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SPOTLIGHT

Real Estate

Thoughts on the current and future demand for housing in Germany

The German housing market displays considerable regional disparities. In some areas, the markets are tense; in others, a significant share of the housing stock is vacant. There are a variety of reasons for these disparities, notably demographic developments, and new construction activity that is not in step with the market situation. We will examine these points in the following, and ask what we can expect of the years to come.

The “spatial” framework of our analysis takes the shape of settlement structural district types. To this end, all urban municipalities and administrative districts of Germany are distributed among nine district types. In this way, a number of fundamental market processes can be presented which have been highly relevant for some time now. It has to be explicitly stressed from the outset that the procedure selected here is no substitute for a regional market analysis. Every market is different and has to be analyzed thoroughly on its own merits.

01 Swings in construction activity

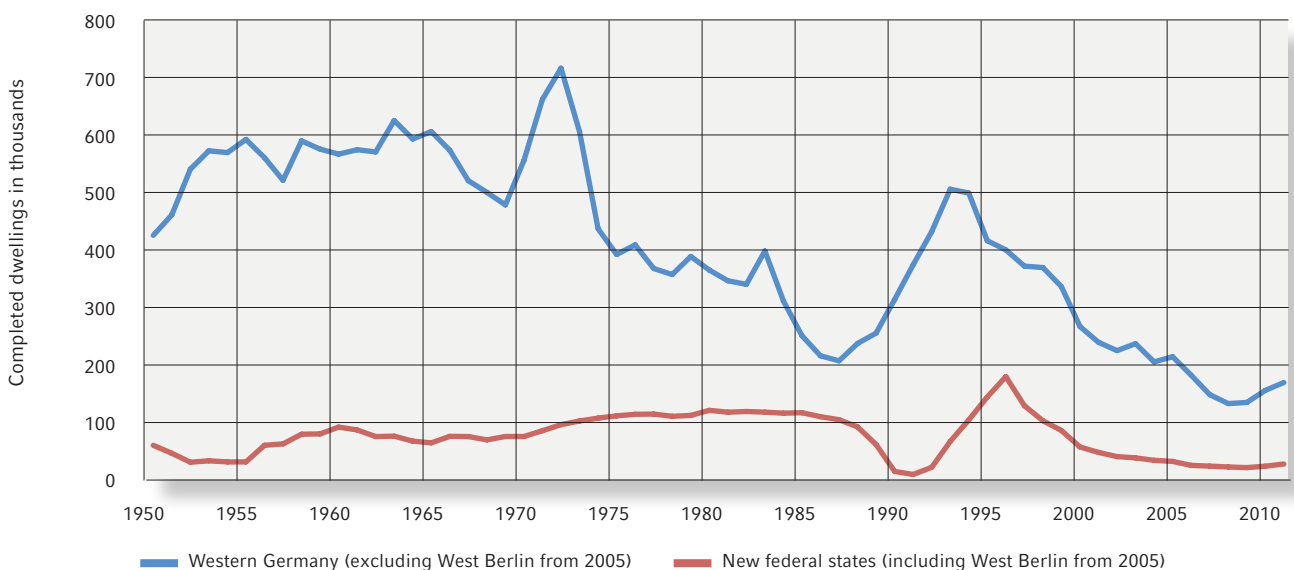
Two factors are key to assessing the foreseeable development of the housing markets. The first is the *status quo*, the second lies in the demographic and social changes that are to be expected in the coming years. The *status quo* is the point of departure. It is impossible to make a projection without describing the housing provision at present. The housing market-related factors that move the *status quo* in one direction or the other include, among others, the future distribution of the population within Germany, the ageing of society and migration processes. Together, the *status quo* and the foreseeable demographic and social changes determine what ought to be built, where and when.

As far as future construction activity is concerned, it needs to be borne in mind that residential property markets tend to overreact. There are enough examples of this both in Germany and abroad. One central reason for these exaggerated responses is that housing markets are inert. The regional distribution of the housing stock, the design of the properties and their technical features are in keeping, above all, with what was necessary and modern in the past. It is not a seldom occurrence that a lack of sensitivity on the part of market participants to change leads to serious planning errors. Whether policymaker,

property developer, owner, bank or investor – many market participants have their own personal tale to tell.

Figure 1 provides a long-term overview of housing construction activity. The chart shows the number of completed dwellings in the old states of Germany (western Germany) and for the new federal states including Berlin. Western Germany experienced a number of pronounced upward and downward movements following the post-war reconstruction phase. The declines after 1973 and 1994 are especially noticeable. In the mid-1970s, supply and demand on the housing market in western Germany were largely balanced. The German government then proceeded to withdraw decisively from the market and construction activity gradually fell in with a reduced demand. This process came to an end in the mid-1980s. First signs of a shortage became apparent. This gave way, a short time later, to pronounced market tensions which were fuelled by the arrival of the baby boomer generation on the housing market, German reunification and a wave of immigration resulting from the opening of eastern Europe. The tensions led to very strong growth in new construction activity which was supported by the government and continued until 1994. Recessionary forces subsequently regained the upper hand and heralded a long-drawn downturn which did not reach its lowest point until 2009. The number of completed dwellings has been edging upwards again since 2011. The rea-

FIGURE 1 Completed dwellings in Germany (all construction measures)



Source: Federal Statistical Office

sons for the renewed increase lie in tensions in parts of the housing market. These tensions are also the result of changing inner-German migratory behavior. Whereas for years, net migration reflected movement from urban to rural areas, urban settlement structures currently hold a great deal of attraction.

In the new federal states and Berlin, fluctuations between the beginning of the 1990s and the present day have been stronger than in the old federal states. The number of completed dwellings decreased drastically immediately after reunification. However, this decline was reversed

within just a few years. Faced with buildings that in many cases were in a poor condition and a shortage of dwellings that met modern-day standards, construction activity surged from just over 11,000 completed dwellings in 1992 to just under 180,000 in 1997. This development was largely driven by extensive government support in the form of tax breaks, housing subsidies and cheap loans. An additional factor was the substantial demand for new one- and two-family houses. Consequently, more homes were then built than needed, as a result of which income-oriented new housing construction almost came to a complete standstill.

02 Settlement structure district types as analysis framework

When new housing construction and demographic processes do not match up, misallocations result. Thus, after asking the question how many dwellings of what type need to be built, and where, the next question should be where such dwellings are needed and demanded today and will be needed and demanded in the future. We use settlement structure district types as our framework for analyzing these questions, and apply this categorization merely to illustrate basic demographic processes and their consequences for new construction. Information that is derived for one district type most certainly does not apply to every individual district of that district type. Each district type category contains districts that show more or less disparate developments. The following pre-

sentation is therefore by no means a substitute for a differentiated regional market analysis at district or municipality level. Its sole purpose is to demonstrate clearly and concisely a number of fundamental developments.

The categorization developed by the German Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), and which we use here, distinguishes between three basic types of district, each of which may be broken down into further district types. The main criteria in allocating districts to a particular district type are population density and the size of the core cities of regions or the functions they perform as central cities. The individual district types are listed in Table 1 with examples. Additionally, the number of districts and the population are stated for each district type.

TABLE 1 Settlement structure district types

Type of region	District type				
	NO.	Description	Examples	Number of districts	Population in million ¹⁾
Agglomerations	1	Core cities	Berlin, Hamburg, Munich, Cologne, ...	42	19.0
	2	High-density districts	Pinneberg, Hanover region, administrative district surrounding Munich, ...	41	13.5
	3	Medium-density districts	Segeberg, Osterholz, Dachau, ...	34	6.1
	4	Rural districts	Duchy of Lauenburg, Erding, Potsdam-Mittelmark, ...	19	2.9
Urbanized regions	5	Core cities	Kiel, Trier, Mainz, Freiburg, Ulm, ...	29	4.8
	6	Medium-density districts	Wolfenbüttel, Borken, Paderborn, ...	85	15.5
	7	Rural districts	Plön, Eichstätt, Cham, administrative district surrounding Rostock, ...	65	8.2
Rural regions	8	Rural districts of high density	Schleswig-Flensburg, Emsland, Bautzen, ...	57	6.7
	9	Rural districts of low density	Dithmarschen, Regen, Uckermark, ...	30	3.5
Total				402	80.2

¹⁾ Census 2011 (May 2011)

Source: BBSR

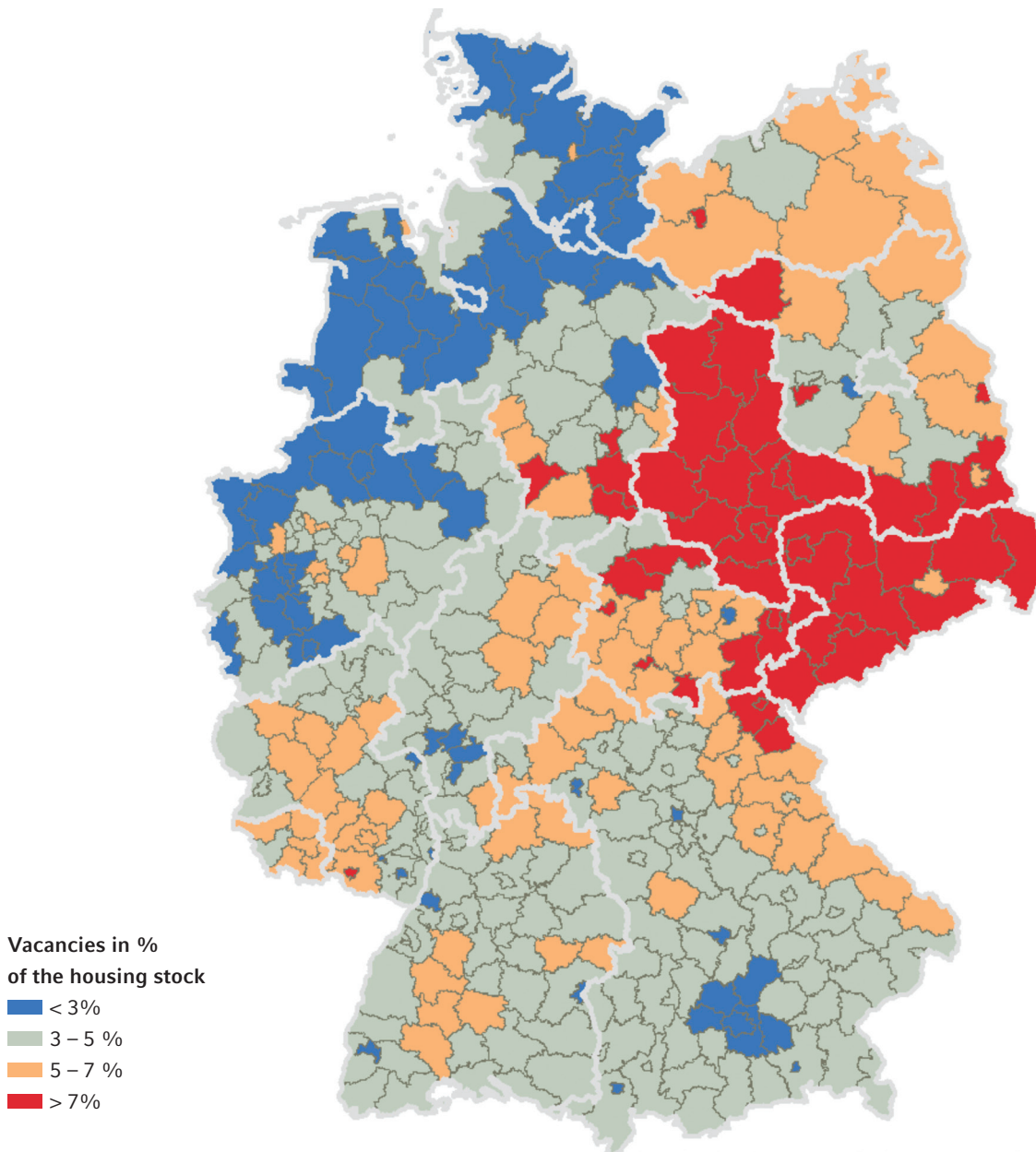
03 Status quo of housing provision

The fairly recently conducted building and housing census makes it possible, on the basis of the vacant dwellings, to present the *status quo* of housing provision with a relative degree of reliability. According to the census, around 4.4% of dwellings were vacant in May 2011, which means that the market was comparatively balanced at that time. The situation in the years before was similar, according to our calculations. However,

two points must be noted. First, there were considerable regional disparities in the housing vacancy rate in 2011. Second, the vacancy rates have undergone markedly different developments in recent years, depending on the settlement structure. Let us first consider the regional imbalance:

- Map 1 shows substantial regional disparities in the number of vacant dwellings. Taking a broad view, very high under-utilizations are to be found in the states of Saxony-Anhalt and Saxony as well

MAP 1 Housing vacancy rate by district and urban municipality, May 2011



Sources: Federal Statistical Office, building and housing census 2011

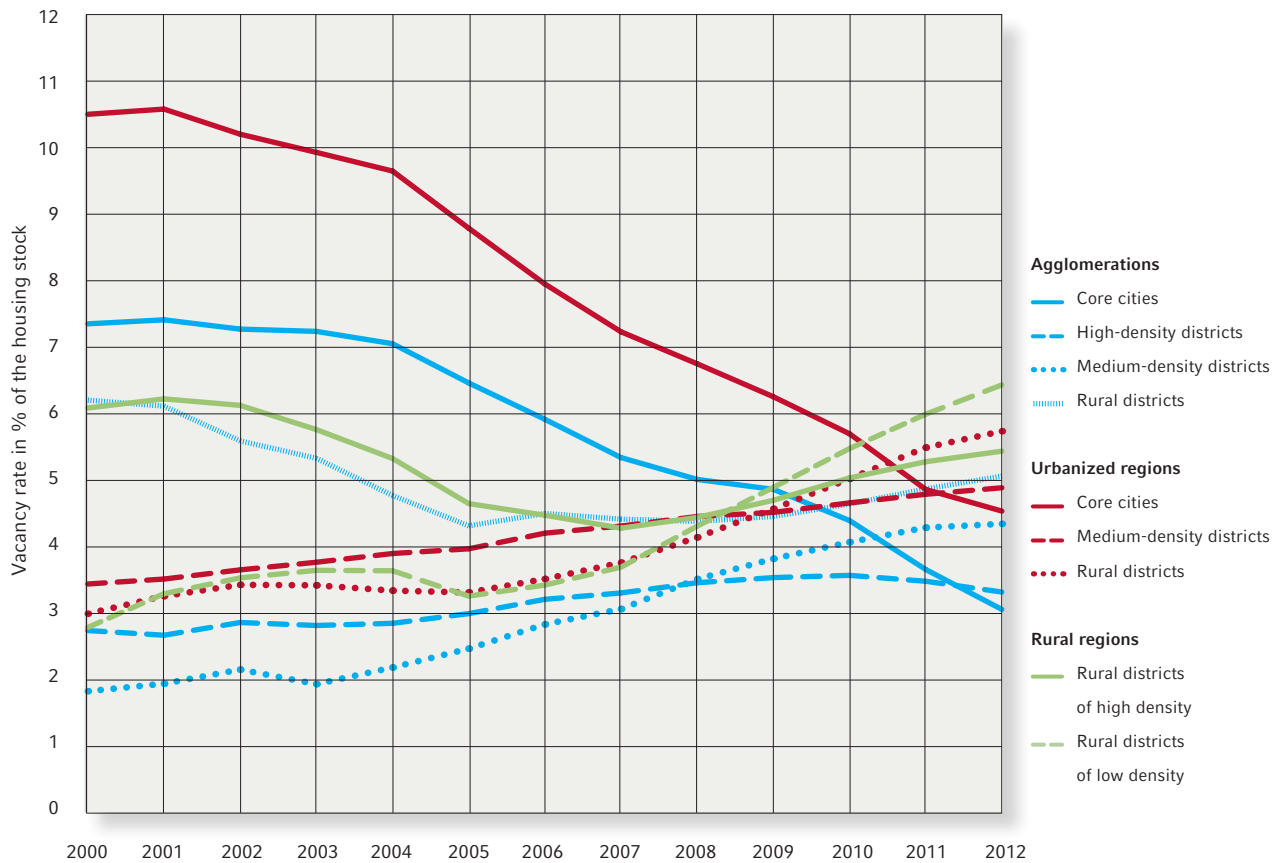
as in the bordering districts in the states Bavaria, Brandenburg, Lower Saxony, Mecklenburg-West Pomerania and Thuringia. On the other hand, we also notice that large parts of the north of Germany show very low housing vacancy rates. One feature of these regions is that between 70% and 90% of the population here live in their own homes. Low vacancy rates are also characteristic of many districts in North Rhine-Westphalia as well as in the agglomerations Frankfurt am Main and Munich. What is more, hardly any unoccupied dwellings are to be found in many university towns and cities, examples being Freiburg im Breisgau, Karlsruhe, Jena and Münster.

— Figure 2 traces the development of vacancy rates from 2000 to 2012, broken down by the nine settlement structure district types. The starting point here are the findings of the building and housing

census of 2011, which have been interpolated and extrapolated taking changes in housing stock and the number of households into account. According to the findings, the vacancy rates in the core cities both of the agglomerations and of the urbanized regions fell continuously over those 12 years. Housing vacancy rates more recently also decreased slightly in the high-density districts of the agglomerations.

In all other district types the number of unoccupied dwellings is rising, with the low-density rural districts reporting the highest growth rates. Overall, the development shown in the diagram of vacancies by settlement structure district type may be described such that the housing markets are experiencing a growing shortage in the core cities but are easing in the rural areas. Unfortunately, these differences cannot simply be set off or evened out by moving housing from one area to another.

FIGURE 2 Development of housing vacancy rates by settlement structure district type



Sources: Federal Statistical Office, own calculations

04 Causes of diverging settlement structures in housing provision

The reasons for the above differences in the movement of housing vacancy rates lie in a combination of diverging developments in settlement structures on the supply and the demand side. On the demand side, core cities showed over a number of years a relatively strong increase in numbers of inhabitants and households. New construction in these cities over the same period was relatively weak, with the result that the housing supply saw only below-average growth. The main reason here was weak activity in the construction of multifamily houses. Between 2000 and 2012, considerably fewer dwellings were built in this segment – one that is important in terms of urban housing provision – than one- and two-family houses (see Figure 3).

The construction of apartments involves other owners and considerations than does the construction of single-family homes. Those who build a new one-family house usually do so for their own use. Privately financed multifamily houses are built either to let the apartments to produce an income or to sell them at a profit. On the one hand, the main consideration is to generate a return; on the other, it is the wish to live in one's own four walls. Deterred by the expectation of stagnating rents and prices, as well as by bleak demographic forecasts, the propensity to invest in new multifamily houses was weak for a prolonged period of time. Multifamily houses, of course, call for a different popu-

lation density than single-family houses. Thus, shifts in the structure of new housing construction always also go hand in hand with shifts in the regional distribution of new housing construction, and in the past decade this has been clearly to the detriment of the core cities.

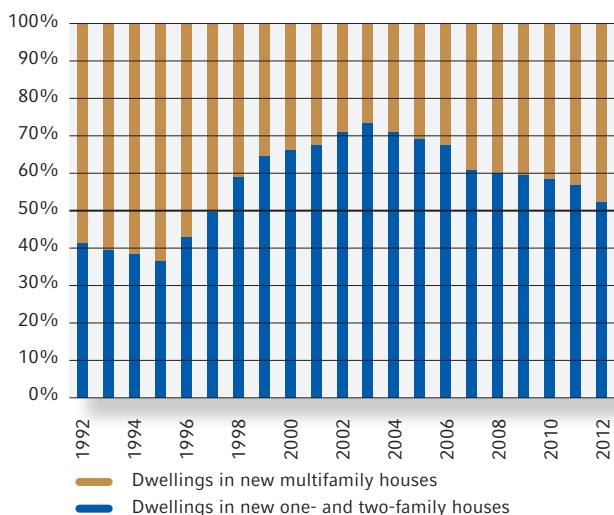
05 Households and housing needs in the years ahead

Real estate market imbalances cannot be remedied by arbitrage. This means that where there is a lack of apartments in multifamily houses in the core cities today, there are only two options. Either housing market participants wait until the problem sorts itself out, or new dwellings are built. New construction activity is conditional on building land and on capital, as well as on the expectation that the newly built dwelling units will meet with sufficient demand in the longer term. New housing construction ties up capital over many years. From the investor's viewpoint, therefore, the success or failure of new construction activity depends primarily on how future demand can be expected to develop in the market in question, and whether and on what scale other property developers build residential properties.

The development of future demand is, as mentioned above, closely related to movements in household numbers. Figure 4 shows the development of the housing stock and numbers of households by settlement structural district type. Both variables are set at 2000 = 100. The housing stock time series run until the end of 2012 and the time series for the number of households until the end of 2020. The development of the number of households was calculated on the basis of our own regional population forecasts and of household structures forecast by the BBSR. The development of household numbers from 2013 to 2020 as presented in the charts below shows the trend line of the potential path in new construction activity. The charts clearly demonstrate the large differences that exist between the individual district types in terms of the expected growth or decline in household numbers. On a more detailed level, the following points are to be emphasized:

1. At first, the trend in household numbers is particularly dynamic in district types 1 and 5 (core cities in agglomerations and urbanized regions). We note that, for years, the number of households in both district types has been rising more sharply than the number of dwellings. If new housing construction in those district types does not rise over a period

FIGURE 3 Distribution of newly built dwellings between one- and two-family houses and multifamily houses



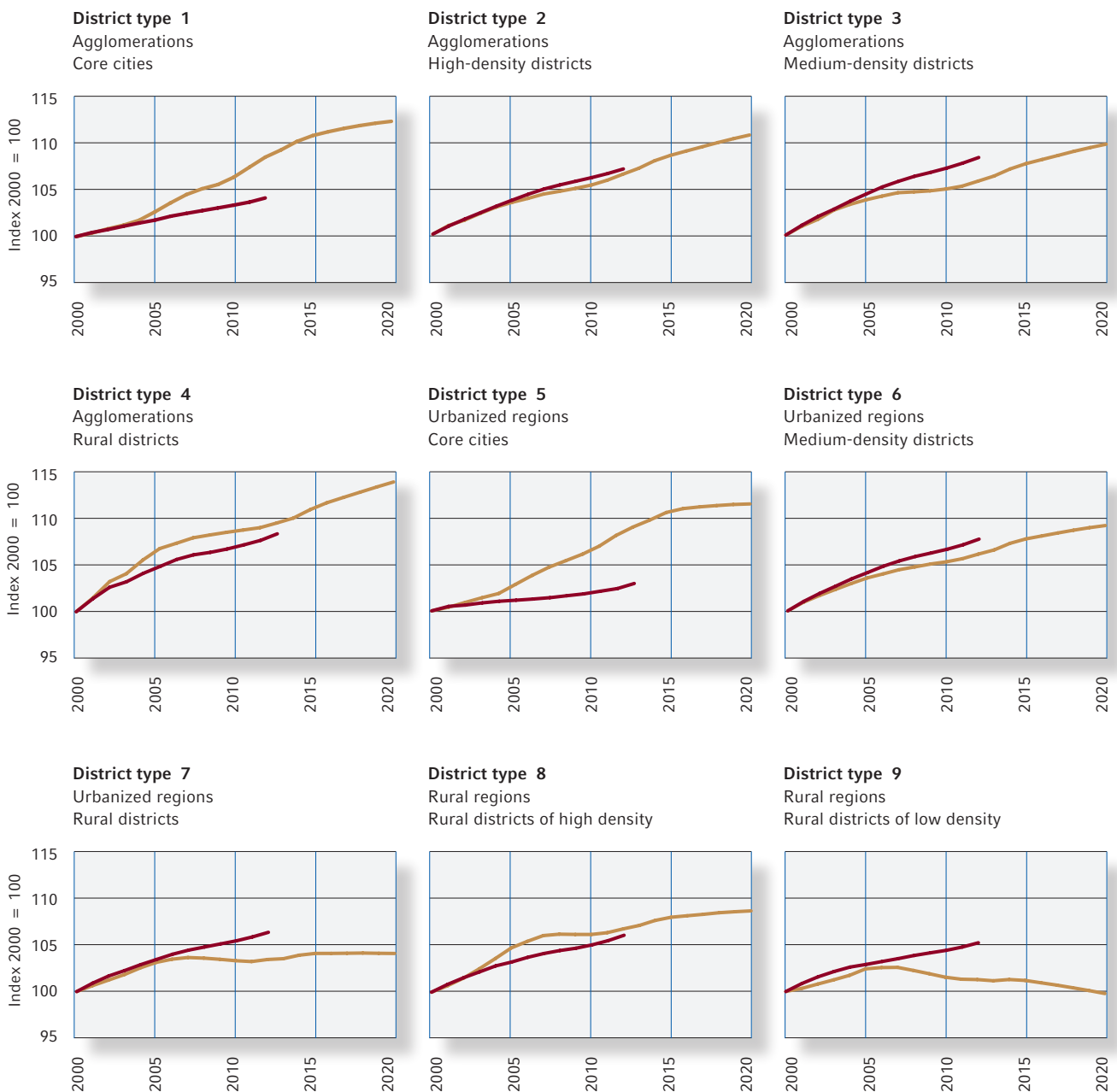
Sources: Federal Statistical Office, own calculations

of several years, these markets will grow more and more tense – bearing in mind that the vacancy rates in most of the towns and cities in question are already at a very low level. This means that the construction of new multifamily houses in district types 1 and 5 would be an effective approach in preventing further market tensions or reducing housing

shortages. Yet two points should be noted. First, the rise in household numbers will flatten in the second half of the current decade (the absorption capacity of these markets is therefore limited). Second, the rule applies in this case, too, that every market is different and must be analyzed thoroughly on the basis of its individual circumstances.

FIGURE 4 Households and housing stock by settlement structure district type

— Number of households — Number of dwellings



Sources: Federal Statistical Office, BBSR, own forecast

2. District types 2, 3, and 4 as well as 6 and 8 have seen largely matching growth in household numbers and housing stock over the last years. Of course, housing shortages have arisen here and there (notably in the districts surrounding the large core cities), and elsewhere vacancies have risen slightly. On the whole, however, there is no sign of imbalances developing in those districts due to settlement structures. New housing construction here is largely in line with market needs and can remain at roughly the current level with regard to the expected development of household numbers in the coming years.
3. The situation is different in district types 7 and 9, i.e. in the rural districts in the urbanized regions and the low-density rural districts in the rural regions. The development in household numbers is expected to be weak in both district types in that it is expected to stagnate in one and decrease in the other. Statistically, new construction activity – which is clearly dominated by the construction of new single-family houses – is today at a level which will cause the housing vacancy rate to increase in the years ahead.

06 Where to build what, and when?

In terms of settlement structures, this question may be answered as follows:

- The housing markets in the core cities show the greatest need for new construction activity, both today and in the course of the current decade. The housing vacancy rates here are comparatively low,

and the number of households is rising most rapidly. The imbalances between the supply of and demand for housing space in core cities are, to a great extent, due to the fact that the level of construction of new apartments is too low. The propensity to invest in building new multifamily houses in the last ten years was insufficient to needs. The latest figures showing building permit trends indicate that this has changed. This finding is to be welcomed and answers the question “what?”. The baby boomers, the generation characterized by high incomes and high birth rates, have mostly built their own homes.

- According to the forecasts available at present, the population will hardly rise in the years ahead, as an increasingly large immigration surplus would be needed for this to happen. The number of households will continue rising for the time being, however. This development is owed to the fact that households are shrinking. Although this shrinkage has been repeatedly underestimated in the past, we should bear in mind that it cannot continue *ad infinitum*. This is to say that the increase in household numbers will probably slow down towards the end of the current decade. Ideally, new housing construction should pick up in the short term and follow a flattening of needs and demand in the medium term.

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