

How to Define Threshold Households in Different big German and European Cities

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SUMMARY

Contrary to the general negative demographic development, German major cities are growing again. The reasons for this development are, on the one hand, the continuing increased immigration from abroad and, on the other hand, a stronger inland migration from rural areas to (big) cities. The availability of technical or social infrastructures, as well as job offers, are much better in the large cities than in rural communities. More and more people are moving to the big cities because of these better conditions. Not only German cities are once again gaining in attractiveness.

Due to these developments, the demand for housing in the growing cities is increasing. Consequently, rental and property prices are also rising. Not every household is able to pay the rental costs for an adequate apartment, especially key workers with low-incomes. Beneath, the property generation is getting more and more difficult for many households due to the rising prices. As a result, a large number of households is dependent on state support. Key workers, who in general earn few money, are highly necessary to maintain the functionality of the cities. But who are these people? Which groups of persons are hidden behind the terms "low-income households", "marginal households", "threshold households" and "borderline households" and how differ all these terms? Is it sufficient to classify them only by their income, as it is done by the government? What kind of surveying-methods exist to categorize and to identify these groups of people?

The paper discusses and tries to define the term of threshold households for the cities of Munich and Cologne as well as for the cities of Basel and Vienna. Which criteria are necessary for a classification and, if needed, even for the cities to be examined? Does a household in the one city still count as a threshold, for example, while in another city it cannot be identified as one?

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1. GERMAN AND EUROPEAN MAJOR CITIES ARE GROWING AGAIN

The current trend of population growth in German and European cities and the concomitant rise in rental and property prices make it particularly difficult for low-income households to find affordable housing in the prospering large cities. Many households are dependent on financial support from the state because of high housing costs. However, in some cases their incomes are higher than the subsidy limits. Especially cities such as Munich or Cologne, Vienna or Basel are currently very attractive as residential and workplace, but also as an investment location. The currently low nominal interest rates allow investments in the property markets and offer a lot of space for speculation that leads to increasing prices. The forecasts, which predicted Germany and other European countries a population decline for many years, have been replaced by calculations, according to which the population remains stable or even rises. These developments in recent months and years have led to a "run on concrete gold" and have led to a rise in property prices.

Metropolitan areas are attractive for many population groups. Young adults come to the cities for training or study and often stay because of better chances on the labor market. Especially a great amount of young adults, who are in the family start-up phase, no longer move into a "house in the green" on the outskirts or in the periphery, but stay in the city, often for rent. Beneath, the proportion of academic study increases, as well, with effort, that the pressure on housing market extent in particular in university cities. But also pensioners are increasingly attracted to the large cities because of the better infrastructure. In addition to the cities themselves, the surrounding countryside, particularly municipalities with connections to the public transport network of the city, is benefiting from population growth. There is also an increase in rental and property prices. Supplementary to the young adults and the persons in the retirement age, a large number of migrants, both economic migrants and political refugees, are also attracted to the big cities. The reasons are prospects for a better-paid job and thus better living conditions than in their home countries, as well as protection from political persecution and the possibility of finding persons with the same origin, an "ethnic colony".

All these population groups, the young adults in education or with low entry-level salaries, retirees and migrants are generally among the low-income groups of society. For this reason, they are dependent on low-cost housing, both for rent and for property.

Within these population groups, there is a large number of households with a regular monthly income, but in particular, in cities with high real estate prices, they have difficulties in providing adequate housing. There is a variety of terms which attempt to describe the household with low incomes above the eligibility limits. The term "low-income household" refers only to the income. This also includes budgets which are still within the income limits of social housing promotion and which are not to be investigated in this paper. Also "marginal households" are defined only by the

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level of income. The terms "threshold households", as well as "borderline households" are better suited to describe the focused households. The households examined in this paper are pictorially situated on a threshold or border. They are no longer part of the households that can be supported through the promotion of social housing, since their budget income is above the ceiling. Besides, they are on the threshold to the households, which have sufficient financial resources to provide adequate living space. For this reason, the term "threshold household" is used in the following chapters.

2. CHARACTERISTICA OF THRESHOLD HOUSEHOLDS

How can these threshold households be characterized? A generic definition of thresholds does not yet exist. Among others, the IFS (2003: 6) defines threshold households as households striving for property, but are financially unable to acquire it. The income of households is examined to determine the eligibility. If the income is within the defined limit, a household is eligible. But tenants can also be threshold households. They also live in the big cities and may not have enough income to rent a sufficiently large and appropriately equipped apartment.

The income is an effective factor for evaluating the eligibility of households. But can threshold households also be defined by other characteristics? Which occupational groups are particularly vulnerable? Are general income limits sufficient or are limits adapted to regional circumstances necessary?

In addition to the income, further characteristics such as nationality, housing, life, age, family status, and the number of children (see Figure 1) could be used to characterize threshold households. The groups highlighted in orange are more vulnerable than the ones in blue.

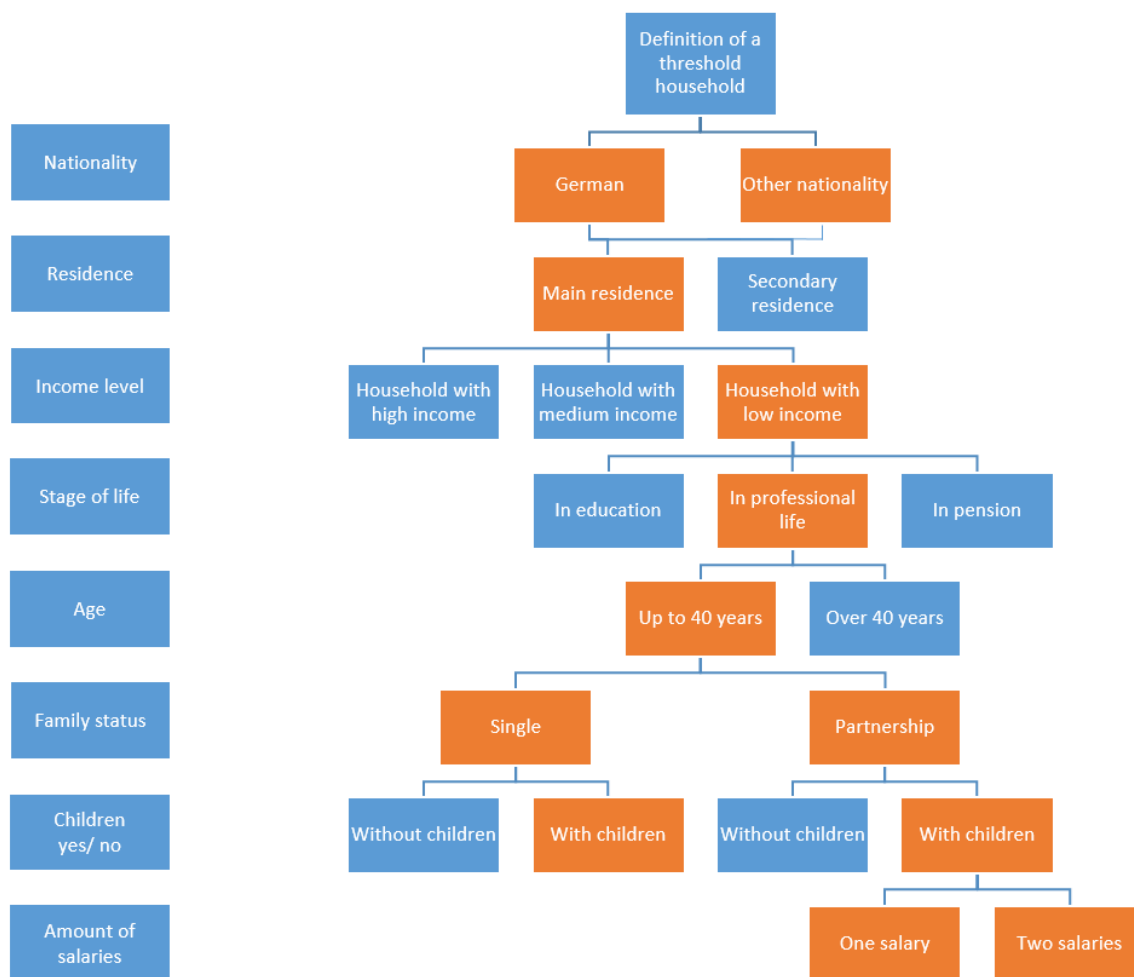


Fig. 1: Definition of a threshold household by selected characteristics (own research).

The nationality of persons living in a household should not be relevant to the decision on eligibility. Only the period in which a person is registered in a city can decide on eligibility. Some cities are specifically fostering households that have been living within the urban area for a certain period of time in order to protect the local population from displacement from a particular district or even the entire city. Eligible should primarily be the main residence, as the household is expected to have a higher income if a secondary residence is required. In addition, it is likely that the adults living in the household have not exceeded the age of 40, as income rises with increasing age. Especially young adults, who are in the family start-up phase and are at the beginning of their careers, generally have low entry-level salaries. In addition, it is likely that single parent families with dependent children and couples with dependent children have a lower household income than singles or couples without children. Especially couples with minor children, of whom only one person applies a regular income, are likely to have greater financial difficulties than couples with two wages.

Especially, incomes in proportion to living costs, ownerships rates and available living space can be used for a first impression on the vulnerability being a threshold household.

2.1 Incomes and costs of living

In addition to the criteria affecting the budget itself, regional differences as well as the cost of living should be taken into account when assessing eligibility. In fact, there are great differences, not just between urban and rural regions, but also between large cities. Purchasing and rental prices are important factors for these differences.

According to the 5th Poverty and Wealth Report of the Federal Ministry of Labor and Social Affairs of Germany, 22.8 percent of tenant households who rented an apartment on the free housing market are burdened by housing costs with more than 30% of the available budget income in 2015 (2014: 23.1 percent) (BMAS 2017). In particular, single households are at high risk of 39.1 percent. "Housing affordability is captured through the housing cost overburden rate, which shows the share of population living in households that spent 40% or more of the household disposable income on housing" (EUROSTAT 2014): In Germany, the overburden rate was 15.9, in Austria 6.6 and in Switzerland 11.7 in 2014 (EU 28 mean: 11.5).

According to the Federal Statistical Office, household income in Germany amounted to € 4.196 per month in 2015, while household net income was € 3.218 per month (STATISTISCHES BUNDESAMT, 2017a). Single parents (one parent with dependent child/children) had over € 2.724 gross or € 2.235 net per month in 2015. The gross income of a household living in a rented apartment amounted to € 2.783 (net 2.118 €) and households living in property had a gross income of € 5,809 per month (net: € 4.451) in 2015 (ibid). The largest share of private consumption spending is invested in housing and energy. Households living in a rented apartment paid an average of € 611 per month (28.6 per cent of net income) for living and households living in their residential property € 1.143 per month (25.7 per cent). Despite the higher amount spent on housing expenses, the percentage of monthly net income for households in a tenancy ratio is with 28.6 percent higher than for households living in their property and spending about 25.7 percent a month (ibid).

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2.2 Homeownership rate and available living space

The historically low home ownership rate in Germany was 44.9 percent, based on the results of the 2011 census (PESTEL INSTITUT 2016). In a European comparison, Germany is almost at the bottom of the list. Only Switzerland has a lower quota, with 44.5 percent in 2015 (STATISTA 2017a). In Austria, 55.7 percent of the population lived in their own property in 2015. However, the residential property quota in the big cities is with only 26 percent significantly lower than the German average. This relationship between urban and rural regions can also be observed in other European countries.

The home ownership rate rises with increasing income. In 2010, 51.4 percent of households with a monthly gross income of between € 2.000 and € 3.200 lived in residential property. In the income margin of € 6.000 to € 7.500, the value was 77.9 percent. Only 32.5% of households with a monthly gross income of between € 1.300 and € 1.500 own residential property (STATISTA 2017b).

The available living space is usually coupled with the disposable income. The more net income a household receives, the more living space is inhabited. In 2014, a low-income household lived on average a total area of 48.3 sqm. A household with a middle-income had 63.7 sqm living space and a household with high income lived on average on 88.7 sqm (BMAS 2017). In Austria, tenants on the privately-financed housing market lived on 66.6 sqm and in Switzerland on 47.6 sqm in 2012. In contrast, tenants in a subsidized apartment lived in Austria on 81 sqm and in Switzerland on 66.1 sqm (EUROSTAT 2014). A large difference in the available living space is between the self-used residential property with an average of 47 sqm and the rented apartment, in which 38 sqm per person are available averagely. An even greater difference is obtained for single-person households, since the average living area of 97 sqm in the property is compared to the single household in the rented apartment with 59 sqm. However, this high value is due to the passive household reduction in age. This is the so-called “remanence effect” (BMAS 2017).

3. MUNICH, COLOGNE, BASEL AND VIENNA – AN INVESTIGATION ON HIGH DENSED CITIES IN DACH-COUNTRIES

All criteria that describe threshold households in general, as well as the external factors relating to the housing market and the cost of living, have been described in the previous chapter. But how is the situation in Munich and Cologne in Germany, as well as in Basel in Switzerland and in Vienna in Austria (fig. 2)? Are there differences in the characterization of thresholds in these four cities?¹

In Munich, Cologne, Vienna and Basel, around half of the inhabitants have low incomes and almost two-thirds live for rent. According to the GfK Purchasing Power Study 2017 of the market research institute GfK, the city

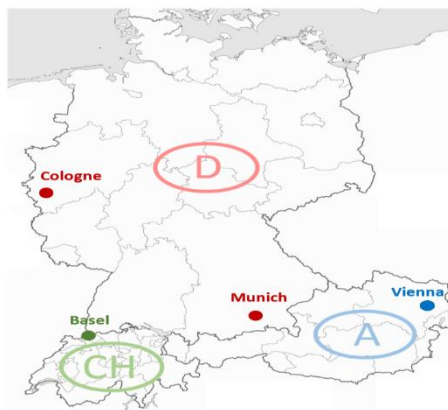


Fig. 2: Investigated cities in DACH-countries.

¹ Because of the heterogeneous data sources in the different countries and cities, the given data varies in the time period. Furthermore, some data are only available at the federal and not at the municipal level.

of Munich is placed fourth in the ranking of the regional distribution of purchasing power in 2017. For all German cities and counties, net income plus all government benefits are added in this study and the purchasing power of all inhabitants was forecasted. This forecast shows that the inhabitants of the city of Munich will have an average of € 30.136 net income in 2017; 36 percent more money than the federal average. However, this does not take into account the costs of living, which are very high in Munich (GfK 2016). In addition, 47.8 percent of Munich households had only a low income (total net income/year below € 25.000 in 2013) (BERTELSMANN STIFTUNG 2017).

At the same time, the rental and property prices in Munich's city district are far above the federal average (see table 1).

Even in Cologne, the rental price is, with around € 10.55 per sqm, much more expensive than in most German cities and regions. With an annual new need of 7.970 new build apartments, the actual demand is very high. In particular, 2-, 3- and 4-room apartments are not available in sufficient amount on the housing market (IW 2017).

Table 1: Purchase and rental prices in Munich, Cologne, Basel and Vienna. (AK OGA 2015; STATISITSCHE BUNDESAMT 2017b, STATISTA 2017c, STATISTA 2017d, STADT MÜNCHEN 2017; STADT WIEN 2017a)

City	Purchase price of residential property		Rental price (net cold rent) for apartment	
	Owner-occupied flat (in €/sqm)	70 sqm apartment (in €)	Rental price (in €/sqm)	70 sqm apartment per month (in €)
Munich (2015)	6.300	441.000	14,21	995
Cologne (2015)	2.875	201.250	10,55	738
Germany (2014/2010)	1.195	83.650	6,37	446
Basel (2015)	7.447	521.290	17,94	1.256
Vienna (2017)	5.198	363.860	10,6	743

Due to the high demand for, in particular, low-cost living space in urban areas, real estate prices are rising strongly. This high pressure makes it difficult for low-income households to provide themselves with adequate living space on their own. Many cities in which pressure on the housing market is growing are using land use policy instruments and subsidy programs to counter the trend. The city of Munich as well as the city of Cologne, for example, have created a so-called “Baulandmodell”, a standardized building land strategy. With this instrument, political objectives, such as the increase in the share of subsidized housing, can be implemented. In addition, municipalities have an effective tool to transfer costs to the investor through urban development contracts with regard to the land value increase. But also at the federal level, the so-called “Mietpreisbremse”, a regulation to control rental fees, is an instruments to counter the rising prices. In contrast to Munich and Cologne, which are trying to influence the development of the housing market by land use political instruments, different strategies are pursued in the cities of Vienna and

Basel. In Vienna, for example, the construction of subsidized housing has a nearly 100-year tradition. In Basel and throughout Switzerland, housing cooperatives have a high priority and hold a considerable number of apartments. In Basel alone, housing cooperatives have about 10.000 apartments in the urban area. This corresponds to approximately 10 percent of the total housing stock. About 4.000 of these apartments have been built on urban plots (IMMOBILIEN BASEL-STADT 2017). With the granting of urban land to cooperatives, the city is able to realize housing policy objectives, for example with regard to social intermixing. Because of a low homeownership rate Basel (16 %) has, like Vienna (20 %), Munich (21 %) and Cologne (24 %) a significant interest in substituting tenants needs.²

In contrast to the great amount of cooperatives, existing in the Switzerland, the subsidized housing in the city of Vienna, is, as already mentioned, an instrument with a long tradition. Already in the 1920s, the first municipal buildings were developed by the city. Still today, the association "Wiener Wohnen" belongs to the city of Vienna. The city currently holds around 10 percent of the total rental housing stock in the urban area and thus provides around 500.000 people with living space (WIENER WOHNEN 2017). In Vienna, one square meter of living space in the first half of 2016 in the first district (downtown) costs € 17 and in the surrounding districts (2nd – 9th district) around € 12.50 per sqm in the privately-financed housing market (STATISTA 2017e). In contrast, the average rental price per square meter including running costs in Vienna was € 7.45 per sqm in 2015, including the rent-controlled housing market (STATISTIK AUSTRIA 2017). With this instrument, the city can control the price trends and is able to offer reasonably priced apartments to vulnerable households. Due to the high rental rate of 80 percent, the supply of condominiums and houses in the city of Vienna is very low, which results in a high purchase price level (STADT WIEN 2012). Are the existing instruments and programs sufficient to support all vulnerable households? How much income does a household need in the investigated cities to afford adequate housing?

4. HOW MUCH INCOME HOUSEHOLDS NEED TO PROVIDE ADEQUATE RENTAL HOUSING?

The following table (see table 2) provides an overview on household net income that a household has to generate in the respective city so that the burden of housing costs does not exceed 30 percent of the total income. The net household income was calculated for the four characteristically vulnerable household types: 1. single person, 2. single parent with children, 3. couple without children, and 4. couple without children. The calculation was based on the household size and the living space per household, as well as the current prices for the rent and the additional costs.

Table 2: Minimum annual net income per household in Euro (€) so rental costs does not exceed 30% of the net income.

	Munich	Cologne	Basel	Vienna
Single person without dependent children	40.000	30.000	40.000	30.000

² Data refer to 2014 in Basel (SCHWEIZERISCHE EIDGENOSSENSCHAFT 2016), Vienna 2012 (STADT WIEN 2012), Munich (BERTELSMANN STIFTUNG 2016a) und Cologne 2011 (BERTELSMANN STIFTUNG 2016b).

Single parent with dependent children	45.000	35.000	55.000	35.000
Two adults³ without dependent children	50.000	40.000	60.000	40.000
Two adults⁴ with dependent children	60.000	45.000	70.000	45.000

In the city of Munich, a single must have a net household income of around € 40.000 a year so that the cost of living expenses does not exceed 30 percent. In contrast, in the city of Cologne, a net income of around € 30.000 is sufficient to finance a one-time household budget of less than 30 percent. In the city of Basel, households need the largest income of all studied cities, because of the highest rental prices and additional costs. The minimum income, a household needs in Vienna is that low because of the great amount of subsidized apartments. In effect, the income, a household needs to provide adequate housing in the privately-financed housing market, is a lot higher than calculated with the given data including the rent-controlled housing market.

In 2014, gross tranche income in Vienna was around € 2.474 (STADT WIEN 2017b). Less tax and social security contributions, net income was around € 1.610 per month. This results in a net annual salary per person of around € 19.300. According to the calculations of an individual, this sum would not be sufficient to keep the cost of living at less than 30 percent. In contrast, the average monthly salary in Basel is CHF 8.404 – around € 7.860 – and after the deduction of the taxes, a net income of € 5.107 per month remains (KANTON BASEL-STADT 2017). With a net annual salary of € 61.300, a single can easily afford an apartment in Basel. In Munich, the net income was an average of € 28.746 per inhabitant in 2011 (BAYERISCHES LANDESAMT FÜR STATISTIK 2013). According to this net income, it would have been very difficult for a single person to afford adequate housing in Munich. Even in Cologne, with an averagely net income of € 20.799 per person in 2015 (BUNDESAGENTUR FÜR ARBEIT 2017), it would have been not easy for a single person to rent an apartment in the urban area. The minimum incomes shown in the chart demonstrate that it is already difficult for singles to rent an adequate apartment in the cities. Households of two or more persons, with only one salary have even more straits to find a payable private dwelling.

The fact, that households have difficulties in three of four of the investigated cities to provide adequate housing, a need for action becomes visible. However, the existing support programs and instruments are only partially suitable to support threshold households. A subsidy program specifically tailored to the thresholds would make sense, which is adapted to the local situation in each city, taking into account income and living costs. For the development of such support, the precise demarcation of the thresholds against the other population and income groups is necessary.

³ Due to missing data, no distinction is possible in couples with one or two salaries.

⁴ Due to missing data, no distinction is possible in couples with one or two salaries.

5. CONCLUSION

There is no easy way to characterize threshold households. It is precisely because of the great heterogeneity of the population and the changing life-styles. But the calculation shows that there are differences even between the investigated cities. As a consequence, the income limits for social housing promotion should be adapted to the local conditions of each individual city. This is the only way to ensure a fair promotion of housing and to achieve the social intermixing of the metropolitan areas.

To get reliable results, a large number of data, which often is subject to data protection and only accessible to a limited extent, should be taken into account. For the present calculation, as already mentioned, not all data were available. This makes the work more difficult and in some cases only allows assumptions.

In a next step, further expert and citizens' surveys would be conceivable in order to reach usable data.

It should also be examined in which districts of the investigated cities the low-income households are represented, the level of household income as well as the burden of housing costs. Based on this, an analysis of the available funding instruments and an evaluation of the application in the investigating cities will show at which points the subject promotion is viable.

Threshold houses are of great importance for the viability of cities. Many low-income professional groups are engaged in essential jobs, for example, to maintain the existing infrastructure. That is why it is crucial to keep these households within the city. In addition, the social intermixing of a city is a land policy goal of almost all municipalities. Gentrification and segregation should be avoided to maintain a vibrant and attractive city for all its inhabitants.

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BIOGRAPHICAL NOTES

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Isabelle Klein and Alexandra Weitkamp (Germany)

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