

The Impact of Real Estate Investment on Housing Markets

A study and analysis of the growth of the housing market in the Imperial Valley through the rise of private real estate investment.

A research proposal submitted to the Urban Studies and Planning Program
Senior Sequence Class of 2004-2005

December 2, 2004

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ABSTRACT

In Southern California, the Imperial Valley has recently witnessed massive growth rates in its housing market. This growth has been widely compared to the growth of the “bedroom community” of Temecula, in that the growth itself is merely spillover from San Diego housing markets, where people seek affordable housing alternatives. However, investors recognize these communities as investment opportunities and have drastically changed the dynamic of the respective housing markets. This study seeks to determine how housing markets of “bedroom communities” continue to grow with investors inflating housing prices which ultimately undermine the very principle of bedroom communities. This study will focus on current market studies of housing growth models and how housing census data from the Imperial Valley figures into this model and the economics of housing markets. This study will add to a growing literature on economics of housing, and growth of bedroom communities. By understanding the phenomenon of the housing market in the Imperial Valley, public policy makers and private homebuilders may more effectively and efficiently develop strategies to anticipate and serve future markets.

HOUSING PROJECTION MODELS AND THE MARKETS

“Martin Escoto and his wife rise long before dawn each weekday to make the 120-mile commute from their home in the Imperial Valley to their jobs in northern San Diego. Nearly 12 hours later they are back on the road, stopping only to gas up their Ford Escort.”

-Lori Weisberg, San Diego Union Tribune

California is widely considered to be enduring a “housing crisis”, or more simply, a lack of affordable housing. However, less widely accepted are the reasons to why there exists a housing crisis. In order to put the complexities of the housing market into perspective, this paper will approach the housing market from the two basic economic principles of supply and demand. Much of the blame for the current housing crisis has been placed on the supply-side of housing markets due to strict public policy constraints on land development, and an inability of public and private decision makers to correctly recognize housing demand.

Several institutions dedicate significant resources to the development and use of growth projection models. Public and private decision makers utilize these projections to formulate housing strategies. The San Diego Association of Government’s (SANDAG) *Regional Growth Forecast* will be featured prominently in this study due to its prominence in the region, and its direct implications in the Imperial Valley. At the heart of the *Regional Growth Forecast* are the five sectors of employment, income, construction, prices, and public finance (San Diego Association of Governments 1984, 9). In terms of the supply and demand model of housing markets, the employment, income, and price sectors would be considered in the demand function, while the construction, prices, and public

finance sectors would fall into the supply-side. SANDAG's growth model correctly assumes that movement in any of the five sectors will lead to a change in future growth. Also assumed is that future growth will directly determine demand and need for housing. However, the growth projection model only projects total amount of housing units needed, and does not take into the consideration the distinction between single family homes and rental units. Additionally, even if the growth model incorporates a distinction between single family homes and rental units, the model will be flawed due to the emergence of an investor population.

I define the investor population as the aggregate group of individuals and families who hold real estate property and shift the characteristic of the property from a personal dwelling unit into a rental unit which is used as a means of current and future cash flows. It is this investor population, I argue, that causes housing demand functions to become distorted and falsely misrepresented. This misrepresentation directly leads to ineffective and inefficient public and private housing policies. These inept housing strategies eventually result in a housing crisis. The ultimate goal of this project is to be able to determine the impact of private investment on the housing markets of bedroom communities like that of the Imperial Valley.

HOME ON THE RANGE

The recent emergence of the Imperial Valley as a player in the San Diego housing market is quite interesting considering its heritage as an agricultural community. The Imperial Valley lies roughly 100 miles east of downtown San

Diego, along the United States and Mexico border. The area consists of 7 incorporated cities of Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial, and Westmorland. The economies of these respective cities have solely relied on farming and basic manufacturing due to its intricate irrigation system which is fueled by the Colorado River. The growth of the Imperial Valley housing market started with the diversification of its economy. In 1995, the Imperial Valley saw the growth of the California State prison system into its region, immediately adding new jobs not affiliated with the agriculture sector. Additionally, the passing of the North American Free Trade Agreement brought with it a demand for a gamut of skill-sets to support the new economy created along the national. This sudden explosion of job opportunities first brought attention to the Imperial Valley as a potential alternative community to San Diego. However, due to declining economic conditions in Mexico through the late 1990s, the growing Imperial Valley economy hit a lull. It was not until early 2000 that the Imperial Valley reemerged as a significant housing market.

As average housing prices crept to an then all time high of \$301,000, San Diego region residents began looking elsewhere for alternative areas for housing (San Diego Regional Chamber of Commerce, 2000). The alternative areas emerged in the form of Temecula and the Imperial Valley, with the former gaining the majority of the attention due to its proximity to the San Diego job market. However, as the Temecula housing market saw consistently rising property values, the need for a new alternative emerged. Lori Weisberg of the San Diego Union Tribune writes, "Some industry experts are going so far as to dub the

Imperial Valley the next Temecula, where reasonably priced new-home developments in southwest Riverside County have long drawn thousands of San Diego households who felt shut out of the county's rapidly escalating real estate market (Weisberg 2004). As a result, the Imperial Valley has experienced the sale of roughly 1000 new homes within the past year (Imperial Valley Economic Development Corporation 2004).

The growing demand for housing in the Imperial Valley will undoubtedly result in increasing housing costs. However, the manifestation of real estate investors has directly influenced the demand curve, creating a misrepresentation of actual demand in the Valley. This artificial demand for housing in the Imperial Valley has pushed average housing prices past \$275,000 (Imperial Valley Economic Development Corporation 2004). Although this figure is still relatively a far cry from the average housing prices of San Diego and Temecula, the trend is not encouraging for those earning low wages seeking to maintain employment in San Diego.

EXISTING LITERATURE

Literature on growth in the Imperial Valley is very limited in scope and number of works. This may be primarily due to the relatively new phenomenon of growth in the area. Although, because the rise of the housing market in the Imperial Valley is considered a bedroom community of the San Diego market, focus will be given to existing literature concerning San Diego, which is

extensive. Additionally, more general works on the economics of housing, and housing projection models will be utilized.

SANDAG's *Regional Growth Forecast* is the most prominent and comprehensive study available to the public for the San Diego region. Now in its 8th series, the study focuses on both short-range and long-range forecasts of growth in San Diego. The *Series 8* version of the *Regional Growth Forecast* projects growth through the year 2020. The *Regional Comprehensive Plan (RCP)* and the *Housing Element* of the *City of San Diego General Plan* both base the foundation of their respective plans off of the projections in the *Regional Growth Forecast* study. The interconnectedness of these works makes understanding the flow of information from data into policy much easier to delineate. Unfortunately, any inherent flaws and biases of the studies will also be reciprocated through the works.

The *Regional Growth Forecast* is funded and overseen publicly through SANDAG's appointed representatives from the San Diego County's member cities. The forecast consists of two phases in the forecasting process. The first phase uses a Demographic and Economic Forecasting Model (DEFM) that looks at the entire region of San Diego as a whole, and makes projections for the region. The second phase of the process allocates the findings of the DEFM into smaller sub-regions for more specific results. This sub-regional allocation phase is split into three allocation models. The first allocation model is the EMPAL, which distributes regional employment totals to smaller areas according to attractions and constraints that are derived from employment concentrations and

planned land uses. The second allocation model is the PLUM, or Projective Land Use Model. The model allocates population and housing units into smaller planning areas. The Sophisticated Allocation Process (SOAP), represents the final sub-regional allocation model. SOAP allocates the population, housing, and employment levels to the smallest geographic areas possible (San Diego Association of Governments 1994, 5). SANDAG's *Regional Growth Forecast*, may be used as a model for understanding how private investment may affect the housing market in general.

In order to understand the intricacy of the housing market, literature on the economics of housing markets must be explored. A housing market brings together buyers, sellers, and renters with intentions of the permanent or temporary transfer of a place of shelter. Assuming that shelter is indeed necessary for survival, demand for housing is relatively inelastic, or insensitive to price (Podenza, 1988:23). Because housing is a necessity for life, no matter how much homes cost, people will buy them because they need it. An opposite view on demand for housing is that it is elastic; based off of research from estimates of the excess form of the flow-demand function from time series data (Muth, 1960:72). In another study, "despite numerous cross-sectional studies of the income elasticity of housing demand, no consensus has been reached (Polinsky, March 1977:1). Interestingly, the difference in the dates of the respective studies must be noted. Because the housing market is subject to cycles of growth and decline, the 1988 market Podenza studied may have been

dramatically different than the 1960 market Muth studied, and the 1977 market Polinsky studied.

The cycles of the different housing markets across time are very much dependent upon the general economic cycle of a country. The housing market is composed of service, manufacturing, and industrial sectors, playing a prominent role in a country's economy. Economic cycles may be looked at from the two perspectives of the Monetarist, and the Real Business Cycle theory (Podenza, 1988:157). The Monetarist view stresses the use of supply-side economics (in terms of money supply), emphasizing that changes to an economy's money supply will create a shock resulting in a change in consumption patterns, or in the housing market case, a change in the demand for housing. The Real Business Cycle theory focuses on supply side of the housing market, arguing that adverse real shocks have adverse real effects. This states that an economy may not be able to produce at a certain level of output, and cause a shifting of the aggregate supply curve to a level in which it can operate. In order to gain a complete understanding of the dynamics of a housing market, one must examine both the supply and demand side of the market (Oxley, 2004:16).

The demand-side of a housing market is associated directly with income (Podenza, 1988:24). As incomes, decline, so do house prices and vice versa. Unfortunately, this theory does not hold in the San Diego market, where income levels have remained stagnant, while home prices have nearly tripled (<http://www.sdhc.net/giaboutus2.shtml>). Housing demand is also directly affected by the costs of capital, including interest rates, and mortgage terms (Howenstine,

1983:36). However, housing and rental markets do not move in tandem (Podenza, 1988:80). Based off of time-series data, periods of strong housing markets coincided with a weak rental market. This suggests that the need for shelter does not play a significant role in the determination of housing prices as previously assumed. In addition, this dismisses the theory of the demand-side driving housing market prices, unless we assume that more important to a person is the utility of owning a home rather than the need for shelter.

RESEARCH DESIGN/METHODS

I approach this study from the perspective of a 4th year college student studying Urban Studies and Planning, and Management Science at the University of California, San Diego. I have also been interning for the past 7 months at Pulte Homes, a private homebuilder in San Diego. At Pulte Homes, I have been overseeing 3 development projects (roughly 800 single family and multi-family housing units) out in the Imperial Valley. My inexperience and lack of a thorough understanding of housing markets will act as limitations to my study. However, I have had extensive practice in running regressions of economic equations, and comparing the outputs. Additionally, my research will be inherently biased from the perspective of a private sector employee; although I do have limited experience in the public sector as a planning assistant.

Research for this study will first focus on determining the profile of home buyers out in the Imperial Valley. Using my direct access to the housing market, I will be able to obtain buyer profiles of the respective projects. Because the

population in the Valley is still relatively small, a small sample size of the population will represent a useful measure of the population. Bias from this aspect of my study may arise simply from measurement error, where the sample population does not represent the entire population, and also from limited access to total homebuyers, because Pulte communities target and attract specific consumer groups. However, I believe this bias will be insignificant due to the relatively similar pricing of homes across the market in the Imperial Valley. Utilizing buyer profiles, I hope to determine the proportion of pure investment in housing to the aggregate consumer market of homes in the Imperial Valley.

Using SANDAG's *Regional Growth Forecast*, information obtained from buyer profiles regarding private investment levels may then be implemented into SANDAG's growth formulation. With the hopeful assistance of SANDAG's officials, and professors from Chapman University, I hope rerun regressions of SANDAG's growth formulation. Afterwards, I hope to compare SANDAG's growth numbers, with the re-regressed numbers. The differential from these two figures will represent the impact of private investment in housing markets. I chose professors from Chapman University to assist me in my study because of professional relations through my internship, and because of the contrast it provides to SANDAG's study. SANDAG's growth forecast is funded and used primarily by public organizations, while Chapman University's study is funded and used primarily by private organizations.

I then hope to present my findings to both SANDAG and Chapman University officials to obtain comments and criticisms of the reliability of my findings.

CONCLUSION/OUTCOMES

The anticipated outcome of this study is there will be a negative differential from the re-regressed growth model to that of SANDAG's. This differential will then imply that private investment in real estate for the sole purpose of investing will result in more accurate data and projections of future growth due to the effect investors have on the demand function of housing markets. This study will then hopefully lead to future consideration of private investors as its own category when determining housing needs of a market.

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