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Impact Fees, Housing Costs, and Housing Affordability

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IMPACT FEES, HOUSING COSTS, AND HOUSING AFFORDABILITY: WHO BEARS THE IMPACT OF IMPACT FEES?

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I. INTRODUCTION

Florida local governments are increasingly using impact fees to pay for the capital improvements resulting from rapid development. Two recent surveys reported that at least twenty-six counties and sixty-two cities in Florida were using impact fees to pay for sewers, water mains, park facilities, fire and police protection, roads, and other public services.[1] In addition, thirteen cities and seventeen counties either have or are considering impact fee ordinances.[2] In some instances, cities have already had to increase impact fees to keep pace with the growing demand for capital improvements.[3]

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1. Manion, Use of Impact Fees Runs Into Some Limitations, The Tampa Tribune, January 25, 1988, at B-1, col. 5 (26 counties and at least 36 cities use impact fees). E. MILLER & E. LINES, PAYING FOR FLORIDA'S GROWTH: SURVEY SHOWS USE OF IMPACT FEES 1 (Economic Leaflets, Vol. 45, No. 4. University of Florida, Bureau of Economic and Business Research) (1986) (15 counties and 62 cities use impact fees).

2. E. MILLER & E. LINES, *supra* note 1, at 1.

3. *See, e.g.*, Manion, *supra* note 1, at 5-B. Tampa's proposed rate hike would increase impact fees from $1.10 per square foot to $3.63 per square foot, a 330% increase. *Id.*

Impact fees are cash assessments builders must pay, usually at the time a building permit is issued, to finance offsite capital improvements such as roads, sewers, parks, or schools.[4] These capital improvements are necessitated by new housing construction. In this sense, impact fees are an attempt to charge those who benefit from new capital improvements a proportionate amount of the overall cost of providing such services.[5] However, local governments also may use impact fees as a method of land use control or growth management. For example, a county may institute impact fees to restrict growth or to direct development away from the urban fringe and towards vacant parcels in previously developed areas.[6] With about 300,000 persons moving to Florida annually,[7] a reasonable assumption is that local governments' impact fee usage will continue to grow to finance the demand for capital improvements and public services.

At the same time that impact fees are being adopted as a means to address the state's infrastructure needs, concern is being expressed about the affordability of housing for certain population groups in Florida. This concern has led the Florida Legislature to study housing affordability issues. Several studies have concluded that state and local government regulations and requirements, such as impact fees, increase housing costs significantly.[8] This paper addresses the theoretical relationship between impact fees and housing affordability for moderate and middle income groups. The paper begins with an overview of the results of various impact fee studies. Included in this section are discussions of the short and long term effects of impact fees and who bears the incidence of impact fees. The paper then

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4. *See generally* Juergensmeyer & Blake, *Impact Fees: An Answer to Local Governments' Capital Funding Dilemma*, 9 FLA. ST. U.L. REV. 415 (1981) (overview of impact fee usage).

5. Impact fees only cover a percentage of the total amount of providing particular services. For example, in Hillsborough County transportation impact fees cover about 27.5% of total cost while in neighboring Pasco County the fees cover 50%. *See* Manion, *supra* note 1, at 5-B. A proposed increase in a Tampa impact fee is expected to cover 45% of costs of capital improvements due to new growth. *Id.* The revenue shortfalls are covered by gasoline taxes and other city revenues. *Id.*

6. Landis, *Land Regulation and the Price of New Housing: Lessons from Three California Cities*, 52 J. AM. PLAN. A. 9, 12 (1986).

7. This represents a 15.7% increase from 1980-1985. G. Israel & L. Beaulieu, Populations and Farms in Florida: Trends & Characteristics, 3 (unpublished manuscript, Center for Rural Development, University of Florida, Gainesville).

8. D. DOWALL, THE SUBURBAN SQUEEZE: LAND CONVERSION AND REGULATION IN THE SAN FRANCISCO BAY AREA 134 (1984). S. SEIDEL, HOUSING COSTS AND GOVERNMENT REGULATIONS: CONFRONTING THE REGULATORY MAZE 228 (1978). *See* Manion, *supra* note 1, at 5-B (a current Tampa proposal would increase impact fees in two middle class neighborhoods from $656 to $2077 for a 1500 square foot home).

presents a model that demonstrates the effects of impact fees on housing costs using data from two Florida cities. The paper concludes that market supply and demand for housing determine which parties — builders, buyers or landowners — bear the burden of the impact fee. This result has implications for a number of public policy considerations including housing affordability and the redistributional effects of impact fees on wealth and income.

II. OVERVIEW OF IMPACT FEE STUDIES

The implementation of land use controls can have considerable impact on the operation of local housing markets. One commentator stated that "the degree or magnitude of impact depends on the demand for land and housing and on the way that local policy affects the supply of residential land and housing."[9] Without supply and demand information, land use controls and growth management policies are developed and implemented without full comprehension of their remifications on housing markets and, in particular, housing affordability. This section presents an overview of housing market analysis with emphasis on determining the incidence of impact fees.

A number of recent studies have attempted to determine the likely effects of impact fees on new home prices. The key issue in these studies is whether impact fees are borne by the homebuilder, passed back to landowners, or passed forward to home purchasers. Generally, the studies take one of two approaches. Some use a strictly theoretical economic approach; others take an empirical approach. However, empirical work in this area is limited by data problems derived in part from the recent adoption of impact fees. This paper uses both approaches by applying empirical data to a simplified economic model. First, an overview of the results of existing theoretical work is presented.

Any attempt to estimate the effects of impact fees necessitates an understanding of the interaction of the supply and demand for housing. Elasticities, the sensitivities of market demand and supply to price changes, are critical.[10] One study considers these supply and demand

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9. Dowall, *Reducing the Cost Effects of Local Land Use Controls*, 47 J. AM. PLAN. A., 145, 146 (1981).

10. Elasticities measure buyers' and sellers' degree of responsiveness to market price changes. Mathematically, they are equal to the absolute value of the percentage change in the quantity of housing demanded (supplied) divided by the percentage change in the price of housing. *See generally* L. KENNY & R. BLAIR, MICROECONOMICS FOR MANAGERIAL DECISION-MAKING 43-47 (1982). For example, if housing prices increases 10%, and buyers continue to purchase the same number of houses, housing demand is termed "inelastic" (i.e. buyers are

elasticities in four sub-market types.[11] The study concludes that the incidence of impact fees will depend on the nature of supply and demand in the sub-market in question. In particular, the party with the lowest sensitivity to changes in market prices will bear the burden of the fee. For example, in housing sub-markets where the housing sellers and buyers are equally sensitive to price changes, then the buyer and seller (assumed to be the builder) will share the cost of impact fees assessed against the structure. In a situation where demand is relatively inelastic[12] and supply is highly elastic,[13] the buyer can expect to assume most, if not all, of the cost of the impact fees in the form of a higher sale price. Conversely, the builder can be expected to bear most of the cost of infrastructure charges when demand is relatively elastic and supply is relatively inelastic. These results are consistent with economic theory which suggest this general rule: the party who is least sensitive to price changes shoulders a relatively greater burden of an impact tax.[14]

Another study also considered different market types in its discussion of impact fees.[15] This study noted that the higher costs resulting from impact fees would fall totally on the buyer only in those communities considered more attractive than others in nearby locations. In markets where demand is relatively inelastic, sellers of housing accrue a degree of monopoly or market power.[16] Homebuyers in these markets must pay a premium, all or almost all the impact fee, to live in the community.

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insensitive to price changes where demand elasticity equals 0). However, if 20% fewer houses were purchased, demand is relatively more "elastic" (demand elasticity equals 2). This latter result means buyers are relatively more sensitive to price changes than in the former instance. Similarly, housing sellers are also sensitive to market prices. If housing market prices increase 10% but sellers do not produce more housing units, supply is termed "inelastic" (supply elasticity equals 0); if sellers produce 20% more housing units, supply is relatively more "elastic" (supply elasticity equals 2).

11. Weitz, *Who Pays Infrastructure Benefit Charges: The Builder or the Home Buyer?*, in THE CHANGING STRUCTURE OF INFRASTRUCTURE FINANCE 94 (J. Nicholas 1985). The four sub-market types include (1) inelastic demand/elastic supply; (2) inelastic demand/elastic supply; (3) elastic demand/elastic supply; and (4) elastic demand/inelastic supply.

12. The quantity of housing demanded does not decline much when the price of a given quantity of housing increases.

13. Builders are willing to supply a greater quantity of housing at higher prices.

14. *See* A. ATKINSON & J. STIGLITZ, LECTURES ON PUBLIC ECONOMICS 160-72 (1980).

15. Stegman, *Development Fees for Infrastructure*, 45 URB. LAND, May 1986, at 2.

16. Market power, also termed monopoly power, is the power of a firm to raise the price of its product by restricting output. R. BLAIR & D. KASERMAN, ANTITRUST ECONOMICS 110-17 (1985). "In all markets that are not perfectly competitive, each firm has some degree of market power — each can increase its price to some extent without a total loss of sales." *Id.* at 110. *See* United States v. Grinnell Corp., 384 U.S. 563, 571 (1966).

A third study argues that in the long run, when there exists a competitive market for development sites, the incidence of impact fees most probably will fall in whole, or at least primarily, on landowners who sell their land to developers.[17] Since a builder estimates the amount of fees required prior to construction and incorporates the amount into a lower bid price for the desired parcel, the pre-development landowner is more likely to pay a higher percentage of any impact fees. If the market for developable land follows this pattern, then impact fees will not affect housing affordability over time. One commentator reached a similar conclusion and noted that developers:

> When bidding for land in a city with [high development fees] developers would bid less, because they would take into account the fee they would later have to pay when they built. The burden would thus be passed backward to the people who, at the time the fee became fully anticipated, owned land suitable for residential development.[18]

Another study examined a number of land use controls used to regulate residential development and found that such controls had both direct and indirect effects on housing costs.[19] Impact fees have a direct price effect by shifting infrastructure costs from the public to the providers of new housing. Housing costs are affected indirectly when impact fee charges cause the number of builders in a particular market to decline. The declining number of builders reduces competition and grants the remaining builders a degree of market power.[20] This market power allows builders to charge excess prices for their product.[21] Impact fees also indirectly affect housing prices when developers reorient their operations to serve a higher income clientele. The marketability of high volume, low- to moderately-priced homes declines when builders have to raise prices to offset higher costs. Therefore, builders will shift to more expensive housing construction where profit potential is greater. Consequently, the supply of lower priced, more "affordable" homes will be reduced as their prices rise.

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17. P. Downing & T. McCaleb, *The Economics of Exactions*, in DEVELOPMENT EXACTIONS (J. Frank & R. Rhodes eds. forthcoming 1988).

18. R. Ellickson, *The Irony of Inclusionary Zoning*, in RESOLVING THE HOUSING CRISIS 154 (M. Johnson ed. 1982).

19. D. DOWALL, THE SUBURBAN SQUEEZE: LAND CONVERSION AND REGULATION IN THE SAN FRANCISCO BAY AREA 108 (1984).

20. *See* R. BLAIR & D. KASERMAN, *supra* note 16, at 110.

21. *Id.*

The effect of land use controls, including impact fees, was found to be greatest in situations where such controls limit the entry of outside builders to a particular market.[22] This study observed in three California cities that when regulations cause a reduced supply of developable land, a small group of builders is likely to dominate the market. Market power is present that allows builders to exercise more control over price than they would have in a competitive market. The study also found "that in growing markets the most important price effects of local land use controls are indirect, and that the structure of the local homebuilding industry influences how local regulations increase new home prices."[23]

In summary, the empirical and theoretical literature indicates that the burden of impact fees may be borne by the builder, the homebuyer, the landowner, or some combination of the three. Furthermore, this literature has focused primarily on the first level effect of impact fees (i.e. the effect on the sale price of new homes in the community imposing impact fees). Fewer efforts have been made to trace the effects of impact fees on the price of new homes in a community located nearby but unencumbered by impact fees, or on existing homes that are in competition with new dwellings. This paper will address the effects of impact fees as suggested by economic theory, thereby illustrating the potential relationship of impact fees to housing affordability in Florida.

III. Impact Fee Incidence: Who Bears the Cost?

A. *Market Analysis*

The analysis in this section uses a model which includes some simplifying assumptions regarding the structure of the housing market in which impact fees are used. First, there is a community (F) which has impact fees and is located geographically near other communities (NFs) which do not have impact fees. In the absence of impact fees, prospective homebuyers consider the NFs equally attractive to F. These communities (F and NFs) comprise one housing market. For simplification, two identical communities, F and NF, are considered. The amenities and public services offered in each are the same and locational and linkage, or transportation, factors result in the home-

22. Landis, *Land Regulation and the Price of New Housing: Lessons from Three California Cities*, 52 J. Am. Plan. A. 9 (1986).

23. *Id.* at 10.

buyer being indifferent to residing in either of the two communities. The sole criteria for electing to live in F or NF is the price of comparable housing. Also assumed, as is likely in Florida's growth areas, is that, in the long run, demand for housing is inelastic across the entire market while the long run supply of housing is elastic. However, demand for housing within communities may be very elastic because of the presence of comparable but lower priced housing in neighboring communities.

This model assumes that a rational person will choose to pay less as opposed to more for an identical bundle of housing services and prefers new housing over equivalently priced existing housing. Therefore, if community F imposes an impact fee and the builder attempts to pass it through to homebuyers, a prospective buyer will choose a comparable home in community NF. Several additional assumptions are also necessary.[24] The subsequent effects of this action are illustrated in the context of a two community world.

B. *Builder Response*

The immediate consequence of a fee levied in community F will be to raise the builder's cost of constructing a home. If the builder in community F were unable to pass the impact fee through to homebuyers, then he must either reduce profits, lower other factor costs such as labor, or reduce the price paid for land suitable for development. Because the model assumes the builders' market is competitive, profits cannot be lowered in response to increased costs. In addition, due to collective bargaining agreements, inadequate labor supply, or strong builder demand for other factors of production, it may not be possible to reduce factor costs. Prices for developable land depend on

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24. These assumptions are necessary to have intelligible results; the assumptions can be altered to determine the effects of impact fees in communities which do not have the assumed characteristics.

1. F and NF operate as a single market for labor and building supplies, and the supply of these factors is constant across F and NF. The mix of each factor can vary but cannot exceed the amount available initially.
2. Land suitable for development is limited in both communities.
3. Impact fees are levied against all new housing construction (single- and multi-family) in community F and collected from the builder at the time the building permit is issued. There are no impact fees in community NF.
4. Impact fees are significant and total at least $2,500 per single-family housing unit.
5. Builders face no barriers to entry in either community.
6. A number of competing firms operate in the housing market.

alternative uses for the land, the extent to which builders have already inventoried land, and the willingness of landowners to sell at lower prices. Thus, the builder may have to raise prices. The result of the price increase is that demand for new homes in community F will decline and demand for new homes in NF will increase.

In the short run housing supply is inelastic (builders cannot immediately increase the supply of new homes), the increased demand in NF will manifest itself fully in the form of higher prices. As builders respond to the increased demand, prices for homes in community NF would be expected to rise to, but not be greater than, home prices in F including impact fees. These higher prices reflect both limited land availability and demand in excess of available supply.

These higher prices for new homes will have an effect on marginal homebuyers, those who were just able to afford a new home prior to impact fees. Because of the increase in home prices these marginal buyers now find they cannot afford new housing in either market. Realizing that new housing has become unaffordable, marginal buyers will attempt to either purchase existing housing which has features similar to that of new housing or remain in their current homes. The shift in demand from new to existing housing will force the price of existing housing upwards. Potential first time homebuyers at the margin will either seek rental housing if they are new to the community or remain in rental housing if they already reside in the community. The increased demand for rental housing will, of course, result in increased rents in both communities, further exacerbating the affordability problem.

Impact fees levied on housing in community F will, therefore, indirectly raise prices for new and existing housing and raise rents on other housing units. The impact will be felt in both communities, albeit at different times. Builders will experience windfall gains if land prices in NF do not increase. Sellers of existing homes in either community will also experience gains.[25]

C. *Marginal Households and the Effect of Impact Fees*

Using common rule-of-thumb measures, the magnitude of the effects of impact fees on housing prices can be estimated. Assume that a new home would sell for $75,000,[26] and that a $15,000 down payment

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25. A real estate transfer tax or some similar revenue raising mechanism is a way to capture growth-induced, market value increases across the entire market. Impact fees, of course, only capture increases from new housing.

26. This figure might represent a lower bound for new home prices.

is available. A $60,000 mortgage loan is necessary. The monthly mortgage payments for such a loan are calculated at three interest rates: ten, twelve, and fifteen percent (See Table 1). Using $150 per month as the cost of property taxes and insurance, the total monthly housing expenditure is obtained. Assuming that the total monthly housing expenditure cannot be more than thirty percent of income, the annual income necessary to purchase the home is calculated and ranges from about $27,000 to over $36,000 depending on the interest rate.

The same calculations are then made assuming that an impact fee of $3,000 is imposed and is passed through by builders to homebuyers. The impact fee increases price and mortgage loan amounts to $78,000 and $63,000, respectively. The income necessary to afford a house increases in a range of $1,000 to over $1,500 depending on the interest rate.[27] Similar price and income implications would result as the indirect effects of impact fees raise prices for new and existing housing throughout the market. As a result, a significant number of households are forced out of the market.

TABLE 1
Median Priced Housing

10% Interest Rate	No Fee	With Fee	Difference
Monthly mortgage payments	$526.56	$552.89	
Total monthly housing expenses	676.56	702.89	
Annual income required at 30%	27,040	28,116	$1076
12% Interest Rate	No Fee	With Fee	
Monthly mortgage payments	$617.16	$648.00	
Total monthly housing expenses	767.16	798.00	
Annual income required at 30%	30,686	31,920	$1234
15% Interest Rate	No Fee	With Fee	
Monthly mortgage payments	$758.64	$796.57	
Total monthly housing expenses	908.64	996.57	
Annual income required at 30%	36,345	37,863	$1518

27. *See* Table 1, col. 3 (Difference).

1. Orlando & Miami

An analysis of Annual Housing Survey data on households in Orlando and Miami allows further investigation into the effects of impact fees on marginal households. These are the only Florida cities covered in this quadrennial survey of sixty metropolitan areas. A common rule-of-thumb is that a household can purchase a house with a value of two and one-half times annual income. Table 2 shows that using this standard in Orlando in 1981, twenty-seven percent of all recent movers who chose home ownership paid more than that standard, with the bulk of these households lying below the $27,700 median

TABLE 2
Recent Mover Households

Income	Orlando, 1981		Miami, 1983	
(1)	(2)	(3)	(4)	(5)
<$3,000	200	100%	400	100%
3,000- 6,999	300	100	200	—
7,000- 9,999	300	100	400	50
10,000-14,999	1,200	60	600	35
15,000-19,999	1,100	35	2,300	65
20,000-24,999	1,300	40	1,400	60
25,000-34,999	2,100	40	3,200	60
35,000-49,999	1,300	15	2,200	—
50,000-74,999	1,400	—	1,000	20
75,000 or >	500	—	1,800	—
Total	9,700	27	13,400	35
Median Income	$27,000		$28,700	
Median House Price	$60,100		$65,900	

Source: U.S. Bureau of the Census, *Annual Housing Survey*, pp. D6-D8 (1981) pp. D6-D8 (1983).

Note: Columns (2) and (4) are the estimated number of housing unit purchases in each city. Columns (3) and (5) are the estimated percentage of households buying housing with a purchase price more than 2.5 times annual income.

income level. Similarly in Miami in 1983, thirty-five percent of recent mover households paid more than the standard, with most again below the median income level. A $3,000 increase in house prices would cause even more households to fall below that level of affordability.

Table 3 gives the percentages for all homeowners with mortgages in the two markets paying more than twenty percent of income as housing costs. It is apparent that in both markets a large percentage of households with below median income were paying over this affordability standard. Clearly there are a number of households struggling to meet housing costs as measured by common rule-of-thumb measures. The imposition of an impact fee in a market as described above, in which the fee would ultimately impact on buyers, would exacerbate these affordability problems.[28]

TABLE 3
Monthly Housing Costs Greater Than 25% of Income.
(All owner households with a mortgage).

Income	Orlando, 1981	Miami, 1983
<$3,000	100%	100%
3,000- 6,999	100	100
7,000- 9,999	85	95
10,000-14,999	65	75
15,000-19,999	45	60
20,000-24,999	25	55
25,000-34,999	20	30
35,000-49,999	10	10
50,000-74,999	10	10
75,000 or >	5	5
Median Income =	$25,900	$31,300

Source: U.S. Bureau of the Census, *Annual Housing Survey*, pp. D6-D8 (1981) pp. D6-D8 (1983).

28. A 1985 study conducted an in depth, county-by-county analysis of housing costs assuming impact fees were passed through to homebuyers. The study estimated the price of new and existing houses and compared it to median income. The authors found that impact fees would affect affordability for a number of households. J. De Lisle, & A. Tashchian, Impact of Florida's Growth Management on the Affordability of Housing, STAR Grant administered by Florida Institute of Government (October 1986).

In this two community scenario, the most likely short run effect of the impact fee will be to raise the price of new and existing housing. Rental prices also will rise but lag somewhat behind the rise in housing prices. The marginal household will be the household most adversely affected because they will no longer be able to afford to purchase housing. The affordability of any housing in the market will be reduced dollar-for-dollar by the amount of the impact fee passed forward through higher price.

D. *Long Run Supply Response*

The long run responses of builders in community F to the impact fee effects described above include a number of options. Depending on the profits anticipated, builders can: 1) exit the construction industry in community F as single-family construction in the moderate to middle income range becomes less profitable with the higher level of costs and build in community NF; 2) switch from single-family in community F to multi-family housing construction in community NF where excess demand exists because of marginal buyers priced out of the owner-occupied housing market; 3) switch to non-housing construction; or 4) build higher price housing where the extra cost of impact fees are less of a burden to potential buyers, but where the number of potential buyers may be limited.

Operating under the assumption of a competitive market, the supply of new, single-family housing in the two communities will eventually decline due to increased prices caused by impact fees in community F and greater demand in community NF. Theoretically, supply will decline to the point where new housing supplied is just equal to housing demanded. At this point the supply of housing provided will have dropped by an amount just sufficient to meet demand at the higher price.

In community F, the reduction in the demand for land will result in lower bid prices and, consequently, certain parcels will be withdrawn from the land market. The effect of this action and reaction is indeterminate. If supply is reduced just enough to accommodate remaining demand then prices realized for land will remain constant. If reduced supply exceeds (lags) demand, land prices will fall (rise) relative to former prices. Thus, the price of a new home may rise, decline, or remain constant depending on the magnitude of the supply response. To the extent impact fees are capitalized into lower bid prices for developable land, housing prices will drop below the short run increase in price.

If the housing market operates as described, the rise in prices and rents predicted above will not be a temporary phenomenon. As the

price of housing reaches this new equilibrium, marginal buyers will continue to be priced out of the owner-occupied market and be less able to afford new housing than prior to impact fee impositions.

E. *Extensions of the Analysis*

The analysis in this paper has been conducted under a set of simplifying assumptions. Obviously, different communities have different housing supply and demand characteristics as well as differing relationships to the inter-community housing market. It is important for a community to determine its own situation before considering the likely effects of impact fees. This section, therefore, offers some alternative market scenarios, such as non-homogeneous communities, and briefly discusses how housing supply and demand, and resulting prices, might be affected in these situations.

One situation that can occur is the case in which the communities are no longer considered equally acceptable to potential homebuyers.[29] In this situation, demand for housing is inelastic among communities as well as throughout the market. It is possible that instead of opting out of new housing altogether, potential buyers will reevaluate their wants, needs, and financial status and simply pay the increased cost of housing. Alternatively, they may elect to purchase a smaller quantity of new housing (i.e. a home with less square footage or fewer amenities, in order to reside in the desired community). In the latter case, the effect of impact fees in community F may be to shift demand for housing downward to the lower quality ranges (now selling for a higher price) leaving demand for existing and rental housing unchanged. If builders are responsive to this change in demand, a greater quantity of smaller housing will be provided leaving relative affordability unchanged.[30]

This paper previously mentioned that impact fees could ultimately result in an increase in rents. For many people, especially those individuals or families just able to afford shelter at existing rents, any increase at all will have significant consequences. Rising rents can lead to doubling up of households and a reduction in the number of new household formations. Larger and fewer households result because young people delay the time they otherwise would have left their

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29. Stegman, *Development Fees for Infrastructure*, URB. LAND, May 1986, at 2, 4.

30. Noteworthy is that in all scenarios potential buyers have a quantity decision available to them in addition to a tenure (i.e. buy versus rent) decision. Limited by local zoning and building codes and the extent of builders' response, homebuyers can address the affordability issue in a way that still allows them to own a new home.

parents' home to begin life on their own. Fewer households translates into fewer housing units, so that in addition to price effects, impact fees result in a reduction in the effective demand for housing units and possibly in crowded living conditions.

Florida's growth situation and population demographics lead one to believe that housing demand among different housing markets is relatively inelastic. If, instead, demand is relatively elastic the analysis would indicate that any price increase would cause buyers to purchase desired housing in other markets. The assumption of elastic demand coupled with limited quantities of developable land and competition in the residential construction industry (builders cannot adjust their factor costs downward) will force builders in the impact fee community to accept lower profits or go out of business. In this situation builders have nowhere to pass the cost of impact fees. As a result the supply of new housing will be reduced in accordance with the higher costs that cannot be capitalized into higher prices. Conversely, if the supply of land in community NF is unlimited, builders would be able to obtain land at lower costs and, therefore, pass some, or all, of the cost of an impact fee back to landowners. To the extent that demand is satisfied in community NF and impact fees are capitalized into lower land values, housing prices will remain unchanged.

Impact fees and other regulations in both community F and NF may serve to create an element of market power for existing builders by raising the up-front costs of new homes. Higher initial costs make it more difficult for new builders to gain access to a market. If builder entry to a market is restricted, thus reducing competition, and all other variables are held constant, the price of new housing will be expected to rise by an amount equal to the cost of the impact fees. This result, of course, assumes demand is perfectly inelastic. As up-front costs rise so will the level of housing price below which it is no longer profitable to build. Existing builders who face little, if any, additional price competition from new entrants to the market can be expected to increase the size of housing constructed in order to maintain pre-impact fee profit levels.

In community NF market power may exist because of some cost advantage enjoyed by existing builders rather than higher up-front costs. For example, existing builders may have large inventories of land while new builders must bid aggressively in order to obtain needed land. Or, existing builders may have access to lower-priced labor or supplies than a new builder. Whatever the reason, new builders find they have higher costs per unit than established builders. One commentator has described the result if this discrepancy in factor

costs continued.[31] New builders eventually will be forced out of the market, if not precluded from entering altogether. In the long run, builders will gravitate to different segments of the housing market where, based on their respective capabilities, their profit potential is the greatest. The eventual result will be fewer large homes constructed with different builders serving different market segments.

IV. CONCLUSIONS

This paper demonstrates that the economic incidence, or burden, of impact fees will be determined based on the pattern of supply and demand in a particular housing market. In addition, market structure affects the degree of competition in the local building industry. The degree of competition will affect the extent to which impact fees are capitalized into prices over the short and long run. Legislators, local government officials, planners, and others considering the use of impact fees to finance the costs associated with growth need to be aware that impact fees having limited effects in one city or county may have serious consequences in others. Before any jurisdiction enacts an impact fee ordinance as a means of financing future growth, it should conduct a careful analysis of the potential negative consequences on housing affordability that could result. The social costs associated with a reduced supply of affordable housing may be greater than the savings accruing to the local capital services budget from impact fee collections. Further, in certain situations, windfall profits may accrue to homeowners through the increased market value of their properties which result indirectly from the imposition of impact fees. In these instances, the impact fee acts to redistribute wealth to unintended beneficiaries.

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31. Landis, *Land Regulation and the Price of New Housing: Lessons from Three California Cities*, 52 J. AM. PLAN. A. 9 (1986).