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**LAND VALUES IN THE FEDERAL REPUBLIC OF GERMANY  
UNDER SPECIAL REGARD TO THE CONCENTRATION AREAS PRESENTED ON  
THE EXAMPLE OF THE REGION OF MUNICH**

**1. The actual report on land values in the Federal Republic of Germany**

The land value problem, once a discussion within science — above all in the economic field — has today aroused a broad, wide and private interest. The discussion of the problem is today not only handled in scientific discussions, but also appears in the press, radio and television. The wide interest is caused by the growing wishes for real property (flat, house) of all groups of the population and the gradual scarcity of developed land. Growing demands on the one side and scarce offers on the other side have led to a price explosion, not only unknown during the historical evolution of the Federal Republic of Germany, but also in previous decades.

Some examples will help to explain it:

- a) Under the title: »Price explosion on the real estate market« the 'Süddeutsche Zeitung' (Nr. 216/S.13) reports in September this year: »On the average at 18,8% in the suburbs, but the price barometer climbed up to 30% within a year for a small piece of developed land«.

The prices for several objects amount according to this information as follows:

— self contained houses	470.000.— DM
— row houses	400 — 500.000.— DM
— semi - detached houses (good localities)	400 — 600.000.— DM
— property flats	p. qm 2.300 — 3.000.— DM

- b) The magazine 'Quick' reports in the 11<sup>th</sup> publication 1979 under the title »what costs Germany?«: »In the Hohen Straße in Cologne the ground is literally plastered with thousand mark notes. A square meter of ground is sold for 25.000.— DM«. If one takes this fact literally, one realizes that this is not an exaggeration but the opposite, because a plot of 1 qm can be covered completely with no gaps with 24 single thousand mark notes. In the following price list from Cologne are:

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Königsallee Düsseldorf	15.000.— — DM/qm
Marienplatz München	12.000.— — DM/qm
Jungfernstieg Hamburg	10.000.— — DM/qm
Remigiusstraße Bonn	8.000.— — DM/qm
Roßmarkt Frankfurt	5.000.— — DM/qm
Kurfürstendamm Berlin	3.000.— — DM/qm

There are plenty of such publications. These few examples should be enough to give a picture of the building land situation. Also even if one feels slightly irritated over the somewhat thrilling formulation in the daily or weekly newspapers the fundamental declarations of:

- Immensely rising prices in the last years
  - In combination with an extraordinary strong price difference from region to region
- are correct reported by the press.

## 2. Land values on the basis of official statistics

### 2.1. Federal Republic of Germany

In comparison to the information of the »Federation of the German Brokers« commented upon by the press, land values and their increase published by the Federal Office for Statistic in Wiesbaden and the other regional statistic offices are almost moderate.

Tab. 1: Prices for developed land in the Federal Republic of Germany 1962 — 1977

Jahr	DM/qm	Jahr	DM/qm
1962	14,83	1971	33,56
1963	16,92	1972	40,23
1964	18,46	1973	40,77
1965	21,89	1974	40,34
1966	23,61	1975	44,08
1967	25,71	1976	48,80
1968	28,37	1977	53,98
1969	29,86	1978	57,35
1970	30,74		

For developed land whose share constitutes over 50 % on the rest of the different land types of the land market in 1962 14,83 DM/qm were paid on an average, whereas the price rose to 53,98 DM/qm in 1978, which means a raise of 364 % in 17 years, in other words: an average yearly value increment which would conform to 21 %.<sup>1</sup>

These prices though do vary greatly. In communities under 2.000 inhabitants the qm of developed land costs in 1977 28,55 DM, in communities with over 500.000 inhabitants on the other hand, more than five times, namely 150,28 DM/qm.

<sup>1</sup> Quelle: Statistisches Bundesamt (Hrsg.), Statistisches Jahrbuch für die Bundesrepublik Deutschland, Stuttgart v.J.

**Tab. 2: Prices for developed land according to different municipality types in the Federal Republic of Germany 1977**

inhabitants/municipality	DM/qm
under 2 000	28,55
2 000 — 5 000	38,66
5 000 — 10 000	45,41
10 000 — 20 000	53,55
20 000 — 50 000	63,55
50 000 — 100 000	80,77
100 000 — 200 000	86,47
200 000 — 500 000	118,04
500 000 and more	140,28

The 12 cities with more than 500 000 inhabitants show among themselves again a considerable, but for the Federal Republic of Germany characteristic north-south-preference. The pricespan reaches 1977 from 384,36 DM/qm in Stuttgart to 97,88 DM/qm in Dortmund.

**Tab. 3: Prices for developed land in cities with more than 500 000 inhabitants in the Federal Republic of Germany 1977**

cities	DM/qm
Dortmund	97,88
Hamburg	101,35
Duisburg	122,26
Bremen	123,46
Essen	152,30
Hannover	169,10
Köln	181,33
Berlin	194,31
Düsseldorf	224,07
München	279,53
Frankfurt	323,50
Stuttgart	384,36

At the same time in 1977 land for commercial buildings showed a unique price level of 261,96 DM/qm almost eight times as much as in village areas with 33,02 DM/qm.

**Tab. 4: Prices for developed land according to different using types in the Federal Republic of Germany 1977**

using typ area	DM/qm
commercial	261,96
commercial/dwelling	108,15
dwelling	60,77
industrial	46,98
village	33,02

The different regional price level, already shown by the average prices of the official statistic are pointed out in the »Atlas of regional development« Vol. 7: Utilization of land clarifies.<sup>2</sup>

**Map 1** shows the prices for developed land 1965/67 on district bases. The situation is characterized through:

- High prices in the middle of the more concentrated areas and regionally a limited spreading out of the price niveau to the outlying areas.
- Low prices in large connected rural areas (North German lowlands, Rheinland-Pfalz)
- Pronounced descent to the outer suburbs of the towns especially in the more concentrated areas (Rhein-Fuhr and Rhein-Main-area)

**Map 2** shows the prices for developed land 1973/75 on district basis with equal prices in comparison to map 1. In the course of 8 years the price structure has changed as follows:

- Low prices (10.— DM/qm) characteristic in 1965/67 for large areas of the Federal Republic of Germany, have vanished completely out of the picture and have given way to the next higher price step.
- Highest prices on map 1, which were only in Munich and Stuttgart, are now in all more concentrated areas.
- The high price niveau in the middle of the more concentrated areas not only affect the directly overlapping outer suburbs, but reach far into the country and has led to a standard merging.
- This process has led to a big raise in value of the neighbouring areas and herewith caused an equality in price of the whole area (Stuttgart, Mannheim, Frankfurt).
- An adequate price niveau has occurred in the attractive tourist areas of the alpine region.

## 2.2. Bavaria

While the standard prices for developed land in the last few years in Bavaria for example 1977 with 53,84 DM/qm vary only slightly from the arithmetical average of the Federal Republic with 53,98 DM/qm, by the over-regional comparison of the massed areas on the one side and the tourist areas on the other side precedence is indicated for the South German area, especially Bavaria. The proved country-wide North-South-preference is very strong within Bavaria; 27,90 DM/qm in Unterfranken and 75,40 DM/qm in Oberbayern in 1977 verify this.<sup>3</sup>

The regional price difference on the basis of planning regions is even more significant. In this way for example 17,20 DM/qm was payed for developed land in 1973 in planning region 3 (Main-Rhön), while in region 17 (Oberland) at the same year almost 6 times as much, namely 99,90 DM/qm and in region 14 (Munich) even 9 times as much, namely 155,60 DM/qm was paid.<sup>4</sup>

<sup>2</sup> Bundesforschungsanstalt für Landeskunde und Raumordnung: Atlas zur Raumentwicklung, Bd. Flächennutzng, Bonn 1976, Bl. 710.

<sup>3</sup> Bayer. Statistisches Landesamt (Hrsg.): Statistisches Jahrbuch für Bayern 1978, München 1978, S. 317

<sup>4</sup> Bayerisches Statistisches Landesamt (Hrsg.): Durchschnittliche Kaufwerte von Bauland in Bayer, in: Beiträge zur Statistik Bayerns, Heft 338, S. 32.

The extraordinary price differences between large regional districts for example administrative areas and planning regions will even show another distinction if judgement is based on the size of a municipality, the smallest political community.

**Map 3** shows turnover in real estate and price for developed land 1972 on the basis of municipality.

The accumulation of large sums and therefore a high market intensity in the concentrated areas show pronounced concentration of the market events in these districts.

The following example will underline this:

A quantity of 27% of the whole turnover in land and 15% of the total sales prices thereof (whole turnover) between 1962 and 1973 are distributed on 80% of the municipalities (number of municipalities in 1974). This means, that a figure of 73% in sold land and 85% of the total sales amounts are concentrated on only 20% of the municipalities.

This proves that there is an essential influence on the land market and in connection with this on future housing policy mainly caused by some regional points such as you can see on **map 3**:

- The concentration area, especially Munich, and the municipalities next to it.
- The remaining central places together with their areas of influence and involvement.
- The tourist centres of the alps and the upper alp country.

With regard to that for the large concentrated areas this result in connection with the fact that about 1/8 of the sold land quantitywise and more than 1/4 of the total sales amounts fall to region 14 (Munich) between 1971 and 1973 this area has to be treated with special care under the auspices of any planning importance.

## 2.3. Planning region 14 (Munich)

### 2.3.1 Turnover Volumes

The analysis is based on an 11 year observation period between 1962 — 1973. All together 42 qkm of land was sold at a price of 1,6 Milliard. DM. The mentioned area in this observation period is equivalent to 1/12 of the housing area of the region and is almost identical with the area of the Ammersee (46 qkm). It must be noted with these figures, that due to secrecy not all sales are published and the actual figures therefore can be taken as higher rather than lower. These realistic global figures should be enough to put the often used slogan of »selling off the region« into some perspective. It must be considered however, that the concentration ratio in some municipalities in regions to the market intensity within the region are similarly stratified as in the already mentioned situation region 14 (Munich) and Bavaria.

**Map 4** gives an impression of the capacity defining this concentration:

- In 50% of the municipalities there is a turnover in land of 11,7% together with a portion of 7,8% from the total sales amount.
- On the other side 10% of the municipalities show a turnover in land of 41% and 44% of the sales amounts in total.

Even if the concentration ratio (measured by the Gini-Coefficient) is not as large as in Bavaria, it can be easily seen that the market activities are concentrated on few central points. Herewith the growing municipalities in the Southwest, West and Northwest come strongly into the picture, especially the district of Starnberg, the eastern part of the district of Fürstenfeldbruck and part of the municipalities of the district of Dachau.

Aside this a remarkable concentration in the estate market can be recognized also in the North and East of the region. But they differ remarkably in regard with the areal expansion. While the market concentration in the West is mainly defined over the whole area, the concentration in the East is restricted to a few municipalities. Those municipalities with the highest turnover rate are directly situated aside others which hardly show any sales in real estate. Hereby it is noticed that sales intensive municipalities in the North and East nearly all show a commuter train (S-Bahn) connection, or they are linked to the traffic net by the highway circle Nürnberg-Salzburg. The big decline at the end of the local railway line (S-Bahn) show the importance of any public affords in the infra-structure of an area which until some years ago have hardly shown any impulses. In this connection the assumption can be made that the already existing aerial effectiveness due to an actual development predominance in the West will also soon come up in the East of the region.

### 2.3.2 Price-Structure

Aside the question of the intensity in the sold land which give a signal for future building activities the areal evaluation which show their counterpart in the building land prices is of special interest. In order to get reasonable results the prices of 1962, 1963 and 1964 form average prices of period number I and out of the prices of 1971, 1972 and 1973 average prices of period number II were computed and compared with those of period I. In order to compare the prices there were only considered those for developed land. An interval scale due to the number of municipalities were arranged, that means that each interval contains the same number of municipalities.

**Map 5** shows the average prices in DM per square meters during period I (1962, 1963 and 1964) for developed land. The evaluation scale goes from 0,75 DM until 86.— DM/qm. The price structure in region 14 (Munich) is extremely characterized by a price decrease from the centre to the outskirts. The highest prices are mainly in the attractive South Eastern to South Western suburbs and therefore show the peoples preference to live in those garden cities in comparison to the northern suburbs. Beneath the suburbs the prices go down extremely fast whereas quite often some ranges in the scale are left out. This is a special hint for the fact that there is an extremely decreasing price graduation towards the border of the region. This graduation is specially strong in the East and West of the region. In the North however the lowest price steps will never be reached. An exceptional situation is the southern part of the region. Especially the Würmtal communities and those in the Northern part of the lake of Starnberg belong all to the highest grade due to very attractive living conditions in these garden cities.

**Map 6** shows the average prices in DM per qm in period II (1971, 1972, 1973) for developed land. This map is arranged by the same principles as map 5 it can be well used for price comparison between period I and period II. The evaluation scale has gone in a 9 year period from 2,50 DM to 211.— DM/qm. This means an average price increase of 300 %.

The regional situation has hardly changed. There is still an outstanding degradation which is characteristic for the price situation with the typical exemption down in the South of the region. Nearly the same regional price structure in both periods should not end up in the assumption that in some smaller parts of the region no changes in the evaluation have taken place. So for example middlecentre Landsberg fell back by 2 points. There is a remarkable revalorisation of the northern suburbs whereas especially those communities of the district Dachau which are trafficwise well-linked to Munich are well noticed. On the other side the price increase in the preferred southern suburbs of the region has slowed down which led to a remarkable slip in the evaluation scale.

To draw further conclusions from this fact seems to be questionable because especially the year 1973 shows very clear the first signs of a close recession in all economic sectors. However the question of the price increases in the developed land market as it could be shown by the press reports is still the centre of interest.

**Map 7** shows the price variation for developed land from period I to period II.

The turnover for developed land is shown for the period 1962 till 1973 as well as the price variations. First of all the fact is noticed that many communities especially in the districts Erding and Freising show of course a turnover in land, but no change of prices. The reason for this is, that either in period I or II no price information has been made for statistical secret reasons, what normally means, that no, or only very few estates were sold. There are isolated cases of price decrease, what presumably can be explained at random based on the statistical basic material. The general tendency is characterized by the fact, that high price increases of 300 % and more can be found above all in areas which have a relatively low price level to start with, as for example, the western communities of the districts Landsberg, Fürstenfeldbruck and Dachau. On the other side those areas with a high price level in the district of Starnberg show little price increasing. This is the reasonable explanation when facing the fact that from a relative point of view the price increase from 20.— to 40.— DM/qm is the same as from 200.— to 400.— DM/qm. The results of the already mentioned same as from 200.— to 400.— DM/qm. The results of the already mentioned in comparison to the South. This can be taken as a sign that high prices to the time in question have reached a certain price limit.

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## **CENA ZEMLJIŠČ V ZRN S POSEBNIM OZIROM NA OBMOČJE KONCENTRACIJE V MÜNCHENSKI REGIJI**

1. Kategorija »vrednost zemljišč« primernih za izgradnjo stanovanjskih in drugih objektov je predmet širokih diskusij. V najširšem smislu predstavlja element za vzpodbujanje privatnih in družbenih interesov po prostoru.
2. Statistični podatki o ceni zemljišč so za večja administrativna območja nepriemerni, ker ne izražajo dovolj natančno razlike v ceni med posameznimi območji. Že same planske regije kažejo nenavadno spreminjanje koncentracije visokih cen zemljišč.

Ta vidik potrjuje potrebo po analizi manjših planskih območij, npr. občin, katastrskih občin itd. Ta koncept zahteva tudi prikazovanje regionalnih kategorij — prodajne in nakupne cene zemljišč za posamezna območja.

3. Obseg prodaje zemljišč je skoncentriran v posameznih območjih, oziroma točkah, ki predstavljajo območja bodoče koncentracije gosto pozidanih površin. Ustvarjena koncentracija visokih cen zemljišč ni bila zajeta v rednih statističnih popisih prebivalstva.

Cena zemljišč je ena izmed glavnih kazalcev za planske posege v prostoru.

4. Cena zemljišč ne oblikuje samo dejstvo, da obstoja pomanjkanje površin za gradbene namene, marveč tudi različna vrednost bivalnih območij.

Največje regionalne razlike v ceni zemljišča (od 2,50 DM/m<sup>2</sup> do 210 DM/m<sup>2</sup> v letih 1971—1973) izražajo v bistvu različno stopnjo privlačnosti območij primer-  
nih za bivanje.