

High-Influx Cities (Schwarmstädte)

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Definition High-Influx Cities: Excerpt from GdW Annual Research Paper 2016

"Housing Market – Data and Trends 2016/2017" | Facts and Figures from the Annual GdW Statistics, November 2016

2

Extract from

"Challenges and Perspectives for the German Housing Market - Abridged Version", Prof. Dr. Harald Simons Berlin, et al. August 2017, Berlin

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List: Young High-Influx Cities in Germany, 2015

(Table from the report: "Challenges and Perspectives for the German housing market" - Prof. Dr. Harald Simons Berlin, et al. August 2017, Berlin)

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Vonovia's portfolio is mainly located in High-Influx Cities

Updated graphics - based on the Young High-Influx Cities, published 2017



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Definition High-Influx Cities: Excerpt from GdW Annual Research Paper 2016

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The study that was commissioned by the Federal Association of German Housing and Real Estate Enterprises (GdW), together with the regional associations, and titled: "Schwarmstädte in Deutschland – Ursachen und Nachhaltigkeit der neuen Wanderungsmuster" ("High influx cities in Germany - Causes and sustainability of the new migration patterns") for the first time provides a comprehensive overview of intra-national relocations within Germany, examines the migratory behaviour of different age groups and looks at the sustainability and the causes of this new migration pattern.

The study also breaks new ground in methodological terms. Unlike conventional population and household projections, which form the basis for the description of the quantitative requirements for the housing markets, in the "High influx cities" study, the migration process is examined using cohort analysis. Here, intra-national migration was observed on the basis of the behaviour of specific birth cohorts. Therefore, the study did not examine how many people aged between 20 to 25 years live in a city today compared with five years ago, but rather how many people, for example from the 1989–1993 birth cohort, live in this city today compared with five years ago. The increase and decrease was adjusted for the natural population development which was estimated on the basis of age-specific mortality rates. The result then solely describes the change in the size of the birth cohort due to migration. The "cohort growth rate" determined in this way can be interpreted as a measure of a city's or a region's attractiveness. In this case, the cohort growth rate does not remotely correspond to the growth rate for the population. Population growth is not necessarily high in places where the cohort growth rate is high. Indeed, it is possible for both of them develop in opposite directions.

A key finding based on this new analytical perspective is that while some 30 high influx cities in Germany have benefited from intra-national migration, practically all districts in rural areas have lost out.

The demographic divide in the country is being driven by younger people who are still looking for a home base for themselves, in particular the career entrants (25 to 34-year-old age group). Once the new entrant trainee and career entrant migration was concluded, 40% of the districts lost inhabitants. Gains were seen, first and foremost, in the "new high influx cities" - and these gains were very considerable.

1 empirica AG (2015): High influx cities in Germany. Causes and sustainability of the new migration patterns. Berlin.



2

Extract from

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Stable swarm behavior and new High-Influx Cities

Germany is divided demographically. The concentration of young people in selected High-Influx Cities were the cause for the strong growth of High-Influx Cities such as Leipzig, Regensburg or Mainz in the last 10 years and the simultaneous shrinking of almost all other regions. For example, if one follows the birth cohorts 1986 to 1991 over time, the enormous force of swarm behavior becomes apparent. As 10 to 14 year olds in 2000, only 14% of them lived in one of the 30 High-Influx Cities. 15 years later, now 25 to 29 years old, it was 26%.

These days, the young people do not move very far anymore. The large-scale population shifts from East to West and from North to South Germany have levelled off. The net migration balances between the major regions of Northern, Eastern, Western and Southern Germany have been more balanced for several years now.

For about 10 years now, a more regional migration pattern has been predominant. Young people leave rural areas and unattractive cities and, on balance, swarm into one of the nearby 30 or so High-Influx Cities. A young person from Prignitz moves to Rostock, from Nordhessen to Frankfurt, from Oberpfalz to Regensburg. As a result, immigration and emigration are often very close to each other, such as Remscheid and Cologne, Frankfurt/Oder and Berlin, Gera and Jena, Salzgitter and Braunschweig.

In the last two to three years, this development has been overshadowed by the high number of immigrants from abroad. Without taking into account the refugees, who are distributed almost evenly throughout Germany, there is no sign of a weakening of swarming behavior at the present boundary. The proportion of the population (25 to 29 year-olds, German citizens) in the emigration regions has also recently continued to fall between 2013 and 2015 from 39.8 % to 39.5 %.

However, the increasing concentration of the young population on a few High-Influx Cities seems to weaken, as a result of the emergence of some new High-Influx Cities¹, especially smaller cities in eastern and southern Germany such as Magdeburg, Erfurt, Passau or Fürth.

¹: Definition of High-Influx Cities: Up to now, cities have been classified as High-Influx Cities if their cohort growth rate of more than 200, i. e. if the number of inhabitants of a birth cohort until the age of 35was at least doubled by immigration. Due to the strong inflow of foreign immigrants, in particular of refugees, this is currently being achieved in significantly more cities than before. Considering this one-off effect, the threshold value for a High-Influx City was raised from 200 to 224. This increase corresponds to the increase in the nationwide cohort growth rate from 218 in 2013 to 242 in 2015.



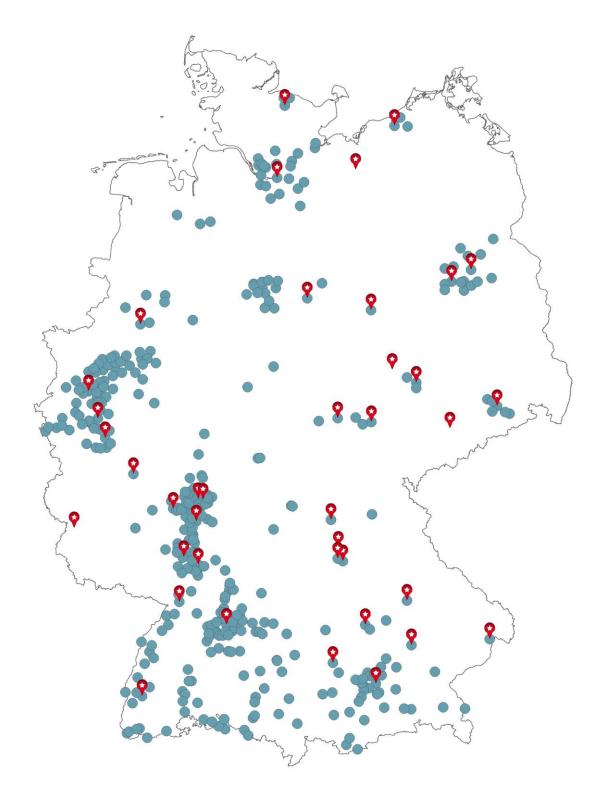
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Status 2015: List of young High-Influx Cities in Germany (cohort growth rate 15 to 34)

(Table from the study: "Challenges and Perspectives for the German Housing Market" - Prof. Dr. Harald Simons et al. Berlin, August 2017)

	Cohort growth rate 15-34		
	2013	2015	Change 2013 to 2015
High-Influx Cities 2013			
Leipzig	325	479	+154
Frankfurt a.m.	325	374	+49
Munich	336	366	+30
Trier	203	343	+141
Darmstadt	287	336	+50
Regensburg	277	331	+54
Heidelberg	287	329	+42
Dresden	271	321	+50
Karlsruhe	271	292	+21
Stuttgart	247	291	+44
Jena	231	282	+52
Münster	241	279	+37
Düsseldorf	242	276	+35
Freiburg	258	276	+18
Landshut	206	272	+66
Mainz	235	270	+35
Halle (Saale)	205	266	+61
Mannheim	213	264	+51
Offenbach a.M.	232	259	+27
Köln	236	258	+22
Augsburg	205	257	+52
Kiel	231	253	+22
Nürnberg	211	252	+41
Berlin	223	251	+28
Rostock	207	250	+43
Koblenz	206	246	+40
Braunschweig	218	245	+27
Erlangen	209	238	+30
Hamburg	209	234	+25
Bonn	210	225	+15
New High-Influx Cities 2015			
Chemnitz	171	267	+96
Magdeburg	191	258	+67
Schwerin	121	256	+135
Passau	181	251	+70
Bamberg	186	242	+56
Erfurt	181	236	+54
Potsdam	193	230	+36
Fürth	193	228	+35
Ingolstadt	193	225	+32

Vonovia's portfolio is mainly located in High-Influx Cities



- High-Influx CitiesVonovia location, strategic portfolio