## **Rent Control (Price Ceiling)**

Econ 201/Haworth

## Does a rent control make us better off?

When imposing any type of government-based policy, we should always ask whether this policy makes us better off. This handout shows how we might do that.

First, what direct effect does rent control have on a market like rental housing? To answer that question, let's start with the following assumptions:

- 1. our market will be the market for 2 bedroom rental apartments in Metro Louisville
- 2. for simplicity, let's say that the only type of apartments in Metro Louisville are 2 bedroom apartments (and that they are basically all identical)
- the price of rental apartments is the monthly rent, which we'll assume is \$600 per month (i.e. P\* = \$600)
- 4. the quantity here is the number of 2 bedroom apartments in Metro Louisville, and we'll assume there are 10,000 units in Metro Louisville (i.e. Q\* = 10,000)
- 5. there are also rental houses, but they are a substitute good for 2 bedroom apartments

Suppose Metro Louisville government decides to impose a rent control of \$500 per month on 2 bedroom apartments. The effect of this policy is illustrated on the graph below.



The graph shows us that if a price ceiling (PC) is set below the equilibrium price ( $P^*$ ), then there will be a shortage because the resulting quantity demanded ( $Q_D$ ) will increase and become

greater than the resulting quantity supplied ( $Q_s$ ). This is a standard result for any price ceiling set below the equilibrium price, because the ceiling prevents the price from occurring at the equilibrium (where  $Q_D = Q_s$ ). Let's say that the post-rent control quantity demanded is 15,000 units, and the post-rent control quantity supplied is 9,000 units. This means we have a 6,000 unit shortage (i.e. we need 6,000 more 2 bedroom apartments to satisfy demand).

## Does this policy make us better off?

To answer this question, we must define what we mean by better off. Our definition must comply, however, with these 2 concerns:

- 1. Our measure of better off should account for both the positive (e.g. benefit) and negative (e.g. cost) effects of this policy. E.g., policies that simply lower a price are only looking at benefit, and don't account for other effects like fewer units being sold.
- 2. Our measure of better off should be something we can measure. E.g., if I claim that I'm better off because I'm happier, that definition isn't good because "happy" isn't something we can easily measure. If we can't measure the effect of a policy, then it's harder to determine whether we're better off or not.

We do have an example where we've talked about becoming better off. When working with the PPC model, the concept of better off was brought into the discussion of comparative advantage and defined as countries being able to consume more of one good, but no less of the other good. I.e., we could consume more of something without incurring a cost.

Here, we don't have enough tools in hand that allow us to answer this question of "better off?", but we can at least describe what this policy has done and do so from the perspective of how society would view this situation. Then, when those tools become available, we can apply them to a situation like this and attempt to answer this question.

Since better off suggests greater net benefit, let's consider the benefits and costs of this policy.

**Benefit:** the benefit derived from this rent control relates to the fact that renters will save money from paying lower rent. Rent has decreased from \$600 to \$500 (using our numbers from above), so renters save \$100 per month. Note that the quantity of units supplied in Louisville also decreases from 10,000 to 9,000 (again, using our numbers from above). Prior to the rent control, renters spent \$60,000 per month on apartments overall, and after the rent control, renters spend \$45,000. We have to be careful, however, in saying that renters save \$15,000 overall, because although the price is lower, there are also 1,000 fewer renters.

**Cost:** when we say cost here, we are actually talking about the negative aspects of this policy. There are 2 negative things to discuss. First, as noted, the quantity of units has decreased from 10,000 to 9,000, so there are 1,000 fewer 2 bedroom apartments being rented in Louisville. Therefore, while the renters who don't lose their apartment pay less rent, the renters who do lose their apartment are clearly worse off, because now they need to find alternative accommodations.

The idea of people losing their apartment in this situation is understandably difficult to envision. Why would a landlord kick someone out and leave an apartment vacant? Generally speaking, this happens because it's not worth the landlord's time and effort to keep someone in the apartment. Perhaps the landlord decides to use some of their vacant apartments for storage. Maybe landlords are simply not putting people in newly vacant apartments. Note that even if there is no reduction at all in the quantity supplied (e.g. if the Supply curve is vertical), there will certainly be an increase in quantity demanded and a shortage would still arise.

We could also argue that the people who make up our shortage, the people out there looking for an apartment, but not finding one, are definitely also worse off. In a normal market setting, if you're willing to pay the current price, then the time and effort you put into looking for something like an apartment will pay off in terms of finding an apartment. I.e., everyone who wants an apartment and can pay that rent will get an apartment. In the rent control setting this is not true, there are people who are willing to pay \$500 per month and they get nothing. Those people would also be worse off.

## The effect of rent control over time.

Lastly, we must ask how this rent control affects growth within the industry as well as related markets. In a normal market setting, as people move into an area, demand increases because the number of demanders increases. Increases in demand put pressure on prices to rise, which increases the incentive to build new apartments (due to higher expected profits).

What happens in a market with rent control? As people move into an area, there is still growth in demand, but because the rent control prevents prices from rising, there is no incentive to build new apartments. The demand curve will shift right, but the supply curve does not shift over time. If suppliers exit the market, then supply could actually decrease over the long run. This suggests that the shortage we observe above may only get worse.

If the shortage of apartments in Louisville continues, then that shortage could also possibly raise the price of substitute goods. E.g., rental houses, which are not affected by this rent control, would be more expensive. Similarly, we might expect owner-occupied housing prices to increase (i.e. it'd be more expensive to buy a house).

In other words, over an extended period of time, we could possibly observe this rent control leading to a continuation of negative effects that at least conceptually cause us to question whether this policy makes us better off.