FRBSF Weekly Letter
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# Can Paradise Be Affordable?

Hawaii has the distinction of having the highest housing prices in the nation. The median price of a house in Honolulu stood at $335,000 in late 1991. In comparison, the median price of the second highest market (San Francisco) stood at $252,000, while the national median price was only $100,000.

The gap between Hawaii and the nation has been growing in recent years. In 1985, average prices were 64 percent above the national average; in 1990 prices were more than 142 percent higher.

Home prices also are higher relative to income in Hawaii. In terms of affordability, a person earning Hawaii's median income has only 53 percent of the income necessary to qualify to buy a median priced single family home. This compares to a national figure of 120 percent; that is the national median income exceeds the income needed to qualify for a median priced home. The lack of affordable living space is of growing concern to policymakers and has led to several initiatives to promote low-cost housing in Hawaii.

In this *Letter* we evaluate various demand and supply aspects of the Hawaiian housing market to understand the factors leading to these high prices. We argue that a combination of growing demand and restricted housing supply goes a long way to explain Hawaiian housing prices. Land-use policies favor agricultural and open space and restrict residential development. The lack of affordability resulting from growth controls is a clear illustration of the tradeoff between the amenities resulting from preserved open space and the social value of affordable housing—a policy tradeoff that is faced in housing markets elsewhere in the Twelfth District and the United States.

**Housing demand in Hawaii**

At the most basic level, growing demand for housing in Hawaii reflects population growth that is nearly double the national average. Since 1972, population has risen at an annual rate of 1.95 percent, compared to a national average annual rate of 1.02 percent.

Growth in population has been possible because of relatively strong employment gains (2.9 percent per year) driven by a boom in tourism. The number of visitors to Hawaii has more than tripled since 1972, with strong growth from both the U.S./Canada mainland (165 percent) and Asia (388 percent). To meet the needs of these tourists, service sector jobs have expanded at a 5.0 percent annual rate, with hotel employment rising 135 percent. In addition, construction of new resort facilities has provided strong job opportunities, as the number of hotel rooms doubled from 36,608 to 72,237.

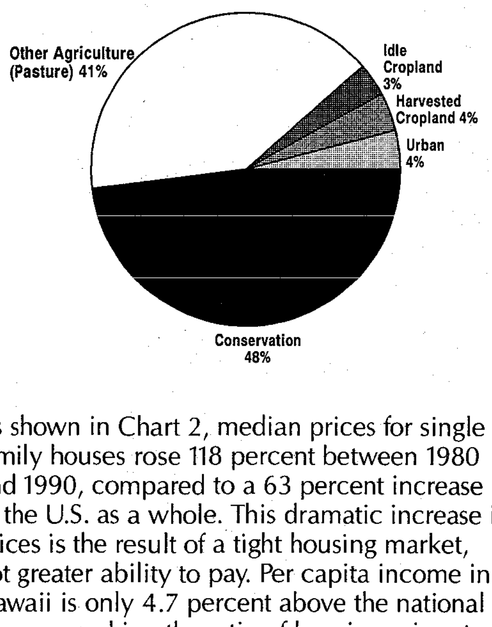
An additional consequence of increased tourism has been increased demand for vacation homes by both mainlanders and Japanese, which reduces available supplies for permanent residents. Particularly in recent years, the press has reported a number of Japanese purchases at very high prices. Although this investment has had some effect on boosting prices in high-end residential markets and nonresidential resort properties, studies show little effect of Japanese purchases on *median* residential prices.

All these factors have boosted the demand for housing in Hawaii. Higher demand for housing, however, does not necessarily imply exorbitant prices. In a well-functioning housing market, increases in demand will raise prices in the short-run, but lead to an expansion of supply as new housing is constructed and existing housing is expanded and improved. The long-run supply of housing is expected to be more elastic than the short-run supply. If the supply of housing is constrained by geography or land-use policy, however, higher prices will result.

**Housing supply**

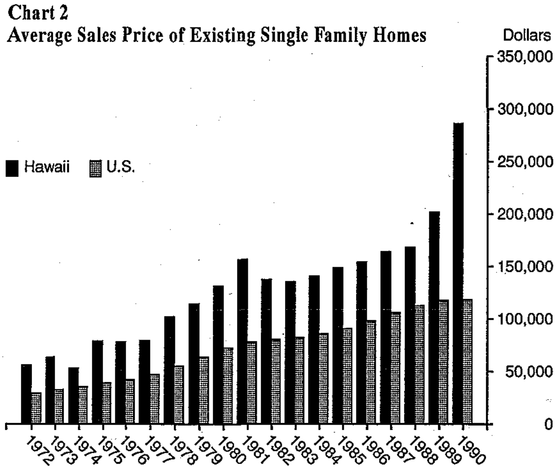
While demand has been rising, supply has been constrained by some of the strictest land-use policies in the United States. By state law, less than 5 percent of the state's acreage is available for urban development. Chart 1 shows that a little over 4 percent currently is categorized as urban. The rest is equally split between agricultural and preserved tracts. Of the 1.7 million acres of agricultural land, however, only 327,000 is actually zoned for crops, and only half of that is harvested. The vast majority of agricultural land stands as pasture, woodlands, or open space.

**Chart 1**
**Land Use in Hawaii**
**(Total Land Area: 4.1 million acres)**




As shown in Chart 2, median prices for single family houses rose 118 percent between 1980 and 1990, compared to a 63 percent increase in the U.S. as a whole. This dramatic increase in prices is the result of a tight housing market, not greater ability to pay. Per capita income in Hawaii is only 4.7 percent above the national average, making the ratio of housing prices to median income the highest of any state in the U.S.

**Chart 2**
**Average Sales Price of Existing Single Family Homes**




More recently, prices have received another upward jolt because of the renewal of long-term leases. A large part of the Hawaiian real estate market is built on leased land. With the sharp gain in land prices in recent years because of increasing scarcity, real estate analysts report that those renewals often lead to larger than anticipated increases in rents.

Recent prices also have exhibited upward pressure from other cyclical factors. Analysts studying the market suggest that demographic and social factors, together with lower interest rates, are prompting an unusually large number of residents to move up to higher priced housing. A similar pattern was noted in the late 1960s and early 1980s.

**Effects on market composition**

These supply and demand conditions have had several predictable effects on the Hawaiian housing market. Multifamily housing comprises 38.1 percent of all units in Hawaii, versus a national average of 29.8 percent. A larger than average share of the population lives in multifamily housing (27.8 percent versus 23.2 percent in the nation as a whole). Moreover, the average living area in multifamily units in Hawaii has declined by over a third, from 1,289 square feet in 1970 to 711 square feet in 1990.

The reduction in average unit size has helped slow the growth of rents. Rents continue to rise faster in Hawaii than elsewhere, however. Between 1980 and 1990, median rents in Hawaii rose 121 percent, compared to an increase of 88 percent nationally. On average, rents per square foot are 50 percent higher in Hawaii than in the rest of the country. Because of this faster growth, average Hawaiian rents in 1990 stood at $599 per month, compared to a national average of $374. (In Oahu rents are considerably higher, averaging $1150 per month for apartments.)

Similar trends are observed in the single family market. Increasing scarcity has caused average single family housing units to downsize. Lot sizes, in particular, have decreased in size to offset some of the effect of higher land costs.

**Promoting low-cost housing**

In Hawaii, concern over affordability has spurred many local governments to promote low-cost housing. In many cases, developers are required to set aside a certain portion of new construction as affordable. Recent policies have offered to cut red tape in the development process in return for devoting 60 percent of the units to affordable housing. In 1990, 636 units were built under this program, compared to 330 completed outside the program. Developers' interest in the program is waning, however, because of weak demand for the expensive homes in the development, which in the past subsidized the cost of building the affordable units.

The affordability of these "affordable" units also may be temporary. While housing is affordable for those lucky enough to make the initial purchase, at the time of resale, the price of the affordable houses often rises to the higher market level. Moreover, affordable housing requirements can deter developers from building middle-range housing, since they must compensate for the low-priced units by building very expensive units.

**Open space versus affordability**

Concern over housing affordability also has led to proposals to change the land use mix—principally to convert agricultural land to urban use. From the perspective of generating income, converting large portions of agricultural land appears to be warranted. In 1990, 41 percent of the land was used for agriculture, and it produced only 1.2 percent of the personal income of the state directly, plus an additional 1.0 percent of income indirectly through jobs created in food and fiber processing. Moreover, agriculture is diminishing in Hawaii, with pineapple and sugar cane production declining, while other industries are expanding.

These figures understate the current value of that land, however. Hawaii is valued as a tourist destination and a place to live because of its natural beauty. Overdevelopment of the Islands would diminish this beauty. This explicit value of open space is reflected in preserving lands for natural parks and wildlife refuges. It also is reflected, however, in the zoning of large expanses of land for agriculture, even though it is uncultivated. Uncultivated agricultural land (pasture, woodlands) provides much of the same value as parks or preserved lands.

In sum, the restriction of the usage of land for agricultural purposes is not supported by economics alone. Agricultural output is not intrinsically more socially worthy than other forms of economic output. If agricultural use of land is more aesthetically pleasing, however, there may be positive production externalities that would not be valued in the marketplace. Indeed, these amenities act to raise the demand for Hawaii real estate. Such public good aspects of agriculture are an argument for protecting land-use controls. The tradeoff, however, is a restricted housing supply.

**Conclusion**

The Hawaiian experience provides a dramatic example of tradeoffs in land-use policies that are being examined in much of the Western United States. Similar debates about development versus preservation of open space are taking place in the San Francisco Bay region, Seattle, Los Angeles, Portland, and other areas experiencing rapid increases in population.

Land use policies that preserve space for parks and agriculture result in social benefits ranging from physical beauty to environmental protection. The tradeoff,however, is that competing uses of the land also produce economic benefits. To the extent that Hawaii land-use policies constrain development, one result of these policies is a scarcity of affordable housing. Explicit recognition of this tradeoff in policymaking potentially will result in a more efficient use of Hawaii's natural endowments.

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The *FRBSF Weekly Letter* appears on an abbreviated schedule in June, July, August, and December.