The housing market during the nineties

In the past decade, the German housing market has been characterised by marked vicissitudes and structural changes. In the late eighties and early nineties, substantial immigration led to a sharp rise in the demand for housing in western Germany. Construction activity, reinforced by government promotional measures, increased distinctly, and prices went up strongly. With the ebbing of the immigration wave and the expansion of the supply of housing, conditions eased noticeably in the second half of the decade, as was reflected in the sluggish movement of rents.

In eastern Germany, the manifestly poor stock of buildings, out of line with the demand, at the time of reunification and - as was generally supposed - the inadequate supply sparked off a distinct surge in construction activity. Fostered by massive government promotion, there began a construction boom that initially paid little heed to the aspect of the sustainability of returns on investment. The ensuing setback was all the more pronounced and protracted. The adjustment process will continue in the current year as well. In the new Länder, the construction industry is therefore increasingly forfeiting the outstanding position it once had there.

The structural features of the housing market

Pronounced segmentation

In the past ten years, the German housing market has presented a very variable picture. If the early years of that period were marked by signs of shortage, later on a virtual balance was reached between supply and demand on the market as a whole. The adjusting and balancing processes on the housing market, compared with conditions on many other merchandise markets and the financial markets, are generally characterised by a number of specific structural features. They are due in large part to the fact that supply is mainly determined by the housing stock, and is location-specific, which, in the short run, sets strict limits to the elasticity of supply. The fact that the housing market is in many respects a very imperfect market, in terms of ideal market forms, owes something to the heterogeneity of the types of buildings and kinds of housing, to the specific conditions of the housing environment and to the problem of the limited divisibility of the assets. The upshot is high transaction costs and rather low "market liquidity". The fairly loose association of market segments results not infrequently in a temporal juxtaposition of a good supply situation, supply bottlenecks and oversupply in different segments of the market.

High capital tie-ups and long service life High capital tie-ups and a long service life are likewise among the distinguishing features of the housing market. Hence investment decisions are highly future-oriented, and therefore inevitably pose a particular degree of risk. For instance, the expected average service life of a residential building erected in

1995, according to the official capital-stock account, is 74 years, compared with 52 years for industrial buildings and 13 years for machinery and equipment.

Moreover, the construction of new housing is both costly and time-consuming. That is not just a matter of the construction phase proper; instead, the public sector is likewise involved in the context of building supervision and in the provision of the requisite infrastructure. Especially in the declaration and development of new building land, considerable periods may elapse because of conflicting interests.

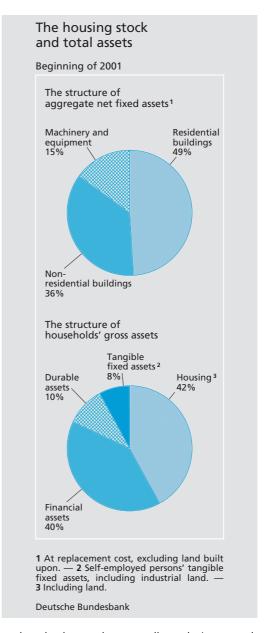
In view of the long space of time over which capital is tied up in housing, the long-term interest-rate factor, too, is a major element in investors' calculations, either in the context of a strict comparison of the returns and risks (including changes in value) posed by investment vehicles, or - especially in the case of owner-occupied housing – in the form of debt-service expenditure and rent payments saved. Often, however (especially during the nineties), the interest-rate effect is obscured by changes in the underlying tax and government-promotion conditions. Demand-side cyclical influences, which come into play primarily via the reassessment of longer-term income expectations, likewise curb the effectiveness of the "interest-rate channel".

The capital good "housing" is an economic asset or store of value that can be used both as a consumer good and as productive capital. Regardless of the use to which it is put and its ownership, housing (excluding land)

Housing as a key asset

constitutes the largest segment of aggregate fixed assets, which comprise the total stock of durable reproducible assets. On the basis of net fixed assets at replacement cost, at the beginning of 2001 almost 49 % of the aggregate capital stock was held in the form of housing, compared with barely 45% at the start of 1991. This reflects, besides the generally high esteem which the asset "housing" enjoys, and which is likewise mirrored in the composition of households' assets, the high cost and long service life of real property. Given the size of the housing stock, even a strong investment year in residential construction appears relatively insignificant by comparison. If only for that reason, even small rates of change in demand can barely be offset in the short run, even if the response of construction activity is vigorous.

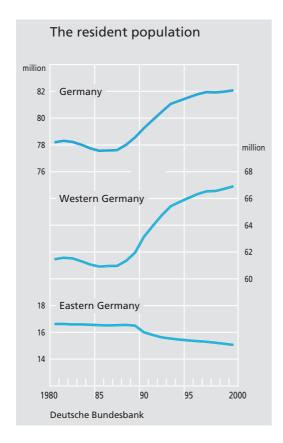
Differentiated approach required Altogether, it is due to the profusion of determinants and players in the housing market, and to their complex interactions, that, even when the overall situation can be said to be in balance, major disequilibria regularly supervene for prolonged periods in certain market segments, and soon spark off calls for government intervention, with an allusion to the supposedly particularly meritorious nature of the service "utilisation of housing". Especially in regional terms, differences of varying intensity are manifest, both in a more smallscale approach between conurbations and their surrounding areas and rural districts and on a broader geographical scale, e.g. between Länder. In view of the (until very recently) highly divergent market conditions obtaining in western and eastern Germany, it will often be necessary in the following pages



to break down the overall analysis accordingly.

Housing challenges between 1990 and 1995

In the second half of the eighties, the west German housing market was reckoned to be largely in equilibrium. The resident populaBalanced conditions in western Germany in the late eighties



tion, which had previously declined somewhat, had stabilised at around 61 million inhabitants by the middle of the decade. Compared with the peak level at the start of the decade, that implied a decrease of over 650,000 people, or slightly more than 1%.1 The slackening of demand pressures was accompanied by a distinct slowdown in rent rises. On the basis of the consumer-price index for all households, the year-on-year increase in rents for housing and garages reached its lowest level during the eighties in 1987, at 1.6%; compared with its peak in 1983, that represented a decline to less than one-third of the former rate of growth. The purchase prices of owner-occupied houses and apartments, which had gone up steeply in the preceding years, actually decreased somewhat. Putting up additional housing became dramatically less attractive. In 1988, as the official statistics show, barely 210,000 new housing units were completed. That was the lowest figure in the history of the Federal Republic. In 1986, the total stock of housing units came to just over 27 million, according to an extrapolation by the Federal Statistical Office. That meant that, in arithmetical terms, there were only 2.2 inhabitants per unit, compared with 2.4 at the beginning of the eighties and 2.9 at the beginning of the seventies. Correspondingly, in 1986 there were 445 housing units for every 1,000 inhabitants.

However, it was to turn out a short time later, when the results of the 1987 building and housing census were released, that the extrapolation was rather imprecise. Extant at the date of the survey were only 26.3 million housing units. The difference from the extrapolation is explained by the fact that, although detailed statistical data on additions to the housing stock are available, the information on retirements from that stock is incomplete. Such information comprises only the reported demolitions of housing, but not losses of housing due to redesignations or amalgamations.² Hence the official extrapolation tends to overstate the number of housing units available.

1987 housing census

¹ When determining the demand for housing, the number of households is of course the prime consideration; but the relevant figures, obtained from the official statistics, show breaks over time that are difficult to account for. Hence the present analysis is based mainly, as a makeshift, on the resident population, which constitutes, so to speak, the demographic framework for housing demand

² If the overestimate of just over one million housing units is distributed over the period between the 1968 and 1987 housing censuses, the annual retirements of housing were about 70,000 higher than assumed in the official extrapolation.

Strong immigration to western Germany Although the new interpretation of the statistics made no difference to the real supply situation, the suddenly discovered "shortfall" was largely responsible for the impression that there was a lack of housing. That impression did not gain a real backdrop until there was a massive growth in immigration to western Germany. In the six years between 1988 and 1993, 11/2 million ethnic Germans from eastern Europe, about 1 million migrants from the new Länder and almost 1½ million asylum-seekers entered the territory of the former Federal Republic. Despite the continuing excess of deaths over births, in 1993 the average resident population exceeded the level of 1988 by more than 4 million, and the figure of 65 million was outstripped for the first time in 1995. According to the data of the "microcensus", the number of households increased in that period by almost one-tenth, or approximately 23/4 million.

Rise in apartment rents

Signs of an increasing tightening of the market were reflected in apartment rents, too. Whereas the rise in rents, according to the official yardstick of the consumer-price index, had slackened to 1.6% a year by 1987, it accelerated in the following years to a peak of almost 6% (in 1993), with the result that the gap vis-à-vis the general inflation rate came to 11/2 percentage points. Altogether, rents went up by just over one-quarter within a good half-decade. At the top of the table were apartments in older buildings, although publicly-assisted and privately-financed residential construction was not far behind. Similarly steep rises in rents had last been recorded early in the seventies. Housing costs per household increased from almost 16 % of disposable income to about 20 %.

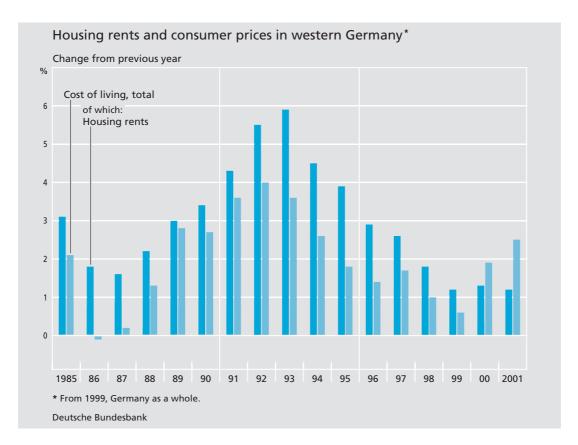
In view of these developments, the government saw fit to foster the construction of new housing by means of a whole series of promotional measures. The centrepiece was formed by substantial depreciation facilities for the construction of rented housing. In addition, the volume of programmes in the field of social welfare housing construction was markedly expanded again, after a period of retrenchment. The number of sponsored housing units, which had fallen below 40,000 in the second half of the eighties, rose at times at the beginning of the following decade to over 110,000 units.

Increase in construction activity

Enhanced government

promotion

Not least for that reason, the consequent housing demand soon led to a strong revival of construction activity. As early as 1990, the number of housing units authorised was twice as high as in 1987; by 1994 it had increased again by almost 200,000. That was the highest level of the past two decades. The same thing also applies to the number of completions. 500,000 new housing units a year came on the market in both 1994 and 1995. In particular, the construction of apartment blocks was stepped up. Whereas, in 1990, more housing units had been erected in the form of owner-occupied houses (buildings with one or two apartments) than in that of apartment blocks (buildings with three or more apartments), in 1994-95 apartment blocks outstripped owner-occupied houses by 50%. Over one-half of the former were owner-occupied apartments (condominiums), which are mostly intended to be let. There-



after, the total stock of housing units grew to 28.9 million, according to calculations by the Federal Statistical Office. Notwithstanding the steep growth of the population, the housing situation improved; the number of housing units available for every 1,000 inhabitants rose to over 435.

Higher construction costs and land prices Simultaneously with the increase in activity, construction costs shot up despite the expansion of capacity. In the six years from 1988 to 1993, expenditure – as measured by the Federal Statistical Office's overall construction-price index for residential buildings – went up by nearly one-third, equivalent to an average annual rise of over 4½%. Between 1982 and 1987, the annual growth rate had been barely 2%. Land prices likewise began to move perceptibly upwards. According to the Fed-

eral Statistical Office, in the middle of the decade, the prices of land ready for building were about one-fifth higher than at the start of the period. Broker organisations and other observers of the real property market actually ascertained price rises of almost one-third for building sites in good residential areas.

In the new Länder, housing construction activity was cut back drastically in the first few years after German reunification. In 1992 the number of housing units completed reached an all-time low of approximately 11,500 units.³ In relation to the resident population, that was equivalent to only 7 housing units

Initially declining completions in eastern Germany...

³ According to the findings of the Commission for Structural Change in Housing in the New Länder, it must, however, be assumed that completions were under-recorded by 50 % between 1991 and 1993.

per 10,000 inhabitants. During the eighties (when construction intensity, in numerical terms, actually exceeded that in western Germany), as many as 54 housing units had been completed for every 10,000 inhabitants. In view of the reduced construction activity at the start of the nineties, the housing stock, according to calculations by the Federal Statistical Office, hardly increased any more, and remained at about 7 million units for several years. Even so, in arithmetical terms, the supply of housing improved in that period, above all because the population contracted owing to heavy emigration.

... accompanied by a high vacancy rate It would, however, be wrong to infer from these figures that the supply situation on the housing market was good, particularly in qualitative terms. As a matter of fact, the supply (in terms of both quality and structure) fell distinctly short of the demand, as it had traditionally done already in the GDR. A substantial proportion of the housing units could not be let or sold. According to estimates by the Commission for Structural Change in Housing in the New Länder, 4 approximately 420,000 housing units were vacant in 1990 because they were either dilapidated or had other serious shortcomings. In 1993, the official statistics came to a similar conclusion. That meant that about 6% of all housing units were, in effect, not available for residence. By 1998 the number of vacant units, which by then also included unlet apartments in new buildings, had increased to about 1 million, or over 13 % of the housing stock.

Initially, the vacant housing resulted above all from the fact that, in the view of the GDR

Housing completions

Number, in thousands

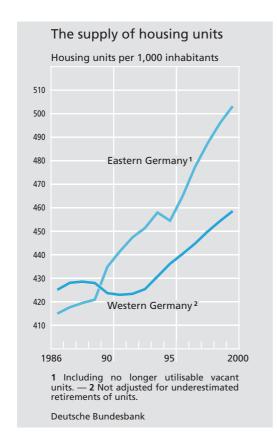
Year	Western Germany	Eastern Germany
4005	242.4	445.7
1985	312.1	115.7
1986	251.9	116.5
1987	217.3	109.8
1988	208.6	104.7
1989	238.6	92.3
1990	256.5	62.5
1991	314.5	1 16.7
1992	374.6	1 11.5
1993	431.9	1 23.6
1994	505.2	67.7
1995	498.5	104.2
1996	416.1	143.4
1997	400.4	177.8
1998	372.2	128.4
1999	369.9	102.7
2000	336.8	86.3

1 In the opinion of the Commission for Structural Change in Housing, recorded about 50 % too low.

Deutsche Bundesbank

leadership, the preservation of historic town centres was not worth fostering. Private initiatives to repair and refurbish old buildings were hampered, if not indeed prevented. Instead, housing promotion concentrated specifically on the creation of new building estates in industrial centres. On grounds of expense and time, prefabricated industrial construction methods were employed for preference. The prefabricated style of apartment blocks offered distinctly more comfort than many apartments in old buildings did, which made the former comparatively popular in the GDR; but the size of the apartments and the environment of the blocks mostly fell significantly short of west German standards, and of the wishes of east German residents.

⁴ Report of the Commission for Structural Change in Housing in the New Länder, November 2000.



East German construction boom in the mid-nineties Under the impact of the scarcity on the housing market, and in the light of the generally dilapidated state of the housing stock, construction activity was massively stepped up at first in the mid-nineties. Special stimuli were imparted by extensive government promotion, including tax concessions, financial subsidies and cut-price loans. The number of building permits rose from 5,500 in 1991 to over 185,000 in 1996. Housing completions reached a peak, at just under 178,000, in 1997. At 430 new housing units per 10,000 inhabitants in five years, construction output far exceeded the figure of 310 housing units recorded during the construction boom in western Germany early in the seventies. According to the official statistics, the "advantage" of the new Länder – in terms of the stock of housing units per 1,000 inhabitants – rose from 3½% at the beginning of the nineties to about 10% at the end of the decade. Even if one takes account of the Commission's assumption that about one-half of the vacant housing units (i.e. nearly half-a-million units) are no longer utilisable owing to constructional shortcomings, and are no longer being offered on the market, the supply – as measured by quantitative yardsticks – in eastern Germany is to this day higher than that in the old Länder.

In search of a new equilibrium

In the second half of the nineties, a progressive slackening of construction activity began on account of the distinct convergence of supply and demand. In the year 2000 in western Germany, the number of potential construction projects documented in the form of construction permits dropped to one-half of the peak level recorded in 1994; in the new Länder, the figure fell to only one-third. The fact that market equilibrium had improved noticeably was also reflected in the development of rents. According to the official price survey, the rise in housing rents in Germany in 1999 decelerated to little more than 1%. Such low rates have not been recorded in this country in the past four decades.

One of the reasons for the decreasing demand for housing was unquestionably the fact that population movements diminished perceptibly. Whereas the number of inhabitants continued to grow in the old Länder, although the pace of the rise slowed down markedly, the resident population of the east

Period of adjustment after over-investment

Reduced population movements

German Länder has gone down right up to the present. Old industrial locations, in particular, registered strong waves of emigration. Moreover, in many places former residents of prefabricated apartment blocks moved to more up-to-date rented housing or houses of their own, which are more in line with their wishes. The massive amount of investment, specifically in east German residential construction, was thus largely responsible for the distinct increase in the vacancy rate over time. Since, under current market conditions, many of the vacant apartments can no longer be let, the demolition of quite a number of the buildings will be unavoidable.

Curtailment of government promotion

Under the impact of the easier market conditions, Parliament has gradually reduced the government promotion of residential construction; in particular, it has repealed some of the preferential tax depreciation conditions. Moreover, the option of offsetting, for income-tax purposes, losses from letting and leasing against other income was curtailed, land-transfer tax was raised and what was known as the "deduction of preliminary expenses" was abolished. The speculation period for gains from the sale of private land not used by the purchaser was extended from two years to ten. In addition, in the context of a tenancy-law reform, the capping limit for rent increases was lowered and periods of notice for terminating leases were shortened, to the benefit of tenants.

Gloomier yield outlook

It was no doubt largely because of that package of measures, along with the market-induced slowdown in rent rises, that many potential investors critically reconsidered their

yield expectations with respect to residential property. Since, however, the financial markets were offering attractive alternative investments at the same time, in many cases retirements from the housing market may have been due to that factor, too. The construction of apartment blocks, which pays much greater heed to yield considerations than the building of owner-occupied houses, was particularly hard hit. In the old Länder, the number of housing units approved in buildings with three or more such units dropped from over 315,000 in 1994 to no more than 90,000 in 2000. That roughly conformed to the level of the late eighties. In eastern Germany, only about one-seventh of the peak level recorded in 1995 was reached, when almost 105,000 housing units were approved. In the field of owner-occupied houses, which here comprise buildings with one and two apartments, demand has moderated distinctly since spring 2000. That may have owed something to the lowering of the income limits for the granting of the owner-occupied housing allowance.

Of late, however, there have been signs of a further tightening of certain segments of the market. In some conurbations, the supply of rented housing is becoming scarcer; according to the associations, rents are rising perceptibly again when new agreements are concluded. Inexpensive and large-sized apartments are hardly obtainable. Another reason why the construction of owner-occupied houses is becoming more expensive is that only limited space is being made available for residential development. In the somewhat longer run, however, a shortage of housing, notwithstanding extra demand due to afflu-

Signs of a tightening of the housing market, but adverse population forecasts

ence and a demand for diversified investment vehicles, may be prevented by the noticeable decline and progressive ageing of the population. In view of the long service life of real property, such a development, even if its impact is not felt in full until future decades, will not be disregarded in investment decisions taken in the housing market.

n employ-

Employment in

Construction investment and aggregate output

Even so, housing construction is likely to remain the most important branch of the construction sector. Measured by construction investment within the national accounts, in the year 2000 almost 60 % was accounted for by that sector in Germany. The proportion was actually somewhat higher in the old Länder, while it came to just over 45% in eastern Germany. That also owes something to the heavy expenditure on improving the public infrastructure in the eastern part of Germany. Notwithstanding that, the influence of residential construction on the overall economy there is still distinctly higher than in the old Länder. An estimated just over one-tenth of the aggregate value added must be attributed to construction output; in western Germany, this figure is just over 6 1/2 %. That explains why developments in housing construction, for good or ill, have a considerable impact on the overall performance of the German economy. While the boom in housing construction in the first half of the nineties contributed, in arithmetical terms, almost ½ percentage point to the annual growth of real GDP, in the second half the net result was a negative balance of almost ½ percentage point per annum.

The construction sector is a major factor, not only in aggregate output but also in employment. In 2001 no less than almost 7 % of the total labour force, corresponding to about 2½ million persons, found employment in that industry, which is one of the most labour-intensive in the producing sector. Just under 30 % of them came from the new Länder. Particularly there, during the boom in the first half of the nineties, the construction industry offered jobs to many wage and salary earners who had lost their previous employment. In many cases, however, those positions were not permanent. Approximately one-third of the distinctly more than one million jobs have meanwhile had to be sacrificed to structural adjustment. In the old Länder, too, many jobs have been shed as a result of the slowdown in construction activity. In Germany as a whole, the size of the labour force in the construction sector had decreased by over half-a-million, or nearly 20%, by the year 2001 since its peak in 1995, when 3 1/4 million persons were employed.

ers *Prospects*

If the new residential construction orders reaching the construction industry are taken as a yardstick, the downswing gradually seems to be coming to a halt. At any rate, business has stabilised at a low level since the middle of last year. That applies equally to the old and the new Länder. In particular, the construction of owner-occupied houses in western Germany is acting as a buttress of construction activity. If, moreover, the rented housing market tightens further, especially in the conurbations, and rent increases can be imposed, the nadir of construction activity might gradually be reached, at least in the old

Länder. Viewed as a whole, however, the construction sector will presumably not make

any positive contribution to growth in the present year either.