

THE RENT CONTROL PARADOX: EXPLANATIONS AND PRESCRIPTIONS

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Abstract

If rent controls are unambiguously bad, as economists typically argue, why have they been adopted in so many jurisdictions? This paper offers three explanations: (1) people do not act rationally when they support rent control legislation, (2) a minority of individuals, who feel they will benefit from rent controls, have captured the political process, and (3) the standard economic analysis is flawed; there are instances in which rent controls serve the best interests of a majority of voters. In those cases, rent controls are a rational response to economic conditions.

The paper begins with an interpretive review of the standard analysis. It then discusses each of the proposed explanations. It argues that the third is the most plausible. That explanation is consistent with an alternative economic analysis of rent control, one that allows market imperfections and rigidities, and recognizes that rent controls take a variety of forms. The paper concludes by discussing policy implications and planned empirical work on the topic.

Introduction

For at least 15 years, the economics profession has been telling the American public—in an uncommonly unified voice—that rent controls have numerous undesirable effects: they lead to undermaintenance of dwelling units by landlords,¹ they distort the consumption of housing and nonhousing goods,² they lead to less rental housing overall in the long run by discouraging new construction,³ they create housing rationing and black markets,⁴ and they serve to drive up the price of uncontrolled rental housing, thereby transferring financial

burden from one group of renters to another.⁵

In those same 15 years there has been an explosion of rent control legislation. In 1969, New York was the only major U.S. city to have a rent control law. Now, more than 250 cities (including Atlantic City, Boston, San Francisco, Miami Beach, Los Angeles, and Washington, DC) and five states (Alaska, Connecticut, Maryland, Massachusetts, and New Jersey) have, or recently have had, some type of rent control ordinance.⁶ There is no evidence that this trend will be reversed.⁷

The trend *toward* rent control in the face of its widespread disparagement creates a curious paradox: if rent controls are unambiguously bad, why are they popular in so many places? There are a number of possible explanations: (1) people do not act rationally when they support rent control legislation, (2) a minority of individuals, who happen to benefit from rent controls, have captured the political process, or (3) the analysis of rent control's effects is flawed; there are, in fact, benefits from rent control that the public recognizes.

Each of these possibilities is discussed below. Most stress is given to the third explanation, in part because it provides the basis for a sorely lacking economic rationale in favor of rent control. The following section provides a context for the later sections by summarizing the economic arguments against rent control. The literature I review has yet to be drawn together in one place, so the summary should be of independent interest. Similarly, the comprehensive critique of that literature is unique, as far as I can tell.⁸ The paper concludes by discussing policy implications and describing empirical work that is planned for a future paper.

The Simple Analytics of Rent Control: An Interpretive Review

This section reviews the neoclassical economic analysis of rent controls' effects on new housing investment, maintenance, the consumption of housing and nonhousing

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Rental Housing Market Outcomes
Without Rent Controls

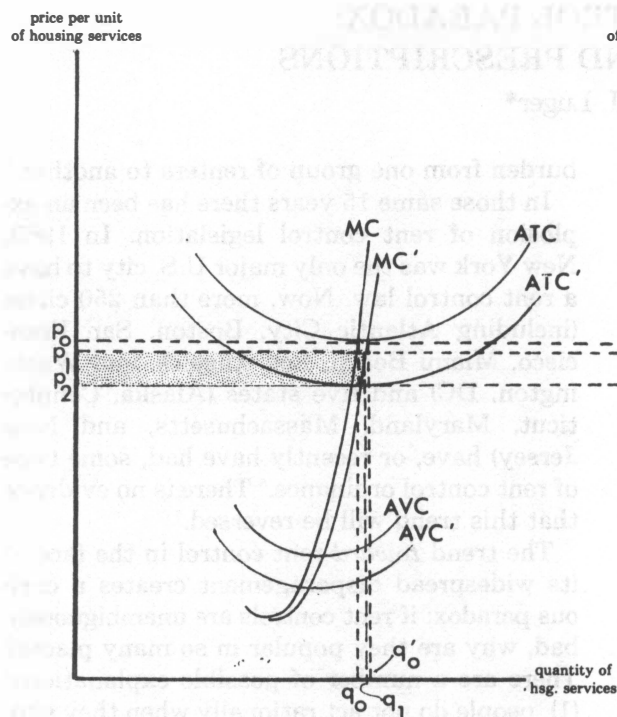


Figure 1

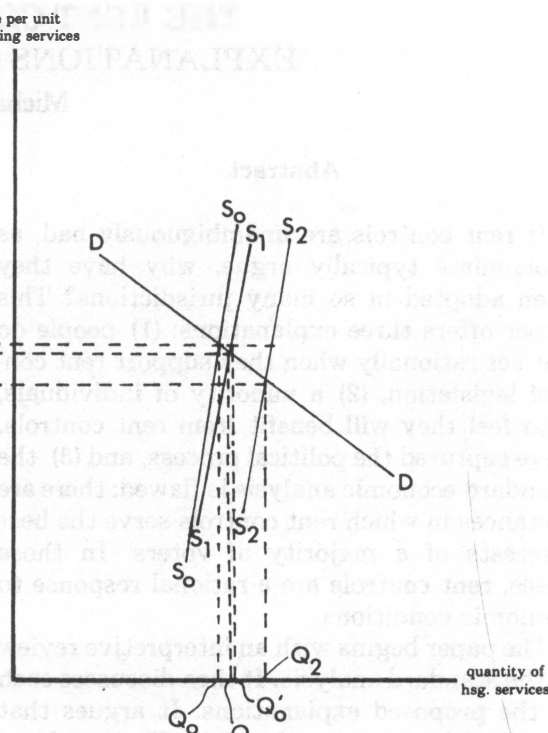


Figure 2

goods, and the price of uncontrolled apartments when controls are not comprehensively applied.⁹ Graphs are used to illustrate landlord behavior and housing market outcomes with and without rent controls, defined in two ways: as an *ex post* ceiling on the price per unit of "housing services," where "housing services" is a quality-adjusted measure of housing (including condition, size, and features), and neighborhood externalities, and as an *ex post* ceiling on revenues.

Figures 1 and 2 illustrate what happens without rent controls. Figure 1 is for the individual landlord who has U-shaped short-run cost curves, as normally assumed in microeconomic analysis. AVC in the figure stands for average variable costs, including maintenance outlays. The difference between those costs and ATC (average total costs) equals average fixed costs, such as debt repayment and taxes per unit. In an unregulated environment, the landlord would provide housing with q_0 units of service when the market price is p_0 dollars per unit, since that is the profit maximizing quantity, given his structure of costs. The landlord's rate of return on his investment in q_0 units of housing services depends on

market conditions. At p_0 dollars per unit of services, or $p_0 q_0$ for the apartment, the landlord would earn no "quasi-rents." (That does not mean he would not earn *any* profits. At point $q_0 p_0$ he earns the risk-adjusted "normal" rate of return for the economy. We might think of the associated volume of profits to be part of fixed costs.)

Housing "output" has quality and quantity components. Landlords adjust both to maximize profits. AVC in Figure 1 reflects the market for quality. If a landlord could cut maintenance and still rent the apartments he owns, his cost curves would be lowered, to AVC' , ATC' , and MC' , for example. Setting output so that price equals marginal cost (MC'), the landlord would attempt to produce q_0' units of housing services. $q_0' > q_0$ with reduced maintenance means that more apartments are rented, each of lower quality. (In the short-run, the landlord could only increase the number of apartments in service by renting vacant units, unboarding abandoned structures, or converting buildings used for other purposes.)¹⁰ The attempt to increase the level of housing services at a given price, p_0 , would cause the aggregate supply curve in Figure 2

to shift to the right, from S_0S_0 to S_1S_1 . The slope of S_1S_1 may be different than S_0S_0 because the reduction in maintenance changes the structure of costs. Since the aggregate demand curve, DD , is downward sloping, there would be short-run excess supply at the new supply level and price p_0 , so price would fall to the short-run equilibrium of p_1 . At that price, the maintenance-reducing landlord would produce q_1 units of housing services, slightly more than before maintenance was cut. At p_1 , he would earn short-run profits equal to the shaded area in the figure.

If some apartments were rented at p_1 which were of higher quality (that is, better maintained or containing higher grade appliances and fixtures), the quality-cutting landlord may not be able to rent his apartments. He would then have to increase maintenance to compete, until his costs returned to AVC , ATC , and MC . Price would rise to p_0 and equilibrium would be reestablished at Q_0 . If all landlords cut maintenance and earned above-normal profits, new investors would enter the market so that the aggregate supply curve would shift to S_2S_2 in Figure 2. Then there would be an excess sup-

ply of rental housing at the prior market price, so the price would fall to the new equilibrium of p_2 . The relationship between the new equilibrium quantity of housing services, Q_2 , and Q_0 and Q_1 , depends on the elasticities of supply and demand.

Similar dynamics accompany short-run changes in demand and supply. If demand fell suddenly, because of an unexpected loss of local income due to plant closings, for instance, there would be a temporary oversupply of rental housing services. As the market price fell, landlords would strive to cut costs to maintain their profit margins. Conversely, if demand suddenly increased, due to unexpected immigration, for example, or supply were unexpectedly reduced, perhaps as a result of a natural disaster, existing landlords would be able to earn above-normal profits until new investors entered the market.

Consider now the *ex post* imposition of a price ceiling (p_c) at a level below p_0 but above minimum AVC (see Figures 3 and 4). At that price per unit of services, landlords would try to cut costs (*i.e.*, reduce maintenance) to maintain normal profits. If they could do so, their

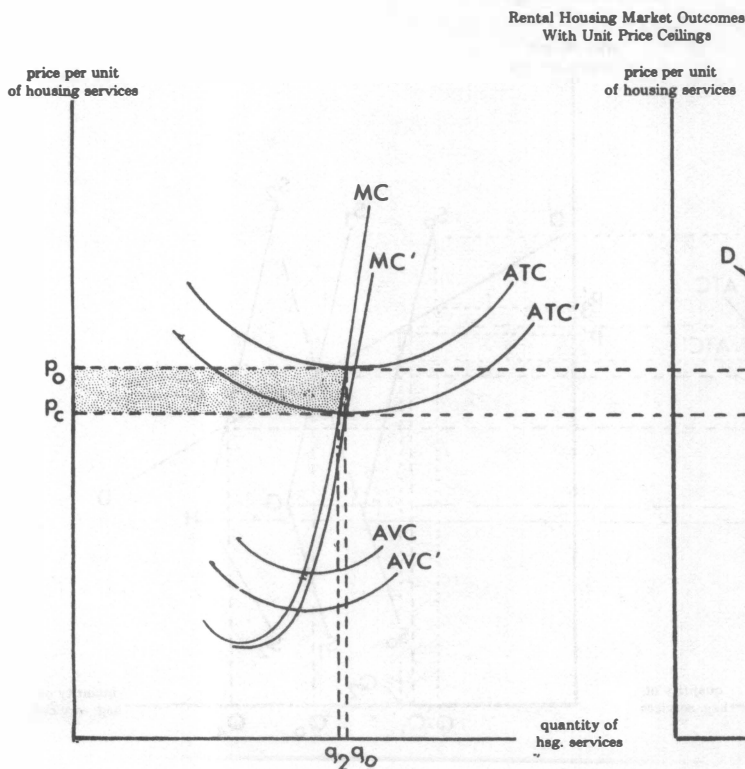


Figure 3

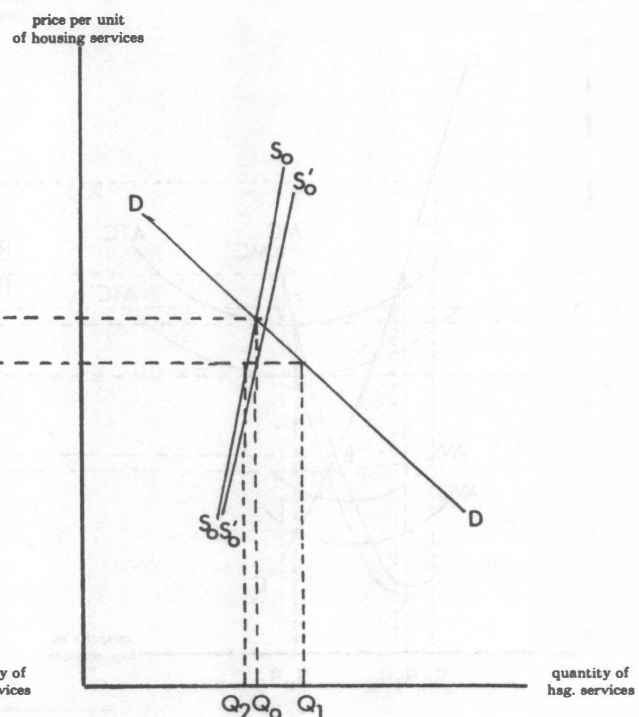


Figure 4

marginal cost curves would shift down and to the right, as before. In that situation, controlled landlords would still produce q_0 units of service, by renting more apartments of lower average quality. Because a reduction in maintenance changes the structure of costs, the aggregate supply curve flattens to S_0S_0 . Note that there is still short-run excess demand equal to $Q_1 - Q_0$. Because quasi-rents are not being earned, that excess demand will persist.

If landlords could not cut maintenance costs because of competition for quality or statutory protections in the rent control laws, they would earn less-than-normal profits. (Their loss would equal the shaded area in Figure 3.) Nonetheless, as long as p_c were greater than minimum AVC, they would be better off keeping their apartments in service, at least until their mortgage debts were retired or they were able to convert them to another use, such as condominiums. Even without abandonment and conversion there would be excess demand for rental housing at the rent controlled price, equal to $Q_1 - Q_0$ units. With abandonment and conversion by existing landlords, excess de-

mand would increase to $Q_1 - Q_2$. As demand grew over time, because of natural population increase, in-migration, or changes in household formation, the demand gap would widen further, necessitating even more rationing by landlords or the government. Several writers have observed that that rationing is not always done equitably.¹¹

A number of economists have criticized this model for its unrealistic depiction of controls as a cap on the price per unit of housing services. As Olsen (1969) points out, that price and the quantity of "housing services" are separately unobservable.¹² In fact, most rent control legislation imposes a cap on total revenue per housing unit, or $p \times q$, which is observable. This is illustrated in Figures 5 and 6.

AVC, ATC, and MC in Figure 5 are the same as in the earlier figures. Line CC is the schedule of p and q combinations consistent with a revenue ceiling (that is, a ceiling of \$500 per apartment per month may mean that 200 units of housing services can be rented for \$2.50 each, that 250 units can be rented for \$2.00 each, and so on). CC is equivalent to the

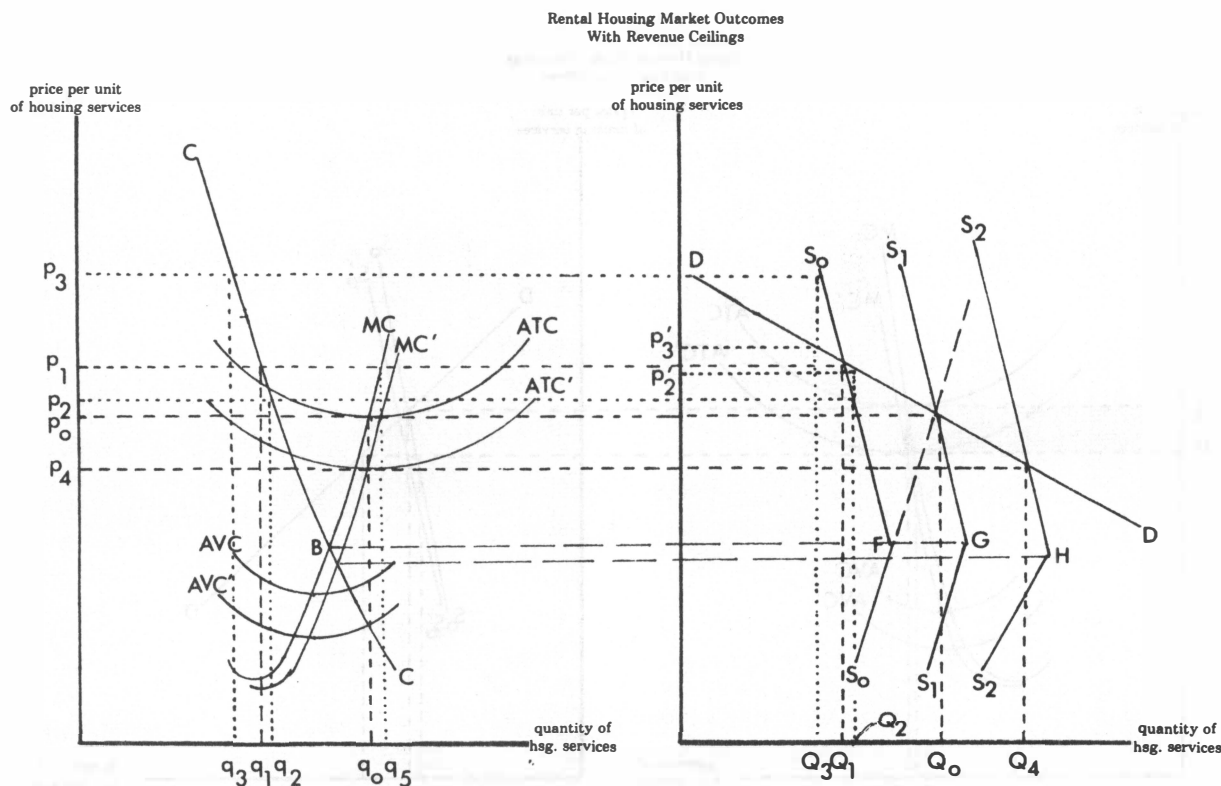


Figure 5

Figure 6

unitary demand function since it gives the maximum price that can be charged for any given quantity with revenue controls.

Since landlords are constrained to produce on or below CC with a revenue ceiling, their individual supply curves are backward bending, following MC to point B, and then following CC. The aggregate "controlled" supply curve is thus S_oFS_o in Figure 6, which is the horizontal sum of individual supply schedules. If landlords do not change their maintenance levels, revenue controls would result in a short-run reduction in the aggregate supply of apartments from Q_o to Q_1 , and an increase in the unit price of housing services from p_o to p_1 . This result follows from the dynamics of the model. If individual landlords reduced supply by less than $q_o - q_1$, (say, by $q_o - q_2$), the aggregate would be at Q_2 . But, at that point, renters are willing (and able) to pay a higher unit price (p_2). If landlords cut back by more than $q_o - q_1$ (say, by $q_o - q_3$), they would want to charge more per unit of services than tenants would be willing to pay. p_1 , Q_1 , is the point of short-run convergence.

Note that there are short-run equilibria in this model with and without controls; without a revenue ceiling it is at p_o , Q_o , and with the ceiling it is at p_1 , Q_1 . Because p_1 , Q_1 is an equilibrium point there is no excess demand with revenue controls, as there was with unit price controls. But, since $Q_1 < Q_o$ and $p_1 > p_o$, the controlled and uncontrolled equilibria are different. $Q_1 < Q_o$ because existing individual landlords have chosen to provide fewer apartments in response to the revenue ceiling. $p_1 > p_o$ because the demand curve, DD, is downward sloping, indicating that renters will bid more per unit when less is offered. Because the price of housing services is flexible under revenue controls, it serves to ration the scarcer quantity of housing services to renters.

Note, also, that while p_1 , Q_1 is a stable equilibrium, it is also a point of positive quasi-rents for existing landlords. That could induce additional investors into the rental market. Since S_oFS_o is the horizontal sum of individual supply curves, entry means that the aggregate curve would shift to the right over time, to S_1GS_1 in Figure 6, until p_o , Q_o were reestablished as the equilibrium. The resulting aggregate quantity of housing services provided is the same as in the no rent control case.

Let's now consider what happens when land-

lords cut maintenance in this model. As before, AVC and ATC shift downward, and MC shifts slightly down and to the right. But, since the revenue ceiling does not change, the individual supply curves remain the same above point B. If landlords were successful in cutting maintenance, they would earn higher short-run profits. If that level of maintenance could be sustained, there would be more entrants into the market, moving aggregate equilibrium supply to S_2HS_2 . At that point, there would be more apartments of lower average quality, or Q_4 units of service.

Economists have demonstrated two other effects of rent controls: that they alter the consumption of housing and nonhousing goods, and drive up the price of uncontrolled rental units. The first of these is deemed negative because any distortion in a *laissez faire* consumption pattern is inefficient—resources are no longer apportioned according to "true" preferences. The second is undesirable because a wider spectrum of renters is adversely affected.

Figure 5 helps illustrate the distortion problem. With revenue controls that are binding, tenants, individually or as a group, end up consuming a lower level of housing services than they would without controls. They also spend less on housing as a result. For example, when tenants consume q_1 units of housing services, they save $(q_o - q_1) \times p_1$ dollars in rent. Those savings would be used to buy more nonhousing goods, under conventional economic assumptions.¹⁴

The second issue is analyzed by Fallis and Smith (1984) for the case of price controls applied to all units except those newly built, rehabilitated, or luxury. They show that, following an exogenous increase in demand, tenants excluded from the controlled stock will bid up the uncontrolled stock's price even more than they would without controls. The basic point is that controls prevent price pressures accompanying excess demand from being spread to controlled and uncontrolled units evenly. The analysis is somewhat different when rent controls more plausibly are interpreted as a ceiling on revenues. If a segment of the rental stock were exempted from controls, and demand increased exogenously, the price increase could be spread among controlled and uncontrolled units. But, if maintenance were cut on controlled units, the average quality of uncon-

trolled units would be higher per dollar spent. In that case, there would still be more demand pressure for those apartments, causing their price to rise faster than with no controls. If prices rose enough, new uncontrolled units would be built, but because their q and p both would be high, they would be beyond the means of low and middle income renters.¹⁵ That leads to what is commonly known as the "dual rental market."¹⁶

Explaining the Growing Popularity of Rent Control

The theoretical case against the use of rent controls, summarized in the previous section, seems compelling. If landlords can cut maintenance outlays, the rental housing stock would end up with more units of lower average quality. Otherwise, there may be a reduction in the number of apartments. In the price ceiling model, rent controls require landlords or the government to ration the relatively scarce units; that creates inequities and fosters a black market in rental housing. Both models indicate that rent controls affect the price and availability of uncontrolled units when coverage is not comprehensive, and distort the consumption of housing versus nonhousing goods.

This section attempts to explain why these grim predictions have not slowed down the growth of rent control legislation in the United States. It discusses three possibilities: that the public acts irrationally when it supports rent controls, that a minority of rent control beneficiaries have "captured" the political process, and that rent controls do not, in fact, have the effects delineated above, so that support for them may be rational after all. Each of these deserves article-length treatment; my purpose here is only to lay out the broad outlines of the arguments.

Rent Control and Irrational Behavior

The first possible explanation for the explosion of rent controls in the face of their widespread criticism is that individuals act irrationally, *i.e.*, not in their own best economic interest, when they support such legislation. This irrationality may be due to an inability to understand the economic arguments, or to what political scientists call "symbolic behavior"¹⁷—for instance, acting more out of a desire for in-

come redistribution than for increased efficiency.

It is important to point out, first, that this is not meant as a social choice argument. Whether or not individuals work in the collective, public interest, is another matter.¹⁸ The possibility posed here is that individuals make irrational, private choices based on predictions about the likely impact of rent control on them. There is, of course, a social choice dimension to the argument since individual support for rent controls translates into majority support. That is not a problem if we consider the behavior of a median voter who (by assumption) is adversely affected by rent controls, in the manner outlined in the previous section.

One tenet is that our representative individual mistakenly supports rent control because he could not understand the arguments made by economists against it. That is not likely, however, because the anti-rent control arguments have been presented in non-technical terms in lay journals and the popular press.¹⁹ Few other economic issues, in fact, have been treated more thoroughly in the mass media.

Moreover, the irrationality argument flies in the face of conventional economic wisdom about individuals' behavior.²⁰ It would be inconsistent to call individuals ill-informed and irrational in their support of rent control when they are considered well-informed and rational in every other instance. If individuals act to maximize their welfare when they consume private goods, plan their financial futures, decide which community to live in, and vote in elections, for example, they certainly would optimize for themselves when deciding to support rent control.

A second possibility is that the median voter understands that rent controls are not in his best economic interest (or even in society's interest in terms of efficiency), but supports them anyway, for symbolic reasons. Kochanowski (1980) claims, for example, that "in the case of rent controls, equity outranks efficiency as a vote generating force" (p. 174). Since rent controls are popularly advertised as being *inequitable*, due to their putative effects on the supply of low income housing, voters' symbolic support of them as equity-improving would be irrational, unless those voters have reason to discount or dismiss the advertised claims. In fact, the equity consequences of rent control are not readily apparent. Following the imposi-

tion of rent controls there is a complex web of transfers between landlords and tenants in controlled units, landlords and tenants in uncontrolled units, tenants in controlled and uncontrolled units, and future renters. The net equity outcomes depend on a host of local factors, including existing housing conditions, income distribution, and the type of controls that are used.²¹ For that reason, one cannot generalize about equity being "a vote generating force."

Rent Control and Minority Rule

A second possible explanation for the growth of rent control legislation in the United States is that the relatively small number of people who benefit from it have been able to "capture" the political process. This is a derivative of the interest group political theory developed by Bentley (1908), Truman (1951), and others, and of the economic theory of regulation associated with Stigler (1966) and Peltzman (1976).

The argument goes as follows: individuals who believe they would benefit from rent controls (most likely, existing renters) organize to elect pro-rent control representatives, or vote to pass rent control referenda. Even though this group may be a minority, it can win because: (1) the intensity of members' feelings leads to a higher percentage turnout at the polls than the majority can muster; (2) it is less costly for the minority to mobilize, not only to increase voter turnout, but also, to inform the group members about the issue; and (3) the minority is a more homogeneous group than the majority, so its members are more likely to vote the same way.

This argument correctly identifies a renter coalition as an important, if inessential, precondition for rent controls to pass. Rent controlled tenants, or low income tenants whose housing would be subject to controls, typically lack the resources to win political battles. (That makes the rent control case different from the business regulation case used by Stigler and Peltzman. In their analysis, small but powerful business interests can succeed in getting legislation passed, even when the public interest is not served as a result.) Because of the relative powerlessness of rent controlled and other low income tenants, Lett (1976a) argues that rent control is only viable

politically when it gets the support of middle income renters, never before in controlled housing, who feel threatened economically by rapid rental price rises.²² Kochanowski (1980) provides some empirical verification. When he used discriminant analysis to help determine why 17 of 40 communities in Connecticut, Massachusetts, and New Jersey adopted rent controls, and 23 did not, he found that two proxies for the "pressures from middle income households" had signs that were consistent with that hypothesis, though the relative contribution of those proxies to the overall difference between adopters and non-adopters was small.

There are two problems with the capture explanation. First, it oversimplifies the politics of rent control by dividing voters into two groups: a renter minority and others. There are, in fact, five relevant groups: controlled tenants, uncontrolled tenants, both existing and potential future owners of rent controlled apartments, and non-landlord homeowners. The relationships among these groups are complex, and their responses to rent controls depend on many factors. Second, the capture explanation is not symmetrical in its treatment of competing interest groups. In the rent control case, landlord and realty groups may be as intense, mobilized, and homogeneous as renters. Because there are strong competing interests, a median voter or majority rule framework makes more sense than the minority rule approach.

Rational Rent Control

A third possible explanation for rent controls' recent popularity is that a majority of people (or the median voter) finds them to have distinct benefits. For this explanation to hold, rent controls must not have the negative effects that economists have demonstrated, and voters who perceive themselves to be beneficiaries of rent control must outnumber others. These are addressed in turn below.

The analysis summarized in the previous section of the paper is flawed because it rests on two questionable assumptions: (1) that rental housing markets tend toward competitive equilibria and (2) that rent control is an *ex post*, rigid ceiling on price or revenues. Consequently, its predictions about the effects of rent control are cast in doubt.

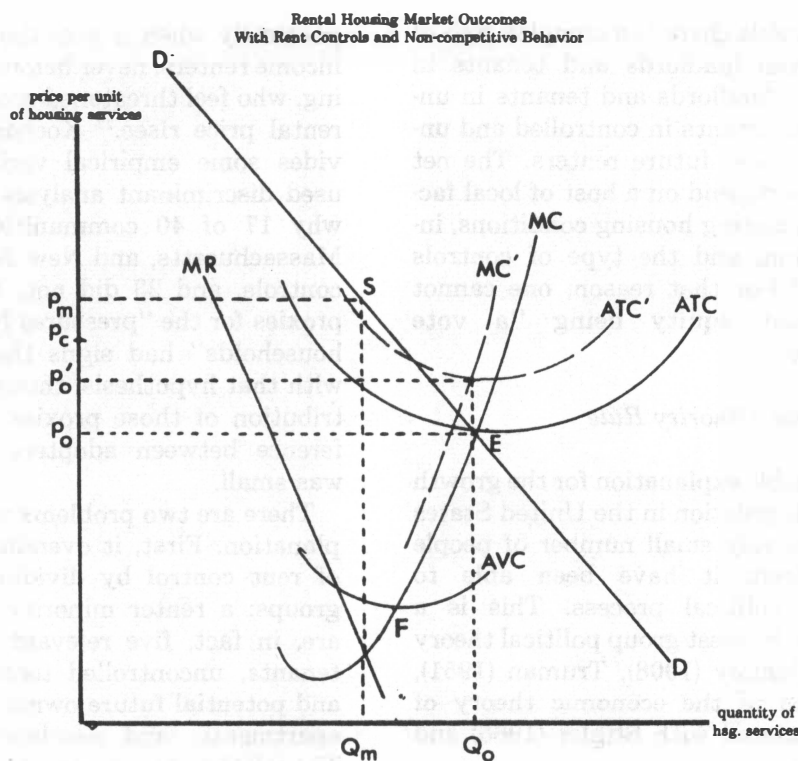


Figure 7

Figures 3-6 show what happens when a short-run equilibrium is disturbed by the *ex post* imposition of rent controls. The conclusions about excess demand (in Figures 3-4) and disinvestment (in Figures 3-6) would not necessarily follow if rental markets were not in short-run competitive equilibrium to begin with.

I consider two counter possibilities here: non-competitive equilibria and competitive disequilibria.²³

Non-competitive equilibria. Let's begin with the extreme case of landlord monopoly, as illustrated in Figure 7. (There is only one figure here since individual and market outcomes are identical.) AVC, ATC, and MC are average variable, average total, and marginal cost, as in the earlier figures, but they do not necessarily have the same values for monopolists or oligopolists as for competitors. First, monopoly landlords may be able to realize economies of scale in maintenance and the purchase of inputs, so average costs would be less. Second, since there is no competition for quality, monopolists can spend less on upkeep than their competitive counterparts, without losing tenants.

Without rent controls, landlords equate

marginal cost and marginal revenue (MR in Figure 7) to find their profit maximizing price (p_m) and quantity (Q_m). Even if monopoly average total costs were somewhat lower than average total costs in competitive equilibrium (p'_0), the monopoly price of housing services charged is likely to be higher than the competitive counterpart. Moreover, $Q_m < Q_0$ in both quality and quantity terms.

If a ceiling on the price of housing services were imposed at p_c , monopoly landlords would increase output as long as p_c were greater than minimum AVC and less than p_m . They would continue to earn quasi-rents as long as p_c were more than minimum ATC (i.e., as long as $p_c > p_0$, based on my definition of p_0). With price controls, monopolists are forced to be price takers, just as competitive landlords are. Consequently, price controls can be used to drive output toward the competitive market level. Note that there would only be excess demand for housing services in this situation if $p_c < p_0$, just as in the competitive case. (By plotting different p_c , Q combinations under price controls, we can trace a monopoly supply curve, FES.)

Revenue controls do not operate the same way with a monopoly as they do with competi-

tion. When there are many suppliers of rental housing, none is likely to be constrained by demand. The monopolist, however, will not produce more than aggregate demand, so DD in Figure 7 is itself a revenue constraint. In addition, with revenue constraints in a competitive environment, p is set in the market, given landlords' choice of q . The monopolistic landlord still can choose p and q (up to the $p \times q$ ceiling). The implication is that a downward sloping revenue constraint would have to intersect DD in Figure 7 to the right of point S to be effective. (Otherwise, the constraint would serve to exacerbate undersupply.) If the point of intersection were between S and E, the revenue constraint would be indistinguishable from a price ceiling. If the point of intersection were to the right of E, monopolists would produce at E, their point of maximum net revenues. That would have the same effect as a ceiling at p_0 .

The impetus to reduce maintenance following the imposition of rent controls is less with monopoly than with competition. Since monopolists are profit maximizers they can be assumed to have reduced maintenance to the lowest level they feel is possible, before rent controls were enacted.

Effective landlord monopolies used to exist in company towns, and today may exist in some neighborhoods, but generally, the monopoly construct is unrealistic.²⁴ The foregoing analysis also applies, however, to the case of landlord oligopoly when there is collusion. Then, DD in Figure 7 can be interpreted as the i^{th} firm's agreed-upon share of market demand and p_m can be viewed as the consensus price.

Economists typically argue that oligopoly is also unlikely since, when prices are set above p_0 , new entrants will bid them down.²⁵ While this is obviously true for large cities overall, it does not appear to apply to some smaller cities and to particular neighborhoods with captive low income populations.

Looking at small cities (less than 200,000 population), this author (Luger, 1982) concluded that those with relatively skewed income distributions, large student populations, and high growth rates are likely to have the greatest concentration of ownership overall and in particular neighborhoods. Spurr (n.d.) and Bylsma (1977) drew similar conclusions about concentration in studies of Canadian cities. And Sternlieb (1966) found that in Newark "the

worst housing areas have the highest concentration of major owners. Analyses of data on acquisition, by area, as a function of race, indicate that [these areas are] increasingly dominated by white, large-scale owners" (p. xviii).²⁶

At issue in all these studies is the relationship between concentration and market manipulation. In my earlier paper I used 1981 data from Durham, North Carolina, to show that, overall, 17 individuals (0.04 percent of all tax-paying units) owned almost 1500 rental units (approximately 6 percent of the rental stock). While this degree of ownership concentration is high in *relative* terms, it is still too small in absolute terms to affect city-wide market outcomes. I proceeded to show, however, that concentration is considerably more pronounced in some low income areas. In one all black neighborhood, for example, almost two-thirds of the nearly 150 rental units were owned by three individuals. Since the tenants of these units are tied to the neighborhood by kinship relations spanning a century, those landlords seem to have been able to exact oligopoly rents.²⁷

But the concentration of ownership is only part of the story. The degree of management concentration is also important to consider since companies that manage rental properties for absentee owners generally set rents, choose tenants, and make maintenance decisions. This type of concentration is significant in many small cities. I verified that in Durham at least 50 percent of all rental units were controlled by 14 companies; one management company official I interviewed estimated that the three largest management firms alone controlled 70 percent of all units.²⁸

Where management concentration is this great, collusive rent setting is greatly facilitated. The management company vice president I interviewed admitted that his firm "normally set prices 10 to 15 percent above the competition to raise the general rent level." That conforms closely to what is commonly called the barometric firm model of oligopoly which "lead[s] to prices that are above the levels that would prevail under perfect competition."²⁹ Powerful management companies also could erect entry barriers in small cities, by capturing local planning and zoning boards. But even if management companies do not bar entry in that way, potential new landlords might find it difficult to enter the market because of land scarcities or the high cost of capital.³⁰ Weitzman (1984)

introduces one other type of collusion: the prevalence of organized groups of apartment owners and real estate developers "which frequently advise and influence their members on rent levels, marketing, and maintenance strategies" (p. 13). He argues, further, that those groups' use of the standard lease dilutes renters' bargaining power by requiring fixed periods of tenancy at constant rent levels.

The evidence just presented suggests that rental markets may not operate competitively everywhere. In those cases, rent control could serve to improve economic efficiency by forcing oligopolists to behave more like competitors. Unfortunately, however, my evidence is thin; more work needs to be done on the issue of ownership and management concentration and market outcomes.

Competitive disequilibria. The second counter possibility is that markets are competitive, but out of equilibrium for more than a temporary period. Then, landlords could earn positive quasi-rents for an extended time. In that case, the landlords' gain is the tenants' loss since rents would be higher than if there were quick adjustment to equilibrium. The possibility of this inequitable transfer seems to have motivated many rent control laws; most of the acts I have read cite "protection against temporary rent gouging" as their *raison d'être*.

Markets may not adjust rapidly for several reasons. Rate of return information is not usually publicly accessible, so potential investors may be slow to recognize the profit opportunities in the rental housing market. Once the decision to invest is made, investors often face delays in getting financing and securing building permits and zoning variances. Even when new construction is completed, old landlords may continue to realize above-normal profits by having entered the market when building costs were relatively low. As the general rent level rises, and new construction becomes viable, older existing units can become increasingly profitable.³¹

Federal tax policy also contributes to market disequilibrium. A number of economists discuss how favorable treatment of housing investment has led to higher-than-normal actual profits for landlords and imputed profits for homeowners. deLeeuw and Ozanne (1981) show that overinvestment in rental housing was particularly acute before 1969, when taxpayers were still allowed to expense construction period interest

and taxes, did not have to repay, upon the sale of their property, the excess depreciation claimed during ownership (i.e., there was no recapture provision), did not face a minimum tax on tax preference income, and paid preferential rates on 60 percent of capital gains. Hendershott and Hu (1980) calculated that under those provisions in 1964-65, the average risk-adjusted net user cost of capital was 6.93 percent, versus more than 9 percent for corporate structures and equipment. Gravelle (1983) conducted a similar analysis, showing that in 1962, for example, the effective corporate tax rate on apartment buildings was 11.6 percent below the economy's average, enabling the owners of those structures to earn greater than average profits. (The user cost of capital and effective tax rate are inversely related to the rate of return.) Taubman and Rasche (1971) likewise concluded that "an important consequence of the tax laws [in the 1960s] is that the economic life of buildings is lowered by tax law subsidies. Thus, in the long run, high tax bracket investors, renters, demolition companies, and landlords all benefit . . . In the short run, which lasts more than 10 years, investors receive excess profits" (p. 138).

It is true, as Gravelle (1983), Hendershott and Hu (1980), deLeeuw and Ozanne (1981), among others, point out, that changes in tax policy and high rates of inflation during the 1970s reduced the bias toward rental housing, but those events did not eliminate it. In 1976-77, according to Hendershott and Hu, the average risk-adjusted net user cost of non-corporate rental housing capital was still more than four percentage points less than the cost of non-residential corporate capital. And in 1980, according to Gravelle, the effective corporate tax rate on apartment buildings was still more than 9 percent less than for the overall economy. Even taking the 1981-82 tax changes into account, Hendershott and Shilling (1982), Gravelle (1983), and Brueggeman, *et al.* (1982) concluded that tax policy favors rental housing investment. Hendershott and Shilling show that following those tax acts there still was a 1.5 percentage point spread between the net user costs of non-residential corporate and rental housing capital, and Gravelle estimated the effective tax rate on apartment buildings in 1983 to be 0.33 versus 0.39 for the economy as a whole.³³

If landlords' tax savings were passed on in lower rents, renters would benefit directly. If the resulting higher-than-normal profits induced more investment in rental housing, renters would benefit nonetheless by having a wider choice of apartments at a lower unit cost. At the same time, however, they would have to pay higher personal taxes to offset the revenue loss from the owners' tax breaks.

It is important to know for policy purposes whether renters benefit from the use of disequilibrating tax laws. If they do not, there is a *prima facie* case for some type of government action to limit landlords to normal profits.³⁴ Some type of rent control is one candidate policy, but at most, it would be a "second best" palliative.³⁵ The first best action would be to eliminate the tax biases that enable landlords to earn extra-normal returns. That alternative may not be politically feasible, however, since tax biases are supported by powerful lobby groups.³⁶

The authors cited above indicate that tax savings are not passed on to renters to any substantial degree. They show, however, that the rental housing stock is somewhat larger than it would have been without the favorable tax treatment of residential investments (though the increase in supply has not been so large as to eliminate excess profits completely). Most of these new units have been built for higher-income tenants, so rental housing shortages still exist at the low-income end of the spectrum, filtering notwithstanding.³⁷ This has an important implication for rent control: for that policy to help restore the economy to its *laissez faire* equilibrium, it would have to be applied to higher-income units. That is hard to justify on equity grounds.

The point of this section is that even if rental housing markets are competitive, they are not necessarily at the *laissez faire* equilibrium because of market rigidities. "Old" landlords and landlords who have taken advantage of tax breaks, for example, can earn above-normal profits for more than temporary periods. In those cases, equity would be served by capturing the quasi-rents and redistributing them to lower income tenants. When the quasi-rents are earned on low income properties, rent controls would have that effect.

Ex post versus *ex ante* imposition. Forget for now the windfall effect of new rent controls on existing landlords. Consider, instead, their

effect on future owners of rental properties (for whom the controls are *ex ante*). Their offer price for rental housing equals the present discounted value of the stream of expected gross revenues minus projected costs.³⁸ In this scenario there is little incentive for potential buyers to maintain their new property poorly.³⁹ They would take projected maintenance costs (as well as expected taxes) as given, and base their offers on the expected stream of controlled rents. If their bids were accepted, and there were no unanticipated changes in the market environment, they could earn a normal rate of return while fully maintaining their new apartments. The prediction of poor maintenance with rigid rent controls applies only to properties still owned by the original landlords; the longer rent controls are in force, then, the less effect they will have on the quality of the rental stock.

Rent control as a rigid ceiling. Actual rent control laws do not necessarily affect investment and maintenance decisions of original landlords. More recent legislation (referred to as "second generation" as opposed to "first generation" rent controls⁴⁰) allows those owners to raise rents by the value of increased maintenance and other costs.⁴¹ To quote Lett (1976a):

As opposed to World War II and 1971 Phase I price controls, present day rent controls are not absolute freezes on rent levels. Rather, all ordinances allow for regulated increases. Further, most provide for pass-throughs or surcharges of cost increments in designated expenditure categories. (p. 57)

This provision ensures owners a "fair" return on controlled units, at least in theory. Moreover, many recent rent control ordinances exempt new buildings, so even if landlords received somewhat less than normal profits on old buildings, they would earn normal or above-normal returns on new rental properties. (Recall Fallis and Smith's argument that rent controls raise the rate of return on uncontrolled units.) Therefore, landlords' *composite* rates of return may not be depressed by rent controls.

The evidence about the effect of the more lenient rent control measures on new investment and maintenance in controlled housing is mixed. Lett (1976a) points out that it is costly to administer investment neutral programs that

allow landlords to petition a board for rent increases. Those "deadweight social costs" are important to consider. But presumably they are offset by social benefits. Lett (1976b) also points out that there are some pro-tenant rent review boards that turn down legitimate requests to raise rents. As a consequence of these facts, rents have not increased at the same rate as expenses in many rent control cities, even those with lenient laws. That does not necessarily mean, however, that rates of return on controlled units have fallen. Davidson (1978) explains that net income can stay constant even when the percentage change in expenses exceeds the percentage change in rents, as long as the base level of rents is higher than the base level of expenses. "Net income stays constant," according to Davidson, "if the ratio of the percentage change in rents to expenses equals the operating ratio (presuming no vacancies)" (p. 573). When Davidson compared the percentage change ratio to the operating ratio for selected years in four rent control cities (Boston; Fort Lee, NJ; New York; and Washington) he found that net income was allowed to rise in two instances.

The previous discussion of revenue constraints raised another key point about rates of return. As long as landlords are allowed to cut maintenance expenses, they can continue to earn normal rates of return (or more). The short-run social welfare effect of this depends on whether the value of maintenance reductions is greater or less than the value of tenants' rent savings. If it is less, tenants can perform maintenance themselves and come out ahead, but if it is more, tenants would end up worse off.

Considering the variation in rent control laws and their enforcement, and the differences among communities in key economic, institutional, and physical characteristics, it is not possible to generalize about the effects of rent control on housing supply. Some case studies show substantial negative supply side effects,⁴² but others show minor changes in supply. Rydell, *et al.* (1981) estimated a reduction in housing services in Los Angeles of only 1.5 percent between 1978 and 1982. A more recent study, commissioned by the Los Angeles city council, concluded that "the rent lid [in L.A.] has held down landlord profits 'only slightly' when compared to profits enjoyed by property owners in adjacent cities," and "the impact of

rent stabilization on both maintenance and reinvestment has been modest" (*Los Angeles Times*, 1985, p. 1). Even if the measured level of rental housing services has fallen because of less maintenance, it is not clear social welfare has diminished.

Lett's hypothesis is that rent control's enactment requires a coalition of controlled tenants and middle income renters. But that coalition is neither necessary nor sufficient for the adoption of controls. If it were sufficient, we would see rent controls in even more communities with relatively high ratios of renter-to-owner occupancy.

The critique in the previous section provides the basis for a more complete model of majority support. It identifies four groups of voters, which standard analyses show to be uniformly harmed by rent controls: existing tenants in controlled housing, tenants in uncontrolled housing, existing owners of rental units just made subject to controls, and potential owners of rent controlled apartments. It then explains that outcomes may not be as dire as predicted for each of those groups. Based on my analysis, the first two groups may indeed perceive rent controls to be in their best interest, and the last two groups may not be as strongly opposed to rent controls as most economists assert. A fifth group of voters, non-landlord owner-occupiers, may well be decisive in rent control elections. The effects of rent control on them are difficult to predict; most likely, they would be small.⁴³ So, this group is likely to make their vote symbolic—for example, to express sentiment about equity (if rent controls would be equity-improving in their community) or government intervention. This leads to the hypothesis that communities with liberal owner-occupiers will have a higher rate of adoption than those with conservative homeowners, all other things equal.

Because rent control laws differ, the distribution of their costs and benefits do as well, so it is impossible to generalize about voting behavior. My point here is simply that a renter majority is likely to increase the probability of support for rent control, but even without it, a majority of voters may allow the legislation to pass for quite rational reasons.

Conclusion

The motivation for this paper was that no

satisfactory model exists to explain why hundreds of communities have chosen to adopt rent controls despite vigorous opposition by economists. I discussed three possible explanations for that paradox. The first was that people act irrationally. The second was that a minority of beneficiaries capture rent control elections. Both of those explanations were shown to be unsatisfactory. The third possibility was that rent control actually does benefit the majority of individuals in some communities, so support for it is a rational expression of self-interest.

This third explanation is consistent with an alternative economic analysis of rent control, one that allows market imperfections and rigidities, and recognizes that rent controls take a variety of forms. This alternative construct is more realistic than the standard analysis since rental housing markets often contain physical, institutional, and economic impediments to equilibration. In some communities, for example, there are serious land shortages or development freezes that effectively prevent supply-side adjustments when there are higher than competitive returns to rental housing ownership (e.g., Berkeley, California). In other communities, the ownership and/or management of rental housing is concentrated among relatively few landlords (Durham and similar cities). And during times of high interest rates, new construction to absorb excess demand is shut off everywhere. In addition, federal tax policy has created an oversupply of rental housing nationally, at least at the high income end of the spectrum.

The analysis in this paper has several direct policy implications. The most important, perhaps, is that one should not generalize about the advisability of rent controls. First, the various types of rent controls have different economic effects. Overly restrictive controls, such as those described for the United States during the World Wars by Blumberg, *et al.* (1974), and for New York City in the 1950s and 1960s by Achtenberg (1976), can cause severe housing shortages and quality deterioration. But carefully administered "second generation" controls can be socially efficient and equitable, even though they are accompanied by sizable deadweight costs. Second, communities have different housing needs and socioeconomic characteristics. For that reason, rent control must be a local option, not a

federally mandated policy as it was during President Nixon's 1971 price stabilization program. Conversely, rent controls should not be proscribed as a matter of federal policy, as they would be under President Reagan's urban enterprise zone legislation.⁴ In some places rent control would be beneficial to a majority of residents; in others, the likely outcomes are less clear.

While rent control should not be dismissed as a policy tool when appropriate conditions exist, it should not be used without careful evaluation of the alternatives. For example, when markets are in competitive disequilibrium due to housing overinvestment, rent controls could improve efficiency, but would be inequitable. If the tax biases creating overinvestment could not be eliminated, a direct tax on landlords' profits would be a preferable policy. Similarly, when there are market concentration and tax biases, it is not clear whether rent controls would make matters better or worse. In that case, as for the case of market concentration without tax biases, it might be more effective for the government to assist new entrants into the market (via subsidized mortgage schemes, for example), build rental housing itself, or proscribe anti-competitive practices. These alternatives to rent control have limitations of their own, however, and some are politically infeasible or legally suspect.

Much of what is presented here requires more empirical substantiation. A number of projects come to mind. The first is to document more carefully housing market structure in different communities, as was done for Durham. Another is to perform a multivariate logit regression of rent control adoption (yes or no) in a cross section of communities on such variables as: (1) the concentration of rental ownership (or some proxy), (2) the concentration of management concentration (or some proxy), (3) town size, (4) the renter-to-owner occupier ratio, (5) income level and distribution, including the income strata of renters, (6) some measure of landlord and realty group political strength, (7) the rate of inflation, (8) some index of the median homeowner's ideology (liberal-conservative), and (9) exogenous housing development factors, such as the availability of land for residential use. At the very least, this paper provides a justification for testing the significance of each of these.

FOOTNOTES

¹For example, see Arnault (1975), Kiefer (1980), and Moorhouse (1972).

²For example, see Olsen (1972) and Rydell, *et al.* (1981).

³For example, see Moorhouse (1983), Davidson (1978), Grampp (1950), and Albon (1978).

⁴See Friedman (1984), pp. 459–461.

⁵The best example of this is by Fallis and Smith (1984).

⁶This information is from Moorhouse (1983), p. 1. Developments subsequent to 1982 are not included here.

⁷See Mitchell (1978).

⁸Weitzman (1984) provides an unpublished critique that is fairly comprehensive, but not technically sophisticated. Achtenberg (1973), Musgrave (1976), and Marcuse (1981), among others, critique some aspects of the neoclassical argument.

⁹The analysis in this section should be comprehensible to readers who have had an intermediate microeconomics course. Others might find this section a bit tedious. Those who are intimidated can skip this section without missing the main points of the paper.

¹⁰See McGough (1983).

¹¹See Grampp (1950), Paish (1950), Johnson (1981), Phelps-Brown and Wiseman (1964), Lindbeck (1967), Hemel (1979), and Albon (1978).

¹²Hedonic price models break down market price into the unobservable component prices of separate housing attributes. See Follain and Malpezzi (1979), for example.

¹³The following is based, in part, on Frankena (1975).

¹⁴Those assumptions include the following: that nonhousing goods are “normal” in the sense that more are demanded at higher levels of income, and that preferences can be represented as a continuous, convex function.

¹⁵See Rydell, *et al.* (1981). As tenants moved into these units their old apartments would become available for occupancy by others. This is called “filtering.” (See Lowry, 1960.) It is not clear that enough uncontrolled units would be built to make a difference; nor is it clear that lower income tenants would be able to move into vacated apartments without paying substantially more rent.

¹⁶See Krohn, Fleming, and Manzer (1977), Eckert (1983), and Stegman and Sumka (1976), note 4.

¹⁷See Laswell (1930, 1935, 1976), Edelman (1964, 1977), Sears, *et al.* (1980), and McConahay (1982). My definition of irrationality is narrow since it rules out “public regard- ingness” as a rational act.

¹⁸There is a large public choice literature. See Mueller (1979) for a general overview.

¹⁹Anti-rent control arguments are made in non-technical journals that are accessible to the public, including Mitchell (1978), Brownfeld (1975), and Starr (1979). Recent newspaper articles include *Los Angeles Times* (1985).

²⁰For example, economists assume rational behavior in the formation of expectations, as demonstrated by Sargent and Wallace (1976), Shiller (1978), Barro (1976), Pool (1976), and others. Also, to quote Samuelson (1947):

... Many economists, well within the academic fold, would separate economics from sociology upon the basis of rational or irrational behavior, where these terms are defined in the penumbra of utility theory (1965 edition, p. 90).

²¹See Albon (1978).

²²This has been used to explain the adoption of rent con-

trol in Santa Monica, California (see Keating 1983).

²³A third possibility is that there are non-competitive disequilibria. To conserve space, I do not discuss that here.

²⁴This framework could, however, be used to analyze the efficiency of government controlled (public) housing.

²⁵See Ault (1981).

²⁶See, also, Rapkin (1959).

²⁷See Friedman (1978).

²⁸Interview with Carol Brooks, Vice President of Southland Real Estate Co., Durham, North Carolina, in April 1982. My estimate is based on an examination of Durham County tax records. The figure is conservative since those records do not specify how many apartments are contained within each taxable unit.

²⁹Same interview as cited in preceding note. Quote from Cohen and Cyert (1975).

³⁰High interest rates for construction loans affected multi-family housing starts over the 1978–1982 period, especially for small, illiquid companies. *Business Week*, Nov. 7, 1983, discussed how small developers were being replaced in the housing market by a relatively few large-scale operators for the same reason.

³¹In 1974, the estimated gap between market and replacement rents (rents needed to make new construction viable), was \$64 per month, or 40 percent of current rent levels, nationally. By 1981, the gap had widened to \$172 per month, or 91 percent of current rents. See Arnold (1982) and *The Wall Street Journal* (1982).

³²The 1981 Economic Recovery Tax Act limited depreciation on newly-acquired property to straight-line at 175 percent (versus a 200 percent declining balance method using sum-of-the-years digits). At the same time, it shortened buildings' tax life dramatically, to as little as 15 years. It also liberalized depreciation procedures for newly-acquired used property. The 1982 Tax Equity and Fiscal Responsibility Act pushed buildings' tax life back to 18 years.

³³One problem with the studies just reviewed is that they calculate effective tax rates and net user costs of capital using incomplete information. Tax rates and user costs of housing are also affected by the level of property taxes, for example. But, since corporate capital is also subject to state and local taxes, the omission of those levies is not likely to alter the conclusion that there currently is a bias in policy toward the rental housing sector. Preliminary analysis indicates that the 1986 tax reform act will substantially reduce the tax bias toward rental housing.

³⁴Similarly, the windfall profits tax on oil was justified on equity grounds when it was enacted following the Arab oil embargo in the mid-1970s.

³⁵The theory of the second best says that when there are market imperfections, conventional correctives could make matters worse. Conversely, policies, such as rent control, that are distorting when markets are perfect, could otherwise improve efficiency. (See Lipsey and Lancaster, 1956–57.)

³⁶The 1986 tax reform act removes some of the biases toward rental housing, including the amortization of construction period interest; adjusts depreciable tax lives upward; and removes 175 percent declining balances. Preliminary analyses indicate that mean rents can rise as much as 25 percent. See Turner and Struyk (1984) and Stegman (1986).

³⁷Hence, the rash of books and articles on the rental housing crisis. See, for example, Starr (1979), Lowry (1982), Johnson (1982), Hartman (1983), and U.S. Commission on Civil Rights (1983). Lowry (1982) says, for example:

The only satisfactory explanation for the declining operating returns to rental housing is that an excess supply of rental housing prevents landlords from raising rents to compensate [fully] for cost increases.

³⁸This is the main result of the capital asset pricing model. See, for instance, Jorgenson (1963).

³⁹It might be argued that investors buy rental housing as a short-term "cash cow," to be milked for its tax benefits and then abandoned. I have seen no evidence that this is a widespread practice.

⁴⁰See Blumberg, Robbins, and Baar (1974).

⁴¹States such as Maine and Massachusetts, and municipalities such as Los Angeles and Miami Beach, have lenient rent control laws that allow increased costs to be incorporated into rents for existing as well as new tenants. Other states, notably Alaska and Connecticut, allow municipalities to control rents only in response to "legitimate" complaints by tenants of unwarranted rent increases. See Lett (1976a, 1976b), Davidson (1978), and Rydell, *et al.* (1981).

⁴²See deSalvo (1971), Olsen (1972), Albon (1982), and Moorhouse (1983).

⁴³These effects depend on the location of rent controlled housing within the city, the condition of that housing, the income levels of controlled tenants and homeowners, the public service requirements of controlled tenants, and the degree of substitution between controlled and uncontrolled housing. All these factors could affect local property values.

⁴⁴Four urban enterprise zone bills were introduced in the 98th Congress (see Luger 1984, note 8). In his 1985 inaugural address, President Reagan vowed to continue to press for urban enterprise zone legislation.

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