
 Leibniz  
Universität  
Hannover

**FIG – Working Week 2015**  
17.– 21. May 2015, Sofia, Bulgaria  
Commission 9

**Quality and Demands  
concerning Valuation Data**

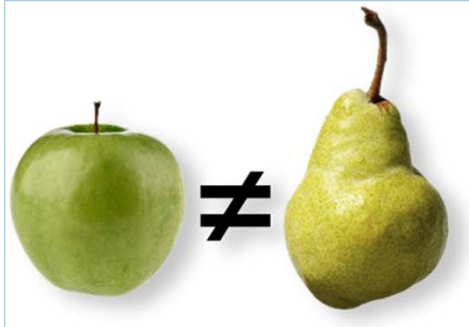
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FIG Working Week Sofia, Bulgaria – 17.-21. May 2015 Prof. Dr.-Ing. Winrich Voß



Content

- Market transparency
- Quality of market data
- Requirements and Standards



Auf der Jagd nach dem Wahren, Guten, Schönen  
Source: [www.zeitfragen.wordpress.com](http://www.zeitfragen.wordpress.com)

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Two possibilities  
to improve transparency and valuation results

1. Better models
  - Research about (new) influence factors
  - Research about improving accuracy of valuation
  
2. Better data
  - Market transparency → precondition for satisfying markets
  - Data necessary for 2 topics:
    - Market analysis
    - Real Property Valuation

It is all about market transparency (MT)!

MT → property and financial crisis 2007/8  
→ strong demand for more reliable market data

More information demanded and available:

- Demand for market prognosis
- Information about market bubble risks
- More supply of market data

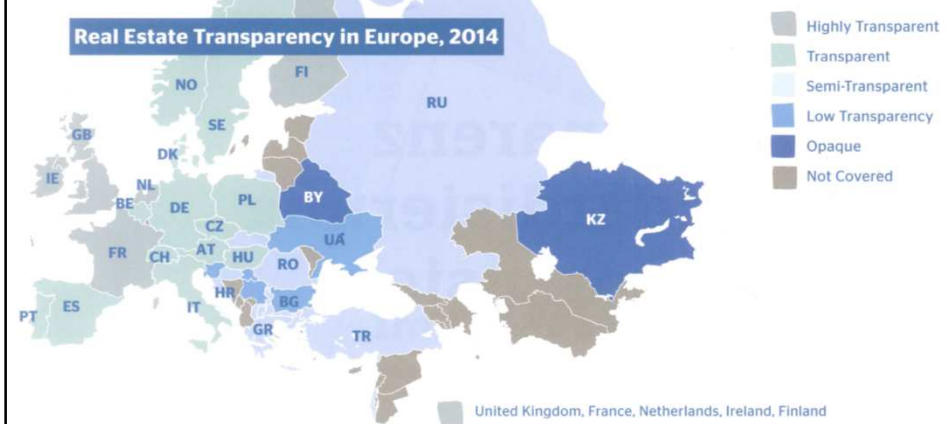
Germany: MT on the public agenda and strengthened by law:

- Main task of Upper Valuation Boards: Regional and supra-regional analysis of market trends and activities
  
- Metropolitan areas: Scarceness and strong increase of prices since 2009/10

**Europe: Differences in market transparency (Index JLL)**  
(Focus: commercial markets)

6 // gif im Fokus 1/2015 - Spezialthema Markttransparenz

**Real Estate Transparency in Europe, 2014**



**Global Real Estate Transparency Index**

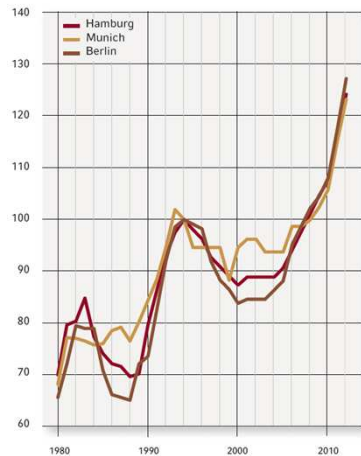
2014 Edition: Real Estate Raises the Bar

**5 Sub-indices**

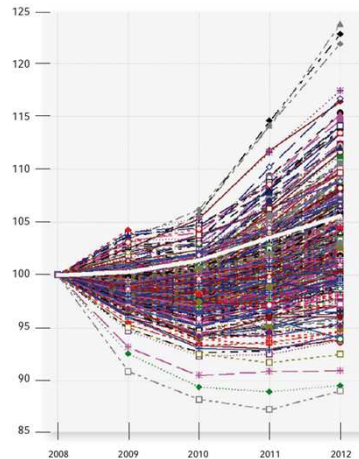
Market	Region	INVESTMENT PERFORMANCE	MARKET FUNDAMENTALS	LISTED VEHICLES	REGULATORY AND LEGAL	TRANSACTION PROCESS	2014 COMPOSITE SCORE	
United Kingdom	EUR	1,0	1,6	1,0	1,3	1,3	1,2	Highly transparent
United States	AM	1,4	1,3	1,0	1,4	1,3	1,3	
Australia	AP	1,4	1,5	1,1	1,3	1,4	1,4	
New Zealand	AP	1,8	1,5	1,1	1,4	1,0	1,4	
France	EUR	1,6	1,8	1,3	1,6	1,1	1,5	
Canada	AM	2,0	1,7	1,3	1,2	1,2	1,5	
Netherlands	EUR	1,4	1,6	1,3	1,9	1,3	1,6	
Ireland	EUR	2,5	2,1	1,0	1,1	1,0	1,6	
Finland	EUR	2,1	2,0	1,2	1,6	1,2	1,7	
Switzerland	EUR	1,5	2,9	1,1	1,6	1,3	1,7	
Sweden	EUR	2,0	2,2	1,2	1,6	1,5	1,8	
Germany	EUR	2,0	1,9	1,6	1,8	1,3	1,8	Trans-parent
Singapore	AP	2,1	2,2	1,2	1,4	2,1	1,8	
Hong Kong	AP	2,1	1,7	1,7	1,8	1,8	1,9	
Belgium	EUR	2,4	2,2	1,1	1,6	2,0	1,9	
Denmark	EUR	2,9	2,1	1,4	1,3	1,8	2,0	
Poland	EUR	2,8	1,6	2,0	1,7	2,0	2,0	
Spain	EUR	2,6	2,2	1,6	2,0	1,4	2,0	
Norway	EUR	2,5	2,9	1,5	1,5	1,8	2,1	
South Africa	SSA	2,4	3,4	1,3	1,6	1,4	2,1	
Austria	EUR	2,3	3,0	1,5	1,5	2,1	2,1	
Italy	EUR	2,1	2,5	1,5	2,1	2,0	2,1	
Portugal	EUR	2,5	3,1	1,7	1,8	1,6	2,2	
Czech Republic	EUR	2,9	2,2	2,4	1,9	1,6	2,2	

Germany: Differences in condominium prices

a. Index of nominal condominium prices  
1994 = 100



Nominal prices for condominiums  
(2008 = 100)

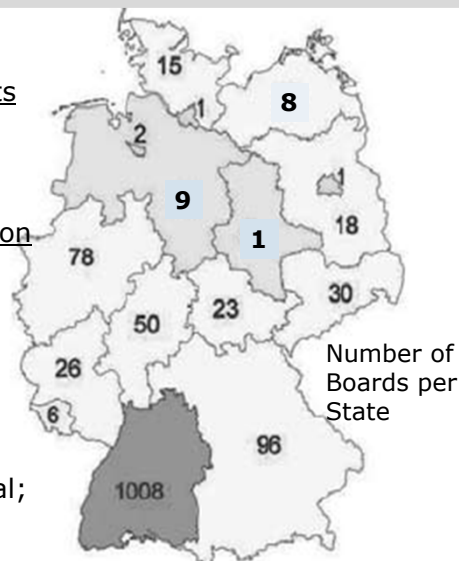


Source: vdpResearch, Federal Statistical Office, vdp Spotlight, Nov. 2013

Organisational structure of the Boards of Valuation Experts

Valuation and market information is based on the Board's purchase price collection

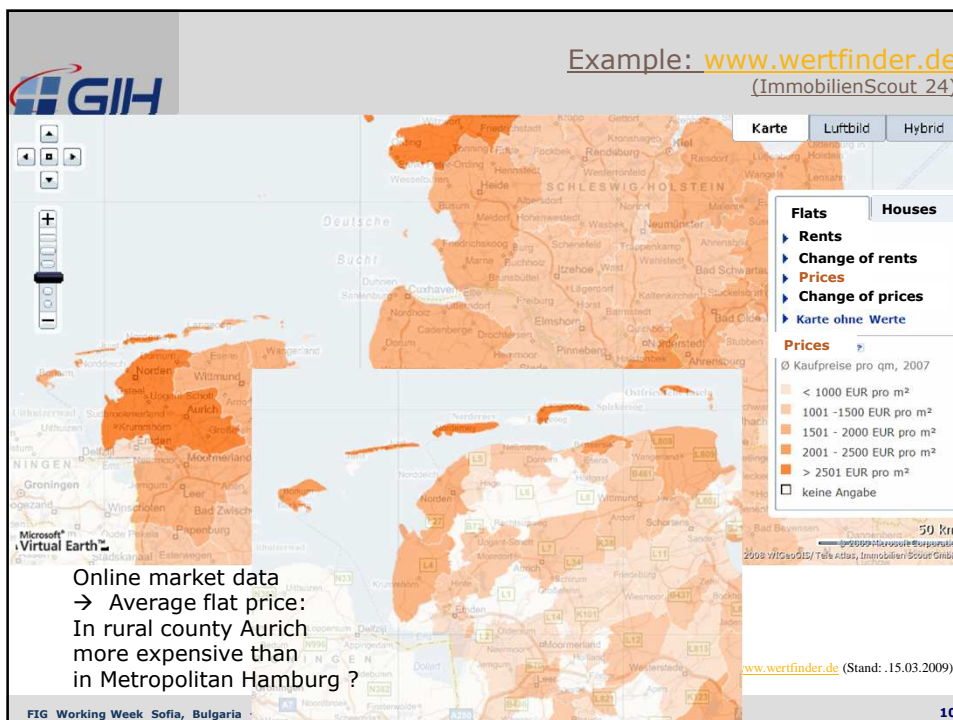
- MT by publication of
- standard ground values
  - prices indices, correlation factors, yield rates,
  - market reports at 3 levels (local, federal state, national;



Source: Krumbholz: FuB 1/2009, p. 35, aktualisiert

### Requirements for reliable market data

- Market data (market analysis + valuation)
  - Primary market data → source of original market information
  - Secondary market data → refining/ derived data
    - Process has to ensure “data quality”
  - Data from valuation reports or lending purposes (loans) ?
- Regional coverage of market information differs (rural areas)
- Completeness of market information
  - “Representative” (!) sample of market situation
    - challenge concerning transparency and quality of data !
  - Combining economic data and technical data



### Area of market analysis:

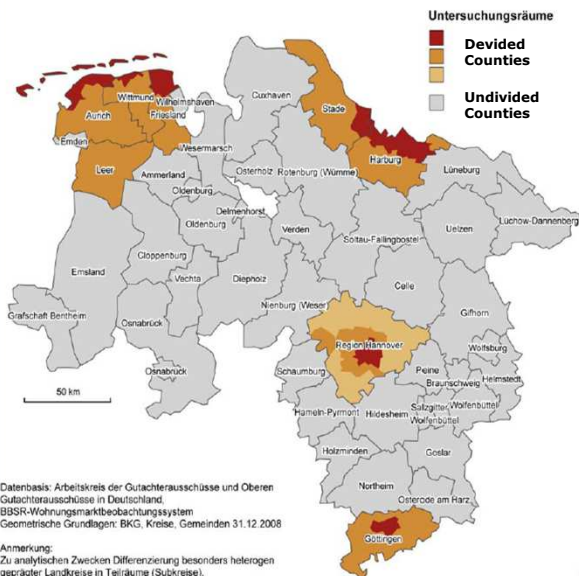
Property market regions

differ from

administrativ regions  
(counties/ Landkreise)

→ Average figures and  
market size should  
coincide

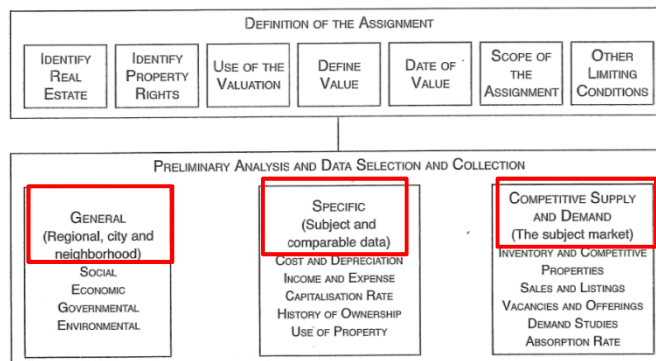
Counties and property market areas in Lower Saxony



### Support from Intern. Guidelines (IVSC) concerning data quality ?

- GN1: Real Property Valuation: 3 types of data

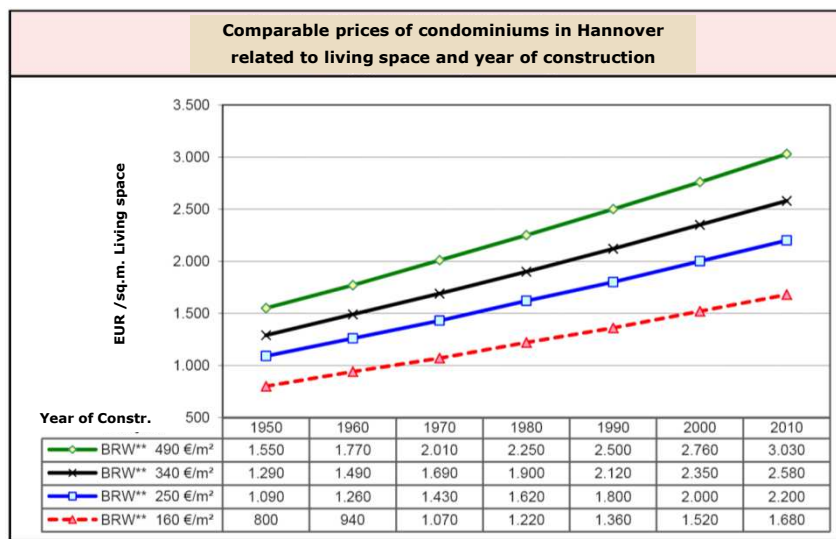
#### Guidance Note Figure 1-1 The Valuation Process



Support from Intern. Guidelines (IVSC) concerning data quality ?

- GN1: Real Property Valuation: 3 types of data
  - information should be "significant and generally considered by buyers and sellers".
  
- GN11: Reviewing Valuations
  - Important: the data used ("... the apparent adequacy and relevance of the data used....")
  
- GN13: Mass appraisal for taxation
  - "... sufficient market data ...."

→ How to concretize these nice words?

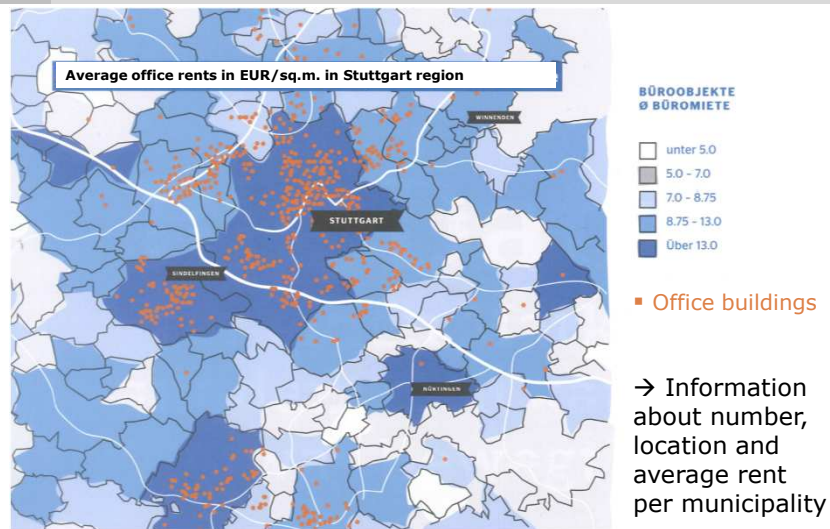




Information about data selection

Hannover Region Market Report 2014

Key data of the selected sample				
Volume of the sample: 885 Transactions (Total: ca. 2.000)				
Criterion	Reference	Min.	Max.	Medium
Time-frame	Year	2011	2013	2012
Location	Stand. Ground Value	140	470	270
Age	Years	4	66	41
Standard	Klasse	einfach, mittel, gut, sehr gut		mittel
Balcony	Yes / No	nicht vorhanden	vorhanden	vorhanden
Garage	Number	0	1	0
Size of building	Number of flats	5	>150	18
Living space	m <sup>2</sup>	40	120	70



Source: Gif im Fokus 01/2015, p. 14; bulwiengesa AG, Kartengrundlage Navteq, DDS



Rent synopsis for office and surgery space in County of Aurich

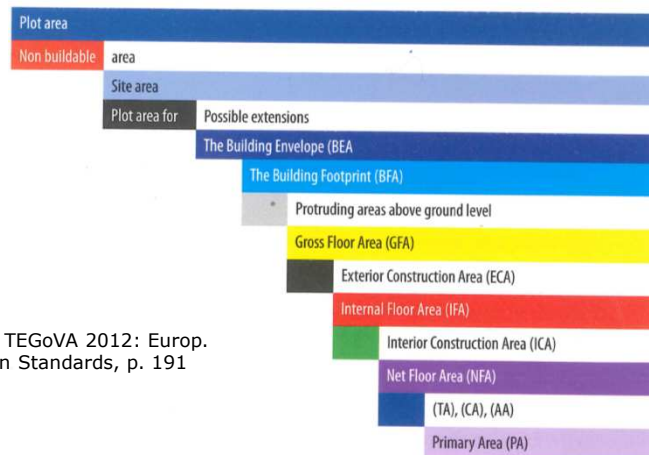


Town	Reference year	Transactions	Average rent (range of rents)
Aurich	2012	25	6,20 (4,10 - 8,80)
Emden	2010	13	7,00 (4,50 - 11,10)
Esens	2011	7	6,00 (5,00 - 7,10)
Leer	2014	16	7,75 (4,40 - 12,00)
Norden	2011	9	7,60 (4,10 - 9,80)
Wittmund	2011	10	5,50 (3,90 - 8,10)

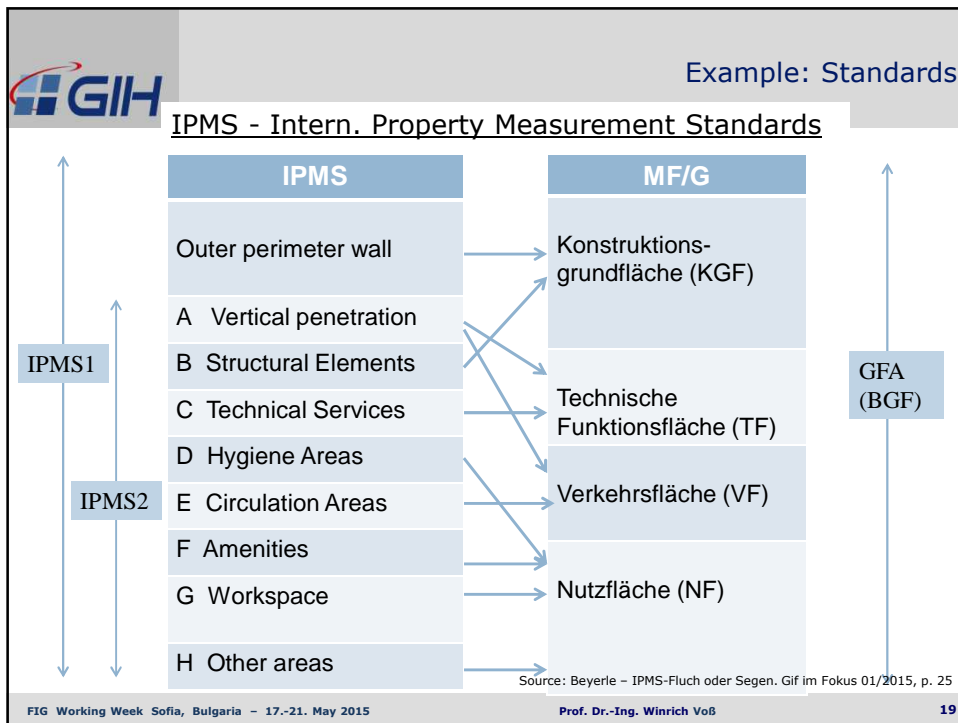
Source: GAG Aurich: Market Report 2015, p. 112

Data Quality – Requirements and Standards

Figure 1 - Illustration of the various types of areas and their relationship



Source: TEGoVA 2012: Europ. Valuation Standards, p. 191



Criteria for Market Data Quality

**GIH**

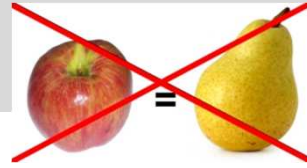
Which information about market data should be available?

**Quality Criteria for reliable market data**

- Sample size, share of market volume
- Origin of data (e. g. market results or data from offers, original or secondary market data)
- Spatial reference (spatial distribution of sample)
- Time reference (temporal distribution of sample)
- Definition of market indicator (e. g. office rent)
- Statistical model of analysis
- Handling of outliers

(Gudat/ Voss: FuB 1/2009, p. 30))

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### Conclusion

- Reliable market data
  - security to investments
  - reduce cost of Due Diligence
  - reducing time of transactions
 → economic importance and value of reliable data
  
- Combining economic data with property-specific data (geo-reference, location quality, building age) makes the added value
  - reliable market data need to be location-based (part of geo-data infrastructure)
  
- Standards of reliable market data are necessary
  - area definition
  - average price determination
  - spatial sub-markets

→ A task for FIG Comm. 9 ?

**Thank you**  
**for your attention!**

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