university of groningen / faculty of spatial sciences

EXAM International Real Estate Markets

2023-2024

ANSWERFILE

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Note:

1. This exam consists of 4 questions asking for 7 written responses with 50 points in total that counts for 50% of your final grade.
2. Read all questions (hardcopy) carefully and provide your answer in English (digital).
3. For calculation questions, you need to show the calculation steps, and you do not earn points if the calculation steps are missing, even if the result is correct.
4. Inconsistency in your answers will lead to fewer points, even if the answer is partly correct.
5. Only a standard calculator is allowed, no graphical calculator, no smartwatches. No devices are allowed that can connect to internet.
6. The exam will last for 2 hours.
7. Students can lodge an appeal against the results of an examination with the Central Portal for the Legal Protection of Student Rights (CLRS) within 6 weeks of the date on which the result was announced.

9. In case of questions, please raise your hand while remain seated.

Question 1 – Socially constructed real estate markets (20 credits)

A. (5 points). Throughout the course, we explored international real estate markets through an institutional perspective. Explain, in 30-50 words, why real estate markets can be seen as social constructs and how this viewpoint enriches our understanding of real estate governance.

Real estate markets are not predetermined but emerge from human actions, constituting a dynamic system shaped by real estate actors and the rules (institutions) guiding their interactions. Hence, they are socially constructed. This perspective helps us to understand differences in real estate markets and the interplay between actors and institutions.

B. (5 points). Residential investors are important players in real estate markets. Nonetheless, academic research often lacks nuanced distinctions among residential investor types, as shown by Özogul & Tasan-Kok (2020). Discuss, in 50-100 words, why a multidimensional approach is more appropriate to understand real estate investors and refer to 2 meta-categories as proposed in the article by Özogul & Tasan-Kok (2020).

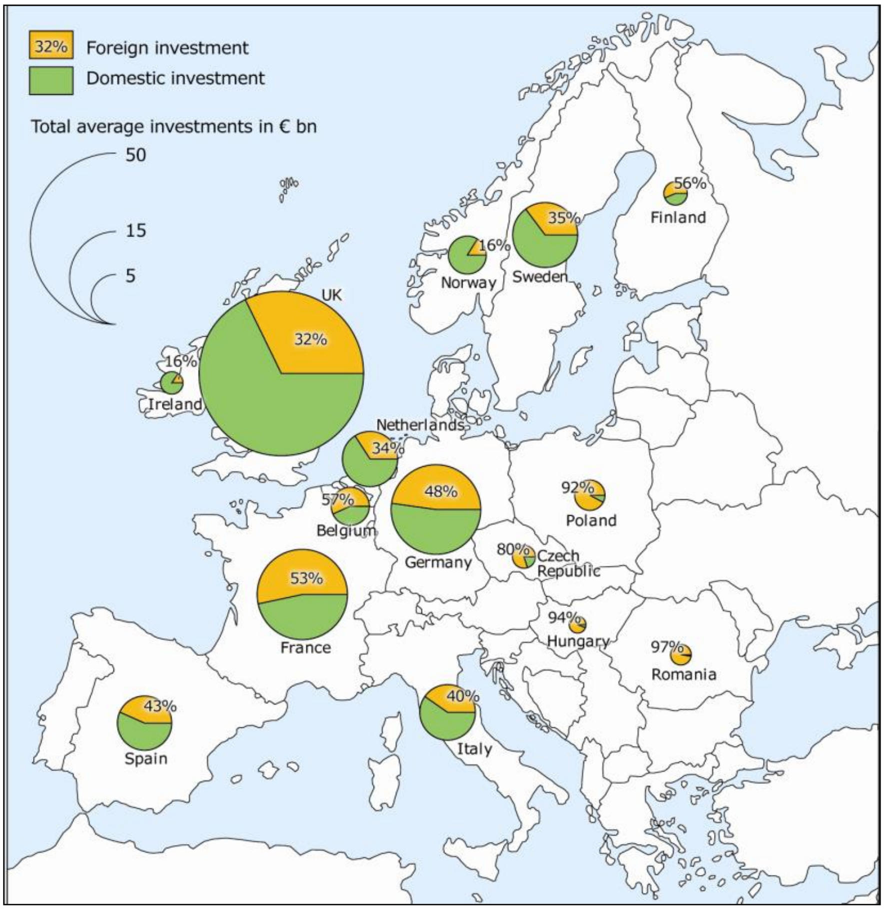
A multidimensional approach is essential to grasp the complexities of real estate markets. Inadequate acknowledgement of investor diversity leads to generalizations and oversimplifications, and may even prevent tailored policy development. For instance, the meta-category Spatial Scales of Operation underscores the diversity of investor reach, from local to international. However, this alone is not sufficient for profiling an investor. The meta-category Investment and Social Behaviour delves into diverse aspects like investors' ambitions, strategies, risk aversion, and relationships with policymakers. Conclusive insights emerge only when these various factors are combined.

C. (10 points). Elaborate, within 50-100 words, on the significance of real estate actors actively seeking and cultivating local relationships and expertise. Furthermore, provide one tangible example illustrating these efforts in the establishment of new markets, such as Build-to-Rent (BTR) or Purpose-Built Student Accommodation (PBSA).

Viewing real estate markets as socially constructed underscores the significance of local relationships and knowledge of context-specific rules and informal patterns of behaviour. This becomes crucial, for instance, when seeking partners for projects, establishing rapport with public sector decision-makers for planning permissions, or attempting to shape future policies aligned with one's objectives. An example is Greystar's venture into BTR in Amsterdam and London markets, as discussed in class. By initially delving into student housing, Greystar strategically learned about local intricacies and started collaborating with planners and mayors. This proactive engagement not only solidified BTR's role in the housing systems but also allowed them to influence governmental policies in their favour.

Question 2 – Comparison between international real estate markets (5 credits)

A. (5 points). Give your interpretation of the data presented in the Figure below - based on your knowledge of markets and institutional framework - by describing the similarities and differences between the given markets. *(50 - 200 words)*



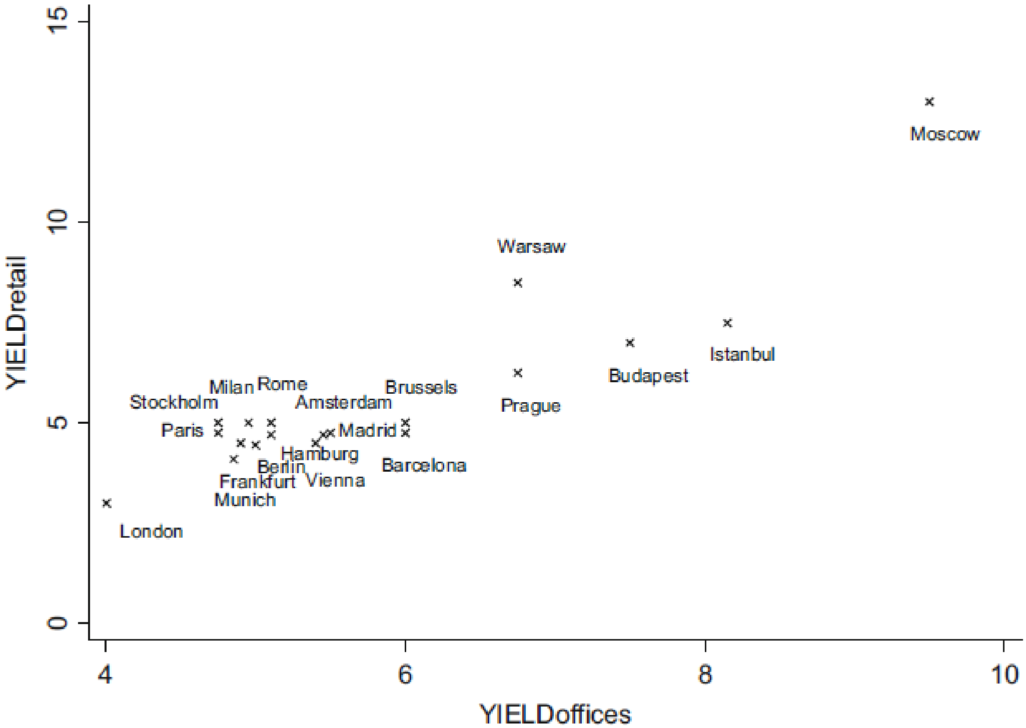
Note: Average annual real estate investments in Europe, 2000-2012.

Grading: The answer must include both 'size' and 'share' aspects as both are provided (1 point): -Size: Why countries vary in size of REI must be discussed. REI includes retail/office/industrial/unregulated housing investment by investors for income generating reasons. Explanation must include what an 'investment market' is: 'the distinction between user market and asset market for good quality CRE property'. 'Size of the market' relates also to demand for space which is local (2 points) – share of foreign-domestic is whom invests and relates to global capital markets. Note that %FDI is being associated with "the presence (or absence) of strong local investors active in the good quality CRE investment market." So in emerging markets little good quality property is available - and very few local institutional investors are active. (2 points). Note that homeownership is not included in any of these aspects of 'RE investments'.

Question 3 – Comparison between international real estate markets (10 credits)

Real estate development constitutes the development of new properties.

A. (10 points). Use the Graph on yields below to elicit differences in real estate development across cities (and clearly indicate which cities you are comparing). *(50 - 200 words)*



The graph does not provide any information on RED, and so that is why the questions asks how to elicit differences in RED.

First: students must realize that the YIELD (or rent-to-price ratio) is equal to the risk free interest rate, expected inflation, risk premium and expected rental growth rate.

To continue the argumentation students must realize that within the EU (interest rates are identical), and that within a country (expected inflation rates across cities are identical). So students must use Madrid-Barcelona or Munich-Hamburg-Frankfurt-Berlin in further considerations.

Then across cities within the country Yields vary because of differences in expected rental growth or risk premium. RED leads to lower expected rental growth and higher risk premia which both have an upward effect on yields.

Consequently –
Yield offices in Barcelona > Yield offices in Madrid and so RED in Barcelona is probably larger relative to demand compared to Madrid.

Grading: if answer does not touch on the question of how to elicit differences in real estate development across cities then max = 3. If yield drivers are discussed and link with RED correctly given then max = 7. If also cities in the same country are compared to come closest to a counterfactual/ceteris paribus, score= 10.

Question 4 – Roots and responses to the global housing affordability crisis (15 credits)

A. (5 points). Urbanization and housing supply restrictions are one of the root causes of the global housing affordability crisis as discussed by Saiz (2023).

Discuss, in 50-100 words, the vicious cycle of housing demand increases in urban areas caused by urbanization and how it relates to the housing affordability crisis.

From Saiz (2023): "Urban areas - with better amenities, access to education, and high skill better-paying jobs - have disproportionally attracted residential demand (Glaeser et al., 2001; Glaeser and Saiz, 2004). Several of them are in coastal or mountainous regions, which limits their potential for geographic expansion (Saiz, 2010). The high income-elasticity of demand for amenities, together with the fact that they grow endogenously in attractive areas (Guerrieri et al., 2013), generates a vicious cycle of ever-increasing concentration of housing demand. Consequently, this results in higher house prices and put housing affordability under pressure in urban areas."

*Only the first 100 words are assessed.

1 pts for explaining urbanization

3 pts for correctly and logically describing the vicious cycle of housing demand increases.

1 pts for explaining increasing demand and sluggish supply lead to higher prices leading to housing affordability issues.

B. (10 points). Short-term rentals are claimed to increase the issues of housing affordability worldwide. See below the framework of the bid-rent model including the bid-rent of high-income and low-income households. Describe, in 50-100 words, how the bid-rent line of short-term rentals would look like in the model below <u>and</u> explain how short-term rentals may influence housing affordability.

The bid-rent line of short-term rentals is even steeper than that of high-income households. As a result, short-term rentals initially only outbid high-income households that see themselves displaced out of the city center. Note that low income households were already outbidded by the high-income bidders in the initial scenario. Short-term rentals therefore decrease the housing supply for residential purposes which puts housing affordability under pressure.

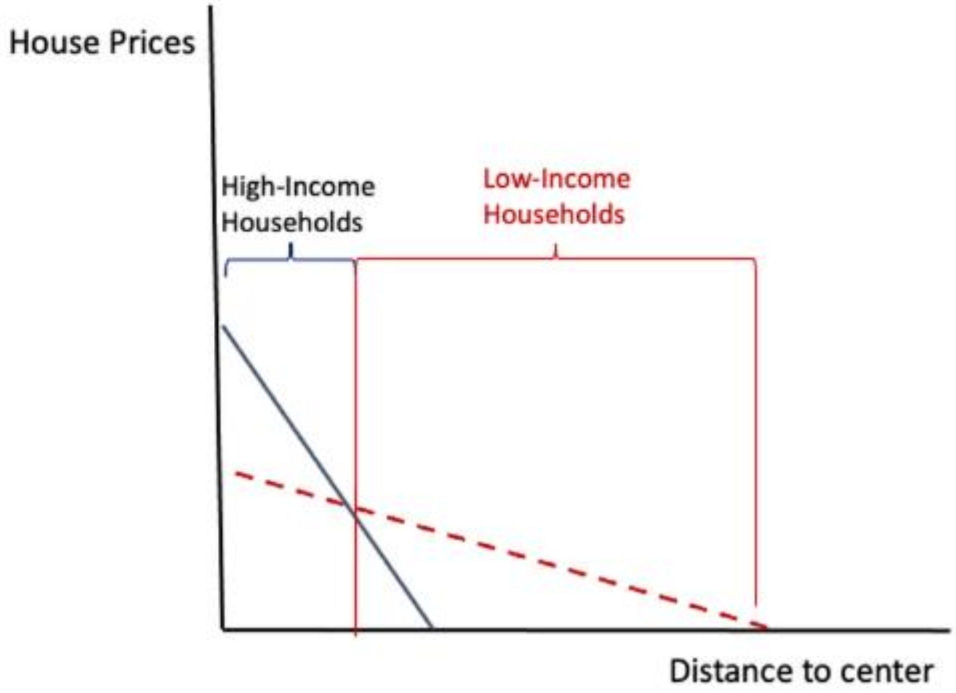
(Discussed in class)

*Only the first 100 words are assessed

5 pts for correctly describing the bid-rent line of short-term rentals

4 pts for correctly describing that short-term rentals – in a market with given supply and demand – decreases the residential housing stock (decreasing supply) and therefore leads to housing affordability issues (quite diverse answers that could result in 1, 2, 3, or full points depending on whether the arguments were consistent, detailed enough, and theoretically sound).

1 pt for correctly describing that only high-income households are initially displaced and nothing happens to the initial outcome of low-income households.


House Prices
High-Income
Households
Low-Income
Households
Distance to center

THE END!