



Dear Readers,

living in Germany has become noticeably more expensive in the last two years. However, the cost of living varies considerably from region to region. This is shown by a new study by the German Economic Institute (IW) and the BBSR. The study identifies the cost of housing, which is above average in many independent cities and their surrounding areas, as a decisive factor. With its innovative methodological approach - the data was automatically extracted from the internet - the research creates a broader database for regional living costs.

Broadband and mobile phone coverage remains an important issue. Our new analysis makes it clear that regional differences in coverage continue to characterise the reality in Germany. It is time to rapidly reduce these deficits in order to make the opportunities of digitalisation equally accessible to all regions.

I would also like to draw your attention to the new BBSR study "Large cities under pressure to adapt". It highlights the need for action in urban development policy resulting from the social and demographic developments of recent years. According to the study, almost all major cities recorded population growth between 2011 and 2021. According to the study, the population growth particularly affects neighbourhoods that are already characterised by high fluctuation and play an important role in the integration of immigrants as "arrival neighbourhoods". The researchers also found that social inequality has increased over the last ten years.

I hope you will find this interesting.

Dr Markus Eltges
Director of the Federal Institute for Research on Building,
Urban Affairs and Spatial Development (BBSR)

Regions differently connected to bus and train

German „Baukultur“ policy in a European context

Results of the BBSR Real Estate Market Expert Panel 2022/23

Regional costs of living in Germany

by Dr Rupert Kawka

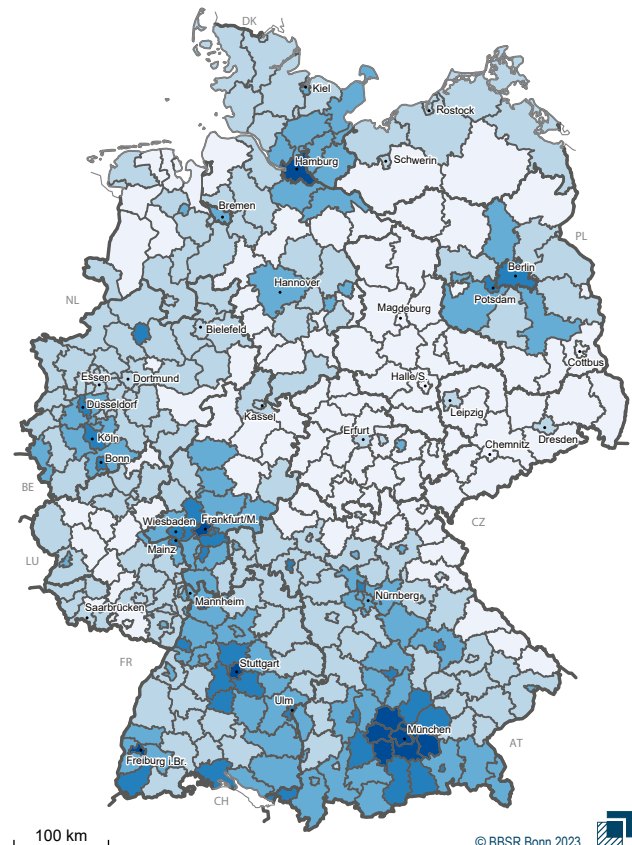
The German Economic Institute and the BBSR have calculated a regional price index for regions in Germany. In doing so, they have continued a feasibility study of the BBR from 2009, but have also added significant changes. As before, the selected items that serve as a calculation basis were taken from the basket of consumer goods and services used by the Federal Statistical Office of Germany for calculating the inflation rate. But this time, the prices and locations of various providers of goods and services, mostly large retail chains, were read automatically for the analysis. The advantage of this web scraping-based approach is that the data can be read repeatedly. In addition, the rental prices of existing housing units were calculated and not only quoted rents. Since the costs for flats, including additional costs, account for about a quarter of the total expenditure, particular emphasis was placed on calculating this key expenditure item by using previously quoted rents and additional information on different types of flats and the rental period. With this kind of data, it was possible to collect prices for 85 per cent of the items within the official basket of goods and services.

Thus, current data are available on the regional prices in all regions of Germany– information that is not covered by official statistics. In addition to the data-based analysis, some conceptual thinking had to be done, e.g. which providers should be taken into account, how to tackle differences in quality and missing values in some regions.

The map shows that in Germany there are considerable variations in living costs. Living costs are higher in large cities and their surrounding areas such as Hamburg, Frankfurt, Stuttgart and particularly Munich, which has the highest prices, at about 25 per cent above the national average. Many rural areas though, particularly in East Germany, but also in some West German peripheral areas, have below-average values. The regional price level there is up to approximately 10 per cent below the national average. But it turns out that a quarter of the districts (25.3 per cent), where also a quarter of the population of Germany (25.7 per cent) lives, are very close to the national average (between 98 and 102).

This is mainly due to housing costs. If they were omitted from the calculation, the regional differences in the prices of the remaining goods and services would be very small. But when housing costs alone are considered, the costs in the city of Munich for example, are 80% above the national average

Regional price index



Regional price index (national average = 100)

- | | |
|---------------------|---------------------|
| up to under 95 | 105 up to under 110 |
| 95 up to under 100 | 110 and more |
| 100 up to under 105 | |

Database: survey of the German Economic Institute and the BBSR
Geometrical basis: VG5000 districts (generalised), As of 31/12/2021 © GeoBasis-DE/BKG
Author: R. Kerstan-Widmann

while in the "cheapest" region (the rural-peripheral district of Vogtlandkreis in Saxony), they are 32 per cent lower. This is also reflected in the overall result: districts which have undergone a population decrease in the last ten years have a below-average price level.

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Regionaler Preisindex für Deutschland – ein neuer Erhebungsansatz mit Big Data [in German]

Regional structures of broadband and mobile phone coverage in Germany in mid-2022

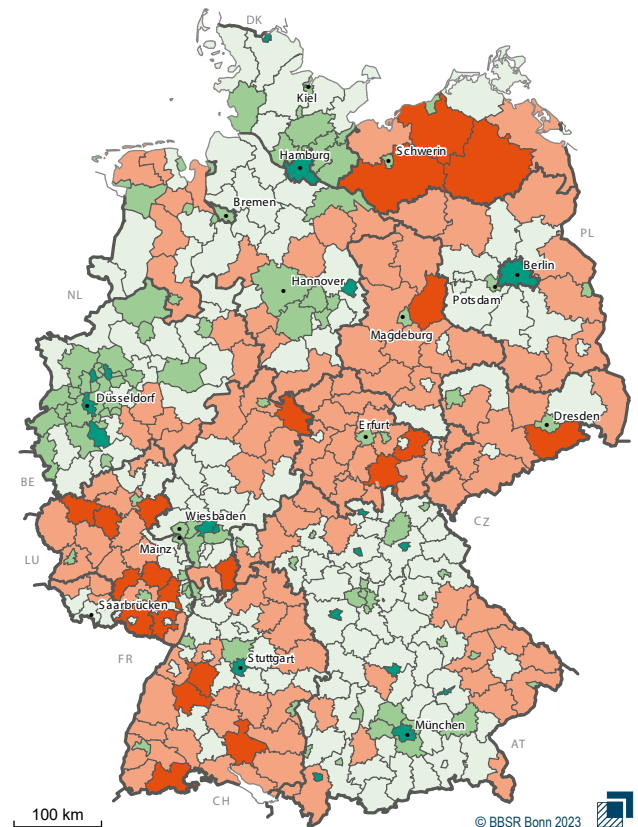
by Dr Steffen Maretzke and Thomas Pütz

Fast internet access is indispensable for both private households and companies, a fact that the German Federal Government has long been aware of. Over that time, it has been its aim to make high-performance broadband connections available nationwide. According to its broadband strategy, fibre-optic lines with transmission rates of at least 50 MBps (megabits per second) were to be available for 75% of households by 2014 at the latest, and for all households by 2018. How far progress has been made in achieving these ambitious goals has currently been verified on the basis of regional district data on broadband and mobile phone coverage from mid-2022. For the first time, they provide differentiated information on the provision of households, companies, commercial areas, traffic routes and other areas with broadband and/or mobile communications. The data were provided by the Bundesnetzagentur (Federal Network Agency) on its Gigabit-Grundbuch (gigabit land register) platform.

Based on this data, the regional broadband and mobile phone coverage of the districts was examined according to the thematic priorities: (1) household-oriented broadband coverage, (2) business-oriented broadband and mobile phone coverage and (3) mobile phone coverage. For each of the three priorities, indicators were calculated to describe the undersupply, the basic and the maximum supply, each of which were summarised in a subindex. Finally, an overall index of the broadband and mobile coverage was determined based on these three subindices. It provides a summary assessment of the regionally differentiated broadband and mobile coverage of districts in Germany.

The present results show that there is still a long way to go in providing households and companies in Germany with high-performance broadband and mobile communications. Even in an international comparison, Germany lagged behind in terms of fibre-optic coverage in mid-2022. Furthermore, there are significant regional disparities in terms of broadband and mobile coverage. They are more marked in broadband coverage than in mobile coverage, they affect households more than companies and, above all, disadvantage structurally weaker or more peripheral regions. The low provision of fibre-optic connections as well as the strongly pronounced urban-rural disparities indicate

Broadband and mobile coverage index



The broadband and mobile coverage in mid-2022 was...

| | |
|--|--|
| ■ very favourable | ■ unfavourable |
| ■ favourable | ■ very unfavourable |
| ■ average | |

Database: Breitbandatlas | GIBABIT-Grundbuch of Bundesnetzagentur (<https://gibabitgrundbuch.bund.de>), own calculations
Geometrical basis: districts (generalised) 31/12/2019 © Geobasis-DE/BKG
Author: Thomas Pütz

that the Federal Government's funding policy for regional broadband urgently requires further strengthening. Such a step would also make an important contribution to securing efficient services of general interest and ensuring equivalent living conditions in the regions of Germany.

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📖 BBSR-Analysen KOMPAKT 09/2023 [in German]

Increase in number of commuters

by Thomas Pütz

In Germany, more employees are commuting again. In 2022, 20.3 million employees subject to social security contributions worked in a different local authority than the one they lived in, compared to 19.6 million in 2021. The share of commuters in all employees subject to social security contributions with their place of residence in Germany remained stable at 60 per cent. This is a result of an evaluation by the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), based on data from the Federal Employment Agency.

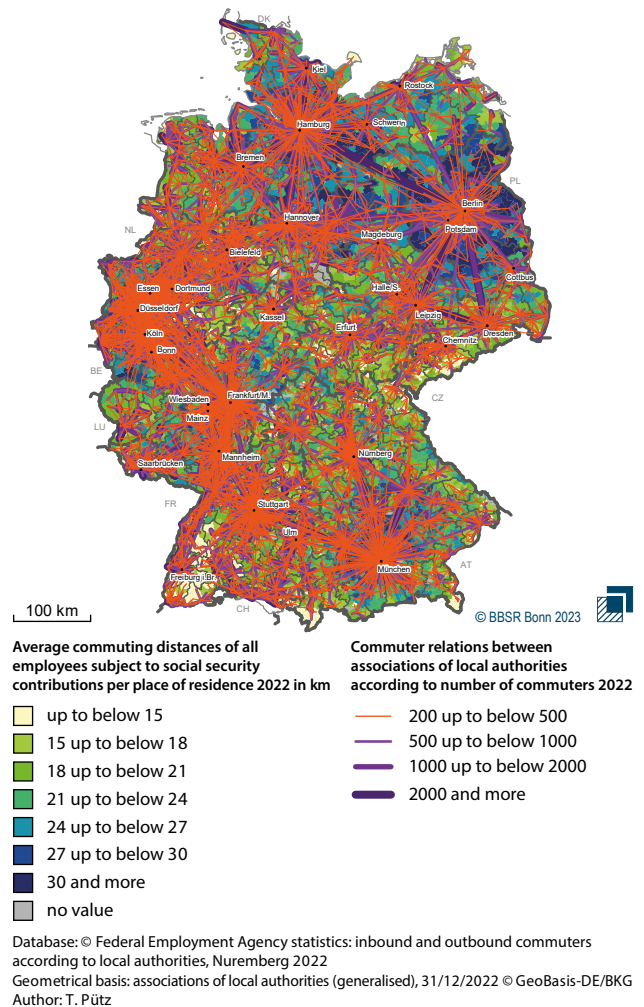
Both the number and the share of commuters travelling more than 30 kilometres to work significantly increased compared to the previous year. In 2022, 7.1 million commuters travelled over 30 kilometres on their way to work (2021: 6.6 million), 3.9 million over 50 kilometres (2021: 3.6 million). The average commuting distance also increased from 16.9 kilometres in 2021 to 17.2 kilometres in 2022.

The districts of Ludwigslust-Parchim (Mecklenburg-Western Pomerania, 27.4 kilometres) and Altmarkkreis Salzwedel (Saxony-Anhalt, 27.3 kilometres) lead the list of districts with the longest average commuting distances. They are followed by the districts of Märkisch-Oderland (Brandenburg, 27.2 kilometres), Landsberg am Lech (Bavaria, 27.0 kilometres) and Pfaffenhofen an der Ilm (Bavaria, 26.4 kilometres).

Especially in the wider area surrounding the labour market centres of Munich, Stuttgart, Frankfurt am Main and Hamburg, an increase in commuting distances can be observed after years of stagnation. This suggests that even more remote small and medium-sized cities are becoming increasingly attractive places for employees to live in – especially as home office and other forms of mobile working allow more flexibility.

Among the large cities, Munich and Frankfurt am Main continue to exert the greatest attraction for workers from the surrounding areas. In 2022, 444,000 of the employees working in Munich lived outside the city limits. It is followed by Frankfurt am Main (397,000), Berlin (382,000) and Hamburg (378,000). In the commuter stronghold of Munich, the number of commuters has increased by more than 100,000 employees within ten years with an increasing number of employees travelling more than 50 kilometres.

Commuting distances



Methodological note: The statistics show the place of residence and the place of work of employees subject to social security contributions as of 30 June 2022. The statistics do not show how many people actually went to the place of work or have worked from home during the reporting period. It is also not clear from the data which means of transport commuters used. However, they do show how the labour market centres are regionally distributed and how far they have an effect on the surrounding area. The statistics do not include data for employees residing abroad and for residence-workplace relationships with fewer than three employees.

Regions differently connected to bus and train

by Thomas Pütz

Ninety per cent of the population in Germany are within easy walking distance of at least one bus or train stop with at least 20 departures a day. However, according to an analysis of the Federal Institute for Research on Building, Urban Affairs and Spatial Development, the proportions vary considerably depending on the region. The researchers identified the proportion of the population living within a radius of 600 metres of an appropriate bus stop or within a radius of 1,200 metres of an appropriate train station. The research was unable to include flexible forms of local public transport like demand-responsive and on-demand transport.

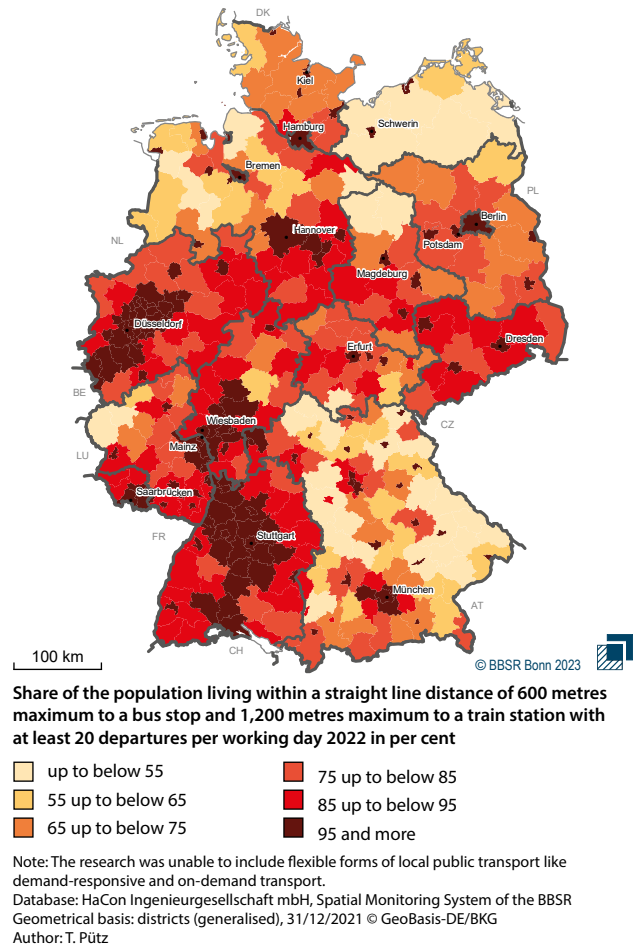
In the city states of Berlin, Hamburg and Bremen, almost 100 per cent of residents live close to such a bus stop or train station. Baden-Württemberg (95 per cent), the Saarland (95 per cent), Hesse and North Rhine-Westphalia (94 per cent each) also have high shares. Among the federal states, the lowest shares can be found in Mecklenburg-Western Pomerania (72 per cent), Bavaria (80 per cent), Lower Saxony (82 per cent) and Brandenburg (83 per cent).

However, densely populated districts are usually better connected to public transport than sparsely populated ones. The lowest rates can be found in the districts of Straubing-Bogen (Bavaria, 34 per cent), Haßberge (Bavaria, 37 per cent) as well as Cuxhaven (Lower Saxony), Cham (Bavaria) and Donau-Ries (Bavaria), each with 38 per cent. In comparison, the proportions are above average in most large cities with district status and densely populated surrounding districts.

"Mobility by bus and train must be suitable for everyday use – in urban and rural areas," says Dr Peter Jakubowski, Head of Department of Spatial and Urban Development at the BBSR. "This includes convenient access to public transport, i.e. stops that are easily accessible on foot and with frequent services. For the majority of the population this is reality, contrary to what many people may suspect. Nationwide standards and quality criteria for transport offers and accessibility may help to make public transport even more attractive and, especially in rural areas, to strengthen it as an alternative to cars."

The BBSR defines convenient access to public transport as the walking accessibility to a stop with a minimum of 20 journey options on a working day. A radius of 600 metres corresponds to an 8- to 10-minute walk, which is still

Accessibility of public transport



considered reasonable to reach a bus stop. A longer walk of 16 to 20 minutes is considered reasonable for access to a train station.

In total, there are 217,000 bus stops and train stations in Germany. Regardless of the number of departures offered, around 97 per cent of the population can reach at least one of them within a maximum radius of 1,200 metres. The approximately 169,000 stops with at least ten departures on a working day can be reached by 94 per cent of the population, the 134,300 stops with at least 20 departures by 90 per cent, while only 86 per cent of the population can access the 114,700 stops with at least 28 departures.

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tu! Hambach: future visions of the Rhenish mining region

by Dr Juliane Ribbeck-Lampel and Hanne Selling

What happens to a place that was once abandoned owing to the planned lignite mining, that was evacuated but has now been reprieved? What sounds complicated is lived reality in Morschenich (Alt) (Old Morschenich), a district of the municipality of Merzenich in the county of Düren in the Rhenish mining region ("Rheinisches Revier"). The ribbon village, located 30 km west of Cologne and directly adjacent to the Hambach open-cast mining area, has been on the list of places to be demolished and resettled and in favour of open-cast mining since the 1970s. By 2015, the first inhabitants had already left the village. Only five years later, the first properties were demolished. In 2020, when the long-standing protests around the Hambach Forest reached a climax and the German Federal Government decided to phase out the use of coal-fired power, the expansion of the Hambach open-cast mining area was stopped and the demolition of Morschenich (Alt) became superfluous.

The Temporary University of Hambach (tu! Hambach), a collaborative learning and design format, has addressed this problematic initial situation and hosted a project week in Morschenich (Alt) from 17–24 June 2023. It was organised by the REVIER a transformational platform of RWTH Aachen University in cooperation with Neuland Hambach GmbH (an alliance of several municipalities neighbouring the Hambach open-cast mining area). Various actors, including students, interest groups, committed individuals and groups, as well as institutions from science and society, accepted the invitation and together joined the discussion to provide impetus for the future development and use of the area.

The BBSR's Competence Centre for Regional Development together with students from RWTH participated in the event with proposals and creative techniques to develop future visions for the area in 2050. The students conveyed their visions for reviving Morschenich (Alt) with postcards, scenic performances and diary entries. A common wish of all contributors was to create an eventful, liveable and easily accessible place.

The Temporary University of Hambach opened the discussions between the actors and enlivened the experience on site. The event once again demonstrated that to make structural change sustainable and future-proof requires taking into account previous developments, creating an understanding of the current situation and creativity.



Impulses for the future design of Morschenich (Alt)

Photo: Dr Juliane Ribbeck-Lampel

The Competence Centre is going to support the further networking of the actors, bring forward the workshop results for public debate and contribute with scientific expertise to the further process of negotiation.

Transformation potential of parking spaces for a sustainable urban redevelopment

by Michael Pollok

The BBSR deals with current research issues on urban and transport planning. These include, for example, the effects on commuter behaviour of new forms of work such as coworking and working from home, the effects of increasing online trade on urban centres, useful measures to reduce motorised private transport in cities, or the conditions for a successful mobility transition outside metropolises. In a new research project funded by the German Experimental Housing and Urban Development programme (ExWoSt), the transformative potential of large parking spaces is now being investigated.

The question of how to deal with high land consumption caused by stationary traffic becomes increasingly urgent in the context of sustainable and forward-looking urban development, and in particular, the growing demand for housing. So far, there has been no systematic and uniform recording of areas reserved for parking. Additionally, a methodology for the systematic assessment of transformative potentials of large parking spaces in different urban contexts has been lacking. However, the use of such potentials becomes increasingly important for future planning and integrated development concepts. The project is intended to make a decisive contribution to closing these gaps in the research. In addition, the project develops a comprehensive overview of successfully implemented transformation projects, including a classification of how they can also succeed elsewhere.

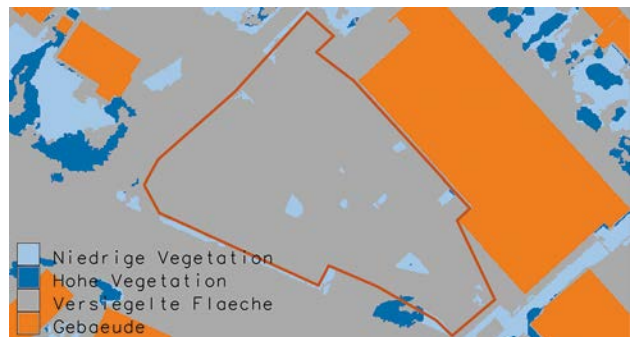
Initially, a methodological approach for identifying large parking spaces shall be formulated as a basis for identifying, assessing and presenting transformative potentials. The methodology is then tested in three sample cities in order to categorise the specific transformative potentials of certain types of parking spaces. Different data sources are analysed, i.e. remote sensing data like digital aerial photos (orthophotos) as well as official cadastral information (Authoritative Real Estate Cadastre Information System ALKIS) and OpenStreetMap (OSM) data. In a parallel step, examples of best-practice, that offer good urban development solutions for the conversion of parking spaces, are researched, illustrated and evaluated. The same process is applied to solutions in which parking spaces are maintained at a basic level, but are extended by other uses.



Digital aerial image of a supermarket car park



Surface classification of the supermarket car park with aerial photograph



Surface classification of the supermarket car park without aerial photograph

Photos: Mundialis



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<https://www.bbsr.bund.de> > Forschung > Programme > ExWoSt > Forschungsprojekte > Transformationspotenziale großflächiger Parkplätze [in German]

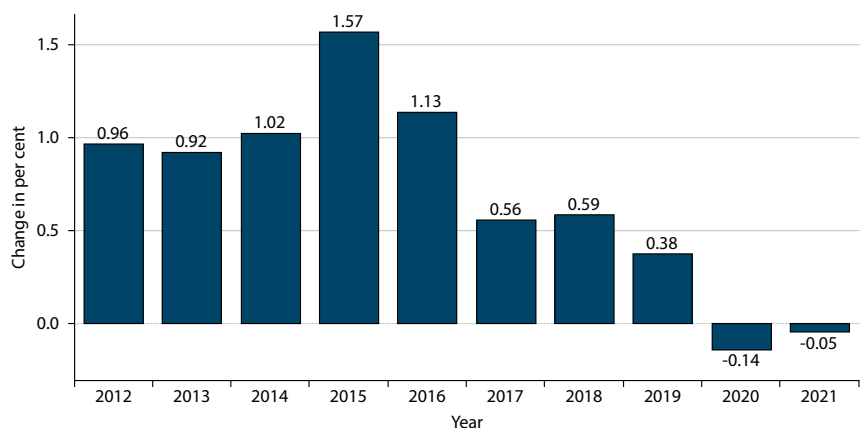
Large German cities under pressure to adapt – current and future socio-demographic and socio-economic development paths

by Dr Judith Kaschowitz and Cornelia Müller

The BBSR is a governmental research institution and advises the BMWSB on issues such as urban development. To fulfil this task, the BBSR not only uses data from the Spatial Monitoring System (Laufende Raumbewachung LRB), but also data from the Inner-City Monitoring System (Innerstädtische Raumbewachung IRB), which is a joint local authority-based statistical project involving 55 cities. The BBSR has been cooperating with the cities involved in the project for many years and acts as the project office. The advantage of the database is that cities provide annual urban district data based on a coordinated catalogue of features for different thematic areas. This detailed information enables comparisons to be made within and between cities, which helps the Federal Government to examine trends in inner-city development.

The current BBSR report sheds light on socio-demographic and socio-structural trends in large cities and tries – very carefully – to look at their future development. It not only illustrates the complexity of urban development processes, but also explains which overarching social trends affect cities. Furthermore, the report examines the pressure currently facing cities to adapt. Changes and trends were examined in various areas such as population development, foreign population and socio-spatial differentiation. Differences were identified between and within cities. One result is that there were population gains in most years and in most of the IRB cities during the monitoring period (2011 to 2021). In the seven largest cities and in the large southern German cities, the population growth is even above average. At the city level, there is a sharp increase in those districts that are characterised by high fluctuations, i.e. strong inward and outward migration both within the city and beyond the city limits. The report also shows that the population growth of cities is mainly driven by immigration from abroad and that suburbanisation continues at the same time.

Population development of the IRB cities compared to the previous year in the period 2012 to 2021



Source: Inner-city monitoring system of the BBSR; data basis: municipal statistics of the IRB cities; N = 51 cities

The characteristics of societal challenges such as adaptation to climate change, the transformation of cities in the course of the mobility transition or socio-spatial polarisation trends vary greatly in the affected municipalities. The report explains how cities are affected by overarching social processes, such as demographic change. For example, societal ageing in Germany affects all municipalities, but differences between cities result from the initial situation and the dynamic ageing processes influencing a city. It also reveals large differences between the IRB cities and striking differences within the cities.

Cities are essential for our entire society because the social challenges of our time are most evident in cities. The aim of this report is to undertake an empirically sound examination of the main socio-demographic and socio-economic development paths in IRB cities. The IRB data are an empirically sound basis that enables the Federal Government to observe small-scale urban development trends for key urban development policy issues. The IRB is of utmost importance for the policy advisory tasks of the BBSR.

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📖 [Deutsche Großstädte unter Anpassungsdruck \[in German\]](#)

Exploring the city with citizens

by Evi Goderbauer

Citizen science can take many forms. The questions as to which activities can be promoted and integrated into urban development processes are investigated in the context of the study "Citizen science in the field of urban development", launched in 2022 by the BBSR and funded under the German Experimental Housing and Urban Development (ExWoSt) research programme.

In this context, citizen science means that citizens participate in research activities and involves the formulation of questions, the development of research projects, the collection and analysis of data and the discussion of results. It has become increasingly important in practically oriented science and at the intersection of science, politics and society. The environmental sector, in particular, benefits from this civic engagement, for example when collecting environmental data or observing ecosystems.

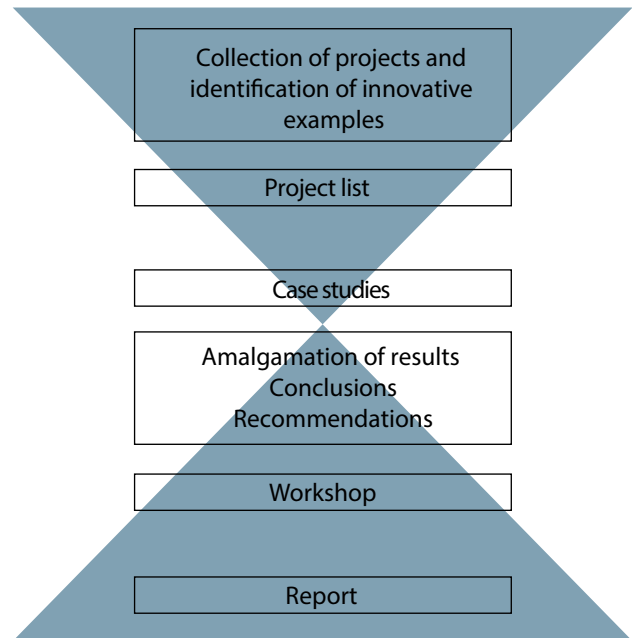
Although the urban development sector has already had experience with public participation and the dialogical development of planning principles, so far, citizen science has scarcely played a role. The BBSR is therefore interested in whether and to what extent citizen science approaches can be part of urban development processes. The study looks at citizens who play a research role within urban development processes – whether self-initiated, by participating in a co-research project or through informal participation.

The dominance of environmental science contents in citizen science projects was confirmed in the context of desktop research and in exchange with key people. But further relevant thematic clusters could be identified, that can be roughly assigned to five fields of action in urban development:

- environment and climate
- mobility and transport
- social affairs and housing
- local and district history
- urban and building culture

The field of mobility and transport focuses on sustainable mobility opportunities from counting bicycle traffic, mapping accessibility in public spaces to conducting a transport experiment in a district. Examples of social projects include the count of homeless people in Berlin, the "Stadtrandgeschichten" (stories from the outskirts of

Study work plan



Source: plan zwei/NetzwerkStadt

Hamburg) project and a project on waste avoidance in a district of Dortmund. Some projects also deal with local history issues or local building culture. In these projects, citizens bring their experience from the part of city, town or village where they live, work or grew up.

In a case study analysis, the research role of citizens is examined and the methods used are discussed. The study is expected to inform the application and choice of specific methods to specific results. The methods include mapping, apps, counting devices or other digital tools, classic participatory formats of social research including city walks, experiments and real laboratories, interviews and questionnaires.

After completion of the case studies on site, the findings and results of the study will be combined and discussed in a workshop with experts.

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📍 www.bbsr.bund.de > [Forschung](#) > [Programme](#) > [ExWoSt](#) > [Citizen Science \[in German\]](#)

German "Baukultur" policy in a European context: guidelines for building culture in Germany

by Dr Alexander Fichte

"Baukultur" (building culture) issues are the focus of numerous BBSR research projects and publications. In developing "Baukultur" guidelines on a cooperative basis, the German Federal Government is seeking to underline its role in shaping a high-quality built environment. The BBSR invites tenders for their development and provides professional support.

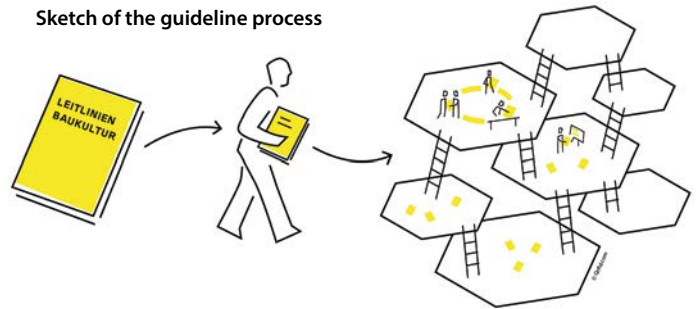
The process is based on the Davos Declaration "Towards a high-quality Baukultur for Europe" and the New Leipzig Charter and follows the long-standing professional debate on building culture. Until now, insufficient consideration has been given to the new demands on the designed environment created by the large societal transformations confronting Europe, the German Federal Government, the German federal states and municipalities. The guidelines can contribute to integrating the new requirements into future planning and construction processes.

"Baukultur" is a cross-cutting theme that affects all areas of life and links them spatially in a high-quality environment. Among others it covers the fields of architecture, interior design and engineering but also elements of urban planning and craft skills. Its goal is to create an environment that enhances the quality of life and is perceived as liveable. Altogether, "Baukultur" is able to achieve social and economic added value.

The guidelines have been developed by a project team in cooperation with the German Federal Ministry for Housing, Urban Development and Building and the BBSR and completed in parallel by an advisory board. Within this process, a communicative approach involving numerous professional and social skills is essential. In addition to the discussion with thematic focus groups, further discussion and assessment is conducted by an interministerial working group, consisting of members of the key ministries and agencies responsible for the Federal Government's construction programme.

In May 2023, four focus groups were set up on four topics, each of which consisted of up to seven experts. Each member of the advisory board was responsible for one topic:

Sketch of the guideline process



Source: Inpolis Urbanism GmbH, Studio Qrflid 2023

- Focus Group 1: What and what for? (core objectives and added value)
 - » What are the key goals of "Baukultur" to achieve a designed quality of life?
 - » What added value can "Baukultur" achieve in the various areas of life and work?
- Focus Group 2: Where? (spatial perspectives and standards)
 - » Which spatial levels are relevant?
 - » Which places are particularly important?
- Focus Group 3: Who? (alliances and governance)
 - » Who is involved?
 - » Who is responsible, who decides?
 - » Which alliances are needed?
- Focus Group 4: How? (quality objectives and criteria)
 - » How must we plan and build?
 - » Which criteria are important for us?

In June 2023, the first interministerial working group met in Berlin, assessed the draft guidelines with a view across ministries and identified links to the tasks of the federal ministries. The results of the interministerial working group are incorporated into the revision of the guidelines. The final results are planned to be published in the third quarter of 2024.

Interim status of the federal programme "Sustainable Inner Cities and Centres"

by Claudia Mannseicher and Monika Mohr

The Federal Programme "Sustainable Inner Cities and Centres" (in German: Zukunftsfähige Innenstädte und Zentren ZIZ), managed by the BBSR, is intended to support cities, towns and villages in coping with acute and structural problems in inner cities and centres with an amount of up to 250 million euros.

| Funded subject | FS municipalities | Share of municipalities | Number of single measures | Share of single measures |
|---|-------------------|-------------------------|---------------------------|--------------------------|
| FS 1 Concepts | 180 | 80,7% | 440 | 11,2% |
| FS 2 Studies, expert's report | 176 | 78,9% | 647 | 16,4% |
| FS 3 Cooperations | 188 | 84,3% | 773 | 19,6% |
| FS 4 Revolving fund | 98 | 43,9% | 137 | 3,5% |
| FS 5 Temporary rented accommodation | 123 | 55,2% | 233 | 5,9% |
| FS 6 Temporary land purchase | 12 | 5,4% | 48 | 1,2% |
| FS 7 Public relations work | 197 | 88,3% | 925 | 24,2% |
| FG 8 Investments into construction measures | 176 | 78,9% | 705 | 17,9% |
| Total | 223 | 100,0% | 3.935 | 100,0% |

Number of single measures according to funded subject
(Status: 01/07/2023, n=223 municipalities)

Source: BBSR

Among the 223 municipalities currently in the ZIZ programme, 149 are larger small towns or smaller and larger medium-sized towns. With 52.9 per cent, medium-sized centres are by far the largest category among the participating municipalities with a central-place function. Almost 80 per cent of municipalities have applied for support for their inner city as an urban subarea. In addition, district and town/village centres are also funded under the programme.

In autumn 2022, the projects started in almost all municipalities, so that initial experiences are now available. During the programme implementation, the municipalities are expected to exchange their experiences and findings and to enter into discussions with the BBSR and its contractor. This is why regional network meetings were held in Cottbus, Bremen and Schweinfurt in 2023. Information about these events, the programme and related projects will be continuously published (in German) at www.innenstadtprogramm.bund.de.

The first project evaluations have already shown that, most municipalities are carrying out measures in accordance with the ZIZ programme approach in the areas of concepts, studies and public relations and are establishing cooperations (see table). Frequent use is also made of the option of realising smaller investments in construction measures. Altogether 3,935 single measures are funded under the ZIZ programme, which are subdivided into eight "funded subjects (FS)". The spectrum ranges from integrated

inner-city concepts or feasibility studies aiming to repurpose problematic properties, civic participation activities and inner-city management to creative interim uses in vacant large buildings or the transformation of public space into green, climate-adapted meeting places.

A survey on the relevance of the programme objectives shows that improving the attractiveness of the centre and revitalising it through new uses is of the highest priority to the municipalities. Upgrading urban spaces and establishing new stakeholder cooperations is also very important to them. The programme objectives of "promoting resilience and crisis management" and "overcoming monofunctional structures and urban spaces" are of less importance.

Capacity bottlenecks at local councils due to a lack of qualified permanent staff, complicated activation of vacancies and their owners and difficulties in acquiring third-party funds, for example to finance the revolving fund, are among the challenges to the municipalities participating in the ZIZ programme. But problems and delays may also be caused by changes in the use of buildings, requiring a licence. The participating municipalities are able to implement their projects up to the end of August 2025.

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🌐 www.innenstadtprogramm.bund.de [in German]

The most pressing issues in the real estate industry – results of the BBSR Real Estate Market Expert Panel 2022/23

by Eva Katharina Neubrand und Nicole Brack

The real estate industry is currently facing a variety of challenges, which are judged differently depending on the real estate market segment and also vary in their priority over time. The framework conditions in the financial and economic markets and the regulatory requirements have different effects on the perception of the challenges and pressing issues in the real estate markets. The state of the respective markets in the process of structural change and the influence of societal changes is also important in this context.

For the office properties market, the most important issue is adapting to flexible and hybrid working models.

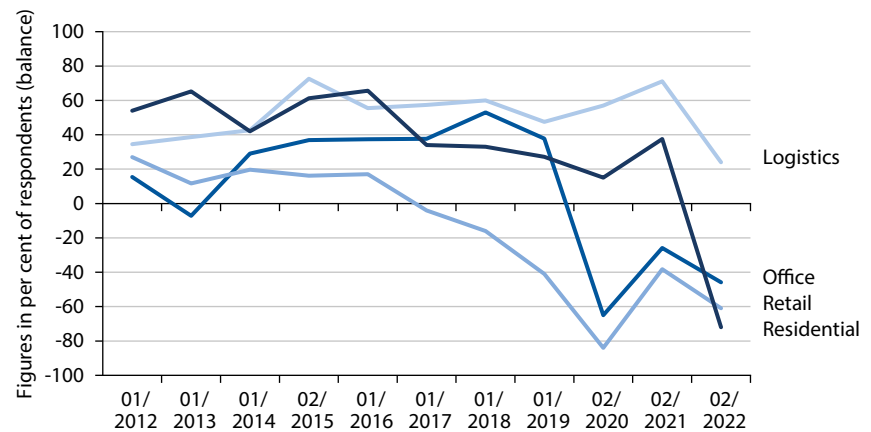
There is uncertainty about the future need for office space, which makes planning difficult. The office industry also faces demand deficits and vacancies.

In the residential property market, increasing housing costs and energy prices are of great importance. Almost everywhere there is a lack of suitable homes and building land to meet the demand for housing. At the same time, the focus is on the rising interest rates and the related affordability of construction projects, while the industry is trying to create affordable housing.

In the retail properties market, demand deficits and vacancies are currently the most urgent issues that bricks-and-mortar retailers have had to deal with since the beginning of the COVID-19 pandemic. Moreover, many of the retail experts acknowledge the need for a large conversion and rethinking process for inner-city locations. These issues have pushed the topic of online trading, which had been dominant in previous years, backwards in the ranking.

In the logistics properties market, the lack of supply and the excess demand have been permanent, central issues

Economic sentiment



The figure shows the netted sentiment value from the responses "(rather) better" and "(rather) worse". Reading example: With a value of -10, the proportion of respondents who expect the economy to get worse is exactly 10 points higher than the proportion of respondents who expect the economic situation to improve. At a value of 0, the difference is zero, with both shares levelling out.

Source: BBSR expert panel property market; 2nd half of 2022; N=189

over the years. Rising construction costs and higher energy and petrol prices for lorry transport are also on the agenda.

Across all real estate market segments, the energy efficiency of buildings and the resilience of buildings against climate change as well as the new Environmental, Social and Governance (ESG) requirements are gaining in importance (second place in the office and logistics properties markets, third place in the residential market). Similarly, the dynamic development of costs and interest rates due to current crises and wars is a cause for concern for all real estate segments.

The Real Estate Market Expert Panel of the BBSR is an annual survey among market players in the real estate segments of housing, office, retail and logistics. Its purpose is to assess current economic and general market trends. The survey was commissioned by the Federal Ministry for Housing, Urban Development and Building.

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📖 **Wohn- und Wirtschaftsimmobilien in Deutschland
2022/2023 [in German]**

The top topics in 2022, 2020 and 2018: energy, costs and transformation are becoming more important

Residential properties market

| | 2022 | 2020 | 2018 |
|---|-----------------|-----------------|-----------------|
| | ranking share | ranking share | ranking share |
| Cost trend (construction, energy and additional costs) | 1 19% | | 5 8% |
| Lack of supply/lack of dwellings and building land | 2 17% | 1 26% | 1 30% |
| Financing/development of interest rates | 3 15% | | |
| ESG, energy efficiency and protection of buildings against climate change | 4 12% | | |
| Legal regulations (building law, housing/funding policy) | 5 9% | 2 16% | 3 11% |
| Development of rents/prices | 6 7% | 3 15% | 2 13% |
| Affordable housing | 7 7% | 4 11% | 4 9% |
| Municipal construction and urban planning | | 5 6% | 7 5% |
| Development of sites/locations | | 6 5% | 6 6% |
| (Overall) Economic situation | | 7 4% | |

Office properties market

| | 2022 | 2020 | 2018 |
|---|-----------------|-----------------|-----------------|
| | ranking share | ranking share | ranking share |
| Home office, new work and space required | 1 21% | 1 23% | |
| ESG, energy efficiency and protection of buildings against climate change | 2 13% | | |
| Demand deficits/vacancies of buildings | 3 11% | 2 17% | 7 5% |
| Cost trend (construction, energy and additional costs) | 4 10% | | |
| Financing/development of interest rates | 5 9% | | |
| Use concepts of areas | 6 7% | 3 14% | 2 17% |
| Lack of supply/excess demand | 7 4% | 7 4% | 1 26% |
| Development of rents/prices | | 4 10% | 5 7% |
| Development of sites/locations | | 5 7% | 3 8% |
| Modernisation of existing buildings | | 6 5% | 4 7% |
| (Overall) Economic situation | | 7 4% | |
| Digitalisation | | 7 4% | 6 7% |

Retail properties market

| | 2022 | 2020 | 2018 |
|--|-----------------|-----------------|-----------------|
| | ranking share | ranking share | ranking share |
| Demand deficits/vacancies | 1 13% | 2 16% | 7 4% |
| Retail in inner cities | 2 11% | 3 16% | 5 10% |
| (Overall) Economic situation (inflation, consumption) | 3 11% | | |
| Use concepts of areas | 4 10% | 4 10% | 2 16% |
| Online trade/digitalisation | 5 10% | 1 18% | 1 22% |
| Cost trend (construction, energy and additional costs) | 6 8% | | |
| Financing/investment market | 7 7% | | |
| Development of rents/prices | | 5 9% | 3 12% |
| COVID-19 (without more information) | | 6 7% | |
| Development of sites/locations | | 7 5% | 4 11% |
| Lack of supply | | | 6 5% |
| Municipal urban planning | | | 7 5% |

Logistics properties market

| | 2022 | 2020 | 2018 |
|---|-----------------|-----------------|-----------------|
| | ranking share | ranking share | ranking share |
| Lack of supply/excess demand | 1 26% | 1 26% | 1 31% |
| ESG, energy efficiency and protection of buildings against climate change | 2 11% | | |
| Cost trend (construction, energy and additional costs) | 3 8% | | |
| Land consumption and sustainability | 4 7% | 5 6% | |
| Urban development/municipal planning | 4 7% | 4 7% | 4 8% |
| Infrastructure/development of sites | 5 6% | 2 16% | 3 9% |
| Image and acceptance | 6 5% | | |
| Last mile/urban logistics | 6 5% | 3 2% | 2 11% |
| Financing/development of interest rates | 7 7% | | |
| Development of rents/prices | 7 7% | 6 5% | 7 5% |
| (Overall) Economic situation | | 7 4% | |
| Modernisation of existing buildings/infrastructure | | | 3 9% |
| Online trade | | | 5 7% |
| Digitalisation/automation | | | 6 6% |

Note: The topic clusters of the most frequently mentioned open responses are shown.

Source: BBSR Expert Panel Property Market; figures in per cent of responses

Trade in housing portfolios remains at a low level

by Jonathan Franke

In the first half of 2023, the players in the German housing market only traded four rented housing portfolios of 800 units or more, that means 10,000 flats changed hands. Both the number of transactions and the number of traded homes were as low as during the financial crisis of 2009 and 2010. This is the conclusion of the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) following an evaluation of its Housing Transaction Database.

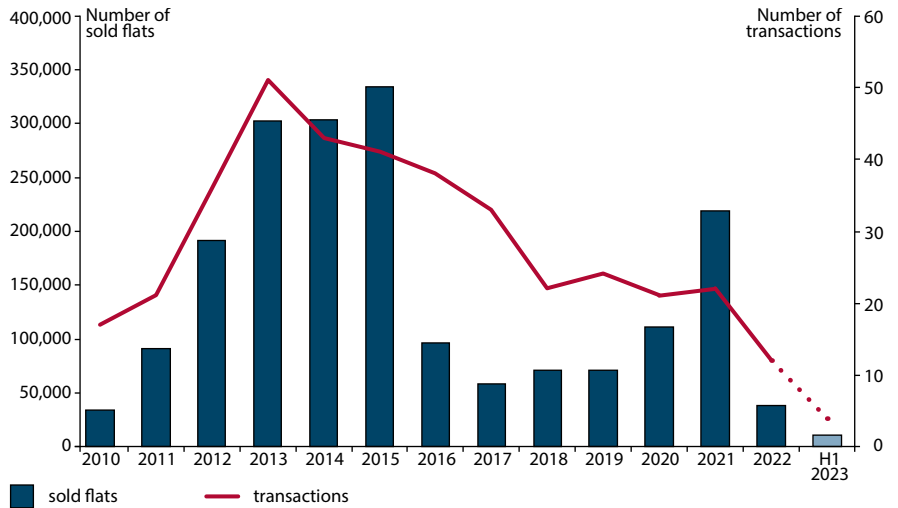
Only one portfolio (the share deal between Vonovia SE and Apollo Global Management) included more than 5,000 flats. Three transactions, with two German private companies and a public limited company emerging as sellers, comprised between 800 and 2,000 flats.

There was also little movement when trading in smaller housing portfolios between 100 and 800 units. In the first six months of the year, the BBSR only recorded 20 transactions with a total of 4,000 flats. Of these 20 transactions, 19 covered the size category of 100 to 500 flats and one the size category of 500 to 800 flats. Overall, trade in this segment continues to be dominated by private companies and public limited companies. Local government stakeholders only bought two portfolios with a total of just under 400 flats.

"High inflation, increased interest rates and the slack economy continue to cause great market uncertainty," says BBSR housing market expert Frederic Ostermann. "The rise in interest rates has made debt financing much more expensive, which might lead former growth-oriented companies to dispose of their housing portfolios and reduce debts."

Since 1999, the BBSR has been recording transactions of large rented housing portfolios of 800 housing units or more in

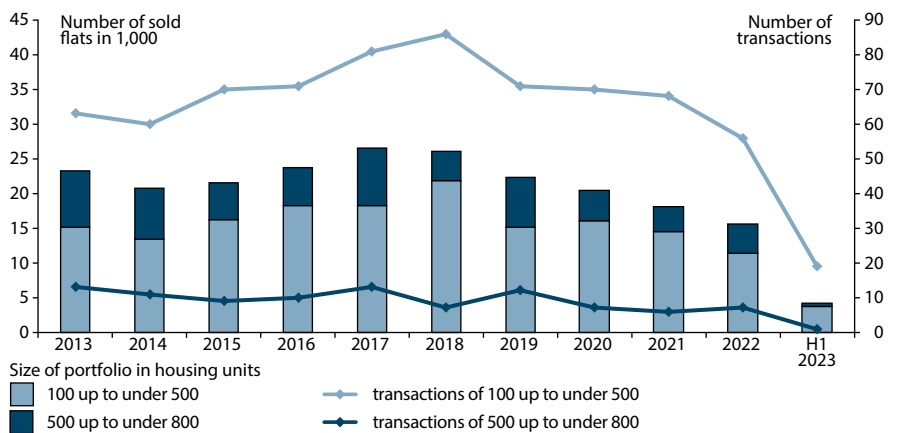
Flats sold and cases of sales in the flat transactions database, 2010 to H1 2023 (portfolios of 800 flats or more)



Note: Sales of large housing portfolios with 800 flats and more are taken into account. Source: BBSR Housing Transaction Database

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Flats sold and cases of sales in the flat transactions database, 2013 to H1 2023 (portfolios of 100 to 800 flats)



Note: Sales of housing portfolios between 100 and 800 flats are taken into account. Source: BBSR Housing Transaction Database

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the Housing Transaction Database. Since the second half of 2006, the database has also contained transactions of small housing portfolios between 100 and 800 units, which is based on a systematic search of different print and internet sources.

Formation of home ownership – Fact Check 2.0

by Iris Ammann

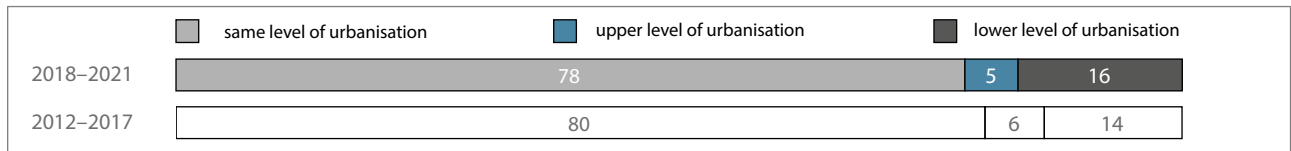
Place of residence before and after the purchase of a home



Share of migration between regions

| Period | From core urban areas to... | From hinterlands to... | From urbanised regions to... | From rural regions to... |
|-----------|-----------------------------|------------------------|------------------------------|--------------------------|
| 2018–2021 | 31 ↑ | 13 = | 16 = | 19 ↑ |
| 2012–2017 | 26 | 15 | 16 | 14 |

Migration between regions



in per cent

Source of data: BBSR Housing Market Observation; Infratest/Kantar: Home ownership formation in Germany, survey waves 2012 to 2017, 2018 to 2021; any deviations from 100 per cent = rounding difference

The desire of many people to own their own home remains high. Especially in times of crisis, home ownership offers security, whether in financial or emotional terms. The current survey on home ownership from 2018 to 2021 falls in the peak phase of the COVID-19 pandemic and therefore deals with the behaviour of people forming home ownership during a global crisis. It was carried out by the market research institute Kantar on behalf of the Federal Institute for Research on Building, Urban Affairs and Spatial Development.

The results show that the pandemic also had considerable consequences for home ownership, although the effects on the various aspects of real estate acquisition were very different. The desire for financial security through real estate ownership, for example, has become stronger.

But how did the crisis affect real estate financing and housing preferences in concrete terms? Surprisingly, the pandemic only had a minor impact on the financing of home ownership. Despite increased financial risks – for example, due to short-time work or job loss – nearly 90 per cent and thus the majority of households were able to meet their debt financing commitments. That means only a small proportion had to adapt their financing arrangements.

Apart from financing, it is evident that the pandemic had a larger impact on demand preferences. Trends in terms of residential location and residential behaviour have noticeably changed during that period. Already before the pandemic, higher real estate prices led to migrations to regions with better conditions, and this trend was reinforced. At the same time, new opportunities in the world of work, such as remote working, had an effect on the choice of the place of residence. About a third of all households now works from home, which is a significant increase compared to previous years and allows people greater flexibility in choosing their place of residence.

The study also shows that the formation of home ownership is becoming increasingly difficult, especially for lower income groups. For these households in particular, inherited or gifted real estate plays an increasingly important role as a means to acquire their own property. Almost half of low-income households form their owner-occupied home ownership in this way. These and other results can be found in the latest issue of "BBSR-Analysen-KOMPAKT" entitled "Wohneigentumsbildung – Faktencheck 2.0" (Formation of home ownership –Fact Check 2.0).

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📖 [BBSR-Analysen-KOMPAKT 08/2023 \[in German\]](#)

Supply chains in the German construction industry

by Christian Schmidt

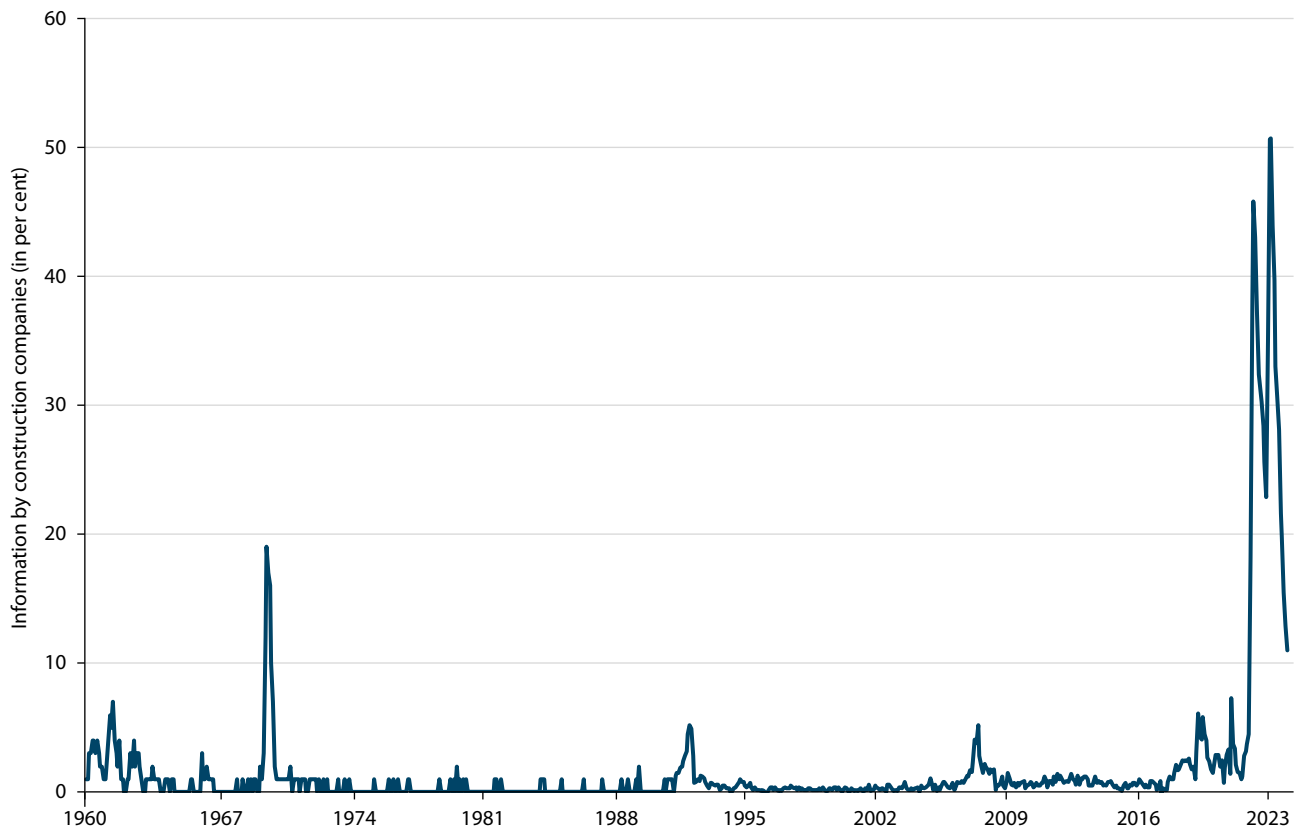
A research project supervised by the BBSR on the topic of "crisis resistance of the construction sector" investigated the resilience of construction companies. One important result is the potential risk of interruptions to supply and logistics chains. The current research project "Supply chains in the German construction industry" takes up this topic. The project examines the supply chains of the German construction sector and contains a comprehensive analysis of the current situation and international interdependencies of the construction value chains. The first results are now available.

The pandemic-related disruption of supply and logistics chains led to massive bottlenecks in construction materials such as timber, steel and thermal insulation, which to date, has been unprecedented in historical terms. There had been

a significant shortage of materials in the 1970s, but which did not reach the scale of 2021 and 2022 (see figure). As a result, construction projects were delayed and construction prices rose significantly. A reliable and manageable supply chain for the construction sector is therefore indispensable in order to reliably implement the required construction services.

However, the construction sector faces some specific challenges, which are that the supply chains of the construction industry are extremely complex and difficult to manage, solely due to the enormous variety of products, and that the industry is very fragmented due to the many actors involved. Furthermore, compared to other industries such as the manufacturing sector, the production location is not permanent. Each construction project is more or less unique, which means that the necessary intermediate products are

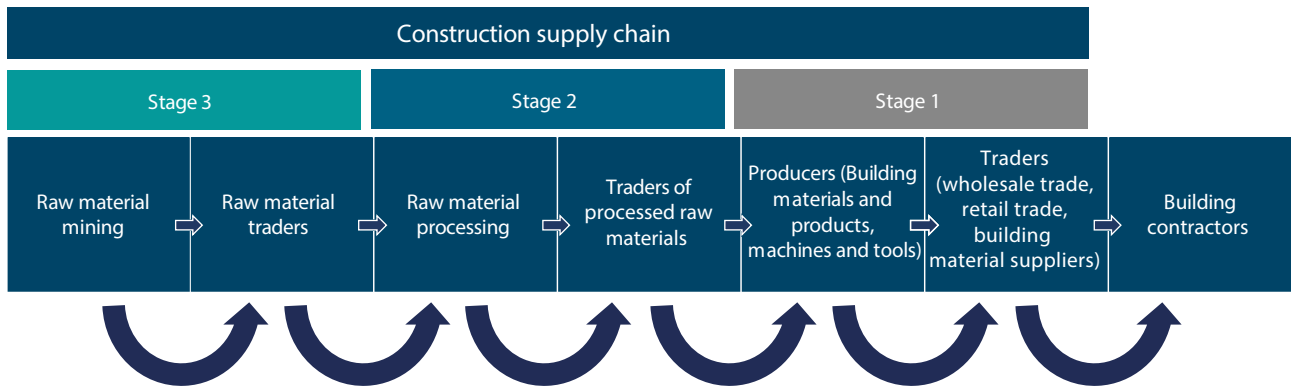
Proportion of German construction companies that indicate material shortage as a barrier to construction (1960 to 2023)



Note: Data prior to 1990 refer to West Germany

Source: Oxford Economics based on ifo (1960 to 1990) and Eurostat (1991 to 2023)

Structure of the adapted construction supply chain



Logistics service providers: suppliers and storage

Source: Oxford Economics

dependent on the related construction project. This leads to a supply network that tends to be confusing, that changes depending on the project and complicates standardisation processes – including supply chain management.

Contrary to popular belief, the construction supply chain has a strong global focus. Although many building materials and supply products most relevant for production are regionally produced, the construction sector uses inputs which are not produced in Germany (e.g. energy). So when tracing back the supply chain, the whole construction supply chain reveals an increasing dependence on imports. Interruptions in supply chains can therefore have an impact on nationally produced intermediate products e.g. due to trade restrictions.

Another challenge is the increasing global distance between the supplier countries, the farther the intermediate production stage is from the construction industry end user. While European countries, including Poland, Italy and France are the most important suppliers for imports in the first stage of the construction supply chain (see figure), China and the USA are among the top three import countries when considering the entire supply chain. Fossil fuels like gas and oil count among the very essential goods. Their availability may have an impact on many other products in the downstream production stages, including locally produced goods. Electronic components are also very essential goods, as they are partly very relevant for managing

the decarbonisation of heating. They are mainly imported and can hardly be substituted by domestic production, which makes them prone to disruptions in the supply chains.

The final report with detailed results can be found on the BBSR website.

New indicators for resource efficiency in the construction sector: a feasibility study by the Federal Statistical Office of Germany

by Claus Asam and Isabel Dietsch

The Earth's natural resources such as fossil fuels and minerals are only available to a limited extent. About ten years ago, the German Federal Government's resource efficiency programme defined approaches to protecting natural resources with the aim of building in a more resource-efficient way and, among other things, to ensure the use of resources for future generations. The programme is expected to contribute to achieving the goals of the German Sustainable Development Strategy and to expand the necessary circular economy.

In two research projects commissioned by the BBSR, the "Assessment Methodology for Resource Efficiency in the Building Sector" was intended to make the development progress in the construction sector measurable. The methodology includes a set comprising a total of 20 criteria and 21 indicators. One example is the indicator "use of raw materials". The aim was to provide each indicator with a sound data source. Until now, seven indicators have lacked sufficiently reliable data sources, which is why they were deferred and have not been further processed for a long time.

In the Federal Statistical Office's current feasibility study, it has now been possible to find data sources and to create calculation methods for two deferred criteria and three related indicators. This means that the official statistics are now available and that it is possible to collect long-term data in order to document changes over time.

The three new indicators for assessing resource efficiency in the construction sector are the following:

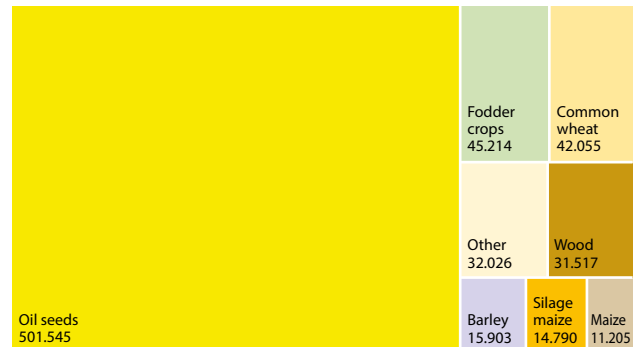
Renewable energy generation in buildings

This indicator shows the different ways in which renewable energy is generated in buildings and the resulting inputs. The types of generation are divided into solar energy (photovoltaics and solar thermal energy), geothermal and environmental heat (heat pumps), biomass and energy from wind and hydropower.

Use of secondary fuels in generating energy for investments in buildings

The second indicator is intended to determine the secondary fuels used for energy generation (e.g. used oil, industrial or municipal waste). The use of secondary fuels is able to reduce

Cultivated areas per raw material for investments in buildings (results for 2018 in ha)



Source: own depiction based on the Federal Statistical Office, 2023: Ressourceneffizienz im Bausektor - Projektbericht zur Neuentwicklung von drei Indikatoren (Resource efficiency in the construction sector. Project report on the development of three new indicators), p. 31 [in German]

the share of primary energy and the related consumption of natural resources.

Land consumption for cultivating biotic raw materials for investments in buildings

The third indicator focuses on the relationship between agricultural land and the construction industry, i.e. on the question to what extent the construction industry invests in the cultivation of biotic raw materials. Examples include cultivated areas for timber, which is needed for roof constructions, or cultivation areas for rapeseed, which, in the form of biofuel, is needed for transporting building materials. It is striking that the largest areas are used for cultivating oil seeds for the production of chemical products used by the construction sector (see figure).

Compared to the other indicators, the third indicator (land consumption) can best meet the future requirements of the study. This means that in future, it should be possible to integrate the results into the environmental economic accounting system and that from the 2008 reporting year onwards, the Federal Statistical Office will be able to provide data on an annual basis. The third indicator should continue to be collected and provide sound results on the resource efficiency in the construction sector.

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Supporting sufficiency approaches in the building sector

by Monika Schröder

In order to achieve carbon neutrality in the building sector by 2045, all potentials must be exploited in order to reduce greenhouse gas emissions. This is why sufficiency approaches should be increasingly used in addition to the already established efficiency and consistency strategies. Among the current policy instruments, sufficiency is still considered as a niche topic. In order to better assess the potential of sufficiency approaches, the BBSR has launched and scientifically supported a research project on behalf of the German Federal Ministry for Housing, Urban Development and Building. The results of the project are intended to support the German Federal Government in reaching carbon neutrality in the building sector.

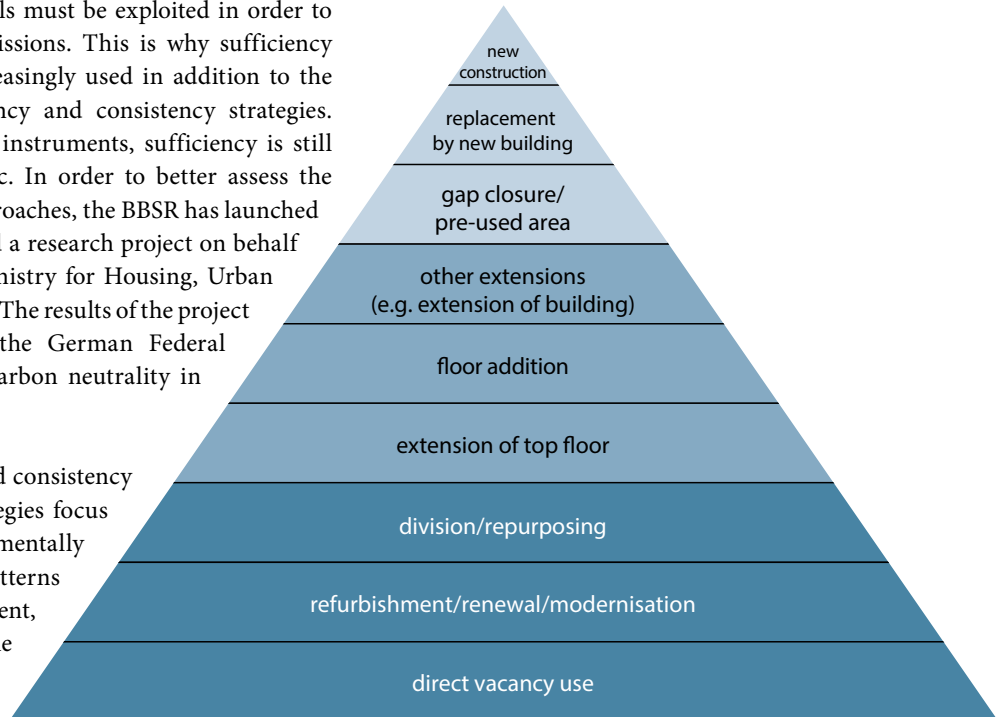
In contrast to efficiency and consistency strategies, sufficiency strategies focus on changing environmentally relevant behavioural patterns and strive for a sufficient, environmentally compatible consumption of energy and materials by changing lifestyles and patterns of consumption.

Thus, sufficiency aims to explore the relationship between the satisfaction of personal needs and excessive consumption of resources. Colloquially, this can be associated with terms such as moderation, modesty, frugality or satisfaction.

With regard to the building sector, sufficiency stands for an appreciative and needs-oriented treatment of existing things, particularly the existing building fabric, historically evolved structures and previously unused areas. That means the priority is on preserving and renewing existing buildings. If this is not possible, the building stock may be expanded. Only if not all requirements or needs are met, may a new building be constructed (see figure).

In the research project "Support for sufficiency approaches in the building sector", the ifeu - Institut für Energie- und Umweltforschung Heidelberg gGmbH, the Wuppertal Institute and the Brandenburg University of Technology Cottbus-Senftenberg have identified and compiled sufficiency approaches in the building sector and political measures for their strategic establishment and support.

Extended sufficiency decision pyramid



Source: ifeu based on Billenstein et al. 2021

In doing so, research and analysis was conducted on existing sufficiency approaches and concepts, which offer a significant potential for reducing greenhouse gases and other environmental impacts and resource consumptions. Examples include an optimised use of existing buildings and the adaptability of buildings to changing conditions and needs over the life cycle.

From the researcher's point of view, effective policy instruments can be used to address and exploit the quantified potentials. An important finding of the study is that to increase the potential of sufficiency approaches, measures in all policy areas are required at the same time. Against this background, the study contains initial systematic and holistic proposals on how sufficiency approaches could be implemented through coordinated policy instruments.

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Carola Neugebauer heads the BBSR's Regional Development Competence Centre in Cottbus

Dr Carola Neugebauer took over the management of the Competence Centre for Regional Development (KRE) in Cottbus on 2 October 2023. With a doctorate in landscape architecture and specialisations in urban development and urban planning, she has been dedicated to the scientific monitoring of transformation processes in cities and regions as well as the sustainable development of existing settlements for many years. Most recently, Carola Neugebauer was a professor at RWTH Aachen University.

The internationally established scientist has relevant experience and expertise in initiating and organising interdisciplinary cooperation and binding networks between science, practice and politics. Dr Neugebauer will contribute her diverse knowledge to structural development in the Rhenish, Central German and Lusatian coalfields with the aim of tackling urgent spatial development challenges and developing practical solutions.

The Regional Development Competence Centre supports structural change in the regions affected by the phase-out of lignite by providing scientific expertise. It is part of the Federal Institute for Research on Building, Urban Affairs and Spatial Development. At the Cottbus site, 56 qualified jobs have been created in the federal service. The experts at the Regional Development Competence Centre deal with issues such as how structural change can be managed, how location conditions can be improved, how people in the regions perceive the living conditions and how partnerships can be formed to take advantage of the opportunities offered by the energy transition and digitalisation for a successful transformation.



More information can be found at:
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