

T 15 RENT CONTROL

1. Maximum prices and rent ceilings.

A maximum price is a price set *below* P^e and enforced by legal penalties. Maximum prices are also referred to as price ceilings. Rent control is an example of a maximum price; it is illegal to charge tenants rents higher than the rent ceiling. Rent controls were introduced in 1942 as part of national price and wage controls. Although many US and foreign cities have rent controls the most studied example is New York.

2. Rent control.

Rent control is very complicated and requires a large, and expensive, bureaucracy to oversee the system. Rent control is essentially a form of central planning - originally at the Federal level, then the state level, and now at the city level - which sets a price with little reference to market conditions. New York has both rent control (about 60,000 apartments) and rent stabilization (about 1,000,000 apartments). We will lump them together and just talk about rent control. As always our analysis is very simplified and we would need a very much more complex model to do a full scale analysis of the market for apartments in New York and the effects of rent control on that market. However, our analysis will capture the major features of rent control.

3. Uncontrolled market response to an increase in demand: the short run.

We begin in 1945, Figure 1. R is the price of an apartment (the rent per room per month) and Q is the number of apartments (of a given quality and controlling for location and similar factors). The market is in equilibrium at (Q^e_0, R^e_0) where $Q^d = Q^s$ and the market clears - there will be a small vacancy rate (2-3% of the apartments are vacant as landlords search for tenants and renovate vacated apartments and tenants look for apartments that suit their specific requirements).

In 1947 (Figure 2) there is a large rightward shift of the demand curve from D_0 to D_1 (an increase in demand) as demobilized servicemen and women return home and look for somewhere to live and start to raise families - the baby boom generation. (Although there can only be one demand curve at any point of time I have left in D_0 - the dashed line - to help you see what is going on). If R stays at R^e then we have $E^d = Q^d_0 - Q^s_0$. The supply does not change (no supply side shifter changed and so the supply curve stays in place at S) and with $R = R^e$ (the original controlled rent) Q^s remains at Q^s_0 . But the increase in the number of buyers (a demand shifter) shifts the demand curve to the right to D_1 , which means that R^e is now associated with a $Q^d = Q^d_1$ [Replace the diagram's Q^d_0 with Q^d_1 . Because $Q^d_1 > Q^s_0$ there is excess demand ($E^d = Q^d_1 - Q^s_0$).]

Let us *assume* that rents were decontrolled as soon as the war ended. The market would then have been free to adjust and the excess demand would cause R to be bid up to R^e_1 and Q to increase to Q^e_1 . We begin in the short run when the capital stock (stock of

apartments) is fixed and there is not enough time to build new apartments. Although the supply curve is relatively steep it is not vertical; as rents rise we move along the supply curve because at the higher rental rate there are market incentives for people with large apartments to rent their spare space, for people in large apartments to move to smaller cheaper ones, for builders to speed up completing apartments that are already under construction, and to convert houses or condominiums into apartments (an increase in the Q^s -- not an increase in supply). There will also be a movement along the demand curve as R increases: for children to remain with, or move in with, their parents, for tenants to move away to the suburbs, for students to share apartments, and so on. At the new equilibrium R is higher but so is Q , which means that the market has done its job and has reallocated the scarce resource by rationing the scarce apartments by raising their prices. Everyone looking for an apartment can find one and everyone with an apartment to let can find a tenant in a reasonable period of time.

In Figure 3 both consumer surplus (CS) and producer surplus (PS) are larger at Q^e_1 than at Q^e_0 . Because of the shift in the demand curve the consumer surplus would be the area under D_1 above R^e_1 rather than the area under D_0 above R^e_0 , and producer surplus would change from the area above S and below R^e_0 to the area above S and below R^e_1 . I have just emphasized the *increase* in consumer surplus and producer surplus (ICS and IPS) from moving from Q^e_0 to Q^e_1 .

4. Uncontrolled market response to an increase in demand: the long run.

In the long run (Figure 4) the supply curve will also shift to the right. Apartments are investments and their owners expect to make a rate of return on their investment equal to what they can obtain by investing their money in some other way (e.g. houses), which has a comparable level of risk. The rate of return is the profit generated by the apartment expressed as a percentage of the money used to build or purchase the apartment.

Assume that landlords expect a 10% return from their investment - for every \$1m they invest in apartments they expect to clear \$100k per year. The landlords' costs have not changed but their revenues have increased because they receive the higher rent R_1 (R_1 is about 50% higher than R_0). Profit is $TR - TC$ and so profit increases and therefore the rate of return increases rate of return apartment units now yield a rate of return greater than 10%. The higher rent R_1 signals to investors that apartments are more profitable - there will be newspaper articles about the high rents. The higher profit causes "predation" - just as sharks are attracted by blood in the water so investors are attracted to the higher yielding investment. In the long run existing landlords will build more apartments and new investors will enter the rental market and add to the stock of apartments. The supply curve will therefore shift to the right - what we want it to do - from S_{SR} to S_{LR} . However, the greater supply will cause rents to fall and the rate of return to drop until the rate of return is equal to that obtained by investing in other assets of comparable risk. We cannot determine whether the new R will be above or below (or equal to) the original R with the tools at hand. I have assumed that R^e_2 (less than R^e_1) is greater than R^e_0 . Q^e_2 is larger than Q^e_1 , which is larger than Q^e_0 rate of return the market has done its job of attracting more resources into the market for apartments, which is what we want to happen.

5. Rent controls: the short run effects.

However, housing is a major component of consumer expenditures, especially for low-income households; poor households may spend 50% or more of their incomes on housing. In Figure 2 R^e_1 is about 70% higher than R^e_0 . Rent controls are enacted in order to protect low-income households from effects of rent increases. Housing is regarded as a "necessity"; we do not control the price of walnuts even if prices quadruple - we can manage without walnuts. [We should really have a second supply and demand diagram to show what happens to the rents of uncontrolled rental units - they will begin to rise - but that would make our analysis more complicated. So we will assume that all apartments are controlled.]

In Figure 5 the maximum rent, the controlled rent (R_c), remains at R^e_0 because the government decides to re-introduce rent controls at its original level or does not repeal rent control. Because the supply curve did not shift when the members of the armed forces returned to the US the Q^s under rent control (Q^s_c) is the old Q^e_0 because the controlled rent (R_c) remains at, or returns to, R^e_0 . The rightward shift of the demand curve means an increase in the Q^d at each and every R and so the new Q^d is greater than Q^s and there is an excess demand ($E^d = Q^d_c - Q^s_c$) – we have created a "housing shortage". The E^d has two components: I = $Q^e_1 - Q^s_c$ is the result of the quantity supplied not adjusting because there is no rent (price) change; and II = $Q^d_c - Q^e_1$, the result of the quantity demanded not adjusting because rents have not changed.

People who are in possession of a rent-controlled apartment have a great incentive to stay where they are. Sub-letting is illegal but is widespread (New York courts are clogged with disputes over sub-letting); once you get your hands on a rent controlled apartment you would be foolish to give it up - even if you leave New York.

R_c is the maximum legal rent and so the excess demand cannot be removed by an increase in R and so the limited quantity supplied must be rationed by some non-price means: (1) First come, first served. A lot of resources will be used hunting for apartments. (2) "Black markets": "key" money, payments for "furniture", "redecorations costs" - buyers want to move into the apartments and will voluntarily sacrifice some of their consumer surplus (their gains from trade). When a government prevents buyers and sellers from engaging in mutually advantageous trades the buyers and sellers will collude to get around the controls: in Figure 6 the tenants' willingness to pay (WTP) is well above R_c – the rent they pay if they can find an apartment.

Many tenants in New York voluntarily pay more than the controlled rent. A bureaucracy is necessary to "police" the system, which adds to the economic cost of rent control. Higher income tenants are the ones most likely to end up with a controlled apartment.

Markets penalize buyers and sellers who discriminate against certain types of customers; if you refuse to buy/sell to people with English accents than you lose part of your market; the apartment remains empty (and generates no cash flow) while you look for an alternative tenant. But the penalty imposed on landlords for discriminating against any

group falls significantly if there is excess demand for apartments - no children, no pets, no students etc. - because there are so many people looking for apartments that turning away some of them does not cause you to have a vacant apartment for long; people are literally banging on your door asking to rent from you.

Rent control leads to a fall in the quality of the average apartment - maintenance and refurbishing cost money and become low priorities when your tenants have little chance of improving their lot by moving out.

In the uncontrolled market tenants and landlords were both in equilibrium at R^e_1 . Fixing R at R_c below R^e_1 means that some tenants who would have been willing to pay R^e_1 are prevented from doing so. People who end up occupying the controlled apartments are better off. In Figure 6 tenants gain $R^e_1 - R_c$ times Q^s_c - the shaded rectangle (less any money they have to pay to get into the apartment). The tenants gain at the expense of the landlords whose producer surplus is reduced by the amount of the shaded area. Some landlords may have lower incomes and less wealth than their tenants and so this is not necessarily a transfer from the rich to the poor.

Economists emphasize the dead weight loss (DWL) of rent control. Consumer surplus at Q^s is smaller than at Q^d_1 by the triangle A and producer surplus is smaller by B and so the DWL of rent control (the loss of consumer and producer surpluses) is A + B. Q^s_c is not Pareto Optimal because we can make consumers (tenants) in general and producers (landlords) in general better off by moving to Q^e_1 . However, this movement is not an unambiguous Pareto Improvement because some tenants gain at the expense of others. Economists are interested in "efficiency" and tend to pay less attention to issues of equity – "fairness" - and distribution. Non- economists would want to look at who benefits and who loses - some tenants who would have been able to find apartments to rent in a free market lose them to other tenants who are better off or simply luckier. (In Figures 5 and 6 "I" apartments are lost because of rent control, "II" also lose but these apartments would be "priced out of the market" as rents rose from R_c to R^e_1 .)

5. Rent controls: the long run.

In the long run rent control has even more perverse effects. Under rent control rents can only rise when the rental bureaucracy allows landlords to charge more for the apartments. Tenants will resist the rent increases and the process of raising rents is slow and cumbersome and so controlled rents seldom keep up with inflation - uncontrolled rents will increase as the price level rises. On the other hand, as economists love to say, landlords' costs will increase because of inflation – maintenance costs will rise when prices in general rise. Therefore, over time the rate of return on investments in apartment units will fall. Landlords, who invest capital in apartments, will "exit the industry" in the long run (they will move their capital to where they can get a higher rate of return for comparable risk), which will cause the supply curve to shift to the left in Figure 7. Excess demand will tend to increase not decrease - equilibrium will occur when people move away from the area of housing shortage; New York will grow less slowly or even shrink as people frustrated with the situation leave the city.

The rent control authorities will sometimes pledge to exempt newly constructed apartments from controls but New York has a history of renegeing on such promises.

6. Evaluation.

Economists cannot say whether rent control is a good or a bad policy, but we can lay out the expected effects of controlling rents – in general, setting maximum prices. You then have to decide whether you think the benefits (and who receives them) outweigh the costs (and who bears them) – this is not a simple case of villainous landlords exploiting impoverished tenants.

Notice that the analysis has had little to say about poor tenants, even though the purpose of the introduction of the (“temporary”/“emergency”) rent control was to protect poor tenants from market forces. In most cases rent controls do not distinguish between poor and rich tenants. There has been extensive research on the distributional effects of rent control. This research shows that tenants in the top half of the income distribution are the ones who gain most from rent control, both because they tend to occupy the apartments that would have the highest uncontrolled rents (Mia Farrow) and because landlords prefer them as tenants (professor versus student).

Rent control is a poorly targeted policy - it controls a *price* not *incomes*, rich and poor pay the same rent (there are some attempts to deal with this problem in New York but they do not really come to grips with it).

If you wish to protect poor tenants from rising rents then the simplest way of dealing with the problem is to make payments to the poor tenants that are equal to the increased share of income needed to pay the higher rents. Politicians prefer "vouchers" because they "stop the indigent spending their rent subsidies on booze and drugs" - but money is "infinitely fungible", a dollar is a dollar and what my voucher saves me in rent I can spend on drugs and alcohol.

Low Income public housing is both expensive (union labor and Congressional micro-management) and has a history of corruption.

[http://nytimes.com/top/reference/timestopicons\)/subjects/r/rent_control_and_stabilization/index.html](http://nytimes.com/top/reference/timestopicons)/subjects/r/rent_control_and_stabilization/index.html)

<http://www.nytimes.com/2004/01/13/opinion/unstable-and-out-of-control.html?pagewanted=all&src=pm>

<http://www.nytimes.com/2008/07/11/nyregion/11rangel.html?pagewanted=all>

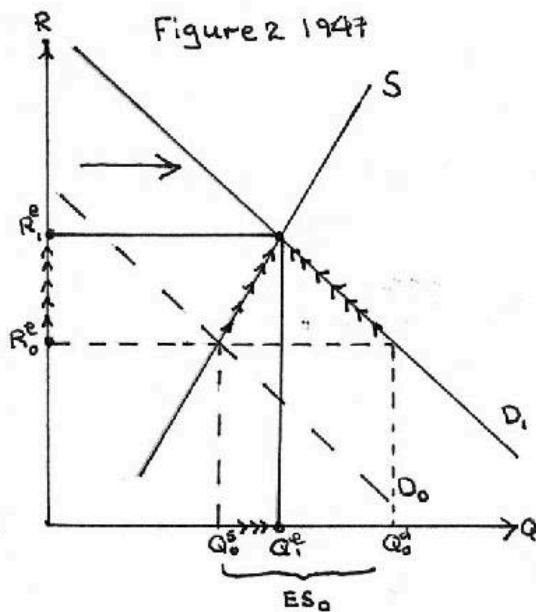
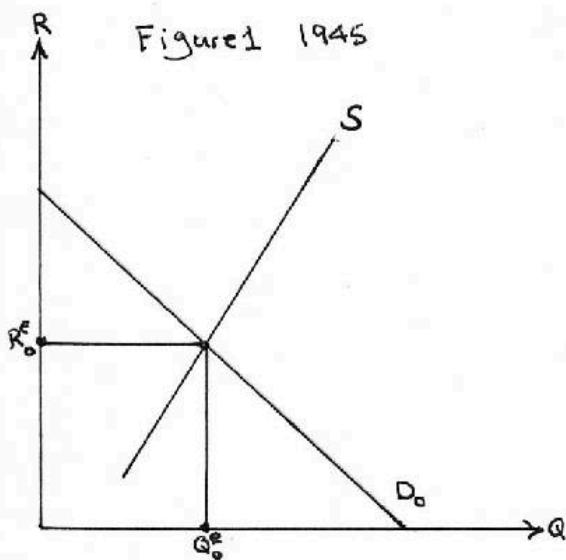
<http://www.nydailynews.com/blogs/dailypolitics/2012/03/rep-charlie-rangel-fined-23k-for-using-rent-stabilized-harlem-digs-as-campaign>

<http://www.washingtonpost.com/wp-dyn/articles/A30341-2005May2.html>

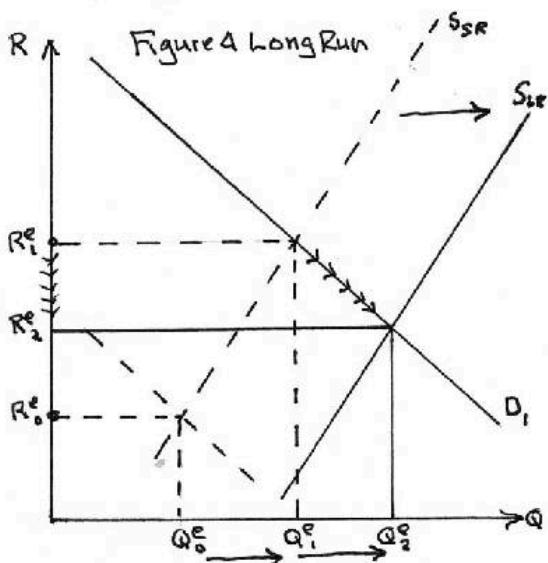
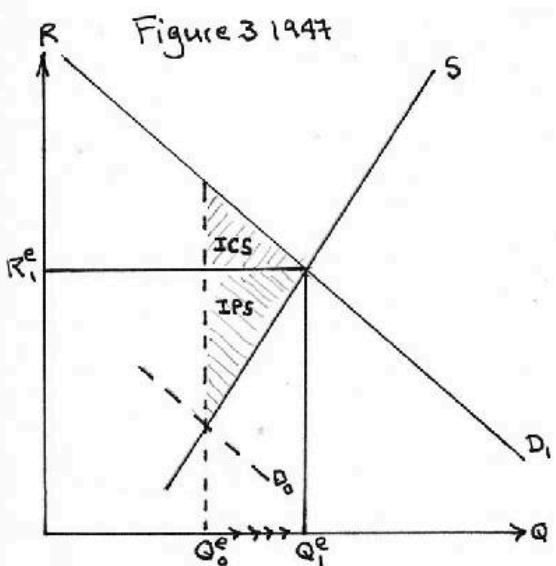
http://money.cnn.com/magazines/moneymag/moneymag_archive/1986/09/01/83456/

http://www.nytimes.com/2007/01/27/nyregion/27detective.html?pagewanted=all&_r=0

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Increase in demand as number of buyers increases.



Long run increase in supply as number of suppliers increases (entry because of high short run ROR on capital)

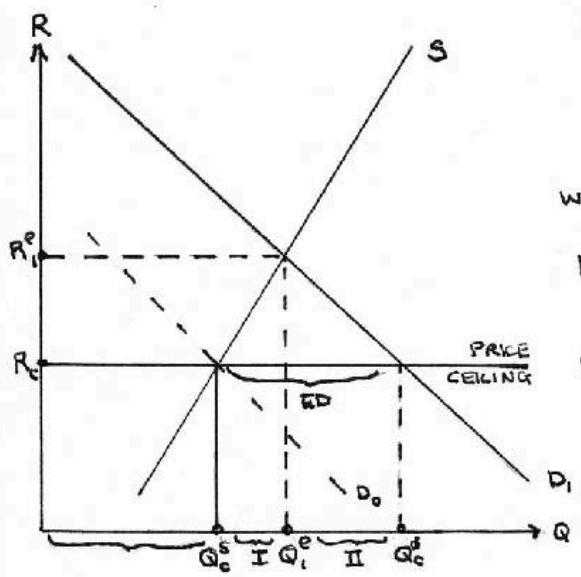


Figure 5: No repeal of rent control

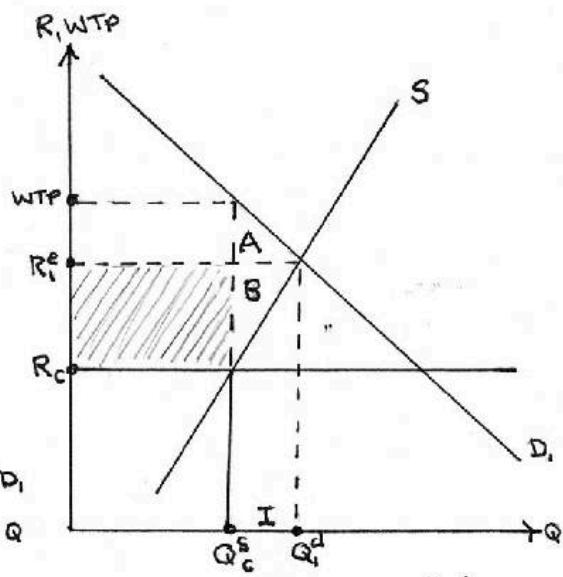


Figure 6 Welfare effects

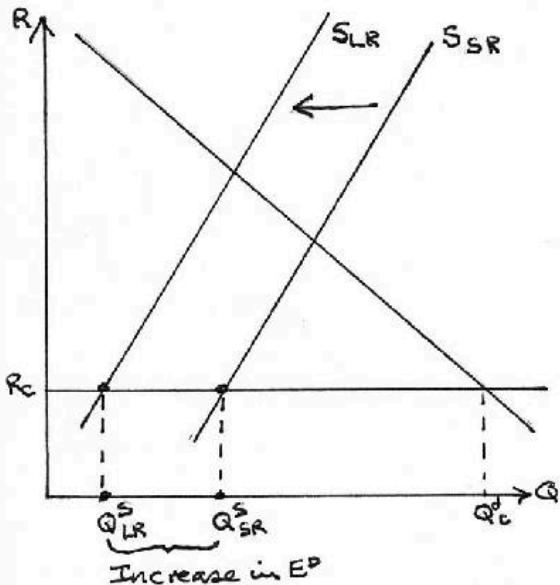


Figure 7 Long-run decrease
in S because of falling ROR and exit.