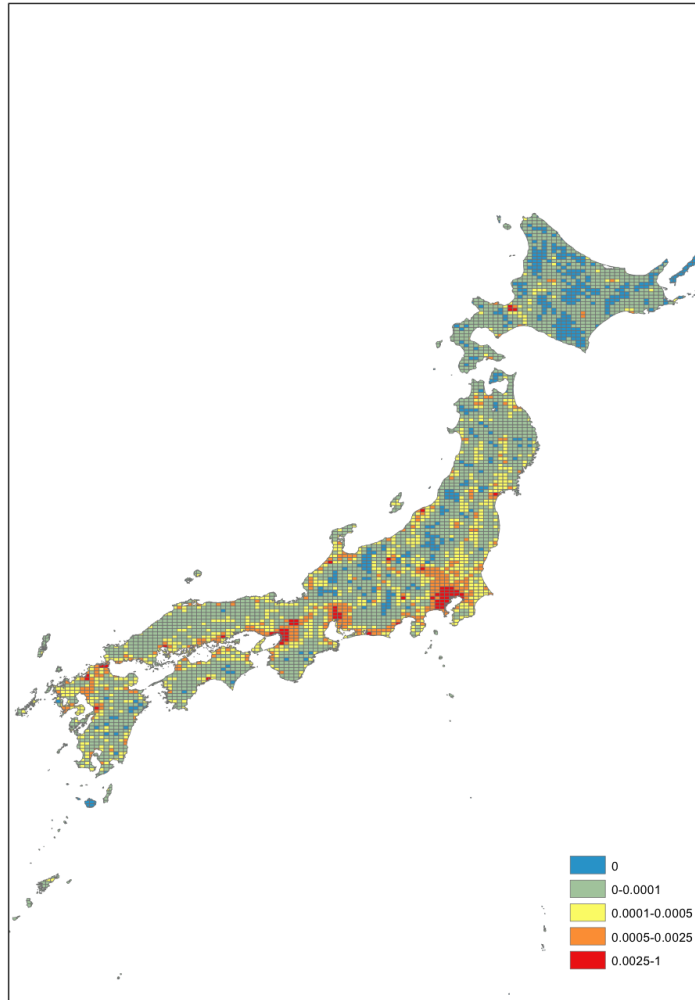


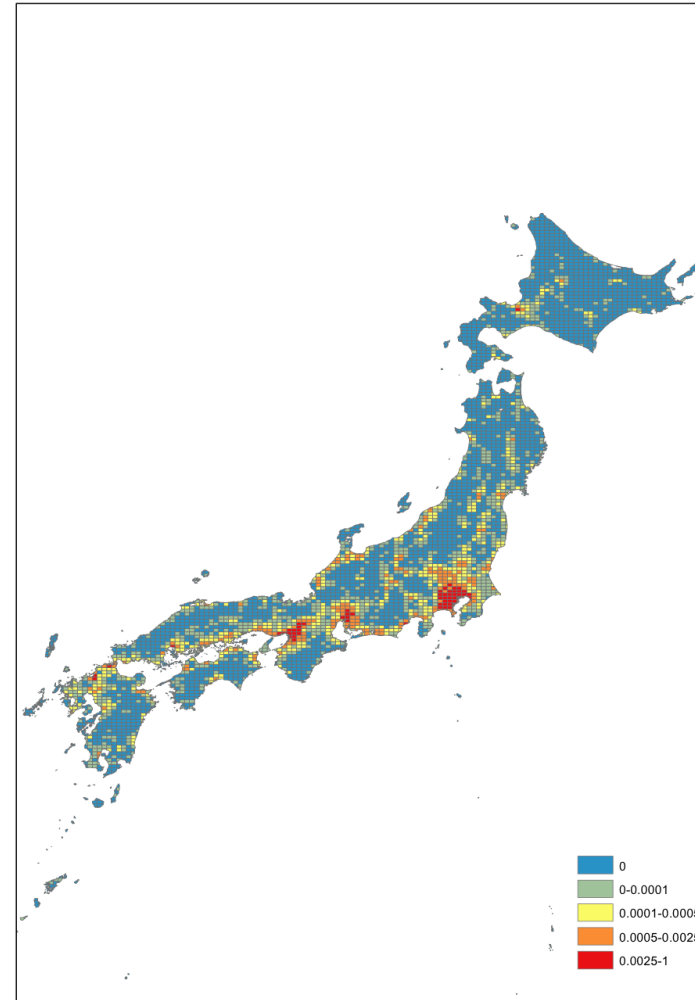
# Urban land use policy and agglomeration economies

Kentaro Nakajima (Hitotsubashi University)

# Clustering of the creative economy



Overall economic activities



Knowledge-creating activities

# Clustering of the creative economy

- Creative industries and startups tend to cluster geographically.
- Therefore, when considering startup policies, it is crucial to examine the mechanisms behind the clustering and devise urban policies that can leverage these mechanisms.
- Specifically, what mechanisms lead to the clustering of creative industries and startups?

# Agglomeration economies on innovative industries and start-ups

- Labor pooling
- Input sharing
- Knowledge spillovers

# Labor pooling | Matching

- In the specialized labor market, finding the best match for both workers and employers can be challenging.
- If the labor market has large pool of workers and employers achieve better matching.
  - A biotechnology company looking for molecular biology degree holders might find such workers in Tokyo, where there is a diverse pool of talent.
  - However, in rural areas, the availability of such specialized workers may be limited.
  - Conversely, for individuals with such degrees, searching job in Tokyo is better to find a better job opportunity.

# Input sharing

- Innovation clusters attract numerous companies, resulting in high demand for various outsourcing services.
  - Services such as advertising, legal assistance, logistics, and management consulting thrive in these areas.
- In non-clusters, there's no demand for such services, leading to the absence of these service industries.
- Companies in innovation hubs don't need to maintain these services in-house, providing advantages, especially for startups.
  - The frequent interaction necessitates proximity, making these services' presence particularly valuable in clusters.

# Venture Capitalists

- Geographical proximity is crucial in fundraising from venture capitalists.
- Close proximity enables easier provision of advice and monitoring, enhancing the likelihood of securing funding.
  - Proximity facilitates regular communication and fosters trust and confidence between entrepreneurs and investors.
- This importance extends beyond just service industries; relationships with venture capitalists are also vital.

# Knowledge spillovers

- Learning from others' knowledge and engaging in discussions with highly skilled individuals are crucial for innovation and the invention of new technologies.
- Proximity is crucial for these interactions to occur effectively.
- Locations with superstars or a high concentration of talented researchers (workers) become attractive for innovation and technological advancement.

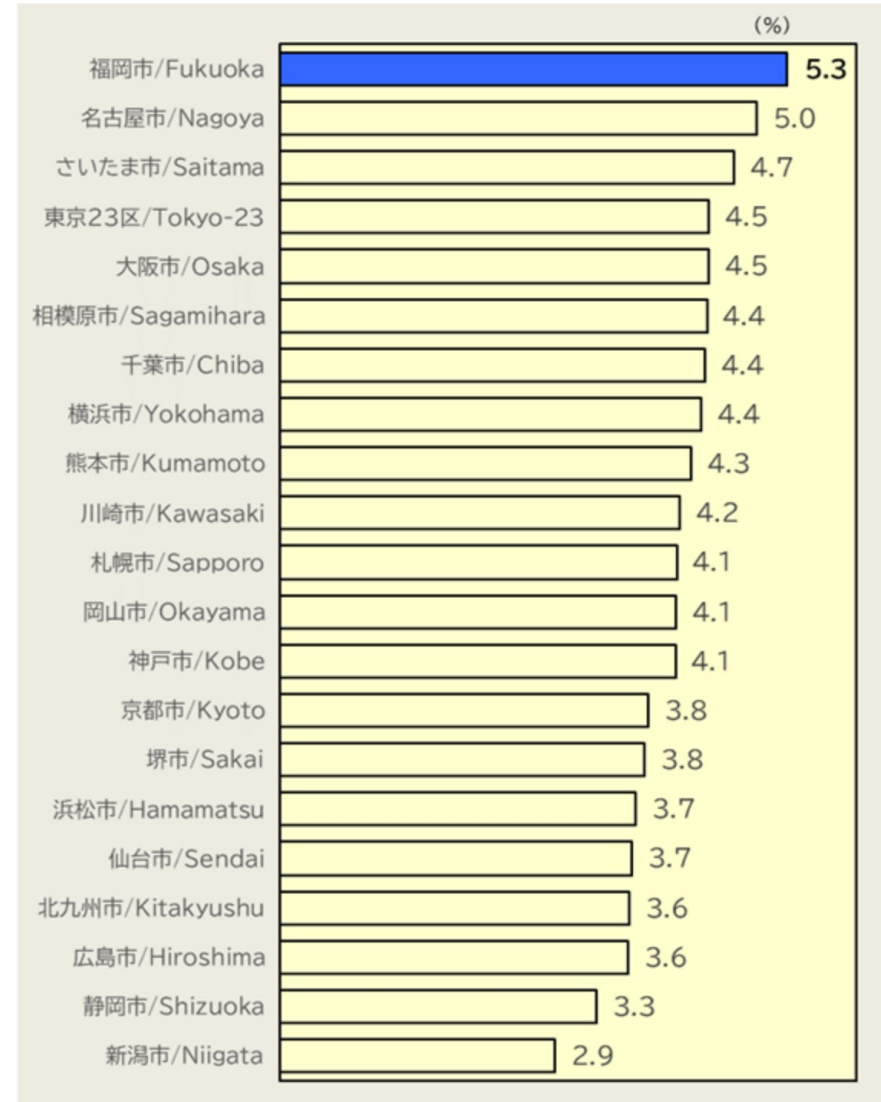


# Agglomeration economies vs. congestion

- Considering the presence of agglomeration economies, it is desirable to supply large floor areas in city centers, further densifying urban areas.
- However, this could lead to significant congestion, posing drawbacks.
- To alleviate congestion, many cities implement regulations on land development.
  - Floor–area ratio (FAR)
- In considering appropriate urban policies for fostering startups, managing floor areas in the city center is crucial.
  - It is essential to measure the costs of regulations.

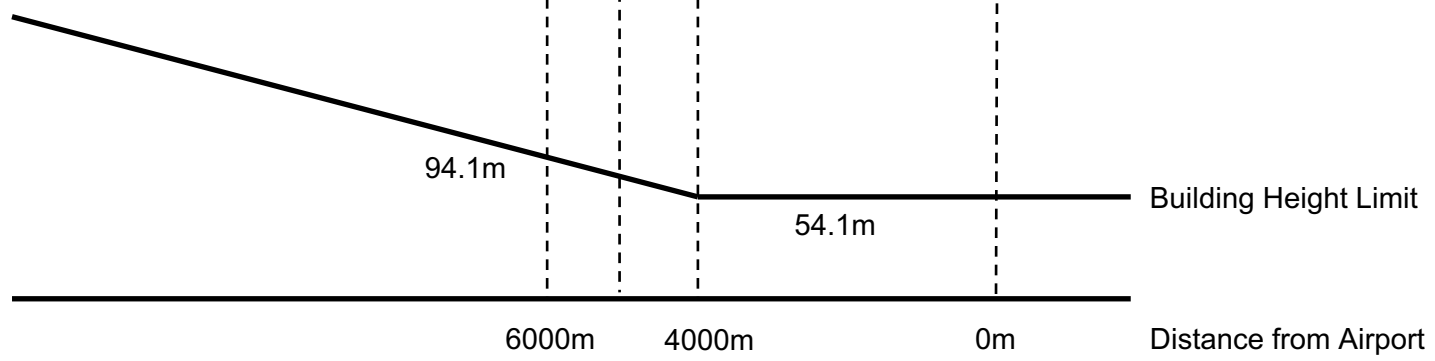
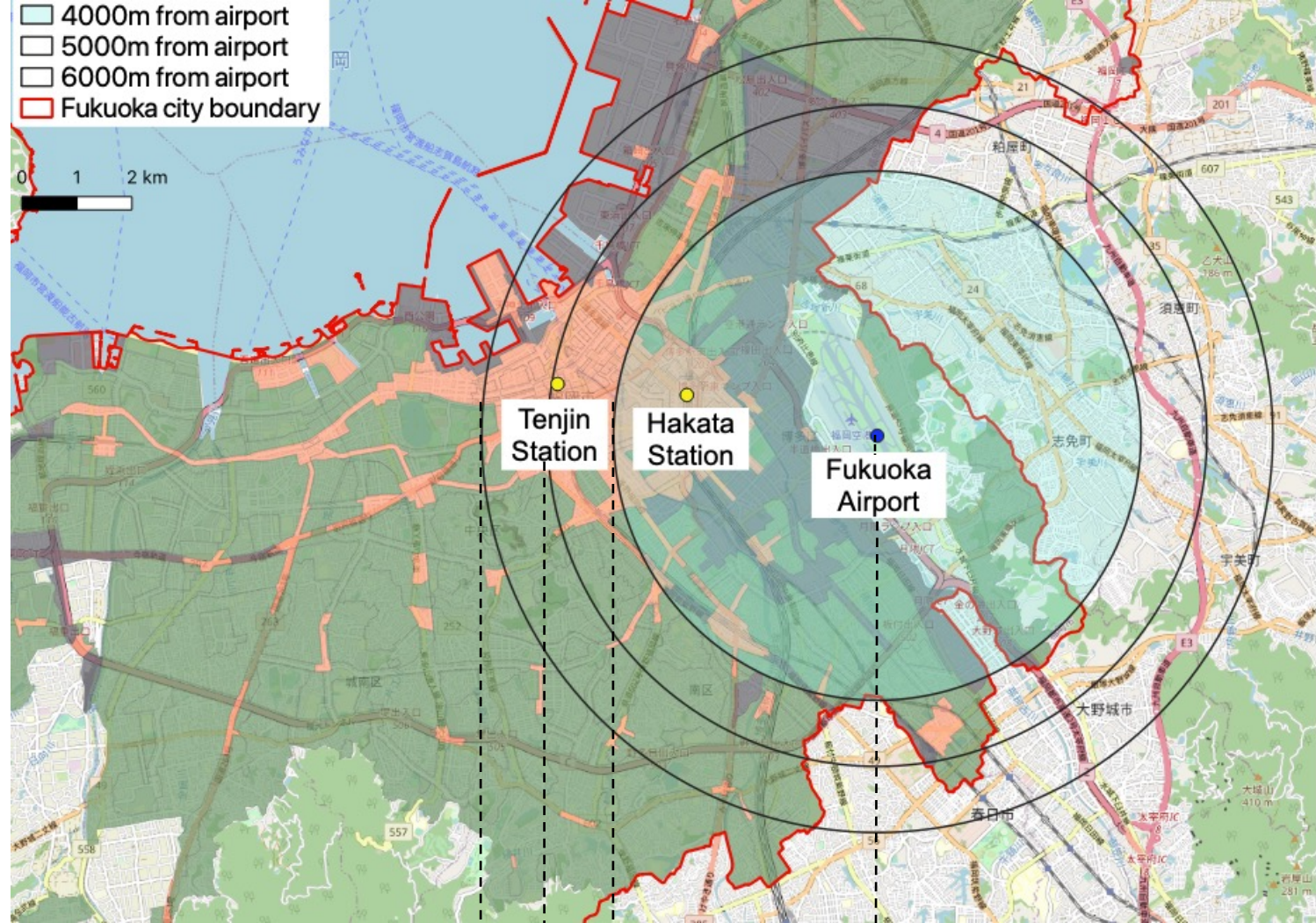
# The case of Fukuoka City

- The fifth largest city in Japan
- The city with the highest startup rate in Japan.



# Low developed land in Fukuoka

- Fukuoka Airport is located close to the urban area (3000m from the central station).
- Regulations imposed by the Aviation Law significantly limit the height of buildings in the city center.
- Providing adequate floor space in the city center is difficult as a result.





# Hakata Station Area





# The view from Hakata Station





# Kobe city | similarly populated city



# Low developed land in Fukuoka

	Fukuoka	Kobe
No. buildings taller than 60m	27	87
No. buildings taller than 150m	1 (far from CBD)	6 (in the CBD)

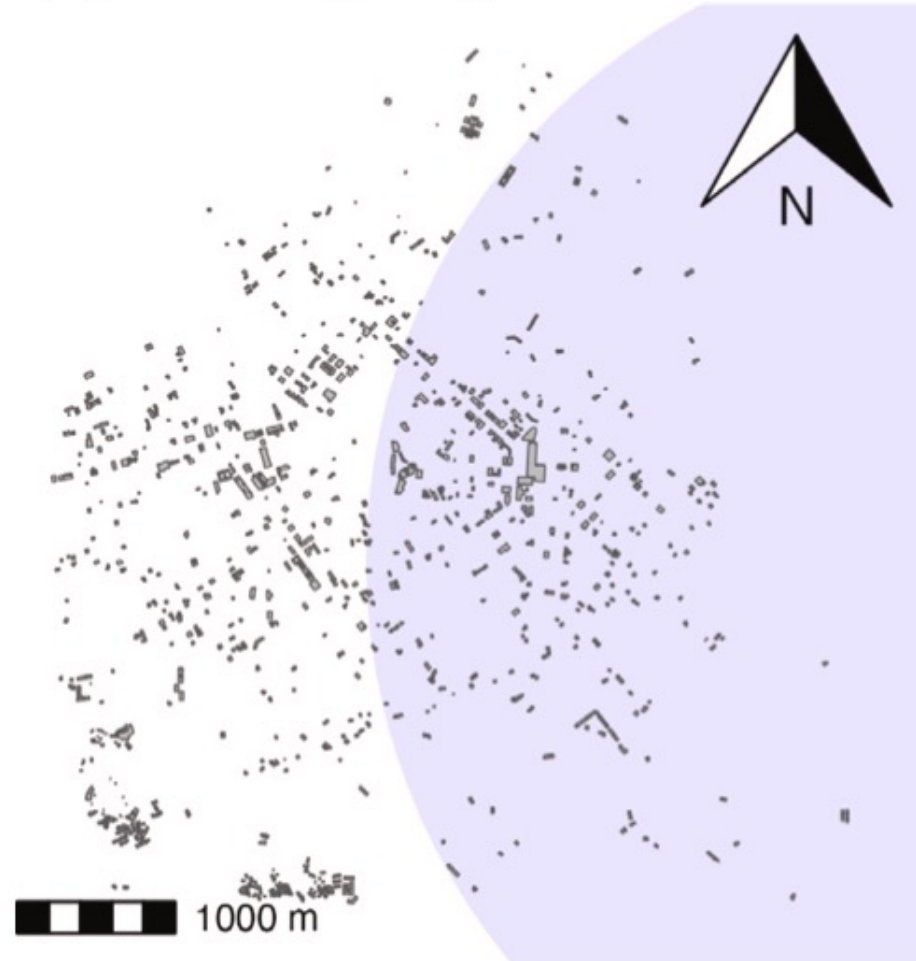


# Low developed land in Fukuoka

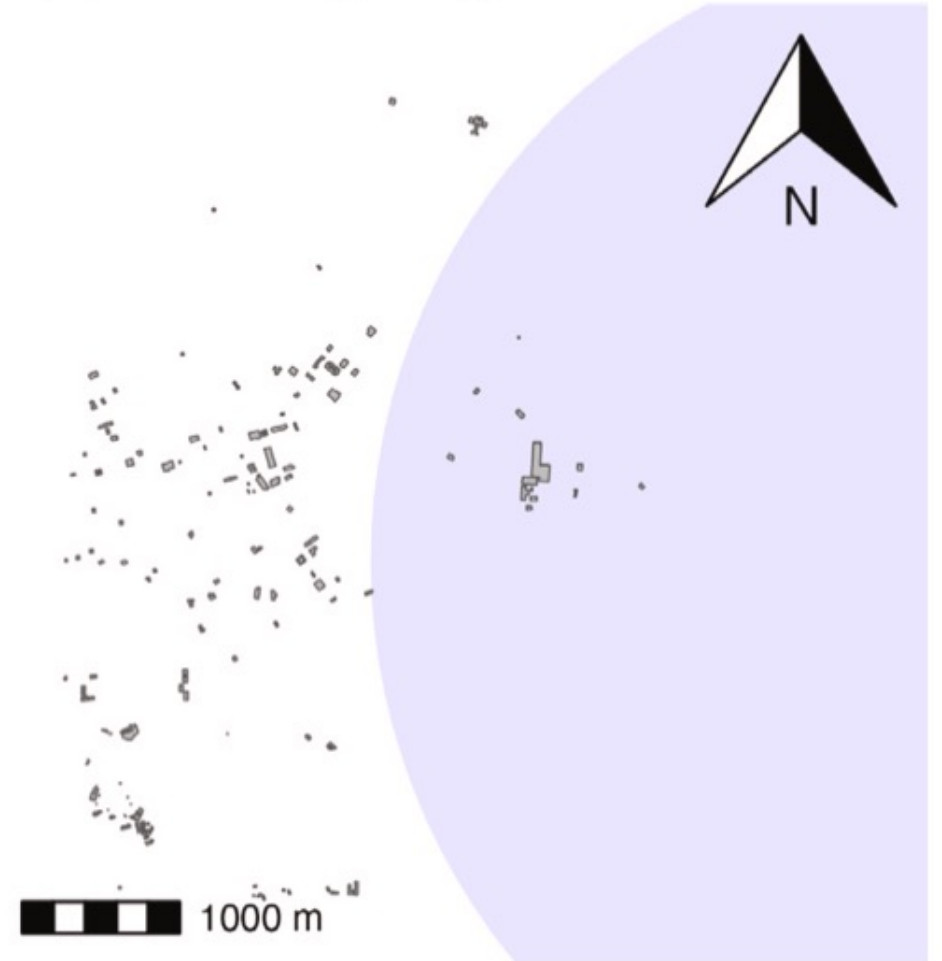
- How much is this strict building height regulation diminishing the value of the land?
- We conducted an analysis focusing on areas where regulations are being relaxed.

# Building heights in the city center

(A) Buildings higher than 45 m

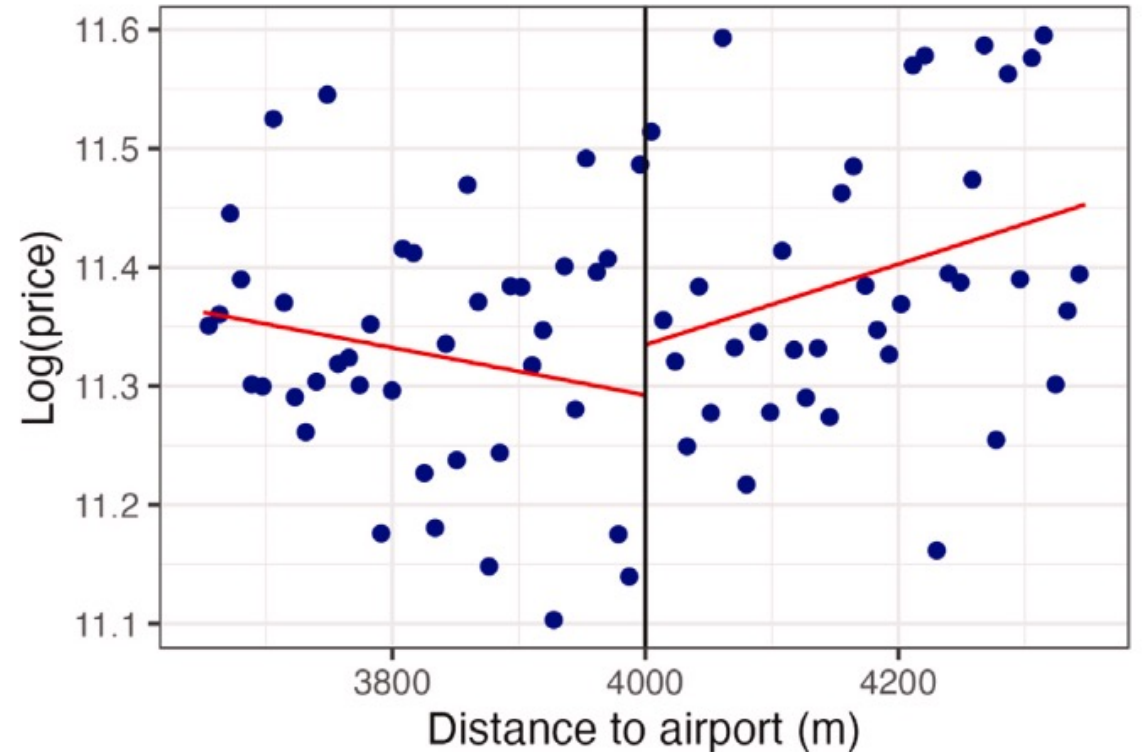
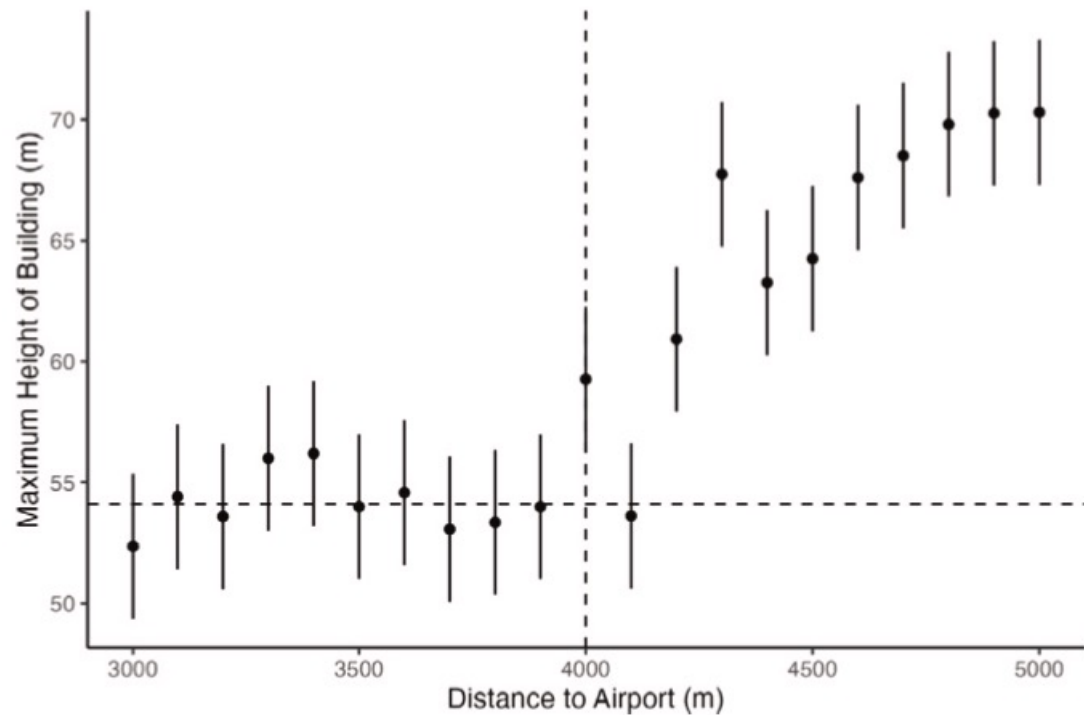


(B) Buildings higher than 55 m



# Building height and land price at the boundary

(B) Excluding deregulated buildings after 2014



- Building height increases outside the boundary
- Land price also increases outside the boundary
  - Those suggest the value of land development in the city center

# Effect of the regulation

- 1% relaxation of building height limits increases land price by 0.93–1.32%
- This suggests the importance of agglomeration economies
  - The relaxation of regulations generates value that exceeds the increase in floor area and subsequent rent.

# Summary

- Creative industries and startups tend to cluster geographically by the agglomeration economies.
- To leverage agglomeration economies, it's crucial to adequately supply floor space in city centers.
  - At least for Fukuoka City, regulations were impairing agglomeration economies.
    - There is currently a large-scale relaxation of regulations underway, with high-rise buildings being constructed one after another.
- Estimating the costs and benefits of urban policy is crucial for better startup policy