AEB 3103 Principles of Food and Resource Economics

Module 5: Price controls, quotas, and taxes

Remember the invisible hand theorem: "Spontaneous market players making self-interested decisions will collectively achieve the most efficient allocation of resources."

Corollary 1 to the theorem: When government tries to "micro-manage" a well-functioning market using their visible hands, it often make things worse.

How can government intervene market transactions?

- Price controls
 - ▶ The price of gas cannot be higher than \$3/gallon
 - ▶ The price received for corn cannot be lower than \$5/bushel
 - ► The monthly rent of thou apartment shalt not increase by more than 1.5% per year
 - Price of essential goods and services should not grossly exceed the average price within the last 30 days
 - ▶ The minimum hourly wage shall not be below \$7.25

- Quotas
 - ► The number of taxi medallions in New York shall not exceed 13,587
 - ► The area of new residential development land shall not exceed 1,000 acres next year

But is it really a bad idea to control price?

Housing price index (Case-Shiller) for Gainesville FL: https://fred.stlouisfed.org/series/ATNHPIUS23540Q

Renter price index for Gainesville FL: https://www.zumper.com/rent-research/gainesville-fl

(Causal estimate of) Median income at age 35: https://www.opportunityatlas.org/

- ► Household median income: \$38,000 (2020)

- ► Average rent for a two-bedroom apartment: \$16,800 + utilities

- ▶ What is the implied housing burden?

How do we thinking about the current housing crisis?

- ► Housing affordability: does that lower the cost of housing on average?
- Housing equity: do low-income people actually get the rent-stabilized units?
- ► Housing quality: are the apartments actually livable?
 - ▶ Free of cockroach, trash piling, and broken dish washers
- Moveability: how difficult is it to find housing?

How does Gainesville rank in the above three categories (with a scale of 1-10)

Different ways of rent stablization

One quick way of fixing this problem: rent control - limiting the amount of rent that the landlord can charge the tenants.

- ▶ If we just limit how much the landlord can charge people, that will surely solve the problem!
- ▶ 7 States have rent-control laws (with MA discussing). 37 states explicitly bans rent control laws

Different forms of rent control

- ▶ Rent freeze: no increase in rent
- Strict control: limited rent increase passed along to new tenants
- ► Tenancy decontrol: limited rent increase within tenancy; new tenants can be charged at market rate

"Landlords cannot be allowed to raise rents to whatever they want, whenever they want. We need national rent control." — Bernie Sanders

"Rent control is one of many tools that local jurisdictions can use to promote access to affordable housing." — Pete Buttigieg

"It's time that we stop commodifying the housing market because it is not a speculative investment, it is a basic right for all Americans."

Alexandria Ocasio-Cortez

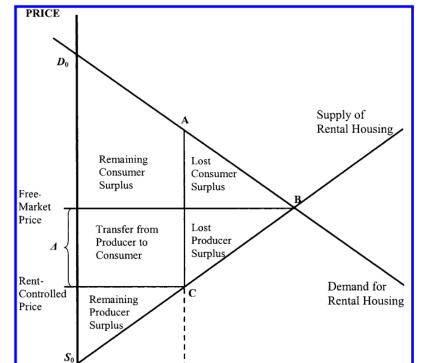
Discuss with your peers:

If Gainesville enacted a rent control policy starting of today, within the next 10 years what will happen to:

- Housing affordability
- ► Housing equity
- Housing quality
- Housing moveability

The Economics of Rent Control

The simpler version



But rent control also have other problems:

What will landlords do with the property if they are only receiving \$500/month for an apartment with a market rent of \$1200?

- ▶ If the toilet/ceiling is leaking?
- ▶ If the dishwasher is 30 years old?
- If there is cockroach everywhere?

Why isn't the landlord afraid of the tenants moving out/write bad reviews?

Rent-stabilization makes it harder to find housing

- ► The waitlist for rent-stablized apartments is sometimes decades long, because:
 - No one wants to move out
- ▶ On average, renters spend more time looking for housing
 - Opportunity costs
- Under rent control, people usually get apartments through luck or personal connections.

Can low-income households actually get those rent-stabilized apartments?

Price controls leads to misallocation of apartments: people who badly need a place to live may not find one, but some apartments may be occupied by people with much less urgent needs.

The Perfect Rent-Controlled Apartment

A retired actor found what he thought was an ideal place to live in Greenwich Village in 1955, for \$90 a month. He never left.









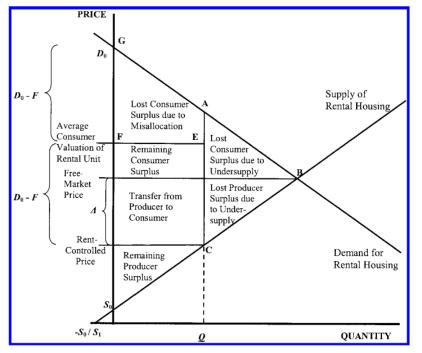


FIGURE 2. THE WELFARE LOSSES FROM RENT CONTROL WHEN APARTMENTS ARE RANDOMLY

Rent Stablization creates black markets (and corruption)

- A black market is a market in which goods or services are bought and sold illegally—either because they are prohibited or because the equilibrium price is illegal.
- Some tenants are willing to bribe landlords.
- ▶ Black markets encourage disrespect for the law in general and worsens the position of those who are honest.
- ▶ Black markets can diminish some of the inefficiencies, but in the end, society as a whole is made worse.

And other types of problems

WARREN DEMOCRATS

ABOUT

NEWS

ENDORSEMENTS

TAKE ACTION

SHOP

Search Q

Most cities and towns in America allow "no fault" or "no cause" evictions, in which landlords can evict renters for **no reason at all, even if they haven't fallen behind on rent or violated a single lease provision**. In other jurisdictions, landlords can refuse to renew leases for any reason at all, including to **retaliate against tenants** who organize or to **flip homes** families have lived in for decades into luxury housing, or they can add **pass through fees** on top of rent. And in other cases, landlords will make homes so unlivable - for example, by **shutting off heat** in the winter or **neglecting repair requests** - that tenants are "**constructively evicted**" and have no choice but to leave. In **Reno**, where there are only 21 affordable housing units per 100 extremely low-income residents, the unjust eviction rate climbed by 300% from 2002 to 2017.

Amending rent controls: do these work?

- ▶ Inflation-adjusted rates: rent increases with CPI + X% (7% in Oregon, 2% in Boston)
- ► New unit exemption: newly-built units are usually exempt from rent control for at least 5 years
- Luxury exemption: if monthly rent is above a certain threshold, it is off the rent stabilization list.
- Means testing: before moving into a rent-stabilized unit, the government verifies if the tenant satisfies a certain income requirement

In-class exercise:

Suppose that the demand curve for taxi rides is P=10 - 2Q. The supply curve for taxi rides is P=0.5Q.

- 1. If the government imposes a price ceiling of \$4, what is the deadweight loss in this case?
- 2. If the government imposes a price ceiling of \$1, what is the deadweight loss in this case?

So why price controls?

- ► They do benefit some people (who are typically better organized and more vocal than those who are harmed by them).
- ▶ If the price ceiling has been in effect for a long time, buyers may not have a realistic idea of what would happen without it.
- Government officials often do not understand supply and demand analysis.

An extreme example

- Venezuela sets price controls for food, oil, housing, etc.
- ▶ When oil prices were high, President Chavez was able to subsidize price ceiling through imports
- When oil price collapse, shortage started
 - Long lines in front of stores, hunger, hyperinflation on the black market

Venezuela Has Run Out of Toilet Paper







- ▶ Maduro announced in 2014 that due to the shortage of steel, abandoned cars and other vehicles would be acquired by the government and melted to provide rebar for housing.
- ▶ In April 2014, Maduro ruled by decree that Venezuelans who owned three or more rental properties would be forced by the
- government to sell their rental units at a set price or they would face fines or have their property possessed by the government.

▶ By 2016, residents of government-provided housing, who were usually supporters of the government, began protesting due to

the lack of utilities and food.

Price Floors

Sometimes governments intervene to push market prices up instead of down.

- Price support for agricultural products
- Minimum wage

That creates a surplus: too much production, too little demand

Problems with price floors

- Encouraging waste.
 - ► To deal with the surplus generated by dairy price floors, the U.S. government sometimes buys back the excess and donates or destroys it.
- Misallocate sales, keeps high-cost firms and discourages low-cost firms
 - Regulated US airlines business prevents low-cost airlines from entering
- Insufficiently high quality



Graphing price floors

Quotas

- Government dictates a fixed amount of quantity for a particular good
 - Often in the form of permits
 - Transferable quota: those permits can be bought and sold on a market place
- Example: The number of taxi medallions in New York shall not exceed 13,587



Let's first think about the non-transferable case

If the city of New York issues a fixed amount (that is fewer than an open-market equilibrium) of non-transferable permits:

- 1. What does that say about the profitability of driving a cab?
- 2. Who will eventually get the permit?
- 3. At what "price"?
- 4. Who will be drive the cabs?

New York's Medallion Market

- ► Transferable via sale/auction
- ▶ Individual operators + medallion-holding companies
 - Lease off medallions to cab drivers for a fee
 - Medallion mortgage/finance

This means that medallion is an asset that generate economic rents

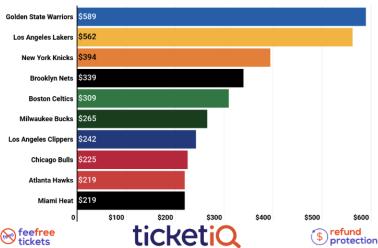
Just like stock, housing, or any other assets

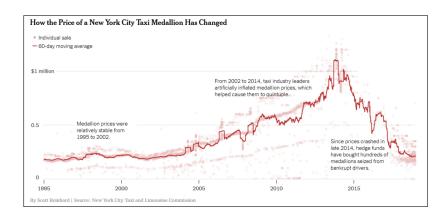
Scarcity rent

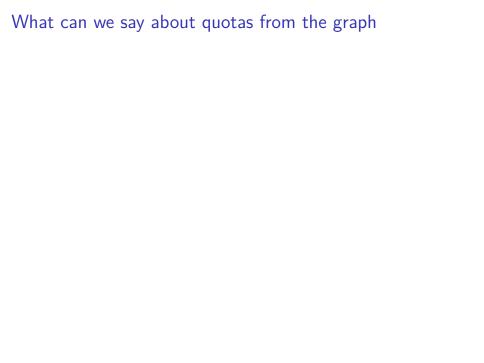
- Price signal reflects the scarcity of the underlying asset
 - Scarcity rent is the difference between production cost and the market price
- ► Capping the number of permit creates economic scarcity
 - i.e. A Taylor Swift concert ticket is priced way above cost of renting the stadium, etc.
- ▶ The amount of scarcity rent reflects the underlying scarcity

2021-22 NBA Tickets: Top 10 Most Expensive Teams

Based On Secondary Market Average List Price







- Quotas create deadweight loss, decrease social welfare
 Price of the underlying asset reflects the scarcity of the
 - regulated good

▶ Non-transferable quota create allocational inefficiency