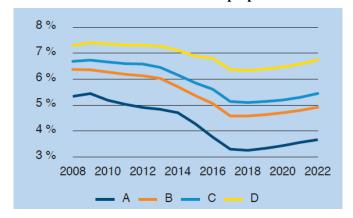
Although the number of building permits has increased recently, especially in the metropolitan centers, demand overhang will continue to exist in the future due to the more than proportionately rising number of households and provide fertile ground for further rent and price increases. The trend toward urbanization primarily favors the large cities in this regard. For new investors, this means declining returns, which for core properties are already only 2-2.5% in A-class cities and around 3% in B-class cities. Political risks resulting from regulation may pose an additional burden.

Micro-apartments have become established in recent years as a specialized variety of residential real estate. They are partly or fully furnished one-room dwellings in housing complexes with 100-300 units and short minimum lease periods of 6-12 months. The need for microapartments results from the increased number of singleperson households, which account for about half of all households in large cities. Furthermore, this type of housing accommodates the population's growing need of flexibility and mobility. Property owners are often in a position to push through higher rents. At the same time, demands on property management are increasing due to the shorter lease periods, as are maintenance costs. The real estate market has reacted to this need, as documented by new building permits in large cities, of which micro-dwellings account for half. While microapartments have registered significant price increases in recent years, returns have declined to the level of normal apartments.

Driven by a long boom phase, the office market has developed very positively in recent years. Vacancy rates in A-class cities have fallen to 4%. With capacities limited, further price increases may be expected despite M.M.WARBURG & CO

new building permits. After a steady decline of returns in the last few years, Bulwiengesa expects a stabilization of net initial returns, but grading as a function of location quality is retained.

Net initial returns for office properties*



Sources: Bulwiengesa, "Die 5% Studie 2018"

Flexile workspaces are an interesting variety of office real estate that have become more popular in recent years. In Germany, the amount of space rented in the seven largest office locations increased fivefold in 2017 alone. These are modernly equipped office units suited for flexible use. Companies only rent them for short periods, often 6-12 months, and thus do not have to enter into long leases. Flexible workspaces are a good solution especially for small businesses, but also for large companies with a temporary need of additional space. They also allow higher rents to be obtained. The cost of renting and dependence on the economic trend are significantly higher, however. Furthermore, there is higher vendor risk, since only seven operators account for more than 50% of the rental space offered in Germany.

Investors have also started to focus on hotel properties. The number of guest-nights in the German hotel trade is rising steadily and reached a new record high of 459 million in 2017. Hotel properties are benefiting directly from a positive economic environment and increasing economic interrelations due to globalization. The main beneficiaries are the business centers of A-class cities. On average, prices of overnight stays have not continued to increase lately. On the other hand, high demand has also led to price increases for hotel properties and a decline of returns.

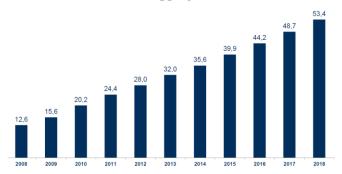
The retail sector is undergoing radical change, driven by the online boom, which is promoting eliminatory competition. While online sales have grown by about one-

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fourth since 2014, the rest of retail sales increased by only just over 5%. While rents in other real estate segments have risen continuously in recent years, rents in the retail trade have flattened and returns have declined in the same period. As a survival strategy, it will be important in the years ahead that retailers give customers added value compared with online vendors by offering competent advising and a special shopping "experience." That will lead to differentiation among top and secondary locations. Shopping and specialty retail centers near large cities have clear advantages over regional locations.

In contrast, the market for logistics real estate is booming. Here, Germany has attained the status of logistics hub and dominant market with a share of more than one-fourth in Europe. The prime mover of this positive development is the trend toward globalization and the rise of online shopping, which in Germany achieved total sales of just under EUR 50 billion in 2017 and for the first time a market share of about 10%.

German online shopping sales (in EUR bn)



Source: HDE (German Retail Federation), "Der deutsche Einzelhandel" (April 2018).

Logistics properties stand out in respect to returns compared with offices and retail. Although take-up has increased, there is only limited supply to meet growing demand. Moreover, restrictive permitting practices are benefiting existing properties. The growing need for city logistics, near-city warehousing to achieve short delivery times, poses a special challenge. This favors spaces on the periphery of A-class cities also in the case of logistics properties.

In summary, prospects for the German real estate market remain positive despite a slowing of economic momentum and high price increases. Continuing demand overhang and low vacancy rates support this view. The risk factors are an escalation of the trade war with the United States and a global economic recession. But the extremely attractive returns on real estate investments M.M.WARBURG & CO

are a thing of the past. Retailers are suffering from the increasing importance of online shopping. Logistics properties are proving to be a natural hedge here. New office properties in good locations with sound tenant structures are likewise attractive. The need for housing continues due to the growing number of households, so further price increases are likely. However, the old real estate adage "location, location, location" remains valid for all market segments. Investors should therefore focus on core properties in or near A-class cities with a view to lower risk.

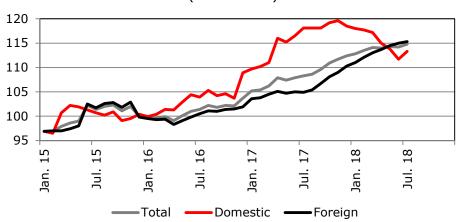
Weekly dutionk for Septi 24 20, 2010	Weekly	outlook for	Sept.	24-28,	2018
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	May	June	July	Aug.	Sept.	Oct.	Release
DE: Ifo business climate index		101.9	101.7	103.8	103.4		Sept. 24
DE: Ifo business expectations		98.6	98.2	101.2	100.8		Sept. 24
DE: Ifo current conditions		105.4	105.4	106.4	106.1		Sept. 24
DE: GfK consumer climate		10.7	10.7	10.6	10.5	10.6	Sept. 27
DE: Inflation rate, m/m - flash		0.1%	0.3%	0.1%	0.1%		Sept. 27
DE: Inflation rate, y/y - flash		2.1%	2.0%	2.0%	2.0%		Sept. 27
DE: Unemployed, change in 000s		-14	-6	-8	-10		Sept. 28
DE: Unemployment rate		5.2%	5.2%	5.2%	5.2%		Sept. 28
EUR19: M3 money supply, y/y		4.4%	4.0%	3.9%			Sept. 27
EUR19: Business climate		1.38	1.3	1.22	1.20		Sept. 27
EUR19: Economic confidence		112.3	112.1	111.6	111.3		Sept. 27
EUR19: Consumer confidence - final		-0.6	-0.5	-1.9	-1.5		Sept. 27
EUR19: Industrial confidence		6.9	5.8	5.5	5.3		Sept. 27
EUR19: Inflation rate, y/y - flash		2.0%	2.1%	2.0%	1.9%		Sept. 28

MMWB estimates in red

Chart of the Week: Crisis in the German auto industry?

Germany: Order backlog in the automotive industry (Value index)



The German auto industry is not running smoothly this year. Profit warnings from some companies and declining production and order numbers are fueling concern that Germany's flagship sector is going downhill. The explanations for this appear simple and clear. The diesel scandal, a supposed lag in switching from conventional to electric motors, and Trump's threats of trade tariffs have substantially impaired the industry environment. But these factors have little to do with reality. We believe the situation this year mainly has to do with "homemade" problems of adjusting to the new Worldwide Harmonized Light Vehicle Test Procedure

(WLTP). German automakers are reducing production significantly now because many of their models have not been certified yet. This could mean that the German economy will not grow much, if at all, in the third quarter, since the auto industry accounts for 14% of total industrial production. However, this will only be a temporary disturbance. German automakers have huge order backlogs. At three months, the cushion of existing orders is more than comfortable. Moreover, despite the weaker domestic trend, the value of orders on hand is higher than ever before due to still high foreign demand.

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Market data overview

	As of			Change versus		
	21.09.2018	14.09.2018	20.08.2018	20.06.2018	20.09.2017	29.12.2017
Stock marktes	10:59	-1 week	-1 month	-3 months	-1 year	YTD
Dow Jones	26657	1,9%	3,5%	8,1%	18,9%	7,8%
S&P 500	2931	0,9%	2,6%	5,9%	16,8%	9,6%
Nasdaq	8028	0,2%	2,6%	3,2%	24,4%	16,3%
DAX	12413	2,4%	0,7%	-2,2%	-1,2%	-3,9%
MDAX	26365	0,1%	-0,5%	-0,6%	3,5%	0,6%
TecDAX	2831	-2,7%	-3,0%	0,0%	18,4%	11,9%
EuroStoxx 50	3433	2,6%	1,2%	-0,2%	-2,6%	-2,0%
Stoxx 50	3065	1,9%	-0,4%	0,2%	-1,5%	-3,5%
SMI (Swiss Market Index)	9029	0,7%	-0,3%	5,5%	-0,7%	-3,8%
Nikkei 225	23870	3,4%	7,5%	5,8%	17,5%	4,9%
Brasilien BOVESPA	78116	3,6%	2,3%	8,3%	2,8%	2,2%
Russland RTS	1146	4,7%	7,6%	2,4%	2,1%	-0,7%
Indien BSE 30	36649	-3,8%	-4,3%	3,1%	13,1%	7,6%
China Shanghai Composite	2797	4,3%	3,7%	-4,1%	-16,9%	-15,4%
MSCI Welt (in €)	2196	0,5%	-0,9%	1,8%	11,9%	6,2%
MSCI Emerging Markets (in €)	1037	-0,1%	-2,8%	-6,9%	-5,0%	-9,0%
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Bond markets						
Bund-Future	158,74	-43	-499	- 277	-258	- 294
Bobl-Future	130,84	-14	-171	-109	-40	-77
Schatz-Future	111,80	-2	-27	-24	-32	-17
3 Monats Euribor	-0,32	0	0	1	1	1
3M Euribor Future, Dec 2017	-0,30	0	-1	-1	-9	0
3 Monats \$ Libor	2,35	2	4	2	103	66
Fed Funds Future, Dec 2017	2,26	1	5	6	70	0
red rands ractile, Dec 2017	2,20		3	U	70	U
10 year US Treasuries	3,08	9	25	15	80	67
10 year Bunds	0,47	2	17	9	3	4
10 year JGB	0,13	2	3	9	10	8
10 year Swiss Government	0,01	3	14	4	6	14
US Treas 10Y Performance	555,28	-0,7%	-2,1%	-0,8%	-5,1%	-4,5%
Bund 10Y Performance	612,71	-0,3%	-1,7%	-0,3%	1,2%	0,9%
REX Performance Index	482,31	-0,2%	-0,8%	-0,4%	-0,1%	0,3%
US mortgage rate	0,00	0	0	0	0	0
IBOXX AA, €	0,83	1	18	4	7	15
IBOXX BBB, €	1,68	-1	12	14	39	45
ML US High Yield	6,51	0	-3	10	53	36
JPM EMBI+, Index	789	0,4%	0,8%	0,9%	-5,9%	-5,6%
Convertible Bonds, Exane 25	7474	0,0%	1,5%	0,9%	3,3%	1,0%
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Commodities						
CRB Spot Index	413,55	1,3%	-0,2%	-7,1%	-3,7%	-4,4%
MG Base Metal Index	307,54	1,0%	0,1%	-11,4%	-9,2%	-14,3%
Crude oil Brent	79,32	1,4%	9,9%	5,3%	40,9%	19,1%
Gold	1208,06	0,9%	1,8%	-5,2%	-8,0%	-7,3%
Silver	14,24	0,6%	-3,0%	-12,9%	-17,6%	-16,3%
Aluminium	2012,00	0,3%	-0,9%	-7,1%	-6,4%	-10,8%
Copper	6075,00	2,1%	1,9%	-10,2%	-6,3%	-15,7%
Iron ore	68,67	0,4%	1,1%	5,6%	-4,6%	-3,7%
Freight rates Baltic Dry Index	1396	2,2%	-19,2%	1,7%	-3,7%	2,2%
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Currencies						
EUR/ USD	1,1791	0,9%	3,2%	1,8%	-1,8%	-1,7%
EUR/ GBP	0,8920	0,0%	-0,4%	1,5%	0,9%	0,5%
EUR/ JPY	132,81	1,6%	5,2%	4,3%	-0,6%	-1,6%
EUR/ CHF	1,1265	-0,1%	-0,9%	-2,4%	-2,3%	-3,7%
USD/ CNY	6,8387	-0,4%	-0,3%	5,6%	4,0%	5,1%
USD/ JPY	112,50	0,4%	2,2%	1,9%	0,2%	-0,2%
USD/ GBP	0,76	-1,0%	-3,4%	-0,3%	2,7%	2,4%
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