CM6: MAXIMUM PRICES (3/27/21)

SOME, BUT NOT ALL, OF WHAT YOU SHOULD KNOW

1. What is a price ceiling?

2. Is a maximum price set above or below the equilibrium price?

3. Why does scalping occur?

4. How might organizers of events allocate tickets fairly?

5. Why do economists argue that scalping may lead to a more efficient allocation of tickets than first come first served?

6. What is price gouging?

7. What does economics predict will happen if prices are allowed to increase in natural disaster situations? What would happen if instead prices are legally frozen?

8. How does an uncontrolled rental market allocate scarce apartments in the short run and increase the supply of apartments in the long run?

9. Why is rent control referred to as a price ceiling?

10. What do economists predict will happen in the short and long run if rent controls are introduced? (A whole section!!) See if you can come up with your own questions. By now you should have got the idea.

11. Why do economists argue that rent control is a poorly targeted policy?

12. If you are concerned with the impact of rising rentals on low-income groups what would an economist advise you to do?

The models in this and all of the other Commentaries is a "toy" model. I could construct more elaborate models but would soon have to resort to mathematics to manipulate the models. However, I believe that the models that we study here are reasonable approximations to reality although I would hesitate to use any of them to illuminate real policy issues. The simple assumptions that I use are designed to make your lives easier while capturing the major features of what economists believe to be true about the issues. Remember that models are by design not meant to capture every aspect of the real systems that we study.

1. MAXIMUM PRICES AND PRICE CEILINGS

A maximum price is a price set by law, not by market forces, and which is enforced by legal penalties. Textbooks distinguish between a "non-binding" *maximum* price, where the *maximum* price is set *above* the equilibrium price (Figure 1a) and a "binding" *maximum* price, where the *maximum* price is set *below* the equilibrium price (Figure 1b). I am not aware of any real-world examples of "non-binding" *maximum* prices. Standard economic reasoning (CM4) suggests that the market price would never reach the non-binding price because there would be excess supply at that price (and all prices between P_e and P_{max}) and so the price would never reach the so-called maximum price. When I write about maximum prices, I will always mean a "binding" maximum price. **Maximum prices are also referred to as price ceilings.**

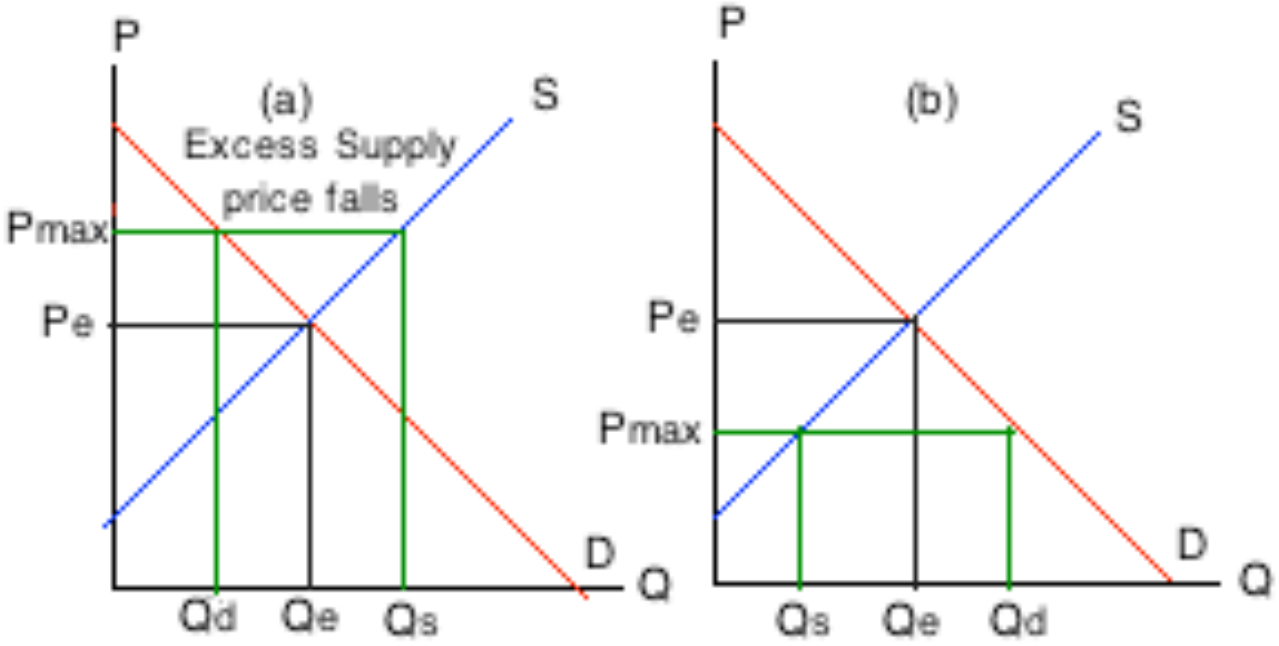


Figure 1

2. SCALPING

1. Although the literature on maximum prices is largely concerned with government intervention in markets, so-called "scalping" is an example of what happens when a price is set below the equilibrium by, for example, rock stars and sports organizations. Many rock concerts are sold out because the price of admission is set below the equilibrium price. The organizers are either altruistic or seek to get publicity from the sold-out concert and expect to end up with

larger profits from the sales of merchandise at the event. Sports team owners do not wish to alienate their regular fans by setting prices at their market levels for special games. Tickets to prime sports events such as the Super Bowl are often resold for many times their face value.[1]

2. In Figure 2 the official ticket price is P_r (for a particular place in the

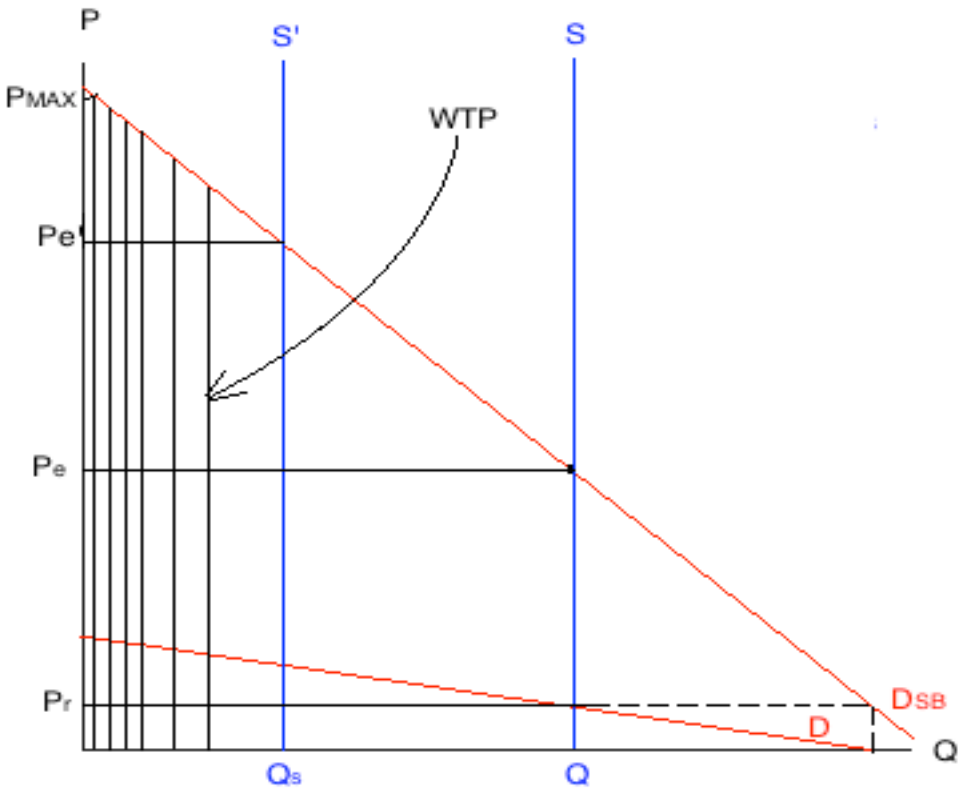


Figure 2

stadium/concert). This is the 'regular' price charged for a normal season game. At P_r there is equilibrium with the usual season demand, D. But the demand for

[1] The welterweight world-title boxing match between Floyd Mayweather and Manny Pacquiao on May 2 2015 was worth hundreds of millions of dollars, mainly through pay-per-view. Only 500 seats were initially available to the public and had a nominal price of $1,500. StubHub sold an additional 1,000 tickets. The cheapest StubHub ticket sold for $2,959, the most expensive sold for $40,955 and the average price was $6,268. About 15,500 tickets were distributed to promoters or the casino. There was an active secondary market for tickets and gamblers bet on what the prices of tickets would be.
Scalpers had to sell tickets to the 2018 game between Alabama and Clemson below their printed price.

Super Bowl tickets is D_{SB}. There is excess demand at P_r. The seats could be sold for the price P_e, but the event organizers decide not to do so (P_e is about six times the regular price). Assume that all of the limited number of seats (S) are sold at the price P_r, which is probably not true.. However, some buyers buy to resell, including the online sellers (such as StubHub and Ticket Lodge) who buy in bulk (at a discount), and so there are S' tickets that are re-sold by "scalpers". In this model they are all sold at the price P_e', which is higher than P_e and about ten times the regular price P_r. However, *these are all voluntary trades and so the buyers as well as the sellers must gain* – the solution is economically efficient.

3. The process by which an individual buys at a lower price with the intention of reselling at a higher price is an example of what economists refer to as arbitrage; arbitrage is a fundamental component of how financial markets work, equalizing the returns on assets. Arbitrage is risky because of the possibility that the item may not be resalable at a higher price if the anticipated demand fails to materialize.[2]

4. Is scalping "fair"? Economics does not provide an answer to such questions. The secondary (black) market is a voluntary one and in situations of scarcity the people who are willing *and able* to pay the most for the ticket are the ones who will end up with the tickets, unless they are sold in some form of lottery. The "highest bidder wins" may not be fair, but it is the way in which goods and services are allocated in capitalist economies; I drive a Chevrolet Cruze because I don't have the income to buy the really powerful sports car that I want – and deserve! – which I "value" more than the rich person who actually buys it – but that is my opinion. The multi-billionaire miser *believes* that the mental agony that she suffers when we take a quarter from her and give it to a hungry child to buy a piece of candy is many times greater than the benefit that the child gets from eating the candy. Perhaps there will come a day when neuroscience or neuro-economics will be able to measure these differences on some objective scale just as we can measure height with a ruler, but don't hold your breath.

5. Notice that because the demand curve is also a WTP curve economists

[2] In arbitrage the seller may not actually own the item being sold but sells it today for delivery in, say, a week's time at a price of, say, $1,000. The arbitrager expects the price will go down and so she anticipates that she will be able to buy the item when it becomes time to deliver it in a week's for less than $1,000, say, $500, making a $500 profit. This is called "selling short", which is very risky. If you "short" an item and your guess is wrong you have to deliver the item anyway and buying it may require you to purchase at a price say, $15,000, far in excess of what you sold the item for initially, in which case you will make a loss of $14,000.

deduce the "valuations" placed on each ticket from the height of the demand curve. But that *WTP is dependent on the buyer's income* and it may be the case that there are "poor" football fans who "value" the tickets more than the "rich" buyers who happen to have enough income to pay for the scalped tickets, although they are only moderately interested in the game. Even with the resources of the World Wide Web at our disposal there is still a problem of matching buyers and sellers.[3] An optimal allocation would be one in which the WTPs and WTAs exactly match. In this case the sellers would extract the full consumer surplus from the buyers. The *last ticket sold* would be sold at a price equal to the WTA of the seller with *the last ticket* to the buyer whose WTP was equal to that price. Annabel, the person buying a ticket for $3,000, may be buying the ticket so that she can boast about going to the Super Bowl, although having no real interest in the game. Zeke, our Seahawks groupie, who "really, really, really" wants to attend the game, and who "values" the ticket at $10,000 cannot buy one even at the regular price of $100, because his ability to pay (ATP) is insufficient to pay the $3,000. How could we objectively work out which person truly values the ticket the most and how can we compare different people's valuations? Economics is about prices, not values. If you can't pay, if your ATP is less than your WTP, then you have no demand. In the ticket case

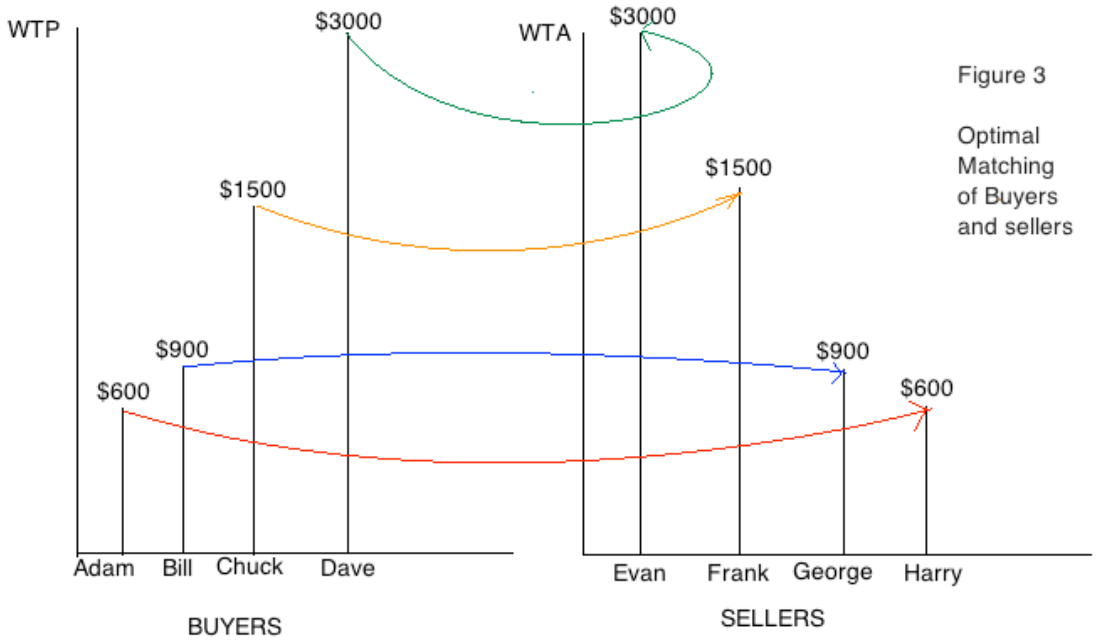


Figure 3

Optimal Matching of Buyers and sellers

[3] Economists have worked on "matching" algorithms since the 1960s. Dating services use algorithms that are based on the pioneering work of Lloyd Shapley and Alvin Roth who shared Nobel prizes in 2012 for their work. http://www.nytimes.com/2012/10/16/business/economy/alvin-roth-and-lloyd-shapley-win-nobel-in-economic-science.html

Zeke could probably raise $3,000 by going into debt with someone who charges 50% interest per week and breaks his legs if he doesn't pay the "vigorish" (interest). If I can't pay for my child's cancer treatment then perhaps, I will steal the money. Historically, people who were starving would steal despite draconian penalties.

7. A way to take fairness into account when allocating resources that have excess demands at the going price is to allocate by lottery. One of my grandchildren went to an exclusive STEM high school. To get in she had to score in the top 2.5% of applicants taking the entrance test and then she had to take her chances in a lottery because there were more potential students than places.[4]

John Stewart's political satire TV show did not charge for tickets, but there were careful ID checks so that re-selling was not a problem. Such a procedure is not feasible at large venues such as the Super Bowl or a rock concert.

8. The initial distribution of tickets is not Pareto optimal because there are some people with tickets who prefer the cash and some people without tickets who are willing to exchange their cash for the tickets. Scalping is a Pareto improvement over a "first-come first-served" or a lottery because it reallocates the tickets so that the people with tickets who value them less than the "scalping" price, sell them to people without tickets who are willing and able to purchase them at the "scalping" price.

http://nypost.com/2014/01/27/ticket-prices-plummet-weekend-before-super-bowl/

http://www.artsjournal.com/worth/2013/04/why-are-tickets-for-rock-concerts-so-expensive/

http://www.princeton.edu/main/news/archive/S01/18/72I40/

3. PRICE GOUGING

1. Extreme weather conditions, such as hurricanes, can lead to shortages of items such as plywood to board up windows and candles to provide light during power outages and generators to replace the lost power. The demand for these items has shifted to the right because of the hurricane and there is excess

[4] When I went to university only 10% of 18-year-olds in the UK went to university and the LSE accepted 1 in 7 applicants. I was awarded a place partly because I came from a very poor family – reverse discrimination! The state not only paid my fees but also gave me a living allowance that was generous enough for me to live in an apartment in London and buy the cheaper seats at theatres and even eat out in decent restaurants.

demand at the going price. The market will deal with the shortage by raising the prices of these items that have suddenly become relatively more valuable. This provides an incentive to suppliers to increase supply by, for example, shipping in supplies from unaffected areas. It also provides an incentive for buyers to cut back on inessential purchases. The increased prices are often referred to as price gouging and in some states, there are laws to restrict the amount by which prices may be raised before, during, and after an extreme weather event. But the scarce resources have to be rationed in some way, and "first come first served" may not be the most efficient way to do so; for example, it will favor people who live close to the stores selling the items. The price system provides two sorts of incentives: (1) higher prices cause the *quantity supplied* to increase in the short run and the *supply* to increase in the long run; (2) higher prices cause consumers to carefully weigh their alternatives and may cause some people who do not really need the items in high demand, not to buy them.

See Figure 4. In the left-hand panel, the green curve shows the excess demand at the original equilibrium price, P^e. The increase in price causes an increase in the *quantity supplied* $Q^s_2 - Q^s_1$. The increase in price also causes a decrease in the *quantity demanded*, the movement along the demand curve. The right-hand panel shows the **long run** increase in the quantity supplied, which is partly the result of the increase in supply, and partly the increased quantity supplied that results from the price increase.

Figure 4

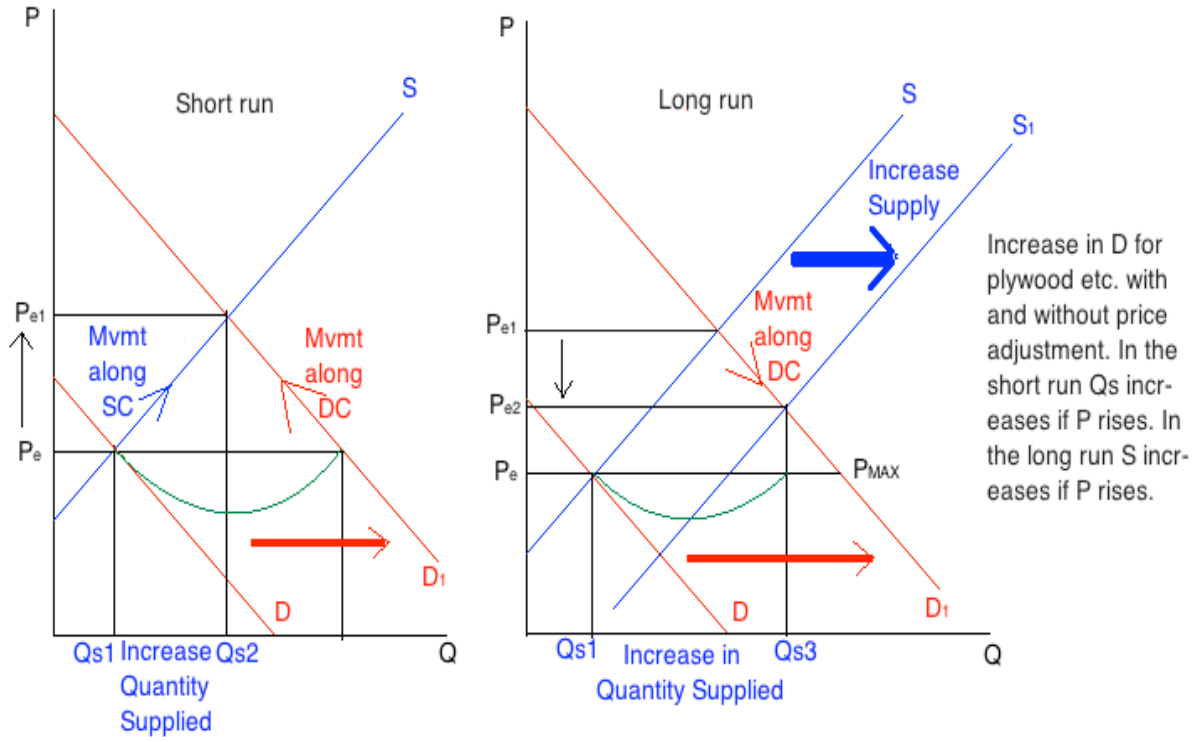
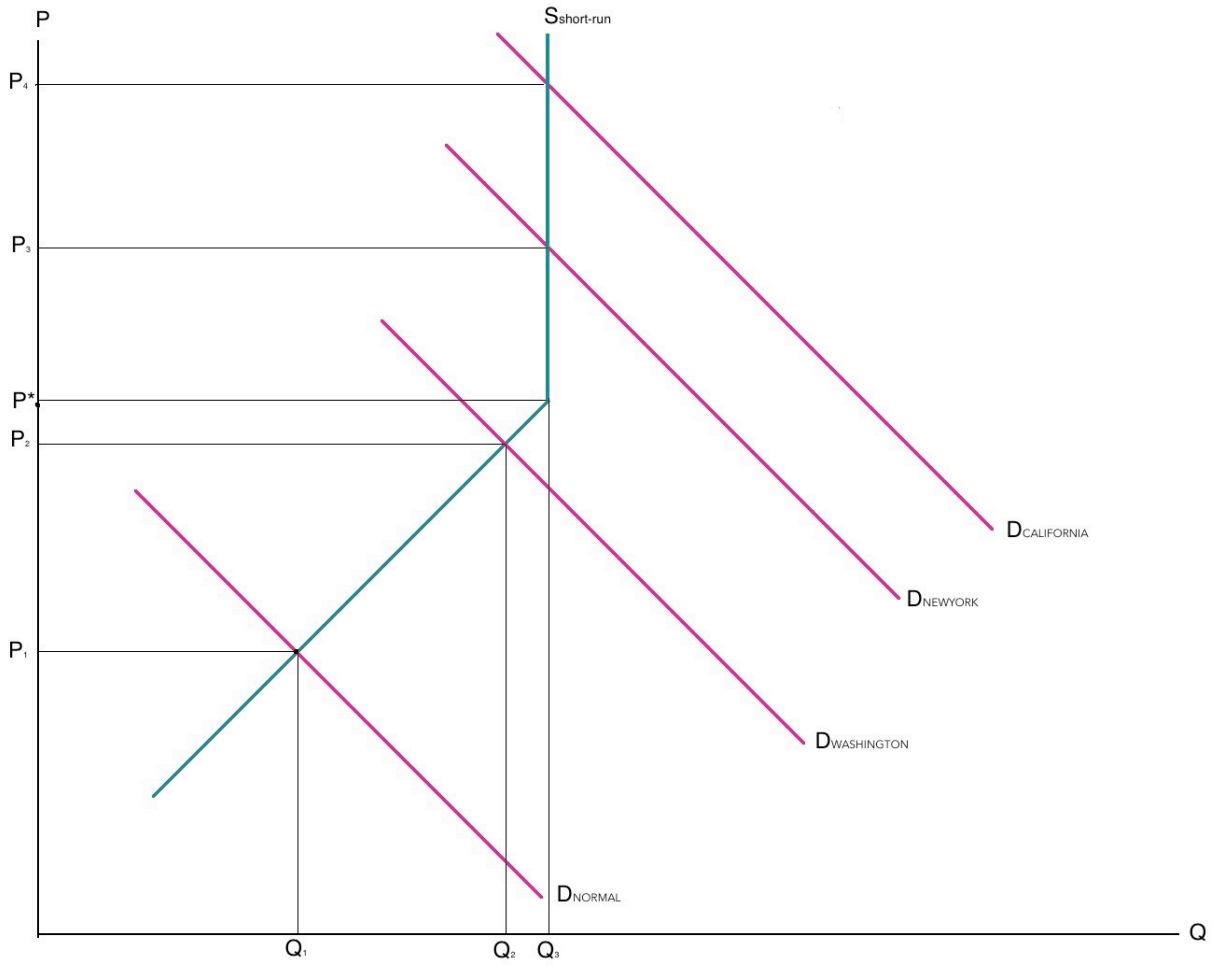


Figure 4

COVID-19

In 2020 we saw price gouging of everything from face masks to PPE suits as the coronavirus spreads across the US and the rest of the world. The Figure illustrates what happens when there is a huge increase in demand but with a limited short-run supply response.

The normal price and quantity are P_1 and Q_1, associated with the "normal" demand. If Washington state wanted to buy more ventilators then we would move up the supply curve until we arrived in a new equilibrium at P_2 and Q_2. But if New York wants ventilators then the demand rises to $D_{NEWYORK}$. However, there are a limited number of ventilators, Q_3, and they cannot be in two places at once. So, they go to New York if the state of New York offers a higher price than the state of Washington. (Think of an art auction. There is only one painting of this type and the price is determined solely by demand.) If California comes into the market the price gets driven up further and California gets the ventilators. Higher prices will cause increases in the quantity *supplied* up the point at which the supply curve becomes vertical. But once the price has risen to P^* raising it



further does not squeeze out any extra supply. At a price P* ventilator suppliers will be making a handsome profit but that extra profit was necessary to persuade them to increase the quantity supplied. As prices rise above P* profits rise but the increased profits are what economists – for historical reasons – call "pure economic rents". The increase in profits associated with the price increases up to P* are incentives to increase the quantity supplied.

In the long-run the increased profits will encourage expansion of the supply and the supply curve will shift to the right as resources move into the ventilator industry as they are bid away from less profitable uses. But in the short run those resources are not available to produce ventilators.

The current situation has been exacerbated by the Federal government also

bidding for the same limited supplies of ventilators as the state governments. The optimal policy would be for the Federal government to have been the sole (US) bidder and then for the government to allocate the ventilators to the states according to "need" at whatever price the government had paid.

Similar analyses apply to the earnings of soccer players in Europe (Lionel Andres Messi had a salary of $84 million in 2019 and made another $27 million from endorsements), and the earnings of entertainers.

4. RENT CONTROL

1. Rent control is an example of a *maximum price* or a *price ceiling*; 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. (There has been discussion about reintroducing rent control in Seattle, although state law prohibits rent control.)

http://seattletimes.com/html/opinion/2024894869_blancatorrescolumnrentcontrol29xml.html

http://www.seattlemag.com/article/it-time-bring-back-rent-control-seattle-0

2. 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 without 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, this is a toy model, 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, I believe that the analysis captures the major features of rent control.

A. THE UNCONTROLLED MARKET RESPONSE TO AN INCREASE IN DEMAND: *THE SHORT RUN*.

1. We begin in New York City in 1945, Figure 5. 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).

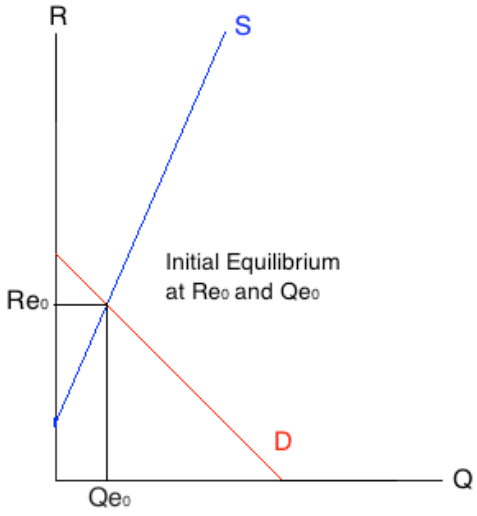


Figure 5 1945

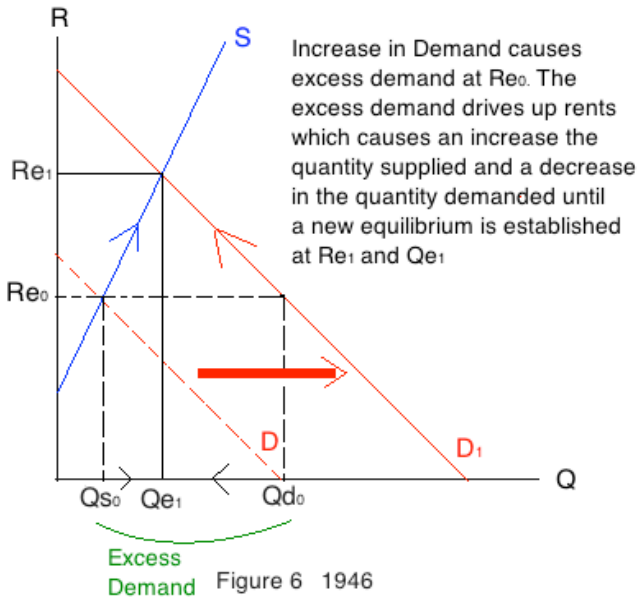


Figure 6 1946

2. In 1946 (Figure 6) there is a large rightward shift of the demand curve from D 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 – the dashed line – to help you see what is going on). If R stays at R^e then we have $E^d = Q^d_0 - Q^s_0$. *Whenever Q^d_0 does not equal Q^s_0 it is the smaller of the two, which is the quantity transacted.*

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.

3. 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 for builders to convert

houses or condominiums into apartments (an increase in the quantity supplied, Q_s – **not** an increase in supply).

There will also be a movement along the demand curve as R increases: the higher rents generate incentives 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 – 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. As always, the market outcome depends on ATP – income, wealth and access to credit

4. In Figure 7 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. 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 (the red triangle) and producer surplus (the blue triangle) from moving from Q^e_0 to Q^e_1.

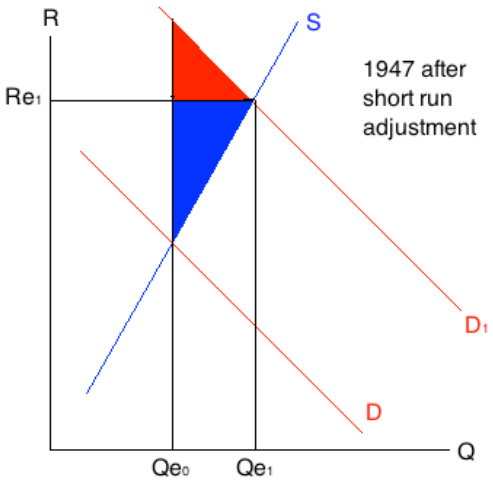


Figure 7

B. THE UNCONTROLLED MARKET RESPONSE TO AN INCREASE IN DEMAND: *THE LONG RUN.*

1. In the *long run* (Figure 8 below) 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, which has a comparable level of risk (e.g. houses or office buildings or in the financial markets). 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.

2. Assume that landlords expect a 10% return from their investment – for every $1m they invest in apartments they expect to clear $100,000 per year. The landlords' costs have not changed but their revenues have increased because they receive the higher rent R^e_1 (R^e_1 is about 100% higher than R^e_0). Profit is TR - TC and so profit increases and therefore the rate of return increases. Apartment units now yield a rate of return greater than 10%. The higher rent R^e_1 signals to investors that apartments are a more profitable investment – 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* (where the capital stock is no longer fixed) 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 new 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; the market has done its job of attracting more resources, especially capital, into the market for apartments, which is what we want to happen.

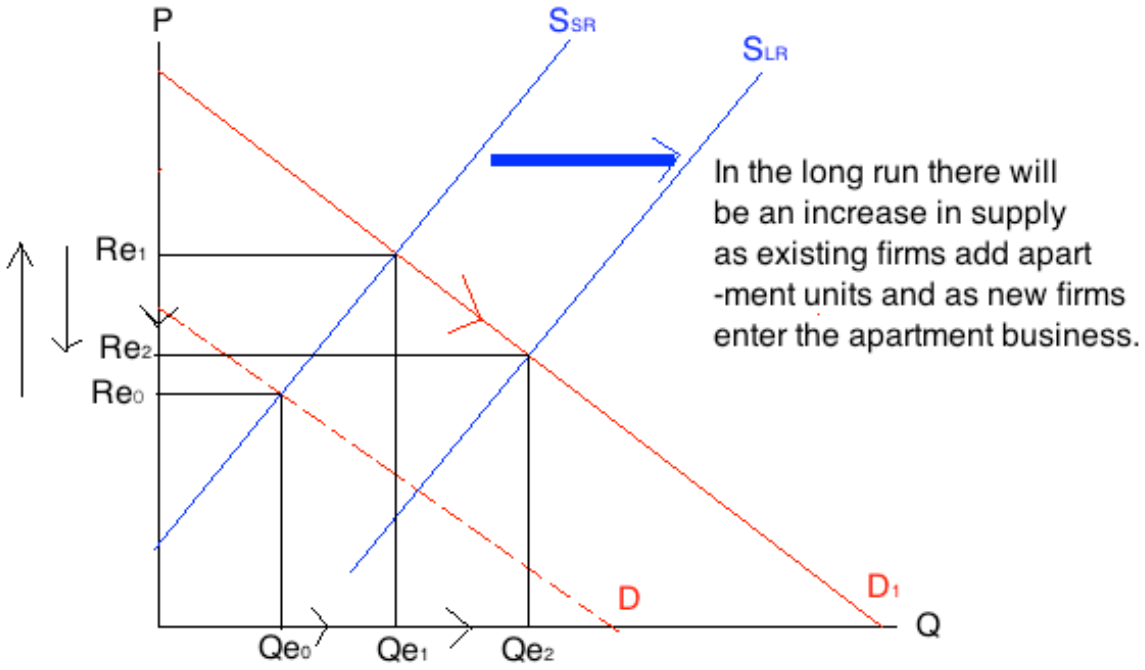


Figure 8

C. RENT CONTROLS: THE SHORT RUN EFFECTS

1. 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 6 R^e_1 is about 80% higher than R^e_0. Rent controls are enacted in order *to protect low-income households from the effects of rent increases*. Housing is regarded as a "necessity"; we do not control the price of walnuts even if prices quadruple because we can manage without walnuts.

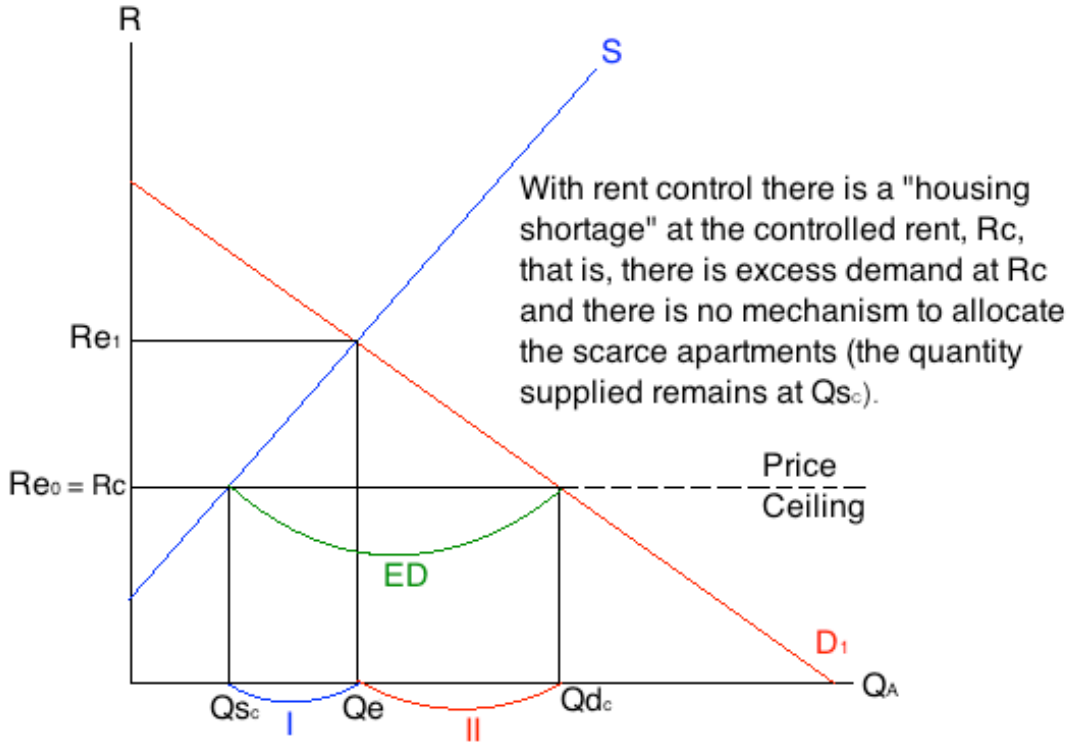
(We should really have a second supply and demand diagram to show what happens to the rents of uncontrolled rental units – they will begin to rise – but that would make our analysis more complicated. So, we will *assume* that *all* apartments are controlled.)

2. In Figure 9 the maximum rent, *the controlled rent (R_c)*, remains at R^e_0 because the government in this scenario decides to set the controlled rent at the old federal level. 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 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: there is an excess demand

(ED = Q^d_c – Q^s_c) – we have created a "housing shortage". The ED has two components: I = Q^e – Q^s_c is the result of the quantity *supplied* not adjusting

Figure 9



because there is no rent (price) change; and II = Q^d_c – Q^e, the result of the quantity *demanded* not adjusting because rents do not change.

3. *R_c is the maximum legal rent, therefore the excess demand cannot be removed by an increase in R; 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[5], payments for "furniture" ($10k for a broken-down sofa), "redecoration costs"[6] – buyers want to move into the apartments and will voluntarily sacrifice some of their consumer

[5] I am the landlord. You are an acceptable tenant. I say you can have the apartment but the keys will cost you $10k. You write me a check or you don't. *It is a voluntary exchange.* If the controlled rent is $500 a month less than you can find anywhere else then you will get your $10k back in 20 months.

[6] The rental authorities have made "key" money illegal. I say to you that you can move into the apartment but it needs decorating, and I won't let you rent unless you allow me to redecorate, which will cost you $10k. The bureaucrats who work in the rent control offices have no incentives to anticipate ingenious schemes like this. You and I have great financial incentives to work out ways to circumvent the controls.

surplus (their gains from trade). When a government prevents buyers and sellers from engaging in mutually advantageous voluntary trades the buyers and sellers will collude to get around the controls: in Figure 10 the tenants' willingness to pay (WTP) is well above R_c – the rent they pay *if* they can find an apartment.

4. The allocation of apartments under rent control is inefficient because *those households who are in rent-controlled apartments have little incentive to give them up even if they do not occupy them.* 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 to retire to Florida. The sub-letting market may reduce some of this inefficiency just as the black-market payments may lead to those with higher WTPs getting the apartments. This may be "unfair" because it favors those with higher incomes, however, *markets are not concerned with fairness but your willingness*, and *ability* to pay (ATP), to offer higher rent bids. *The people who gain most from rent control tend to be the people who were the original tenants and their heirs and people in the top half of the income distribution.*

5. Many tenants in New York *voluntarily pay more than the controlled rent* (perhaps as many as 25%). A *bureaucracy* is necessary to "police" the system, which adds to the economic cost of rent control. The bureaucracy provides political support to keep rent control. Rent control is like herpes, very difficult to get of once you have it.

6. The late Gary Becker, Nobel Prize winner and leading exponent of the Chicago School approach to microeconomics, argued that markets penalize buyers and sellers who *discriminate* against certain types of customers; if you refuse to buy or sell to people with English accents then you lose part of your market; the apartment remains empty (and generates no cash flow) while you look for an alternative tenant.[7] 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, or other "undesirables". Because there are so many people looking for apartments 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.

[7] However, discrimination on the basis of race or ethnicity or because the potential tenant is obviously Jewish or Muslim may be the optimal policy for an *unprejudiced* landlord *if her other tenants are prejudiced*.

7. Rent control leads to a *fall in the quality* of the average apartment: maintenance and redecorating and replacing appliances all cost money and become low priorities when tenants have little chance of improving their lot by moving out. Rent control can fix the price but it is difficult to control the quality; controlling the quality requires more rules and regulations and more bureaucrats to administer them. Charging the same rent for a lower quality apartment is equivalent to raising its "full" price. The fall in quality is one of the worst effects of rent control.

8. 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. Only renters who end up occupying the controlled apartments are better off. In Figure 10 the "lucky" tenants who can find rent controlled apartments gain R^e_1-R_c times Q^s_c – the blue rectangle (less any black-market money they have to pay to get the apartment). The tenants gain at the expense of the landlords whose producer surplus is reduced by the amount of the shaded area. But *some landlords have lower incomes and wealth than their tenants* (especially entrepreneurial immigrants), so rent control is not necessarily a transfer from the rich to the poor.

9. Of course an economist will not make a value judgment about income transfers. Instead economists emphasize the dead weight loss (DWL) of rent control. Consumer surplus at Q^s_c is smaller than at Q^d_1 by the area of triangle A and producer surplus is smaller by the area of triangle B and so the DWL of rent control (the loss of consumer and producer surpluses) is A + B. Although Q^s_c is inefficient, because of the DWL we can make consumers (tenants) *in general* and producers (landlords) *in general* better off by moving to Q^d_1.

10. However, since the demand curve is a MB curve and the supply curve is a MC curve the rent control case is inefficient in the sense that MB > MC, which is what the GFT loss is also telling us.

11. Non-economists would want to look at who benefits and who loses from the controls – 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 9 and 10 "I" apartments are lost because of rent control, apartments in "II" are also lost but these apartments would have been "priced out of the market" if rents rose from R_c to R^e_1.) *The evidence indicates that the households who gain most from rent control are in the top half of the income distribution.* But remember the reason for introducing rent control was to help low income households.

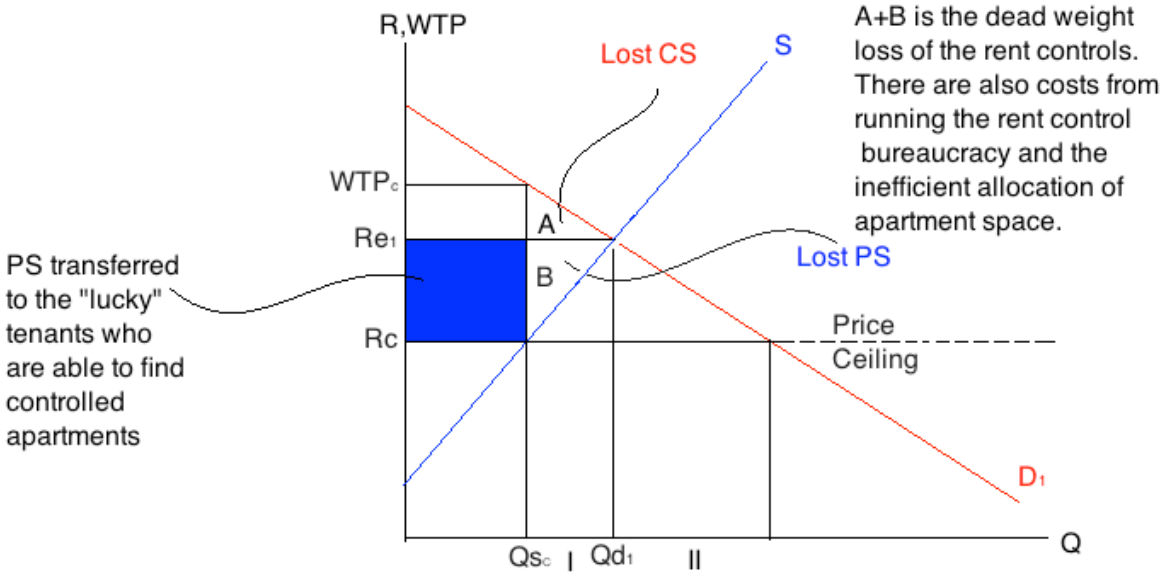


Figure 10

D. RENT CONTROLS: THE LONG RUN

1. 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. 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 11. *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 more slowly or even shrink as people frustrated with the situation leave the city. Seattle will reach its "optimum" size when the last household is just willing to put up with the awful traffic congestion.

2. In Figure 11 we start in equilibrium in 1945 with $R=R_C$ and $Q= Q_C$ (where $D_{1945} = S_{1945}$). Then there is an increase in demand in 1946 from D_{1945} to D_{1946}. This would lead to a new equilibrium at R_e and Q_e. But if the rent is controlled at $R_C = R_{1945}$ there will be an excess demand of Q_D-Q_S. In the long run the situation will deteriorate as the rate of return on controlled apartments falls. The supply curve

will shift to the right from S_{SR} to S_{LR} and excess demand will increase from ED_{short} to ED_{long} (Q_D-Q_{LR}). In New York hundreds of apartment units have been abandoned and left for the city to board up and demolish because the owners refused to pay the property taxes on unprofitable rental units and so ownership reverted to the city of New York.

Assar Lindbeck, a well-known Swedish economist, has said (tongue in cheek) that there are two effective ways to destroy a city: strategic bombing and rent control. Stockholm was still there the last time we visited.

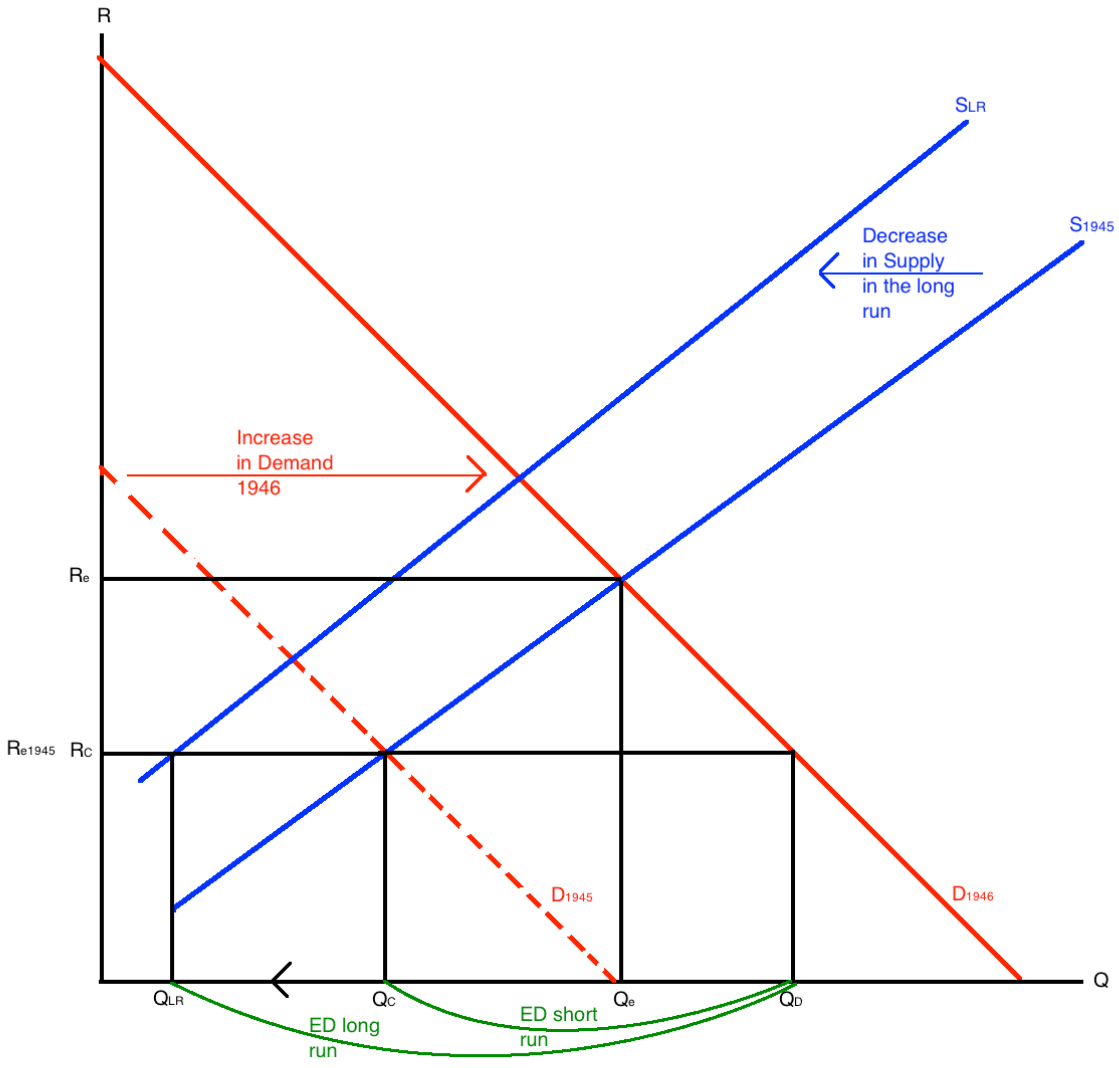
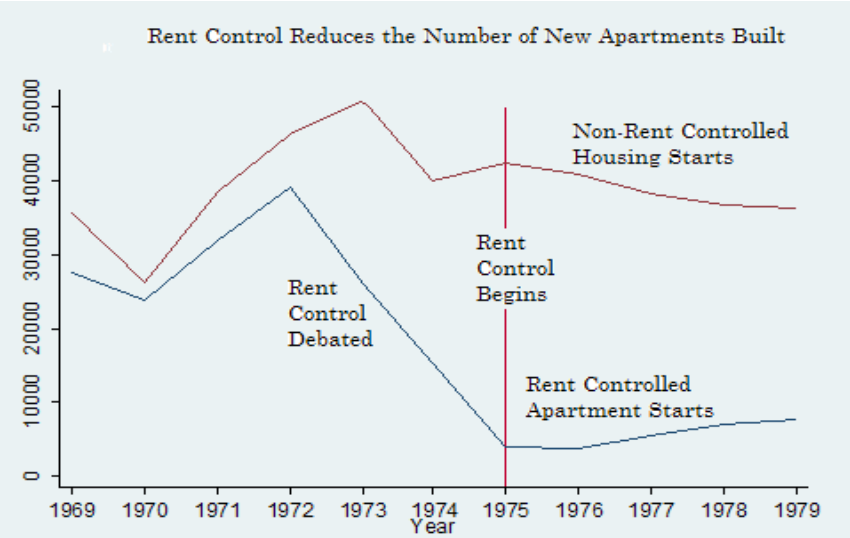


Figure 11

3. Rent control authorities will sometimes pledge to exempt newly constructed apartments from controls but the city of New York has a history of reneging on such promises.

Here is an example of the impact of rent control on the construction of new apartments from Ontario, Canada, in the 1970s.



E. EVALUATION

1. *Economists cannot say whether rent control is a good or a bad policy*, all we can do is to lay out the what our models predict will be the effects of controlling rents. Politicians and voters then have to decide whether they think the benefits (and who receives them) outweigh the costs (and who bear them) – this is not a simple case of villainous landlords exploiting impoverished tenants, because some tenants in controlled apartments are better off than the owners of those apartments.

All of the discussions that I have seen fail to note that once rent control is introduced removing it will make those who gain from rent control worse off. Which means that *the controlled market is Pareto optimal*! However, at the controlled quantity MB>MC and so the policy is inefficient.

2. Notice that *the analysis has had little to say about poor tenants, even though the purpose of the introduction of the "temporary" or "emergency" rent control was to protect poor tenants from market forces.* In "most" cases rent controls do little to 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[8]) and because landlords prefer them as tenants (economics professors with cute English accents versus unkempt male students in beer stained t-shirts).

3. Economists emphasize that *rent control is a poorly targeted policy* because it controls a *price* not *incomes*; *rich and poor pay the same controlled rent*. There have been some attempts to deal with this problem in New York, but they do not really come to grips with it (households with incomes in excess of $200k may not qualify for rent protection).

If you wish to protect poor tenants from rising rents then the simplest way of dealing with the problem is to make income 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 alcohol and drugs – but money is "infinitely fungible", a dollar is a dollar and what my voucher saves me in rent I can spend on booze and fast women, the rest I'll fritter away[9]. However, vouchers may signal to landlords that the tenant may potentially not be able to pay the rent, which may mean an expensive eviction process.

4. Low Income public housing is both expensive (union labor and Congressional micro-management) and has a history of corruption. (6,121)

https://twitter.com/jodiecongirl/status/167367333403312128

http://www.nakedapartments.com/guides/nyc/renting-in-new-york-city/rent-regulation

http://www.nytimes.com/2013/07/28/magazine/the-perverse-effects-of-rent-regulation.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

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[8] The actress Mia Farrow is the daughter of the actress Maureen O'Sullivan. Farrow inherited her apartment on the southwest side of Central Park from her mother. She will probably bequeath it to one of her children. The apartment was used in Woody Allen's "Hannah and Her Sisters". It is rent controlled.

[9] I have not met many slow women.

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

Now *this* is my sort of car:

http://www.bloomberg.com/news/2014-02-13/bugatti-needs-scary-fast-veyrons-to-fly-off-the-lot-review.html