

# Spatial Equilibrium – There Will Always be Rent



Is the payment of rent voluntary, or is it coerced? The answer today is a little bit of both. After all, one can always live rent-free in the wilderness. But then there would be no access to jobs, healthcare, nightclubs, places of worship, and much more.

Why are the rents so high in places where many people want to live? Why do the best sites have the highest rents of all?

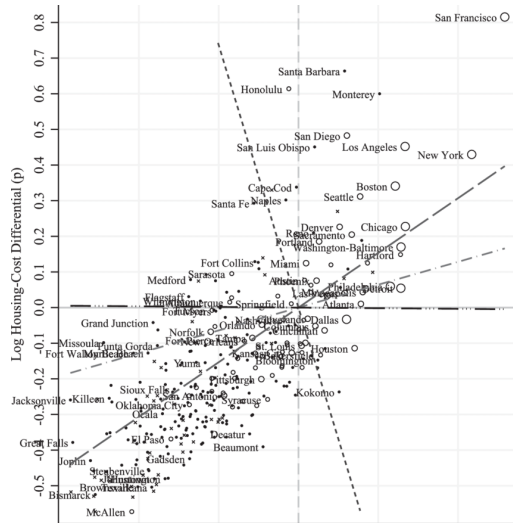
People without an economic background attribute this to “evil landlords,” but it can be no other way.

The economic principle behind rent is called “spatial equilibrium.” It assumes complete mobility of the workforce. People are far less mobile today than they will be with the [Earth Dividend](#). Unfortunately, that means rents in the best places will be even worse.

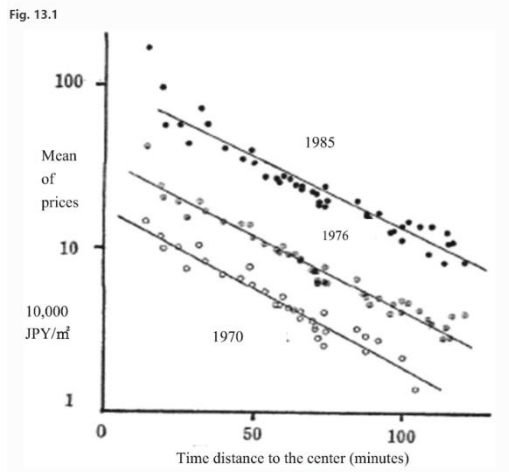
However, spatial equilibrium also assumes identical tastes. Tastes in [land-based capitalism](#) are expected to be far more diverse than they are today. Perhaps the extra mobility will be countered by the increased diversity, and the two effects on rent will cancel each other out. For more discussion on both mobility and diversity, see [The Tiebout Hypothesis](#).

Spatial equilibrium holds that every person gets the same utility from where they live. Utility means benefit minus cost (net benefit). The higher the benefit, the higher the cost. Whatever the benefit and the cost, the difference is always the same. The cost of land is rent. This is technically true whether it is payments to a landlord, mortgage payments plus property taxes, or [ground rent](#) voluntarily paid to the [commons trust](#).

How can benefit be measured? There are many variables, but two stand out as significant. They are wages and transportation savings.



Research done by [Dr. David Albouy](#) shows housing costs versus wage levels in metropolitan areas in the year 2000. Although variables like house size, transportation savings, and climate might skew the graph, the relationship between wage level and the log of housing costs is relatively linear. This is consistent with the simplified spatial equilibrium model where benefit - rent = some constant. In his law of rent, David Ricardo called that constant the productivity of marginal land.



This graph shows land prices as a function of [commute time from the center of Tokyo](#) for three different years. Notice how the benefits of being in the Tokyo metropolitan area increased consistently over those years, as did costs for all distances.

The gradient curve in the west of Tokyo from Kasivadani (1987)

The longer the commute from the central business district, the greater the opportunity and actual commuting costs. Rents are lower to compensate.

Why is benefit minus cost equal to some constant? Because people seek to maximize their utility, regardless of how they recognize benefits and feel costs. Given perfect mobility (snap your fingers and your house, your job, and all your possessions will be transferred to Waikiki), people will move to their favorite place until the cost of living, particularly the cost of rent, exceeds the benefit. Just as rents must rise in the cities they seek, rents must fall in the cities they leave. In economics, this is called the law of supply and demand.

In the long run, supply adapts to demand. City housing grows denser and taller to accommodate the inflow of people. One might guess that this accommodation of supply to demand would bring rents down. Not so. Urban pioneer [Jane Jacobs](#) has written extensively on the many benefits of urban density. Benefit minus cost equals some constant. Benefits go up, rents go up.

In a land-based capitalist system, ground rent is entirely voluntary. Does that mean spatial equilibrium will no longer apply?

It is argued that everyone will work from home one day, and everything can be ordered online. Robots will build houses, and robots will make deliveries. The programs that control these robots will be written from the comfort of our own homes. The energy powering the robots will come from the sun and the wind.

What about the land where robots mine for rare metals to build more robots? Some mining locations are better than others. Perhaps one mining location is stellar. What is the rent that people will pay for that mining location? Considering the margins, it is probably an astronomical amount.

And robots, particularly those powered by the sun and the wind, take time to make deliveries. And in some locations, there is no sun or wind. The closer to the warehouse, the faster the deliveries. How much rent would be paid to live where all deliveries are made in five minutes on an automated supply chain versus five hours or even five days? Suppose something breaks down in the VR pod. How long will it take a repair robot to arrive?

In reality, some people need beaches, some mountains, some forests. Some people need nightclubs, sporting arenas, and the city's hustle. Most people need to sit down with friends at a good restaurant or get together in person for cards, bowling, sports, or sex.

With robots doing all manual labor, the wealth of such a society under land-based capitalism would be enormous. Who would hesitate to spend a little of that wealth to live near the ones they like and love, to live near the places they want to go, to live near a surprise stranger who will capture their heart?

With the elimination of all taxes and the liberation of both land and content, location value will become the premier purchase if it is not already. Spatial equilibrium will become the most critical economic equilibrium as companies vie for [hostile takeovers](#) and people vie to live along rapid supply chains, transportation networks, and with others.

Since before recorded history, humans have sought to increase their control over time and space. Less space between (shorter distances) increases time saved. The longer the radius, the more area available at the circumference. This is physics and geometry. Unless human nature changes radically:

## There Will Always Be Rent!

Readers who want an alternate, more technical interpretation of spatial equilibrium should check out [Land Value as a Fluid](#).

I'll end with a simple example of spatial equilibrium at a very microeconomic level.

Suppose a huge apartment building has a 24-hour convenience store in the lobby. A resident can take the elevator down at 2 am, in their stocking feet, in the middle of a blizzard, and buy a pizza, soft drink, and a candy bar. The total cost is about two dollars more than the now-closed grocery store three blocks away.

But if the total cost were five dollars more than the grocery store, this resident would still buy the pizza, soft drink, and candy bar at 2 am. The difference between what the convenience store charges (\$2 extra) and what a particular customer is willing to pay (\$5 extra) is called consumer surplus by economists.

Economists would say the consumer surplus in the example above is three dollars. That is false. The resident paid a higher rent to live in a building with a 24-hour convenience store. Depending on how often the resident took advantage of the store, there might not be a surplus.

Conversely, the convenience store charges two dollars more than the grocery store. Some might call this profit or the storekeeper's wages. That, too, might be false. The convenience store pays (or would pay in a free market) a high rent for space in the apartment building. The convenience store must do extra business to meet the higher rent.

If the convenience store consistently does better business, the rent will rise. The same is true for residents. If residents always use the convenience store, apartment rents will also rise. There is an increased demand for people to live in the building and for convenience store owners to sell in the building.