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"The Economics of Inclusionary Zoning Reclaimed": How Effective are Price Controls?

Benjamin Powell & Edward Stringham
Many areas of the United States are facing a housing affordability crisis, and the problem only seems to be getting worse. A family with average earnings cannot afford the median priced home in any of the thirty least affordable housing markets, and prices in the most expensive markets continue to rise. Between 1995 and 2002, median home prices rose by 65% in the San Francisco Bay Area, 62% in Boston, 54% in San Diego, and 49% in Denver. The areas with the worst affordability problems are typically clustered on the East and...
West Coasts, with twenty of the twenty-five least affordable metropolitan areas in California. Needless to say, such high housing costs preclude many families from being able to afford their own home.

To deal with high housing costs, many local governments are investigating and implementing a price-control program called inclusionary zoning. Nearly every economist agrees that rent control reduces the quantity and quality of housing, and places such as Massachusetts and California have statewide mandates that prohibit new rent control ordinances, so planners have devised a more complicated alternative to rent control. Inclusionary zoning, also known as an affordable housing mandate, places a price control on a percentage of new development, requiring builders to sell or rent those homes which are deemed affordable to very low-, low-, or moderate-income households. The units must retain price controls for a specified period of time; in California the amount is typically fifty-five years or more.

Although the program is legally and economically distinct from rent control, law-and-economics scholars who have analyzed the issue have argued that price controls on a percentage of new housing will have many of the same negative effects as rent control. In one

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9. See INCLUSIONARY HOUSING, supra note 6, at 31-35.
10. See Mallakh, supra note 8, at 1872-76.
classic article, *The Irony of “Inclusionary” Zoning,* Yale Law Professor Robert Ellickson argues that inclusionary zoning actually decreases development and makes housing less affordable; thus, it should be called exclusionary rather than inclusionary. The widely accepted view within the law-and-economics literature has been that price controls through inclusionary zoning will have negative, unintended consequences on the housing market.

In recent years, however, a few noneconomists have written law review articles that attempt to defend inclusionary zoning on economic grounds. Andrew Dietderich’s *An Egalitarian’s Market: The Economics of Inclusionary Zoning Reclaimed,* Laura Padilla’s *Reflections on Inclusionary Housing and a Renewed Look at Its Viability,* and Barbara Kautz’s *In Defense of Inclusionary Zoning: Successfully Creating Affordable Housing* all attempt to show that inclusionary zoning makes sense from an economic point of view. Rather than dismissing inclusionary zoning as a policy that discourages production, these authors argue that economics tells us that governments should embrace inclusionary zoning as a way of encouraging more affordable housing. These articles have had considerable impact in the academic literature and in the policy

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13. The New Jersey court’s decision does not constitute a real challenge to Ellickson the way the articles, infra note 14, did.

Despite the increasing popularity of their view, we believe that they fail to prove their case. Although authors such as Dietderich, Padilla, and Kautz provide the most sophisticated defense of inclusionary zoning to date, they make some fundamental economic errors and, thus, advocate misguided policy proposals. This Article provides a detailed discussion of the economics of inclusionary zoning and finds that these lawyers’ “economic” defense of inclusionary zoning is severely flawed. The Article is organized as follows: Part II gives a background on inclusionary zoning, such as where it is practiced and how many units it has created. Part III provides an overview of the economics of inclusionary zoning. Part IV responds to the articles that contest the standard economic analysis of inclusionary zoning. Part V concludes.

II. WHERE INCLUSIONARY ZONING IS PRACTICED AND WHAT IT HAS PRODUCED

Inclusionary zoning typically refers to a program that imposes price controls on a percentage of new development. The ordinances vary, but they typically require a certain percentage of new units be “affordable” to certain low-income families. In California, most ordinances target very low, low, or moderate incomes: “very low” is usually classified as up to 50% of the county median income, “low” as 51-80% of the median, and “moderate” as 81-120% of the median. De-


16. See INCLUSIONARY HOUSING, supra note 6, app. at 31-35.
17. A limited response to particular points in these articles is contained in BENJAMIN POWELL & EDWARD STRINGHAM, REASON FOUND., HOUSING SUPPLY AND AFFORDABILITY: DO AFFORDABLE HOUSING MANDATES WORK? (2004), http://www.reason.org/ps318.pdf. Responses in that study were limited to the few points most often repeated in public discourse. The analysis in this Article is more comprehensive and responds to their points in more detail and with a greater level of sophistication.
18. For details of the definitions of “affordable,” see id. at 11.
19. INCLUSIONARY HOUSING, supra note 6, at 10.
pending on the ordinance, builders must sell or lease 5-25% of the new homes at below-market rates.20 When the units are for sale in most California cities, the below-market rate is often hundreds of thousands of dollars below the market rate.21 If the units are for lease, the present discounted value of the revenue stream from that property is equivalently decreased, so the economics behind the price control are the same.

Most often, the below-market units must be of similar size and quality as the market-rate units and must be spread throughout the project in order to create integration and avoid “ghettoization.”22 Some jurisdictions allow off-site construction or allow developers to pay a fee in lieu of building a below-market unit, but the intent of inclusionary zoning is to have the below-market units “included” among the market-rate units.23 Most ordinances are mandatory, meaning builders must participate in order to get permission to build,24 but a few ordinances are “voluntary” in that they offer incentives in exchange for a builder selling at price-controlled rates.25 Jurisdictions may also offer compensating incentives, such as density bonuses, fast-track permitting, or fee waivers, but as evidenced by builders’ unwillingness to participate in voluntary ordinances, the value of these incentives is oftentimes small.26

Inclusionary zoning has become most prevalent over the past fifteen years, but it was first implemented in the 1970s in California and the New York and Washington, D.C., metropolitan areas.27 In 1971, Fairfax County, Virginia, enacted inclusionary zoning by applying price controls to 15% of large dwellings if a developer built fifty or more units.28 The Virginia Supreme Court ruled that the law was a taking because landowners were not compensated for the new regulation;29 thus, Fairfax had to make it a voluntary ordinance. In

20. Id. app. at 31-35.
21. See Powell & Stringham, supra note 17, at 12-13 figs.6, 7 & 8.
22. See Burchell & Galley, supra note 6, at 6.
24. Inclusionary Housing, supra note 6, at 8 (reporting that only six percent of the ordinances are voluntary in California).
25. But as Bernard Tetreault notes, “The problem is that most of them, because of their voluntary nature, produce very few units.” Bernard Tetreault, Arguments Against Inclusionary Zoning You Can Anticipate Hearing, New Century Housing, Oct. 2000, at 19; see also Kautz, supra note 14, at 982 (showing the voluntary programs are ineffective at producing units). We argue below that this is because of the very nature of the economics of inclusionary zoning that these authors fail to understand.
26. See Tetreault, supra note 25, at 19; Inclusionary Housing, supra note 6, at 22.
27. Mallach, supra note 6, at 196-224; see also Burchell & Galley, supra note 6, at 4-5 (discussing other information on the history and current practice of inclusionary zoning).
29. Id. at 602.
1973, Montgomery County, Maryland, passed its “moderately priced dwelling unit” ordinance, requiring 12.5-15% of units (in developments of more than fifty units) be affordable to families with 50-80% of the median income.\textsuperscript{30} The ordinance in Montgomery County is still in effect today. Since Palo Alto first enacted inclusionary zoning ordinances in 1973, over one hundred California jurisdictions have followed suit.\textsuperscript{31} Today, affordable housing mandates are found in parts of Colorado, Connecticut, Delaware, Florida, Illinois, Massachusetts, New Jersey, New Mexico, New York, Oregon, and Washington.\textsuperscript{32} “A 1991 survey found that nine percent of U.S. cities with populations over 100,000 had inclusionary zoning ordinances and the number appears to be growing.”\textsuperscript{33}

With over one hundred ordinances and over thirty years of experience, California has the most familiarity with inclusionary zoning.\textsuperscript{34} California is often held up as a success story because so many cities have adopted these ordinances.\textsuperscript{35} Yet many advocates measure success based on the number of ordinances rather than the number of units actually built. Just as economic theory predicts that price controls do not encourage production, when one looks at the data one notices surprisingly few below-market units built. For example, in the San Francisco Bay Area, the Association of Bay Area Governments estimated the need for very low-, low-, and moderate-priced units to be 133,195 units, or 24,217 per year during the 2001-2006 five and a half year period.\textsuperscript{36} Yet in the thirty-plus years that inclusionary zoning has been implemented in the San Francisco Bay Area, inclusionary zoning has resulted in the production of only 6836 affordable units, or 228 units per year.\textsuperscript{37} Controlling for the length of time each program has been in effect, the average jurisdiction has produced only 14.7 units for each year since adoption of its inclusionary zoning requirement.\textsuperscript{38} The number of units expected from inclusionary zoning clearly pales in comparison to the regional need. The program would have to be twenty times more effective each year before it could be relied on to meet the area’s five-year

\begin{thebibliography}{99}
\bibitem{30} Mallach, \textit{supra} note 6, at 218-19.
\bibitem{31} \textit{Inclusionary Housing}, \textit{supra} note 6, app. at 31-35.
\bibitem{33} \textit{Id.} at 1-2.
\bibitem{34} \textit{Inclusionary Housing, supra} note 6, at 2.
\bibitem{35} \textit{Id.} at 1.
\bibitem{36} \textit{Ass’n of Bay Area Gov’ts, Regional Housing Needs Determination for the San Francisco Bay Area: 2001-2006 Housing Element Cycle 33} (2001).
\bibitem{37} Powell & Stringham, \textit{supra} note 17, at 5.
\bibitem{38} \textit{Id.}
\end{thebibliography}
affordable housing needs. The results are similar in Southern California. Thirteen jurisdictions in Los Angeles County and Orange County have inclusionary ordinances, and controlling for the length of time each of these ordinances have existed, these jurisdictions produce an average of 34 units each year. Yet the estimated need for affordable housing in this area is over 1600 units per year. The affordable housing mandates in California and elsewhere hardly put a dent in the regional need for affordable housing.

III. ECONOMICS OF INCLUSIONARY ZONING

The reason that inclusionary zoning has been ineffective at actually producing units may be explained using the economics of price controls. Some advocates of inclusionary zoning attempt to debunk the standard economic view; therefore, before addressing their arguments, a review of the standard economic account is in order. The economics of inclusionary zoning is a bit more complicated than the economics of rent control, but not much. One can think of inclusionary zoning as creating two markets for new homes—the price-controlled homes (the below-market homes) and the non-price-controlled homes (the market-rate homes). The price-controlled portion of the market will have many of the same characteristics of markets with rent control, such as shortages and discouragement of production. The twist of inclusionary zoning is that if builders want to produce non-price-controlled units, they must also provide a certain number of price-controlled units. Unless these units are subsidized by government or some private charity, these price-controlled units become an obligation (or an economic burden) on a development. The cost, which economists refer to as an opportunity cost, is the difference between the level of the price control and the level that the units could have fetched on the market. For example, if a builder could have sold a unit for $800,000 but must sell it for $200,000, then the builder is losing $600,000 that it could have earned. In theory, the government could offer a subsidy equal to the cost of the unit, but as discussed in Part IV, in practice it rarely does. In fact, advocates of affordable housing mandates tout their

39. Id. at 6.
40. BENJAMIN POWELL & EDWARD STRINGHAM, REASON FOUND., DO AFFORDABLE HOUSING MANDATES WORK? EVIDENCE FROM LOS ANGELES COUNTY AND ORANGE COUNTY 4 (2004), http://www.rpii.org/ps320.pdf. These Southern California numbers are biased upward because they include Irvine which has produced 4469 of the 6379 inclusionary units in this area. Id. The Irvine units were not produced via normal inclusionary zoning; however, many are the result of a lawsuit. Id.
42. POWELL & STRINGHAM, supra note 17, at 9.
programs as a way to produce affordable housing without spending public funds.43

To the extent that subsidies do not cover the costs of below-market units, inclusionary zoning, much like development impact fees, will act like a tax on market-rate development.44 Although the builders may appear to bear the burden of paying for the below-market units, they might end up passing part or all of this effective tax onto buyers or sellers of undeveloped land. Who actually bears the burden of any tax is determined by actual market conditions, specifically the relative elasticities of supply and demand.45 Examining the economics of an inclusionary tax will help to determine how the burden is likely to be split between the builders, market-rate home buyers, and owners of undeveloped land.

Figure 1 contains a supply and demand diagram for the non-price-controlled market to illustrate how a tax on housing impacts the price and quantity of new housing. The slopes of the curves vary by city, so the magnitudes of the changes will vary by city, but the diagram shows the directions of the effects of each change.46

43. In fact, Dietderich claims that “[a] vast inclusionary program need not spend a public dime.” Dietderich, supra note 14, at 41. Noncash subsidies such as density bonuses are discussed in Part IV, infra.

44. Victoria Basolo and Nico Calavita, two supporters of inclusionary zoning, recognize that “[i]nclusionary housing] is a development fee.” VICTORIA BASOLO & NICO CALAVITA, POLICY CLAIMS WITH WEAK EVIDENCE: A CRITIQUE OF THE REASON FOUNDATION STUDY ON INCLUSIONARY HOUSING POLICY IN THE SAN FRANCISCO BAY AREA 11 (2004), http://www.nonprofithousing.org/actioncenter/campaigns/download/IH_countering_critics.pdf. Although in that article Basolo and Calavita argue against the theory that inclusionary zoning raises housing prices, Calavita’s prior writing on development impact fees clearly states, “Although the full amount is not necessarily passed on to consumers, high fees usually mean higher housing costs.” Nico Calavita & Kenneth Grimes, Inclusionary Housing in California: The Experience of Two Decades, 64 J. AM. PLAN. ASS’N 150, 153 (1998). So although Calavita never directly admits that inclusionary zoning increases the price of market-rate housing, one must conclude this from his writings. This view on impact fees is also consistent with the California Department of Housing and Community Development, which wrote, “California’s high residential development fees significantly contribute to its high housing costs and prices.” DIV. OF HOUS. POLICY DEV., DEP’T OF HOUS. & CMTY. DEV., PAY TO PLAY: RESIDENTIAL DEVELOPMENT FEES IN CALIFORNIA CITIES AND COUNTIES, 1999, at 99 (2001), http://www.hcd.ca.gov/hpd/pay2play/fee_rpt.pdf.

45. WILLIAM BOYES & MICHAEL MELVIN, ECONOMICS 492 (6th ed. 2005); see also POWELL & STRINGHAM, supra note 17, at 16-19.

46. In the rare market where housing in another jurisdiction without inclusionary zoning were a perfect substitute, the demand curve would be perfectly horizontal (or perfectly elastic), and the price of new homes would remain unchanged, although a tax on housing would still decrease quantity. One of the only ways that inclusionary zoning would not affect quantity is in an equally unrealistic situation where the supply curve for new housing were vertical (or perfectly inelastic). In this case, suppliers (raw landowners) would bear the full burden of the tax. This is unlikely because it would require suppliers of raw land to supply the same amount of land to residential development regardless of what price they received. A final odd case would be if buyers demanded the same quantity of housing regardless of price (the demand was perfectly inelastic), whereby quantity would
Other variables, such as consumer income, interest rates, and population size, also affect the housing market, but the supply and demand diagram isolates the relationship between price and quantity, given the values of those exogenous variables. The demand curve plots the quantity demanded by consumers at different prices, and the supply curve plots the quantity supplied by builders and raw land owners at different prices. The demand curve slopes downward because as consumers have to pay more, they will buy less, and the supply curve slopes upward because as producers receive more, they will supply more resources for residential development. The equilibrium, or market-clearing price ($P_1$ in Figure 1), is determined by the intersection of supply and demand—at any price above $P_1$, the quantity supplied exceeds the quantity demanded, so prices tend to fall until the two are equal; at any point below $P_1$, the quantity demanded exceeds the quantity supplied, so prices tend to rise until the two are equal.

When government places a tax, like an inclusionary ordinance, on new development, it will affect the price and quantity of new development. Suppose that a development company would have been willing to provide ten units at $500,000 a unit, and now it has to pay an effective tax of $100,000 a unit. Now, rather than just receiving $5

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million for those units, the developer has to pay $1 million in taxes. Thus, in order to continue to supply the same ten units of housing, developers would need to receive the old price, $500,000 a unit, plus the amount of the tax, $100,000 a unit. Such a tax is represented in Figure 1 by the effective supply curve shifting directly up by the amount of the tax, which in the above example would be $100,000. Although developers would like to sell ten units at $600,000 a unit, buyers will demand fewer than ten units at that higher price. The after-tax price of market-rate homes will be at a point where the “supply of housing with IZ tax” curve (the original supply curve plus the tax) intersects with the demand curve (points $P_{\text{Tax}}$ and $Q_{\text{Tax}}$ in Figure 1).

Even though developers are legally responsible for providing the below-market units, it is unlikely that they will bear the entire burden or the cost of those units. The burden of the inclusionary zoning tax will end up being borne by some combination of builders, landowners, and market-rate home buyers. Exactly how the burden is split depends on the relative elasticities of supply and demand in each community. Except in the extremely unlikely circumstance of a perfectly elastic demand curve or a perfectly inelastic supply curve, a tax on a good always leads to higher prices for consumers. This is reflected by the fact that $P_{\text{Tax}}$ is higher than $P_1$. In Figure 1 the burden of the tax is split evenly between buyers and sellers, but most estimates of the elasticity of the supply and demand of housing show that suppliers are more sensitive to changes in price and are thereby less likely to bear the burden than consumers. With the exception of a few unrealistic cases, taxes raise the price that buyers pay, decrease the price that sellers receive, and lead to a decrease in quantity supplied.

When the effective tax is large enough, development will be discouraged altogether. The City of Watsonville, California, illustrates this theoretical prediction. In 1990, the City passed a law imposing price controls on 25% of new homes. The law was so restrictive that between 1990 and 1999, with the exception of a few

48. Except in the rare case where the demand curve is perfectly inelastic (vertical) as described above.

49. Burchell & Galley, supra note 6, at 7; Basolo & Calavita, supra note 44, at 11.


51. Terri Morgan, Loosened Rules Lure Developers to Watsonville, SAN JOSE MERCURY NEWS, Oct. 18, 2003, at 1G.
small, nonprofit developments, almost no new construction occurred.\textsuperscript{52} In 1999, the City of Watsonville realized that the law was driving away development. Watsonville Mayor Judy Doering-Nielsen said, “Our inclusionary housing ordinance was so onerous that developers wouldn’t come in.”\textsuperscript{53} Jan Davison, Director of the Redevelopment and Housing Department, commented, “[The inclusionary zoning law] was so stringent, and land costs were so high that few units were produced.”\textsuperscript{54} The consulting firm Bay Area Economics wrote, “The City of Watsonville adopted its inclusionary housing ordinance in 1991. To date, the program has directly created only thirteen affordable units. However, this low number is attributable to the lack of new development in Watsonville over the last ten years.”\textsuperscript{55}

By driving out almost all development, the inclusionary ordinance failed to create below-market units as well. Jan Davison noted that the ordinance “was completely redone in 2000, and we got more units produced.”\textsuperscript{56} The change in 2000 lowered affordable housing requirements from 25\% to 15\% for developments with between seven and fifty units and to 20\% for larger developments.\textsuperscript{57} Mayor Judy Doering-Nielsen commented, “There was an incredible pent-up demand.”\textsuperscript{58} After almost a decade with no new developments, construction began on a 114-unit development, a 351-home development, a 389-unit development, and a number of smaller developments once affordable housing requirements were lowered.\textsuperscript{59} Overall, the number of projects approved and pending approval since 2000 is set to increase the city’s housing stock by 12\%.\textsuperscript{60} All of this development occurred because of a decrease in affordable housing requirements.

Because price controls discourage production, few families end up getting below-market units. The amount of below-market units produced may be greater than zero, but in most cases the supply of below-market units will not meet the demand. An example of such a shortage was in the affordable housing complex Rich Sorro Commons, located near San Francisco’s SBC Park. Before it opened,
the complex had 2700 applicants for only one hundred units. A family had to be fortunate enough to be living in the city, apply, and then win a lottery to get one of the units. The other 2600 families, as well as low-income families who were unable to apply, did not benefit from this program that gave benefits only to a select few.

Standard economic theory predicts that price controls lead to shortages and discourage production. Imposing price controls on a proportion of new development will not discourage production as much as price controls on all development, but it will discourage development nonetheless. By acting like a tax on new development, it will raise the prices of non-price-controlled housing and decrease the amount of new housing.

IV. ERRORS IN THE DEBATE OF INCLUSIONARY ZONING

The notion that price ceilings decrease the quantity supplied is one of the least controversial propositions in economics.62 Nevertheless, recent law review articles have attempted to dispute the standard economic analysis.63 Many advocates of inclusionary zoning clearly lack a basic understanding of economic principles, and they completely fail to address the economic criticisms.64 Some lawyers such as Dietderich, Padilla, and Kautz, however, recognize the economic criticisms and attempt to address them head on. These authors’ arguments have gained popularity among many advocates of


63. See articles cited supra note 14.

64. One of the most egregious examples is “economic” consultant David Paul Rosen who wrote that “housing price[s], be it rents or sale prices, are solely a function of market demand.” David Rosen, Inclusionary Housing and Its Impact on Housing and Land Markets, NHC AFFORDABLE HOUSING POL’Y REV., Feb. 2004, at 38, 42 (emphasis added). Other advocates of inclusionary zoning also miss the elementary economic point that both demand and supply interact to determine price. Rob Wiener from the California Coalition for Rural Housing wrote, “In reality, developers are not philanthropies and will charge the highest price the market will bear, with or without [inclusionary housing].” Rob Wiener, Editorial, Working Strategies for Encouraging Affordable Housing, SACRAMENTO BEE, May 8, 2004, at B7, available at 2004 WLNR 17441233. Because inclusionary housing impacts the supply of housing, any student of economics knows that if the price the market will bear changes, the supply curve shifts. Gary Patton, president of LandWatch Monterey County, a group that advocates inclusionary zoning, also fails to grasp introductory economic principles when he writes, “In fact, building more houses will NOT result in lower housing prices. . . .” Gary Patton, Housing Prices and Growth Management, LAND WATCH MONTEREY COUNTY, May 22, 2002, http://www.landwatch.org/pages/issuesactions/housing/052202prices.html. While the above three quotes are examples of leading advocates of inclusionary zoning who fail to grasp the most basic economic principles, many “studies” of inclusionary zoning fail to even consider the economic consequences. See CAL. COALITION FOR RURAL HOUS. PROJECT, CREATING AFFORDABLE COMMUNITIES: INCLUSIONARY HOUSING PROGRAMS IN CALIFORNIA (1994); see also INCLUSIONARY HOUSING, supra note 6; BAY AREA ECON., supra note 55.
inclusionary zoning, because they are the most theoretical arguments of why inclusionary zoning might work.\textsuperscript{65} If the economics arguments are wrong, price controls on a percentage of new housing may not be so bad after all.

Despite the increased level of sophistication of these arguments, the sophistication is only ostensible. Although the most sophisticated advocates of inclusionary zoning, such as Dietderich, Padilla, and Kautz, clearly have a better understanding of economics than most advocates of inclusionary zoning, their arguments do not hold up under scrutiny. This Part examines the merit of their arguments topic by topic and discusses their basic economic errors. Rather than reclaiming the economics of inclusionary zoning, as these authors assert, these authors’ convoluted arguments fail to provide a cogent case for price controls on a percentage of new housing.

A. Do Builders Absorb the Cost of Inclusionary Zoning as a Cost of Doing Business?

The issue of who ends up paying for the below-market units is hotly debated. The cost must be borne by some combination of landowners, builders, and market-rate home buyers. If people knew that landowners had to bear the cost of providing affordable housing, the policy might be considered unfair or even a taking because landowners have no more responsibility to pay the full cost of social policies than anyone else.\textsuperscript{66} If people knew that market-rate home buyers had to bear the cost of providing affordable housing, the policy also might be considered counterproductive because rather than creating more affordable housing, the policy would be making the majority of homes more expensive.\textsuperscript{67} On the other hand, many people consider it acceptable for builders to bear the cost of inclusionary zoning. Some believe that builders already make high rates of return, while others believe that builders have a responsibility as housing providers to make some homes affordable to low-income households. If the costs of below-market units are simply absorbed in exorbitant builder profits, the program is advancing a social policy that may not adversely affect the housing market. Padilla makes a case along these lines, arguing that “[e]ven if their profits are not maximized,
developers will still realize acceptable profits. Therefore, developers will still develop. She adds, "Even if not 100% compensated, any remaining costs would simply be absorbed as a cost of doing business."

Although Padilla uses economic lingo, she completely misunderstands one of the most important aspects of economics: marginal analysis. The study of economics analyzes how people respond to incentives and how people weigh the additional costs and the additional benefits of each potential choice. Building is not an all-or-nothing proposition. If a project is marginally profitable, then building it makes sense; if a project is marginally unprofitable, then building it does not make sense. Builders must constantly decide whether each additional project pencils out, and if policies change marginal revenue or marginal costs, builders will alter their choices.

The effect of imposing a tax on development alone is easily predicted. The building industry is a competitive industry with relative ease of entry and exit. For example, many national firms have a choice of setting up or closing shop in any given state, and in the long run the number of firms can easily adjust. If profits in a particular area were abnormally high, profit-motivated firms would enter that market and, in doing so, would drive down profits to normal level. If profits in an area were negative, profit-motivated firms would leave the market until the profits returned to normal level.

Suppose that the government decides to impose a cost such as inclusionary zoning in a specific area. The builders considering projects will now face different marginal revenues and different marginal costs, so that many projects that were profitable will become unprofitable at the margin. Wishful thinking notwithstanding, the builders will not passively respond and build the same quantity as before. The simplest option for builders would be to move to jurisdictions free from price controls. This is not to say that all builders will move, but some of them will; they will exit the market until the rate of return in the market after the tax returned to the level before the tax. Even if the policy were national and builders had no option to move, this would still decrease the quantity of development because investment in housing would decrease. The building industry, like all industries, faces financing constraints so that people will not invest in housing if it has lower profit margins.

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68. Padilla, supra note 14, at 576.
69. Id. at 577.
70. Taylor, supra note 47, at 114-17.
71. Glaeser et al., supra note 50, at 4.
73. Boyes & Melvin, supra note 45, at 573-79.
The idea that the cost of affordable housing will be absorbed by builders without decreasing the amount of construction is highly questionable.

**B. Does Inclusionary Zoning Offer Developers Benefits That Offset Its Costs?**

If economists are correct to point out that an affordable housing mandate is equivalent to a tax, then inclusionary zoning would decrease the production of housing and make the majority of homes less affordable. Such consequences are inconsistent with the expressed intent of inclusionary zoning, which is why many advocates of inclusionary zoning have argued that an affordable housing mandate is not equivalent to a tax. Although most advocates fail to recognize that providing below-market-rate housing entails costs, the more sophisticated advocates recognize that it entails costs but argue that these costs can be offset. For example, Kautz writes that “inclusionary requirements should be accompanied by real compensatory measures—in particular, substantial density bonuses—to minimize any effects on the overall housing supply.” It is correct that if a tax is accompanied by a large enough subsidy, the effective tax will be offset.

The first issue to determine is whether the offsetting benefits make up for the costs. Kautz implies that creating fully offsetting benefits is easy: “Even the harshest critics of inclusionary zoning, such as Robert Ellickson, concede that high enough density bonuses create affordable units at no cost to landowners, developers, or other homeowners.” Yet in many existing ordinances, the density bonuses are of little value and come nowhere close to making up for the costs of the program. In many cases, the land is already being developed to the maximum economically feasible density, which makes a density

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74. See Ellickson, supra note 12, at 1187-92; see also Powell & Stringham, supra note 17, at 36.

75. As mentioned, Basolo and Calavita, supra note 44, claim inclusionary zoning is equivalent to a development impact fee, but they deny that it will have the predicted economic consequences.

76. See, e.g., Inclusionary Housing, supra note 6. The report provides details of the inclusionary zoning programs around California and makes policy recommendations, yet it completely fails to consider the economic costs or the potential impacts on the housing market. The closest the report comes to recognizing economics is on the second-to-last page when it states that future research could investigate “the cost impacts of inclusionary programs on market-rate units” or how inclusionary zoning effects production. Id. at 27. Because “the authors did not find an empirical study on the subject,” they decided to take a curious leap of faith and assume that inclusionary zoning “can be a major piece of solving the affordable housing crisis in California and nationwide.” Id. at 27-28.

77. The authors cited supra note 14 fall into this category.

78. Kautz, supra note 14, at 988.

79. Id. at 1019.
Examples of worthless density bonuses occur with high-rises where building any higher would be too costly or with single-family neighborhoods where consumers demand a minimum lot size. Density bonuses can only be valuable in areas that practice exclusionary zoning where density constraints are binding. But even in such areas, the density bonuses will not be helpful if other constraints, such as water permits, are the limiting factor for development. In any one of these cases, a density bonus will be worthless.

The real test of whether density bonuses (or other incentives) make up for the costs of the program is if builders would voluntarily choose them. If a program was voluntary and builders chose to provide below-market units in exchange for a density bonus, it would demonstrate that the benefits more than offset the costs. Yet when looking at most real-world ordinances, the builders do not flock to participate.

One advocate of inclusionary zoning argued that programs must be mandatory; otherwise, few people would participate. Tetreault writes, “There are many jurisdictions that have voluntary, or incentive-based, inclusionary zoning ordinances. The problem is that most of them, because of their voluntary nature, produce very few units.” Similarly, when the California Coalition for Rural Housing reported its survey results, it noted that “truly voluntary programs are generally unsuccessful in producing affordable units.” If the programs were really such a good deal and the benefits did offset the costs, the programs would not need to be mandated.

Kautz responds to this situation by arguing that affordable housing mandates are profitable, but that developers fail to recognize this. She writes, “Even where a ‘relatively generous’ density bonus is given for voluntary participation, developers often fail to participate because they do not understand the economics of the program.” Kautz may know something that everyone else does not, but she gives us no reason to believe why a lawyer writing in a law review article has a better understanding of the profitability of projects than actual builders who make their living doing those calculations. Even if Kautz were correct that developers are incapable of calculating the profitability of projects, as long as one or two builders stumbled into Kautz’s gold mine, they would start making above-normal profits, which would encourage others to follow. The assertion that these

80. Powell & Stringham, supra note 17, at 29.
81. Tetreault, supra note 25, at 19.
82. Inclusionary Housing, supra note 6, at 22.
83. Kautz, supra note 14, at 982.
affordable housing mandates are really profitable but builders do not understand the economics behind them is extremely dubious.

The second—and perhaps more important—response to the proposal for mandatory inclusionary zoning along with offsetting benefits is to question why price controls must accompany subsidies in the first place. If the government has the ability to offer subsidies or zoning exemptions that will increase the supply, then why must those policies be accompanied with a program that restricts the supply? Even if the program was voluntary and actually chosen, which would demonstrate that the subsidy offsets the cost of inclusionary zoning, the inclusionary zoning still has a negative impact on housing affordability compared to what could have been achieved. In such a situation the inclusionary zoning tax shifts the supply curve inward (just like in Figure 1), but then a subsidy comes along and shifts it back to its original position while housing production remains unchanged. But, even under these circumstances, the inclusionary ordinance has a negative effect. If the inclusionary ordinance were removed and the effective subsidy remained, then the supply curve would shift even further outward, resulting in a greater quantity of homes at even lower prices. Figure 2 illustrates this.

**Figure 2**

**Effect of Subsidy and Inclusionary Tax**

Just as in Figure 1, the vertical distance between each supply curve is the size of the inclusionary tax. The vertical distance is also equal to the size of the subsidy since, by assumption, the subsidy to builders is exactly the same size as the inclusionary tax. In this case, the subsidy does reverse the negative effect of inclusionary zoning by
moving the curve from the top to the middle position. But a community could do even more to promote affordable housing. If a community is willing to expedite the permit process, grant valuable density bonuses, or offer other incentives, then adopting these incentives without burdening developers with inclusionary zoning would cause the housing supply curve to shift further to the right. The more the supply shifts right, the lower the prices become, making housing more affordable for the vast majority of buyers.

Dietderich goes one step further than Kautz, arguing that inclusionary zoning actually benefits builders and, thus, will not hamper supply.84 Despite builders’ demonstrated unwillingness to participate in voluntary programs, Dietderich attempts to devise reasons why inclusionary zoning will increase builders’ profits.85 His first argument is that builders have to consider their reputation in a community, not just the profits of any one project, and that these political concerns lead them to provide less affordable housing even though it would have been profitable.86 Dietderich writes, “If a developer decides to build low income units in a traditionally highbrow neighborhood, the developer is likely to lose the goodwill of officials who represent area residents, decreasing the developer’s ability to lure future buyers and win concessions from the jurisdiction.”87 Because lost goodwill would decrease long-term profits, builders refuse to participate in voluntary programs even if they would pencil out; however, by making the program mandatory, builders would benefit because they would get the density bonus without losing goodwill.

There are two problems with this argument. First, if a city’s residents and representatives favored affordable housing enough to pass an ordinance to encourage its production, why builders would lose goodwill for producing affordable housing is unclear. Second, at a more fundamental level, the erroneousness of this argument is demonstrated by the fact that most builders oppose inclusionary zoning.88 If mandatory inclusionary zoning actually benefited builders, why would they lack the foresight to support it? Economists

84. Dietderich, supra note 14, at 75.
85. Id. Dietderich does note that developers lobby against inclusionary ordinances, yet he still claims that these ordinances are in their best interest. Id. at 75-76.
86. Id.
87. Id.
88. We have had extensive interaction with many builders throughout California and, with the exception of nonprofit developers, virtually all of them oppose mandatory inclusionary zoning ordinances. The California Building Industry Association has long been one of the most vocal opponents of inclusionary zoning. Our recent critical study of inclusionary zoning, Powell & Stringham, supra note 17, was reviewed favorably as a cover story in the home builder association magazine, HBA News. See Landmark Study: Inclusionary Zoning Offers Only the Illusion of Affordable Housing, HBA News, June 2004, at 8.
have documented many industries where industry participants have lobbied for government regulation in order to secure gains.\textsuperscript{89} If mandatory inclusionary zoning really benefited the building industry, one would expect to see builders lobbying for it, yet they do not.

Dietderich offers a second reason why density bonuses benefit builders despite their failure to make use of voluntary ordinances. He writes that “multi-family housing construction is marked by a ‘learning-curve’ that may pay off exponentially as more developers are forced to construct multi-family units, pooling technological and design gains as they go.”\textsuperscript{90} Because the learning curve has spillover effects, Dietderich argues that individual builders lack the incentive to bear the cost of learning. He believes that if all builders were forced to build high-density multifamily dwellings, they would collectively make higher profits, so the issue is just pushing them to this Pareto superior equilibrium.\textsuperscript{91} Again, Dietderich wants the reader to assume that the building industry does not know what is profitable. Yet he gives no reason to believe that builders lack an understanding of the concepts of learning curves or technological spillovers. If mandatory inclusionary zoning really helped builders secure higher profits, one would expect the building industry to rally around Dietderich’s proposal. Because builders do not, either builders do not adequately understand their own industry or Dietderich’s argument is incorrect. We strongly suspect the latter.

C. Are Price Controls a Good Way to Correct for Problems Created by Exclusionary Zoning?

The one area where the advocates of inclusionary zoning are in agreement with the typical free market economist is with their criticisms of exclusionary zoning. Exclusionary zoning is the name for the set of policies that mandate minimum lot sizes or other levels of minimum quality that have the effect of excluding the poor. Without exclusionary zoning, multiple low-income buyers who demand inexpensive homes (even if they are at higher density) have the ability to bid land away from a few high-income buyers who desire


\textsuperscript{90} Dietderich, supra note 14, at 76.

\textsuperscript{91} For a discussion of Paretian and other concepts of efficiency, see David D. Friedman, Law’s Order: What Economics Has to Do with Law and Why It Matters 18-27 (2000).
larger lots.92 For example, one hundred low-income buyers might be able to outbid ten high-income buyers for the use of a given plot of land; therefore, developers would find it more profitable to build higher-density housing to serve the low-income families. Exclusionary zoning, however, interferes with the market process by requiring larger lot sizes and low density that only the rich can afford.93 In agreement with economists, Dietderich writes, “To a large extent, it is not the presence, but the absence, of a free market in housing that has helped create a shortage of affordable homes for many Americans.”94

Where Dietderich and other advocates of inclusionary zoning part ways with economists is with their solution to the problems created by exclusionary zoning: price controls. Rather than advocating the repeal of exclusionary laws, they advocate replacing them with more laws, which only inflate the problems caused by exclusionary zoning. Dietderich equates passing inclusionary zoning with ending these restrictions on competition: “Persons with low to moderate incomes, who live at higher density, can often outbid the wealthy for suburban land. Although such competition is illegal under most exclusionary zoning rules, it makes little sense to normalize the noncompetitive baseline, and call any move toward competition among income classes a ‘subsidy.’”95

Yet inclusionary zoning is not a move towards competition. It simply adds another inefficient form of zoning to the existing exclusionary zoning. Because a portion of the homes are price-controlled, it often pushes builders to pack them in at higher-than-optimal densities. Rather than allowing buyers and sellers to decide, these planners want to choose the densities under which everyone lives. Their position is analogous to planners debating a government mandate about the maximum or minimum shoe size. If the government restricted the production of small shoes in the past, one option would be to pass laws restricting the production of large shoes (or mandate that small shoes be produced along with large shoes) or another option is simply abolish the law that restricts the production of small shoes.96 Just like in the shoe market, the best way to find the appropriate density for a development is to eliminate both exclusionary and inclusionary zoning. This would allow competitive

92. See Dietderich, supra note 14, at 41. See generally Bernard Frieden, The Exclusionary Effect of Growth Controls, in RESOLVING THE HOUSING CRISIS 19 (Bruce Johnson ed., 1982); TUCKER, supra note 11.

93. Frieden, supra note 92, at 20-21.

94. Dietderich, supra note 14, at 47.

95. Id. at 41.

bidding for land between those who want low-priced, high density and those who want higher-priced, low density.

Another peculiar argument for inclusionary zoning is that it makes up for the past wrongs of exclusionary zoning. By restricting the supply of housing, exclusionary zoning artificially raises some home prices, and because those owners have received undeserved gains, the advocates of inclusionary zoning contend that taxing them with an affordable housing mandate is justified. Kautz writes:

[H]igh housing prices are the result of local zoning policies that create artificial shortages of developable land for housing. The shortages have inflated land costs, and landowners have gained windfall profits due solely to cities’ zoning policies. In this scenario, inclusionary zoning can be viewed as a way for the public to share in the windfall profits it created. Exclusionary zoning is converted, in effect, into subsidies for inclusionary housing.

Despite the apparent logic of Kautz’s argument, it is faulty. First, Kautz fails to take account of the fact that there are different owners of property over time. If exclusionary zoning were able to boost prices, it would only benefit those owners who bought in early and not those who bought in late. The only residents who experienced windfall gains were the ones who owned property before the restrictive exclusionary ordinance was passed. Those who bought after the exclusionary zoning was in place have paid the inflated prices and have no windfall gains that can be taken away. Imposing a tax on recent buyers who have already paid the effective taxes due to exclusionary zoning would be a double whammy, which hardly makes up for past wrongs.

A second problem with Kautz’s argument is that inclusionary zoning decreases the value of some properties while increasing the value of others, so the tax does not have a uniform effect. When the costs of inclusionary zoning are passed backward to landowners, the policy only devalues undeveloped land; it does not devalue the existing stock of homes. As the supply of new housing is restricted, the price of existing homes will get bid up, so inclusionary zoning will increase the “windfall gains” to homeowners just like exclusionary zoning. This potential was recognized by Kautz, although she misses the importance of the argument. Kautz writes, “[I]f the

97. “Inclusionary zoning can also be considered a means to recapture land prices that have been artificially inflated by communities’ exclusionary policies.” Kautz, supra note 14, at 983.

98. Id. at 987.

inclusionary requirements are excessive and undercut profits too much, they may reduce housing production to a level where the program does indeed have an exclusionary effect.100 What she fails to realize is that even small increases in affordable housing mandates will discourage some development. Excessive requirements discourage more. Economics shows that people make tradeoffs on the margin; therefore, restrictions on supply are not all or nothing. All increases in affordable housing mandates restrict the supply of some homes and, thus, will make existing homes less affordable.

Cities should only enact inclusionary zoning if the goal is to make the vast majority of housing less affordable. Although the intentions of the advocates of inclusionary zoning are unclear,101 Ellickson hypothesizes that some advocates know the bad consequences of inclusionary zoning and enact it because they want to restrict supply.102 Public choice economics would argue that residents might support inclusionary zoning because they know it restricts development and boosts existing housing prices.103 Ellickson says:

[P]roponents of inclusionary zoning may not always have the interests of low and moderate income families at heart. I notice that the towns that require developers to set aside a fraction of new housing units for the low and moderate income families tend to be towns that are otherwise exclusionary.104

He further argues that many of the towns in California enact inclusionary zoning for precisely this reason:

The towns in California that have adopted inclusionary zoning ordinances tend to be wealthy towns. If the program were progressive, one would expect middle income and lower income towns where growth is occurring to be adopting inclusionary programs. But they rarely do. The affluent city of Palo Alto has zoned about a third of the area of the town for development at a maximum density of one dwelling unit per ten acres. Palo Alto also

100. Kautz, supra note 14, at 988.
102. See Ellickson, supra note 12, at 1170, 1215.
103. The public choice field of economics assumes that rational individuals pursue their own self-interest by weighing costs and benefits to themselves in public decisions as well as market decisions. For the classic founding book of this field, see JAMES M. BUCHANAN & GORDON TULLOCK, THE CALCULUS OF CONSENT: LOGICAL FOUNDATIONS OF CONSTITUTIONAL DEMOCRACY (1962). For a recent introduction on public choice, see WILLIAM C. MITCHELL & RANDY T. SIMMONS, BEYOND POLITICS: MARKETS, WELFARE, AND THE FAILURE OF BUREAUCRACY 22-84 (1994).
has an inclusionary program, perhaps partly as a legal smokescreen to fool the courts.\textsuperscript{105}

Whether advocates of price controls know that their policies hurt the poor is unclear. Regardless of their intent, the result of inclusionary zoning is clear. Price controls do not reverse harmful exclusionary zoning practices. Instead, they exacerbate the affordability problem by further restricting supply and driving up the price of market homes. The one clear policy that reverses the effects of exclusionary zoning is the abolition of exclusionary ordinances.

\textbf{D. Is Government Intervention Needed to Prevent High Housing Costs?}

Many advocates of inclusionary zoning say that price controls are needed because a free market would not provide affordable housing.\textsuperscript{106} In other words, even though price controls may have problems, they are better than the alternative: an unregulated market where prices rise without limit. Once again the advocates of inclusionary zoning are ignoring economics and, as a result, are making a fundamental error. Economists of all stripes have shown that the cause of the affordability crisis is not the free market, but excessive government regulation.\textsuperscript{107}

The first issue to recognize is that the affordability problem is not a national crisis;\textsuperscript{108} it is only present in those areas where the supply of homes has not kept up with increasing demand.\textsuperscript{109} This is well illustrated by the situation in the San Francisco Bay Area, one of the nation’s least affordable housing markets. From 1990 through 2000, the region added 547,590 jobs—an increase of 17%.\textsuperscript{110} The California Department of Finance recommends that “1.5 jobs per new housing unit is a healthy jobs/housing balance,”\textsuperscript{111} which means more than

\textsuperscript{105.} Id. at 816-17.
\textsuperscript{106.} Note, Reassessing Rent Control: Its Economic Impact in a Gentrifying Housing Market, 101 HARV. L. REV. 1835, 1840-41 (1988). In reaction to POWELL & STRINGHAM, supra note 17, Gary Patton of LandWatch wrote, “Their paper suggests that the ‘market’ will solve our housing problems. Funny that it hasn’t yet!” Gary A. Patton, Letter to the Editor, MARINA GAZETTE, Apr. 26, 2004, at 2. Patton implies that there is a failing of the market. What he completely ignores is that a free market in housing has not existed, in part because of the very land use regulations his group lobbies for.
\textsuperscript{107.} For the most recent literature review, see Quigley & Raphael, supra note 2.
\textsuperscript{108.} For example, David Lereah, the chief economist for the National Association of Realtors said, “By and large, when you look at the [national] affordability index it is still very healthy.” Simon, supra note 1.
\textsuperscript{109.} Id.
\textsuperscript{111.} Id. at 6.
365,000 new homes should have been built. Yet the region added only 220,154 new homes—60% of the recommended need. Housing prices have soared from their already high levels as production has not kept pace with population and job growth. By 2002, the percentage of homes affordable to a family earning median income was only 23.9% for Oakland Metro, only 20.1% for San Jose Metro, and an astonishingly low 9.2% for San Francisco Metro.

Why has the supply not kept pace with demand? Government regulation is the major impediment. Glaeser and Gyourko find that an affordability crisis only occurred in particular geographic areas that had restrictive land use regulations. The authors write, “[Z]oning and other land-use controls are . . . responsible for high prices where we see them.” Some people believe that unaffordable areas are so expensive because they do not have enough land, but economists have shown that the scarce resource is not land but government permission to build. Because permits to build are scarce, the price of entitled land is pushed up compared to the price of non-entitled land. If intrinsically valuable land were the most expensive factor, people would be able to subdivide their property or build at higher densities, but in the current world, zoning laws prevent such development. These restrictions make housing much more expensive than the cost of construction. Glaeser and Gyourko’s econometric estimates indicate that only 10% of the gap between construction costs and home prices is caused by intrinsically high land prices; the other 90% is caused by zoning and land use regulations. They write:

If policy advocates are interested in reducing housing costs, they would do well to start with zoning reform. Building small numbers of subsidized housing units is likely to have a trivial impact on average housing prices . . . even if well-targeted toward deserving poor households. However, reducing the implied zoning tax on new construction could well have a massive impact on housing prices.

Likewise, a study by University of California, Berkeley, economists Lawrence Katz and Kenneth Rosen on land use regulation’s effect on housing prices finds that until 1970, California prices had been in line with the national average of housing prices, but by 1980,
California prices more than doubled the national average. They determine that one major cause of the price increase was "a dramatic increase in the use of a wide variety of local land use and growth control mechanisms." In his study of housing costs throughout the United States, William Tucker concludes, "[O]ne thing is obvious: Stringent housing regulations have certainly not helped the San Francisco area solve its housing problems. They may even be creating the problems."

Other studies with different methodologies reach similar conclusions. Stephen Malpezzi constructs an index of seven different land use regulatory variables and ranks fifty-six different metropolitan areas according to how strictly land use is regulated. Regulatory variables included measures such as changes in length of approval time, time required to get land rezoned, amount of acreage zoned for residential development, and percentage of zoning changes approved. Malpezzi finds that a change from a lightly regulated environment to a heavily regulated one decreased the number of permits to build by 42%, increased home prices by 51%, and decreased home ownership rates by about 10%.

However, just because prior regulations created the affordability problem does not mean additional zoning laws are the solution. The solution is to encourage the issuance of building permits, open more land for development, and abolish exclusionary zoning laws. If government reduces and eliminates regulations that restrict housing development, the housing market can respond to increased demand just like other industries.

E. Is the Construction of Market-Rate Housing Harmful to Low-Income Households?

Another dubious belief by advocates of inclusionary zoning is that the production of market-rate housing somehow hurts the poor. Rather than holding the views that trade is mutually beneficial and

120. Id.
121. TUCKER, supra note 11, at 5.
123. Id. at 222.
124. Id. at 230, 232.
125. This dilemma is consistent with Ludwig von Mises' economic theory of interventionism. See LUDWIG VON MISES, Interventionism, in CRITIQUE OF INTERVENTIONISM (Hans F. Senholz trans., Arlington House Publishers 1977) (1929). Von Mises discusses how government intervention leads to unintended consequences that create a perceived need for other regulations. Government then has a choice of implementing additional regulations, which will have additional unintended consequences, or it can repeal existing ones. Id.
that increasing the supply of housing benefits all, many advocates of inclusionary zoning treat markets as if they were a zero-sum game. According to this view, if a high-income household gains by being able to buy an expensive new home, it makes all low-income households worse off. They believe that even if the supply of new homes is increased, affordability will not be improved because only high-priced new housing will be built.

Economics shows that all income levels benefit even when new construction is high-priced. The reason is due to the interaction between the various housing markets, which includes the market for new housing and the market for existing housing. Consider what happens when a high-income family moves into a high-priced new home. When the family moves into new construction, its old home is freed for someone else, typically a family of lower income looking to upgrade. If instead a middle-income family moves into that home, its old home is in turn freed up for a lower-income buyer. As each income group moves up, its old home is freed for someone else, allowing many people to upgrade. Economists refer to this concept as filtering, because as families upgrade homes, the old homes filter down to those people who could not afford it before.126

The added benefit of this process is that it puts downward pressure on prices of all homes. When high-income families leave the market for existing homes and enter the market for new homes, they no longer bid up the price of existing homes. If, on the other hand, regulations restrict new construction, high-income people end up bidding up the price of the existing housing stock, making it less affordable. Another way to think about the benefits of increases in the housing stock is to think about the effects of decreases in the housing stock. Most people will recognize that destroying a percentage of existing homes will make housing less affordable because the existing stock of homes will get bid up. Likewise, preventing the construction of new homes limits the amount of available homes and causes the prices of all homes to be bid up.

This principle is illustrated in the classic study by John Lansing, Charles Clifton, and James Morgan, who looked at the chain of existing home sales in thirteen cities and found that each new home generated an average of 3.5 moves.127 All of those moves increase the supply and lower the price of existing homes, thus making them more affordable for low-income buyers. This study also finds that the benefits filter down to lower income brackets. The study reports that 9-14% of all people who moved in the chain of upgrades were low-

income buyers.\textsuperscript{128} The effect on moderate-income families is even stronger. In moves after the first new construction move, people of moderate income made up approximately 30\% of movers.\textsuperscript{129} The authors conclude: “[A]ny policy which increases the total supply of housing will be beneficial. The working of the market for housing is such that the poor will benefit from any actions which increase the supply in the total market.”\textsuperscript{130}

Despite the relatively uncontroversial status of this theory, advocates of inclusionary zoning attempt to debunk it. Although they recognize the potential benefits of filtering, they still offer reasons why it will fail to adequately help low-income buyers. At the forefront of this line of argumentation is Dietderich, who offers a host of reasons why increasing the housing supply fails to translate into substantial benefits for lower-income families.\textsuperscript{131}

Dietderich’s first argument against filtering is due to the introduction of time. Dietderich writes, “The rate of stock deterioration changes with the level of maintenance expenditure, and the necessary level of maintenance expenditures increases as a unit gets older.”\textsuperscript{132} He argues that as deterioration accelerates on older, affordable buildings, those older units will fall out of the housing stock. That is, landlords will let buildings deteriorate because they lose their incentive to continue upkeep, and the people living in the homes that need the most maintenance cannot afford the upkeep themselves.\textsuperscript{133} Despite the seeming logic of this argument, it does nothing to disprove the benefits of filtering. Low-income households are often already the least desirable homes available. If a high-income family moves into a new home and a moderate-income family moves to the high-income family’s former home, that still frees up the middle-income family’s former home for a family with a lower income. The lower-income family still upgrades from their prior home, which may have been a less desirable or a deteriorating home. The introduction of time does nothing to discredit the benefits of the filtering process. Imagine if no new construction took place: Dietderich’s problem would exist and the poor would be stuck in worse homes that deteriorate even faster.

Dietderich’s second objection is that political, cultural, geographic, and racial barriers separate the different stocks of homes from potential buyers and prevent the poor from upgrading into the

\begin{itemize}
\item \textsuperscript{128} Id. at 38-40.
\item \textsuperscript{129} Id. at 37-38.
\item \textsuperscript{130} Id. at 68.
\item \textsuperscript{131} Dietderich, supra note 14, at 92-98.
\item \textsuperscript{132} Id. at 93.
\item \textsuperscript{133} Id.
\end{itemize}
previously occupied unit. He also argues that low-income households fail to upgrade because of differences in the physical traits of units left vacant when upper-income families move. These factors include number of bedrooms, lot size, commuting location, and lack of public transportation in the area. Again, Dietderich’s argument misses the mark. All of his objections stem from his narrow view of the upgrade process. He seems to view the upgrade process as a situation where a low-income, urban family must move into the former home of a high-income, suburban family who moved into a newly constructed mansion. In reality the upgrade process is a chain of moves with multiple families making marginal improvements in their living arrangements. Even if cultural barriers prevented families from moving into extremely different neighborhoods, they would not prevent families from moving into slightly different neighborhoods. Families have different tastes and abilities to move into different situations, so as prices drop, at least someone will upgrade into a nicer vacant home. That in turn frees up another house that could appeal to many different buyers who have different tastes. The housing markets are better represented as a spectrum rather than completely stratified system.

Dietderich’s final argument against the upgrade process is that it does not work when more people are moving into an area. Dietderich writes, “Whenever the number of persons interposed between the original buyers and the target population increases, filtering slows. In the 1970s and 1980s, a surge in the number of younger adults at middle-incomes all but eliminated filtering to the poor in many American cities.” Although an influx of population into an area translates into many new residents jumping into the chain of moves, Dietderich is incorrect to assert that new construction fails to keep home prices down. The relevant question is what would have happened to prices had the new construction not been built. If population is increasing and new construction is hampered, the new residents start bidding against existing residents and drive up the price of even low-quality homes. In contrast, if the number of newly constructed homes exactly equals the number of new residents, prices will remain stable.

Dietderich’s arguments against the upgrade process appear well reasoned, but they are flawed. Making high-income families worse off (by restricting the supply of new market-rate homes) does not

134. Id. at 94.
135. Id. at 96.
136. Id.
137. LANSING ET AL., supra note 127, at 5.
138. Dietderich, supra note 14, at 97.
139. Id.
translate into making low-income families better off. In fact, policies that restrict the supply of new market-rate housing make all income levels worse off. One of the main barriers to the upgrade process is inclusionary zoning itself.

V. CONCLUSION

This Article has reviewed some of the more sophisticated justifications for inclusionary zoning by noneconomists, such as Dietderich, Padilla, and Kautz, and it has found that they do not hold up under scrutiny. These noneconomists’ articles are replete with fundamental economic errors which unfortunately only muddle the debate. Perhaps that was their intent, as their arguments seem to be based more on egalitarian ideology rather than sound economic logic. Despite the nice-sounding name, inclusionary zoning is still a price control that leads to a decrease in the amount of housing. Economic theory and evidence demonstrate that imposing price controls and taxes on housing is one of the worst ways of encouraging the production of housing. These authors’ arguments do not overturn this conclusion. Offsetting benefits, such as density bonuses, does not eliminate the costs imposed by inclusionary zoning, which is evidenced by the fact that voluntary inclusionary ordinances do not work. Builders do not simply absorb this tax as a cost of doing business, nor do they continue to provide the same number of homes. Inclusionary zoning does not correct the problems caused by exclusionary zoning but instead exacerbates them. The real problems causing the affordability crisis are regulations that prevent increases in the supply of homes. Eliminating restrictive zoning regulations will give consumers more choice and make housing more affordable. For those who truly care about making housing more affordable, price controls are not the answer.