Rental Property Prices in Germany

DATA

• Data Source

The data was scraped from Immoscout24, the biggest real estate platform in Germany. Immoscout24 has listings for both rental properties and homes for sale, this data only contains offers for rental properties.

https://www.kaggle.com/code/jonaslneri/german-rent-avg-by-postal-code/notebook

Content

The data set contains most of the important properties, such as living area size, the rent, both base rent as well as total rent (if applicable), the location (street and house number, if available, ZIP code and state), type of energy etc

Profile

Original data set contained 49 columns and 268850 rows. After initial quality control, cleaning and removal of unnecessary data is has 15 columns and 110200 rows.

This included the removal of columns which had missing values and were not relevant to the project brief.

Any duplicates were removed for thorough analysis.

Columns were renamed to ensure readability.

Index Order	Columns	Description	Time Variant/Invariant	Data Type
	State	German Federal State	Invariant	Qualitative
	Service Charge	Landlord Fees	Invariant	Quantitative
	New Build	Property is newly built	Invariant	Quantitative
	Balcony	Does it have a balcony?	Invariant	Qualitative
	Total Rent	Total after heating (warm rent)	Invariant	Qualitative
	Has Kitchen	Is a kitchen included	Invariant	Qualitative
	Cellar	Does it come with a cellar	Invariant	Qualitative
	Base Rent	Rent without heating (cold rent)	Invariant	Qualitative
	Living Space	Total square meters of property	Invariant	Qualitative
	Lift	Is a lift available	Invariant	Qualitative
	Type of Flat	Is it a house or flat	Invariant	Qualitative
	No Rooms	Total number of rooms (excluding bathroom)	Invariant	Qualitative
	District	German District	Invariant	Qualitative
	Town	German Town or City	Invariant	Qualitative
	Date	Date listed	Invariant	Quantitative

LIMITATIONS and ETHICS

- Original data contained several missing values. These were not pertinent to analysis to be undertaken.
- There are no ethical issues with the data. It is anonymous and doesn't contain any private information data.

QUESTIONS and Hypothesis

- Which states have the lowest and highest rents?
- Which towns or cities have the lowest and highest rents?
- Which factors influence rent prices do those with a cellar, balcony and kitchen demand a premium?
- What is the average living area?
- Does that influence number of rooms?
- Do service charges differ per region?