

# **Transparency of Property Markets – The 1. National Level Market Report**

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**Key words:** Market information, market data, public or commercial data collection, quality of market data

## **SUMMARY**

The paper deals with the efforts to improve property market information and transparency in Germany. The standards and results of the first Real Estate Market Report at national level in Germany published in 2009 by the umbrella organization of State-level and local Boards of Valuation Experts (“Gutachterausschüsse”) are discussed.

Market transparency is the most important aspect that makes markets work reliable and sustainable. Market transparency especially is in discussion after market crashes. Market transparency is created by a mixture of very different information collected by public as well as private actors. Transparency requires the information or results of analysis to be published. Private actors predominantly are focussed on the commercial market; the data base depends from the size of business and is more or less casual and incomplete. The market information of public actors mainly is achieved from the official purchase price data collection organized with the local Boards of Valuation Experts. They focus on the sub-markets for land and for housing. The transactions are gathered completely, but analysis and results may be heterogeneous, because staff and standard of the committees are organized very different in the German States.

The first National Report of Real Estate Markets in Germany is introduced. Its aim is to deliver relevant market information (price level, change of prices, activity of markets, etc.) about the hot spots of the market as well as the calm market conditions in rural regions. The standardization of most important market data and of methods of analysis are examined and discussed. Of course the first German Real Estate Market Report still could be improved, but it is an important step to a high level standardized property market transparency. Finally requirements on a comprehensive quality of market information are suggested and quality criteria are discussed.

# Transparency of Property Markets – The 1. National Level Market Report

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## 1. IMPORTANCE OF TRANSPARENCY OF PROPERTY MARKETS

The transparency of the real estate market became a relevant location factor more and more in the last decade, crucially promoted by the increasing international perspective of property markets and in Germany by the increasing participation of international investors in the property market. Since the subprime crises and market crashes started in USA and followed by the worldwide financial crises market transparency undergoes a renaissance. Although the “national part” of the German property market get off lightly by the crises there are “national” reasons to put market transparency on the agenda in Germany (renewal of inheritance tax, new base of property tax in discussion (Voss 2009), demographic change and valuation).

Market transparency is a fundamental element of a well-functioning market. The model of a free market economy ideally suggests complete and fully available information for all actors in the market. Nevertheless a definition of market transparency in real estate markets or a list of requirements according to this idem is missing.<sup>1</sup> It is a self-evident part of the market mechanism, something like the lubricant keeping the machine running. But the lubricant could be better or worse, making the machine running fluid and acceptable - more or less. In this sense real estate market transparency is a most important aspect that makes markets work reliable and sustainable. Valuation and its results are important information and strongly contribute to market transparency.

Market transparency is generated by the availability of market information and could be parameterized by real estate market data. The following four categories of data relevant for real estate markets give a brief structure to the wide variety of data:

- General data (economic and legal issues, planning policy)
- Turnover data (market activity, supply and demand)
- Price development data (relative terms like indices)
- Price level data (absolute terms)

Basically market transparency needs the following actions according to market data:

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<sup>1</sup> In the international valuation standards (cp. Red Book (RICS), Blue Book (TEGOVA) or White Book (IVSC)) the item of market transparency is not mentioned. With respect to property valuation process the IVS Guidance Note 1 mentions the necessity of preliminary analysis, data selection and collection; data for valuation are differentiated in general economic data, property-specific data and supply-and-demand data (cp. International Valuation Standards, 8. Ed., IVSC, 2007, p. 172f.)

- Collection of market data
- Selection of collected market data
- Analysis of selected market data
- Publication of analyzed market data

Market transparency is created by a multitude of very different information collected by public as well as private actors. Transparency requires the information or results of analysis to be published. Globalization and a willingness to invest are not restricted by the national borders; on the contrary, boundaries are often defined by the lack of market transparency. Data on real estate markets must facilitate nationwide and international comparisons of locations, reinforcing the necessity of nationwide analyses. Besides the international perspective target groups for an enhanced market transparency at the national level are policy advisors (as a basis for housing and economic decisions), public administration, the real estate industry, banks and domestic players in the real estate market (AGA 2009, p. 2).

The international perspective of market transparency has its focus on the commercial market sector in the large cities; cross-border investments are in the center of interest. Some years ago the big housing stocks of rented flats in Germany undergone a strong demand of international private equity investors; former owners mainly had been public or semi-public housing associations in many German cities. This development was sharply stopped by the financial crisis. In Germany the aspect of worse international ratings of (commercial) property market transparency is an extra reason to care for making progress in market transparency items. The Global Real Estate Transparency Index published by Jones Lang LaSalle in 2-year-periods determines market transparency on behalf of 20 questions broken out into five major categories that address unique and separate factors affecting real estate transparency across the globe. The categories are:

- Performance Measurement
- Market Fundamentals
- Listed Vehicles
- Regulatory and Legal Environment
- Transaction Process ([www.joneslanglasalle.com/pages/GRETI\\_technote.aspx](http://www.joneslanglasalle.com/pages/GRETI_technote.aspx)).

Unfortunately only the company's experts are consulted, so the results could not be classified as representative.

## **2. CURRENT SITUATION OF PROPERTY MARKET TRANSPARENCY IN GERMANY**

### **2.1 Market transparency as subject of the Federal Building Code:**

The care for market transparency was strongly connected to the beginning of the public sector valuation in Germany according to the Federal Planning and Building Act (Bundesbaugesetz, BBauG) in 1960. At this time, the legislator saw the need for more transparency in the land market in order to protect both sellers as well as purchasers of

land (Krumbholz 2010). In the decades before – started in 1936 - the unhindered and free land market was restricted by price freeze regulations. The introductory statement to the bill claimed: Predominantly it should be achieved that the relevant market sector will be clearly laid down in an adequate manner for the market actors (quoted in Dieterich/Voß 2009, § 192 Rn. 11). The legal instruments introduced to meet these requirements had been

- the establishment of official Boards of Valuation Experts (Gutachterausschüsse),
- an obligation concerning each real property transaction to inform the Boards by sending a copy of the contract (done by the notaries),
- the establishment of a property transactions inventory organized by the Boards of Valuation Experts (purchase price collection, Kaufpreissammlung),
- an obligation of the Boards of Valuation Experts to publish regularly average land prices, especially for the areas of developed land (standard ground values, Bodenrichtwerte).

In the centre of interest of public market information has been since 1960 the individual private actors and the land prices. Amendments of the act from 1976 and 1987 (introduction of the Federal Building Code, Baugesetzbuch (BauGB)) did not change the rules fundamentally. Since 1976 it was recommended to introduce Upper Boards or State Boards of Valuation Experts; they have an advisory vote in cases of conflicts about a Board's survey and they should standardize the results and methods of the different Boards within a State. The latest BauGB-amendment in 2009 aims especially to improve real estate market transparency. The new rules

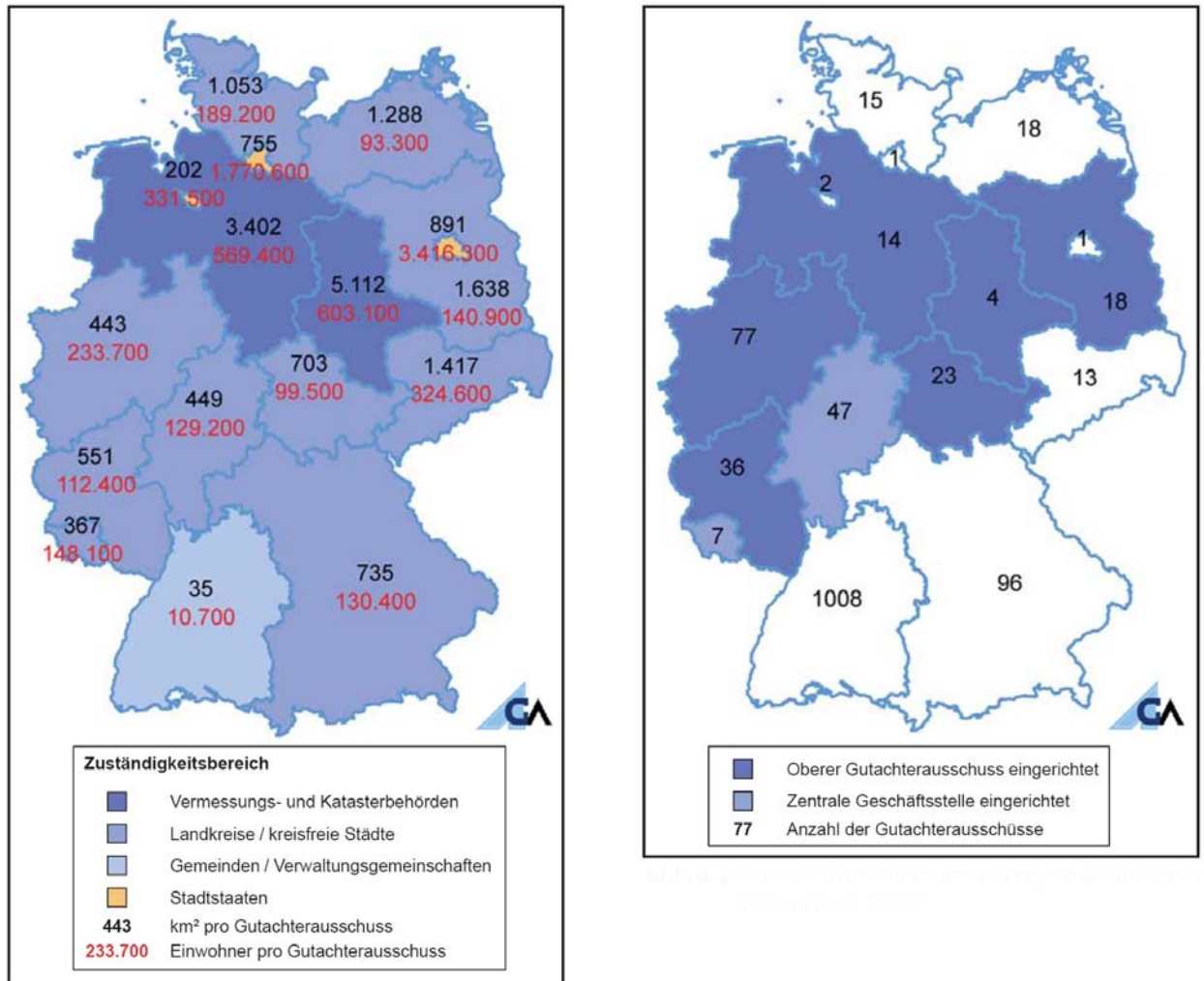
- made the State Boards of Valuation Experts obligatory and responsible for state-wide analyses and summarized market information,
- fixed a closer link to tax valuation purposes and
- extended the objectives of the Boards' market analysis including a unification of the determination of Standard Ground Values.

Another important legal framework which generally burdens market transparency is given by a strong data protection law in Germany. Market information which can be connected to information about individuals are subject of data protection and are not allowed to be collected and published (cp. Kleiber 2010, p. 361).

## **2.2 How are the Boards of Valuation Experts organized?**

The administrative organisation of the Boards of Valuation Experts is in the duty of the 16 German States; the structure of the Boards is not unique across the country. There are currently 1.380 local Boards of Valuation Experts throughout Germany; the number of Boards within the individual States, however, varies strongly (cp. Fig. 1). The Boards of Valuation Experts are independent administrative bodies compound of individual experts. The sphere of responsibility is a State's objective. The federal legislator requires sufficiently large areas of activity to ensure that the Boards of Valuation Experts are able

to perform their tasks (Krumbholz 2010). The majority of the States decided to organize the Boards of Valuation Experts at the level of counties and county-free cities (Landkreise/ kreisfreie Städte). A more compacted responsibility with bigger units is realized in Lower Saxony and Sachsen-Anhalt. Not conducive on behalf of market transparency is the strongly divided organization in the south-west State of Baden-Württemberg; there are 1.008 independent Boards of Valuation Experts, one in each municipality.



Signs and symbols:

Areas of responsibility based on

- Cadastral service
- Counties / County-free Cities
- Municipalities
- Stadtstaaten (Berlin, Hamburg, Bremen) (yellow)
- Area in sq.km per Board of Valuation Experts (black)
- Inhabitants per Board of Valuation Experts (red)

Boards of Valuation Experts

- State Board of Valuation Experts established
- Central office established
- Number of Boards of Valuation Experts per state

**Fig. 1:** Organisational structure of the Boards of Valuation Experts in Germany (status: 2009) (Source: Krumbholz 2010)

## 2.3 Which are the products of the Boards of Valuation Experts serving market transparency?

### Purchase price collection databank:

The main task of the Boards of Valuation Experts consists in operating a databank of all transactions on the real estate market secured by the duty of the notaries to deliver a copy of each real estate contract to the Boards' office. The Boards' office should collect additional information about the transaction which are determinant for the price; this is done by contacts to the involved parties (questionnaire). Only the additional information allow evaluations and analyses of the market. The information monopole on the one hand is a duty on the other hand.

### Standard Ground Values:

Essential component of the public market transparency system is the publication of Standard Ground Values (Bodenrichtwerte) in a 1- or 2-years period. Standard Ground Values are defined as average land values per sq.m. within an area of comparable value-relevant parameters. The results are published in digital or analog maps. Today Standard Ground Values should be determined for all kinds of land (developed, undeveloped, agricultural etc.). Only in few cases the online information is free of charge. In practice Standard Ground Values are well known and a strongly used product. Standard Ground Values additionally are relevant for the taxation of land, especially inheritance tax – and possibly in near future - the local property tax.

### Data required for valuation purposes:

The Boards of Valuation Experts derive additional indices and summarized information necessary for valuation purposes, but also of interest for market transparency; e. g. average property interest rates or average prices for standardized condominiums. The independent Boards of Valuation Experts increasingly support the preparation of local rent tables (Mietspiegel) that set out rental values within the locality and, to some degree, the publication of rent overviews.

### Market Reports:

More and more Boards of Valuation Experts summarize and publish the results of data analysis in yearly market reports. Market reports are not consistent in content, quality and size. But in some of the States the content is standardized and comparable. Today most of the State Boards of Valuation Experts publish an additional state-covering market report which summarizes the development of real estate markets as state-wide and regional overview. The market reports deliver an important contribution to market transparency.

There are some more official statistics which are relevant for market transparency at the property market, e. g. statistics on the granted planning permits or on the completion of construction projects (Baustatistik). A combination of these statistics is not easily possible, so the contribution to market transparency remains small. The Federal Research Institute on Building, Urban Affairs and Spatial Development (BBSR) published reports on "Housing and Property Markets in Germany" in 2004, 2006 and 2009 (cp. AGA 2009, p. 213f.)

## 2.4 Which market information is provided by commercial actors?

Many commercial providers publish - very different - information about the property market. The number of providers explicitly increased in the last years, the demand for reliable information is still growing. The intension of these publications mainly is not to serve market transparency, but showing competence in the real estate market, promoting the company's real estate business or simply selling the information. Typical examples are the research departments of the major banks, national-level acting estate agents, specialized market research institutes or professional associations. Some of them dispose of substantial data banks, partially assembled with own data sets, partially with material of public statistics. The existing data banks have advantages and disadvantages. Some data banks can convince a very good quality of data, but they are limited in their geographic coverage of the market. Some data banks dealing with special market segments and probably have incomplete, but nationwide records (Gudat, Voss 2009; Gudat 2010). The following commercial collections of market information support market transparency (BBSR 2010), examples are also mentioned in the national market report (cp. AGA 2009, p. 215ff.):

- Data from granting property secured loans: The banks' associations (vdp, VÖB) gather and analyse these data for own purposes; the data are qualified to derive average prices and price indices. The original data are not available for other users on behalf of competition reasons and data protection. Results are not published so far.
- Real estate advertisements in newspaper and internet provide extensive information on the supply of properties (offered rents as well as offered sales prices). The advertisements of an increasing number of newspapers/web-pages are analysed by service providers. A clear difference is assumed between the advertised prices and the contracted market results, but a systematic influence is unclear.
- The association of the real estate agents yearly publishes market information for residential and commercial used properties in about 400 cities in Germany. The figures are average figures or estimations. The same type of market information is published for more than 600 German cities by the Landesbausparkassen (LBS). The number of cases the results are derived from is not known (BBSR 2010).
- Rents and information about commercial properties are well known by the tax authorities. The secrecy in tax matters does not allow the use of these data for other purposes. As well, frequent differences between tax values and market values have to be mentioned.

Typically in Germany the most valuable and original market information is achieved from the official purchase price data collection. The local Boards of Valuation Experts dispose of that source and have good opportunities to support market transparency. The transactions are gathered completely, but analysis and results may be heterogeneous, because staff and standard of the Boards and the Boards' offices are organized very different in the German States. In consequence in the market analyses different standards are used, the publication standards are different too. As far as the State Boards of Valuation Experts publish market reports at the State's level, regional standardization is

possible. Nevertheless comparisons between regional markets and a national overview are still handicapped.

The Boards of Valuation Experts focus on the sub-markets for land and for residential properties. The information relevant for property investments are not in the centre of interest here. Private providers of market data predominantly focus on the commercial market; their data base depends from the size of business, is more or less casual and incomplete and is mainly based on advertising prices. The issue of strong data protection legislation is very relevant and has to be mentioned by all participants.

### **3. THE 1. NATIONAL REAL ESTATE MARKET REPORT IN GERMANY**

National market reports in an international perspective often describe a specific sector of the market, e. g. the retail property market in the major cities. National market reports rarely serve a wide range of the different sub-markets and they are rarely published regularly.

In Germany a National Report on the Real Estate Market was published for the first time in 2009. The Report gives an overview of the market situation in the years 2007 and 2008. Its aim is to deliver relevant market information (price level, change of prices, activity of markets, etc.) about the hot spots of the market as well as the calm market conditions in rural regions. The standardization of most important market data and of methods of analysis was advanced and regional comparisons became easier. Of course the first German Property Market Report still could be improved, but it is an important step to a high level standardized property market transparency.

#### **3.1 Organizational aspects**

The Report is published by a voluntary association, called “Working Group of the Boards of Expert Valuers and the State Boards of Expert Valuers in the Federal Republic of Germany”. Today the working group is well established and all Federal States are involved now. The work was structured into various committees which were responsible for a sub-market or special part of the report. These committees have the task of comparing the procedures that are used within the individual States to determine relevant valuation data and of developing recommendations for uniform valuation models and determination standards (AGA 2009, p. 21). An editorial office – a task rotating between the States, started with the very active Lower Saxony State Board of Valuation Experts in Oldenburg – is responsible for merging the data collected on State level and coordinate the authors who wrote the different parts of the report. The data collection itself took place with the help of a broad number of Boards of Valuation Experts and was organized according to a common data catalogue which describes the type and the extent of the requested data.

#### **3.2 Content and data situation**

Data collection took place directly at the local Boards of Valuation Experts. It was based on the data catalogue which defines the market segments and the range of data acquisition.



The data catalogue is divided into the following six sections under which the various segments of the property market are examined (AGA 2009, p. 22):

- Structural data: General information on the areas the Boards of Valuation Experts are responsible for; population, area size, overview of the availability of market data in this region.
- Turnover: Queries on the numbers of purchases/contracts, the financial volume and the area volume of the transactions for the various market segments of developed and undeveloped land as well as price developments. Turnover figures in the three specified categories characterize the market volume and market activity.
- Prices for developed land: Standard Ground Values for developed land that is free of local infrastructure charges and designated for the construction of individual residential properties, multi-storey dwelling units or commercial used properties in various locations.
- Index series: Enquiries on index series for developed land that is free of local infrastructure charges and designated for the construction of individual residential properties for the period from 1980 to 2008.
- Built-up properties: Average purchase prices for individual residential real estates, multi-storey rental dwelling units and commercial used properties (separated by construction year classes), adjustment factors, rental yields, gross income multipliers.
- Condominiums: Average purchase prices for freehold flats and apartments for various construction year classes.

The following main aspects/ content are dealt with in the National Market Report:

- Methodology: Systematic aspects of data collection, its organization and the availability of data
- General information about the Federal Republic of Germany
  - o Structural and economic benchmarks like population, job market, consumer prices, planning permissions etc.
- The land market in Germany (market volume and price level of developed plots excluding the buildings)
  - o Overview real estate market Germany 2007 and 2008 (turnover and price level)
  - o Characteristics of the regional real estate markets in each of the 16 States
  - o Residential real estate in large German cities
  - o Border regions (cross-border influence)
- Development of built-up properties in the sub-markets
  - o Individually used residential properties
  - o Investment and commercial properties
  - o Portfolio sales and large-scale investments
  - o Agricultural and silvicultural land
- Indicators necessary for real estate valuations
  - o Property capitalization rates
  - o Gross yield factors
  - o Asset value factors
  - o Index series
- Information on other property market reports

The report includes regional differentiations: the figures show the average value in the 16 German States and the national average. Additional information is given by listing the counties with the highest and lowest values. Land values are additionally differentiated according to the quality of location (simple, medium, good, top), the prices of residential properties are clustered according to the age of the housing stock in 6 classes of age. Data about the commercial market including the multi-storey rental housing sector are not available in a sufficient extent all over Germany; the survey has a closer look at 20 cities in a reliable allocation across the country.

The data collection resulted in a best coverage of comprehensive data of about 75 - 80 % of the country (100 % = 413 administrative districts). The figures differ according to the required indicators. In the States Baden-Württemberg the data coverage for all indicators is not adequate - mainly because of very small units of the Boards of Valuation Experts in municipal organization; data coverage in Sachsen also is not satisfactory and deficits in the administrative power also are obvious in Bavaria (cp. Fig. 2). Data coverage decreases to less than 30 %, if we have a look at the special factors relevant for valuation (property capitalization rates, market adjustment factors etc.) – availability is concentrated in the north of the country. The land price index is determined with 50 % coverage (AGA 2009, p. 191).

Federal state	2007			2008		
	Administrative districts/ independent cities	Coverage inhabitants [%]	Coverage area [%]	Administrative districts/ Independent cities	Coverage inhabitants [%]	Coverage area [%]
Baden-Württemberg*	5	4	1	15	20	5
Bayern	60	75	57	62	69	59
Berlin	1	100	100	1	100	100
Brandenburg	18	100	100	18	100	100
Bremen	2	100	100	2	100	100
Hamburg	1	100	100	1	100	100
Hessen	26	100	100	26	100	100
Mecklenburg-Vorpommern	16	90	90	17	96	100
Niedersachsen	46	100	100	46	100	100
Nordrhein-Westfalen	48	88	92	48	89	92
Rheinland-Pfalz	36	100	100	36	100	100
Saarland	7	100	100	7	100	100
Sachsen	4	36	12	4	36	12
Sachsen-Anhalt	14	100	100	14	100	100
Schleswig-Holstein	15	100	100	15	100	100
Thüringen	23	100	100	13	43	55
<b>Germany</b>	<b>322</b>	<b>77</b>	<b>76</b>	<b>325</b>	<b>77</b>	<b>75</b>

\*participation per municipality

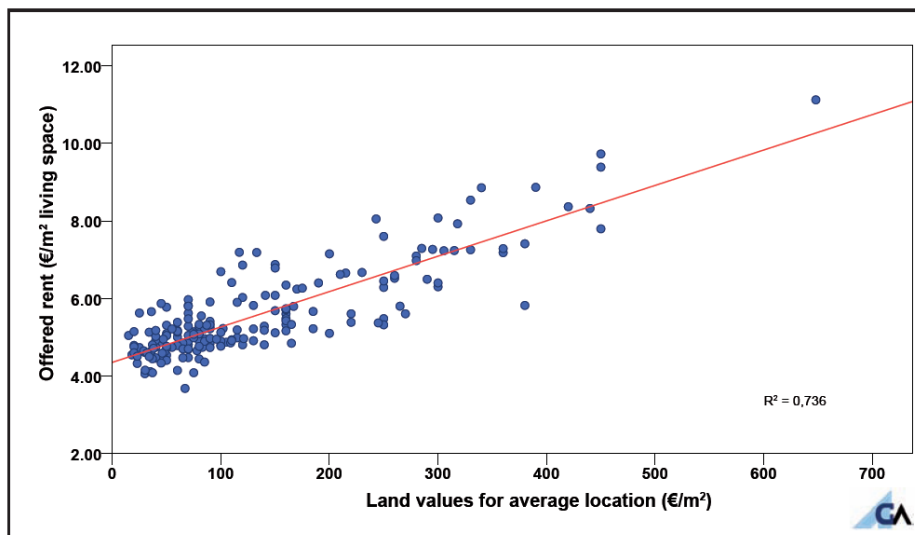
**Fig. 2:** Data situation in the 1. National German Real Estate Market Report 2009.  
(Source: AGA 2009, p. 24)

### 3.3 Selected market results

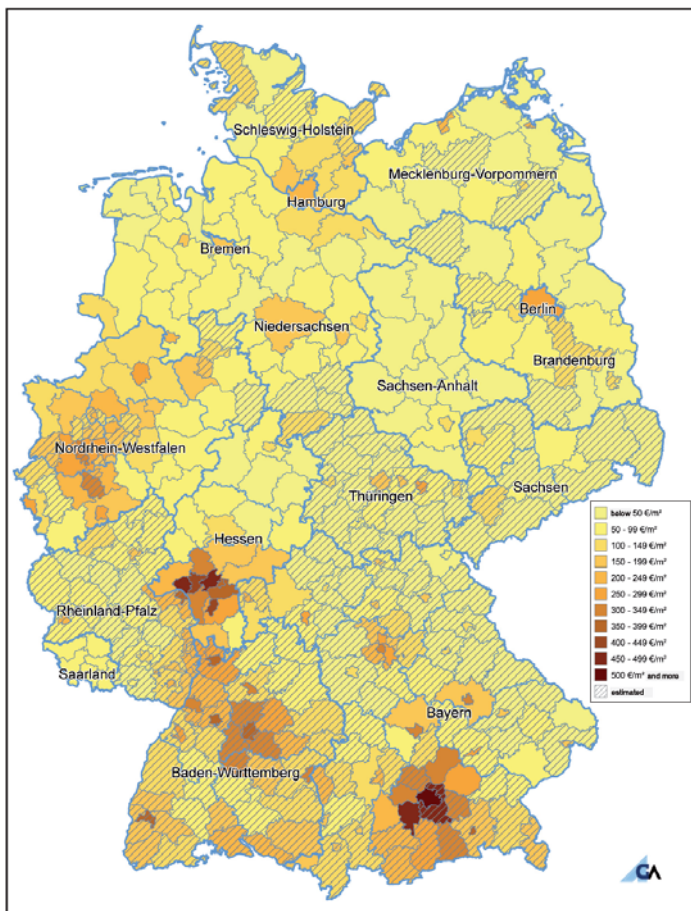
Relatively solid and reliably determined figures are available now for the real estate market activity in Germany based on the official purchase price collection. A forward projection to the whole of Germany results in the figures (AGA 2009, p. 30):

- **Total number of transactions**  
2007: approx. 835,000 sales  
2008: approx. 815,000 sales (- 2.3 %, almost constant market activity)
- **Total area turnover**  
2007: approx. 4,430 km<sup>2</sup> (approx. 1.3 % of the area of Germany)  
2008: approx. 4,560 km<sup>2</sup> changed ownership per year)
- **Total amount of money exchanged**  
2007: c. €174 billion  
2008: c. €131 billion (- 25 %, decrease is essentially influenced by the slice of the property investment market, in numbers and price level. The prices in the important residential market segment remained more or less stable)

The important indicator for the market of developed land (residential use) is the land value, and for the market of (semi-)detached houses it is the price per sq.m. living space. Reliable data for both indicators had been available for 50 % of the 413 counties and county-free cities. Additional available information from other sources is used to stretch the analysis across the country. The data of rents offered for residential properties are well covered and available over Germany completed by socio-economic data (number of inhabitants and households). The impact of the additional indicators on the land or house prices was proved by regression analyses. Adding data about the settlement patterns (rural, partially urban, predominantly urban) the results become more adequate (coefficient of determination:  $R^2 = 0.82$  (AGA 2009, p. 120)). The dependency between level of offered residential rents and land price shows Fig. 3. Thus it is possible to present an overall picture of the price levels in Germany (cp. Fig. 4).

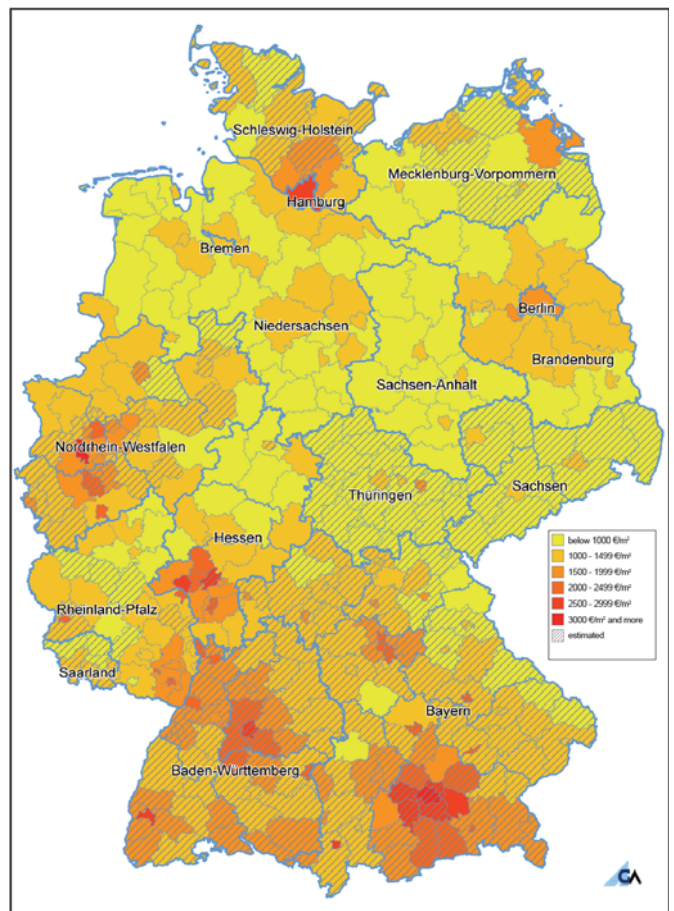


**Fig. 3:** Dependency between land values and level of offered residential rents (Source: AGA 2009, p. 120)



III.4-7: Land values for building plots for individual residential real estate in average locations (2008) that were reported and estimated by applying the regression function

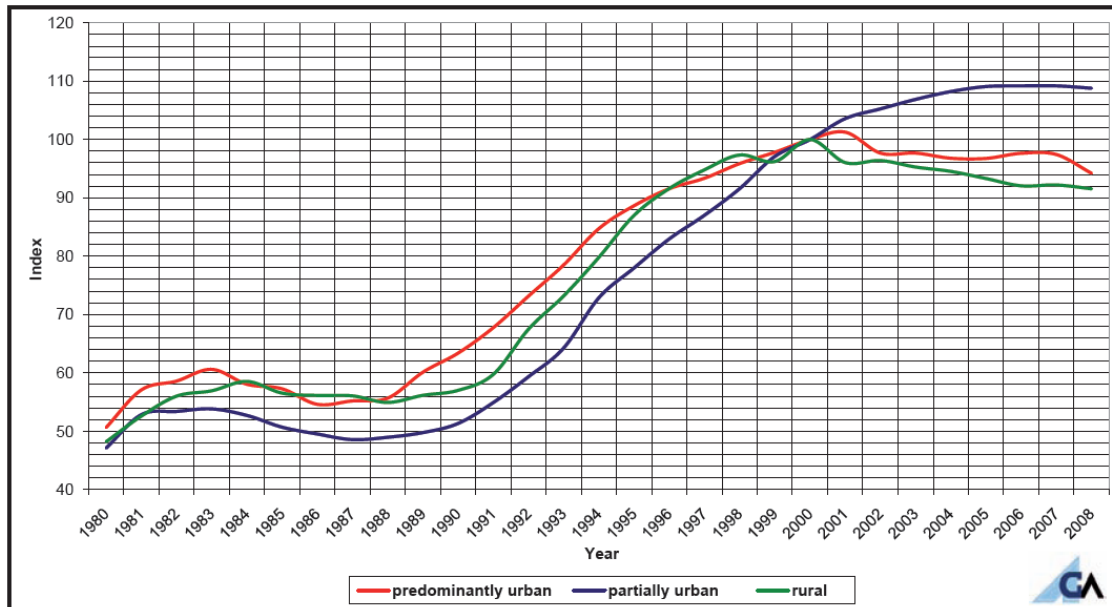
**Fig. 4:** Left: Average land values 2008 (€/per sq.m. developed land for residential use, medium locations); Range: < 50,- up to > 500,- €/sq.m. (Source: AGA 2009, p. 121, 127)



III.4-12: Living space prices reported and estimated by applying the regression function for developed plots for single- and two-family houses (2008)

Right: Average house prices 2008 (€/per sq.m. living space in (semi-) detached houses) Range: < 1000,- up to > 3000,- €/sq.m.

The development of price level is another important market indicator. It is reported since 1980 (cp. Fig. 5). The price level usually is registered in form of index series (here index = 100 represents the situation in 2000). The development of property prices in East Germany is involved since 1990. The graph shows differences caused by the settlement patterns. The price level in the rural areas is decreasing since 2000, especially in East Germany. The price level in the urban areas is more or less stable in most parts of the country. The prices in suburban areas increased over the longest period, but in recent years the slipping demand and the demographic changes stopped this trend too. The financial and property crisis did not cause a noticeable dent in the curves.



**Fig. 5:** Index series of land prices in Germany (West and East) by settlement patterns (Source: AGA 2009, p. 203)

#### 4. CONCLUSION AND FURTHER DEVELOPMENT

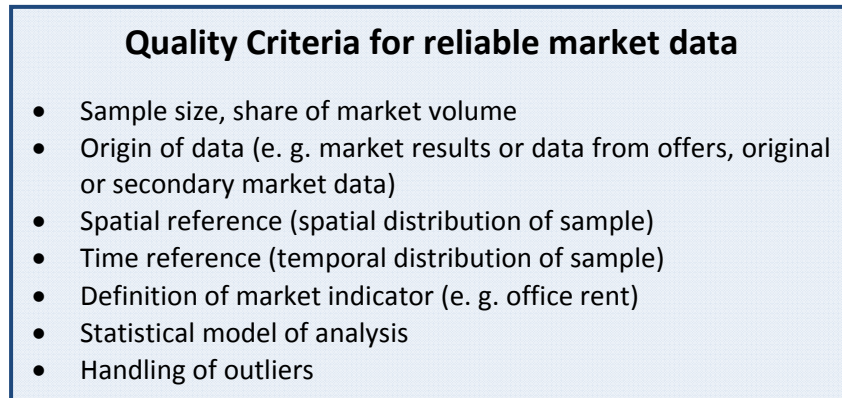
The first National Market report is a result of an ambitious voluntary cooperation of many Boards and State Boards of Valuation Experts. The voluntary cooperation was successful enough to continue the idea to strengthen market transparency by national market reports. Today the German real estate market is a stabilising factor for the entire economy (AGA 2009, p. 2). This should be supported by ongoing efforts in market transparency.

Nevertheless, this initial work does contain "white patches", for which no useful data are available. Since 2009 all States are legally obliged to establish State Boards of Valuation Experts or central offices. Their main task is to prepare supra-regional evaluations and analyses of the real estate market situation. The second edition of the report on the German real estate market can thus resort to a still broader base in the future (AGA 2009, Foreword). The Report on the Real Estate Market Germany 2011 is in preparation and will be published soon.

The 2011 data collection of the local Boards of Valuation Experts works on a new internet-based data bank "Interrogare" which also is on hand for some other public institutions and associations. This is a substantial progress and avoids doing work twice in the local Boards; now the data collection can be done yearly. The data collection is standardized by a questionnaire concerning 9 sections of market activity. The questionnaire is completed by a user guide which illustrates the required figures of market information. A relevant number of counties – which represent the level of data collection - do not represent uniform property markets, especially in the surrounding of big cities. Here the user guide defines new spatial submarkets on the level of lower administrative

levels (municipalities). This improves the quality of the derived market trends.

Ideally, all data should be comprehensive, reliable, up-to-date, standardized and cost-effective (AGA 2009, p. 2). This aim requires a standard of the quality of market information. A suggestion concerning quality criteria for reliable market data have been made by Gudat & Voss (2009). The essential criteria which should be satisfied to secure that market data are reliable are specified in Fig. 6.



**Fig. 6:** Market data quality criteria (Gudat, Voss 2009)

The most important criteria concerns information to specify the sample and the origin the merged market data have been derived from. Further information needed to trust in the market data is necessary about the spatial and time reference of the sample, and – self-evident – the definition of the reported market data should be defined, e. g. what includes the data for an office rent. Finally information about the statistical model and handling of an analysis should be known. The market data will be more reliable if their fundament could be assessed by means of the mentioned criteria. If market transparency reverts to information of different sources – e. g. different private providers and official statistics – quality control is essential and could be managed by such criteria.

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