







# **Policy Brief**

# Shared Equity, Transformative Wealth

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# Shared Equity, Transformative Wealth

by Rick Jacobus<sup>1</sup>

# Designing affordable homeownership programs that produce real wealth - one generation after another

### EXECUTIVE SUMMARY

After nearly a decade of rapid increases, home prices have finally stabilized in most parts of the country; in some areas, they have even started to decline. The current pause in the housing market provides an historic opportunity for communities to review their homeownership programs and ensure they are well-designed to address the inevitable resumption of home price appreciation in the near future. This paper provides an analysis of several alternative strategies for sharing the equity growth that accompanies home price appreciation to balance the dual goals of individual asset accumulation and ongoing affordability to future home purchasers.

As home prices have risen over the past decade, many local government homeownership programs have been forced to dramatically increase the level of public subsidy available to each family – some are now providing well over \$100,000 per family. As subsidy levels have risen, more and more jurisdictions have turned to shared equity approaches that split the equity that results from home price appreciation. Under these approaches, a portion of the equity growth goes to the homeowner – augmenting the asset growth they achieve through paydown of

principal on their mortgage – and a portion either stays attached to the home to ensure its ongoing affordability or goes back to the local government to be used to help subsequent purchasers afford to buy a home.

Despite their great benefits, shared equity approaches are sometimes criticized from an assetbuilding perspective because they prevent homeowners from realizing the full wealth-creation benefits associated with traditional homeownership. In *The Hidden Cost of Being African American*, Thomas Shapiro uses the term "Transformative Assets" to refer to assets like homeownership that transform people's lives and lead to better lives for their children. It is clear that traditional homeownership can have this kind of impact – at least in a stable or rising housing market – but what about shared equity homeownership? Given all the controversy over shared equity homeownership, it seems worth asking: how do shared equity homeownership programs perform as asset-building mechanisms? How do the returns available in these programs compare with market-rate ownership? Do some shared equity approaches do a better job of generating meaningful wealth while still preserving affordability? Is the equity that shared equity homeowners earn enough to change people's lives?

## Designing for Balance

Designing homeownership programs to maximize either wealth creation or affordability is easy. Designing programs that **balance** these two goals is more complicated. While there are hundreds of distinctly different approaches to preserving affordability, a close comparison of a few of the most common approaches makes it clear how programs that look similar under certain economic circumstances can perform differently under different circumstances and highlights some of the program design choices that most influence the effectiveness of any program in maintaining ongoing affordability and generating wealth for homeowners.

This paper presents a detailed numerical comparison of the relative performance of three shared equity homeownership models under a wide range of different economic circumstances. The models are compared in terms of how well each model preserves affordability over time in the face of rising housing prices as well as how much equity each model allows owners to take with them when they sell. The three models studied are:

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- Shared Appreciation Loans: this approach provides families with a deferred loan that they must repay upon sale of the home, along with a share of any appreciation in the market value of the home.
- Area Median Income (AMI) Index Resale Formula: this approach preserves ongoing affordability by limiting the price at which a home may be resold. Assisted homeowners may sell their homes for no more than their initial purchase price plus that price times the rate of increase in the AMI.
- Affordable Housing Cost (AHC) Resale Formula: this approach preserves ongoing affordability by specifying that assisted homeowners may sell their homes for no more than a specific "affordable" price calculated based on what buyers in the target income group can afford at the time of sale given current interest rates, taxes and insurance.

In order to evaluate the performance of each approach, this paper compares outcomes for each model (and a market-rate transaction) under different economic scenarios, including: slowly and rapidly rising housing prices, falling prices and rising mortgage interest rates. As this comparison shows, the relative performance of different shared equity approaches is highly dependent on what is happening in the broader economic environment.

The shared appreciation loan splits the equity growth associated with home price increases between the homeowner and the jurisdiction providing the loan. Under one common approach, which is analyzed here, owners receive a portion of the appreciation equivalent to "their" share of the initial purchase price so that they earn roughly the same amount of equity that they would have earned if they had purchased a less expensive house without public subsidy. The program sponsor also receives a proportional share of appreciation and when prices are rising slowly, they can reinvest this equity together with the initial subsidy to help a new buyer purchase a similar house. But when prices rise faster than incomes, the public share of appreciation is not enough to fully support the next buyer, and the jurisdiction has to invest additional funds to maintain the same level of affordability.

The AMI and AHC resale formulas both limit the resale price to a level that is intended to be affordable to future buyers. When home prices are rising slowly, these models offer approximately the same level of wealth creation as the shared appreciation loan. When housing prices are rising faster, shared appreciation homeowners receive more equity but the AMI and AHC formulas better preserve the affordability of the assisted unit so that future working families can afford it without the need for any new subsidy. And, while the wealth creation under these models will seem lower relative to the market and shared appreciation models, AMI and AHC

homeowners generate an excellent return on their initial investment and will actually receive the same amount of equity whether housing prices are up a lot or a little – or even down.

The AMI and AHC formulas differ primarily in how they respond to changes in the interest rates for home mortgages. The AHC formula places all the interest rate risk on the homeowner, while the AMI formula accepts the risk of a modest decline in affordability to avoid placing the burden on the homeowner. When interest rates rise, the equity available to AHC homeowners declines because rising interest rates reduce the next buyer's purchasing power. Under some circumstances, AHC buyers may even be forced to sell their homes for less than they paid – even when market prices of neighboring homes have risen. The AMI formula, however, ties the resale price only to changes in the median income without reference to interest rates. This means that when interest rates rise, AMI homes become somewhat less affordable. Of course, when rates subsequently fall, they will become more affordable again, but if the homes sell during periods of high rates, they may not be strictly affordable to the target income group.

If you are only interested in maintaining affordability, the AHC formula is the best tool. If you are only concerned with wealth creation, market ownership is, of course, likely to generate the most wealth and shared appreciation loans do a good job of providing market-rate returns while retaining the dollar value (though not the full buying power) of public investment. However, if you want to balance the two goals of maintaining affordability and generating predictable wealth for homeowners, the AMI index outperforms these alternatives in a wider range of situations. When home prices are rising at only a modest rate, the AMI index offers homeowners a chance to earn the same kind of equity that they would have earned under a shared appreciation loan. When home prices rise rapidly, the AMI index protects the public investment by limiting the homeowner's return to what they *would have earned* in a more normal housing market – ensuring ongoing affordability to subsequent purchasers.

#### How Much Wealth Is Enough?

While it is clear from the summary above that shared equity homeownership programs can generate modest wealth while at the same time maintaining long-term affordability, it is also clear these homeowners will leave, under most circumstances, with less equity than they would have earned if they had, somehow, bought an unrestricted home at the full market price. Is this limited equity growth nonetheless enough to matter from an asset-building perspective? There are several ways to evaluate this question.

#### Return on Investment

This paper presents a rate of return for each resale approach under each economic scenario by comparing the total equity at resale to the homeowner's initial down payment and closing costs. Shared equity buyers generally earn a slightly lower rate of return on their investment than market-rate homeowners. Buyers with AMI index resale restrictions, for example, earn *only* a 28% annual return on their investment under the modest growth scenario while their market-rate neighbors earn 33%. While the shared equity approach has prevented them from earning a 33% return, a 28% annual return is still an extraordinary investment opportunity for anyone. There is simply no other reasonably safe investment that provides the kind of return on investment that shared equity homeownership offers – except (possibly) market-rate homeownership.

#### **Risk-Adjusted Return**

Recent research has highlighted the possibility that homeownership may be a riskier and less effective investment for working families with low or moderate incomes. These homebuyers are likely to realize less appreciation than other homeowners, face higher monthly costs relative to income and be more likely to lose their investment entirely through foreclosure. Because of the general lack of ownership options at the lower end of the price spectrum, many working families tend to stretch more financially in order to attain ownership. Despite spending a large share of their income, working families are often forced to buy older, less well-maintained properties and to buy in the least desirable neighborhoods. The dramatic rise in the number of exotic and subprime mortgages in the last two years illustrates the great power of the homeownership dream, but also increases significantly the risk profile of homeownership. Unfortunately, many families who are stretching in this way to purchase a home will end up in foreclosure or with significant equity loss.

While shared equity programs generally offer lower returns than market-rate homeownership, it is clear that these programs can be designed to expose homeowners to far less overall risk. Well-designed shared equity ownership programs make it possible for working families to purchase higher quality homes, often in better locations than they could access without public support. They also limit the buyer's monthly payments to a reasonable percentage of their household income and offer predictable appreciation while insulating homeowners from many of the fluctuations of the market. Changes in median income are far more steady and predictable

than changes in market home prices and the AMI is averaged over a metropolitan region, protecting homeowners from block-by-block price fluctuations as well.

## Moving Up to Market

One of the common concerns with requiring families to share the benefits of home price appreciation with the jurisdiction providing a subsidy is that it will trap homeowners in the assisted units because they will not be able to sell their home and purchase another home of similar quality in the same market. One recent study suggests that the equity that homeowners earn through shared equity ownership may, in many cases, provide enough of a head start for those families to move into the unsubsidized market when they move out. For other families, the income gains they experience after their shared equity purchase may allow them to trade up to unsubsidized homeownership. When market prices are rising much faster than incomes, however, even these head starts will not be enough. Shared equity homeowners whose incomes rise more slowly than housing prices will be much closer to unrestricted ownership than if they had remained renting, but many will not be able to afford comparable market-rate units without some public subsidy.

In rapidly appreciating markets, however, the same may be true for many unassisted buyers. If homeowners' incomes are not rising as fast as housing prices, their purchasing power will fall relative to the market even if the value of their current home rises fully with the market. Certainly, home price appreciation will give them options that they would not have if their appreciation were more limited, but their only options for moving may still require trading down to a less valuable house - smaller, older or further out into the suburban fringe.

# Transformative Equity

A growing number of social programs aim to help working families build assets. Individual Development Accounts (IDA), for example, offer low-income/low-wealth individuals a matched savings program. But the amount of assets generated through such programs is generally quite modest. An evaluation of one of the early IDA programs, the American Dream Demonstration, for example, found that the average participant accumulated \$1,543 in combined savings and matching funds.<sup>2</sup> Individual IDA participants and programs may have significantly higher asset accumulation rates, but it is quite rare for families to save more than \$10,000 through an IDA.

<sup>&</sup>lt;sup>2</sup> Ray Boshara. 2005. *Individual Development Accounts: Policies to Build Savings and Assets for the Poor.* Washington, DC: Brookings Institution.

These programs are considered promising asset-building strategies despite this limitation. Shared equity affordable homeownership programs, on the other hand, offer participating families the chance to earn 10 to 20 times more wealth. In fact, precisely because they limit the equity growth available to any one homeowner, shared equity homeownership programs can offer this kind of significant wealth creation to one family after another without new investment of public resources. Well-designed shared equity homeownership programs offer a stable and sustainable mechanism to provide *limited*, but nonetheless life altering, wealth creation to *unlimited* numbers of families over the long term.

In the face of persistent criticism that shared equity ownership is "unfair" to homeowners, this analysis suggests that shared equity programs can offer not only a *fair* risk-adjusted return but an uncommonly high return – a rate of return that, adjusted for relative risks, is quite similar to that of traditional homeownership and vastly superior to all other investment opportunities that lower income households can realistically access.

## PART I: THE TRADE-OFF BETWEEN WEALTH CREATION AND AFFORDABILITY

Montgomery County, Maryland's, Moderately Priced Dwelling Units program is famous as one of the nation's most productive local affordable housing programs. Between 1973 and 2005 the program produced over 12,000 affordable housing units. This large number of affordable units made a difference not only in the housing situation in Montgomery County, but throughout the region. However, by 2005 only 3,000 of these units remained as affordable housing. The program was producing homes with a market value over \$500,000 and selling them to low or moderate income buyers for as little as \$150,000. Buyers were required to resell at affordable prices for a period of only five to 10 years, after which they were free to keep the full market sales price. In 2005, policymakers in Montgomery County recognized that while the program was making a big difference to those few families who were served, they just did not have the resources to serve a fraction of those who could benefit. In April 2005, the county approved a change to the program that extended the period of resale control to 30 years and added a provision that required the 30-year clock to be reset every time a unit sold, ensuring that most units would remain affordable indefinitely.

Around the same time, San Francisco, another pioneer in affordable homeownership, was modifying its program. In San Francisco, buyers under the city's Below Market Rate (BMR) program were required to sell at an affordable price for 45 years. In early 2006, as long-term interest rates began to rise from historic lows, the program faced a new challenge. Because the program tied the affordable resale price to current interest rates, homeowners who had purchased their BMR units when interest rates were low were losing equity as interest rates rose. San Francisco policymakers recognized that the program rules would mean that some owners would be forced to sell for less than their initial purchase price. They felt that this outcome was contrary to the intent of the program and decided to adjust the program to use a less restrictive resale formula.

San Francisco and Montgomery County are not alone in struggling with these issues. Homeownership is an important part of American life, but it has become increasingly difficult for many families to afford to buy homes. In response, local and state governments and even the federal government have developed a range of programs to help families buy homes. As prices rise, however, the administrators of these programs face an increasingly difficult choice. Managers of programs that provide homebuyers with public subsidy have to decide what happens to that public investment when those families sell. When \$10,000 in public money was enough to help a working family move into ownership, it was common for programs to simply require repayment of this subsidy. As prices have risen, the amount of subsidy needed to help families buy comparable houses has risen, and program managers have found that the funds that they recapture in this way are not enough to help another family into the same house. It now takes more than \$100,000 in assistance in many parts of the country to help a working family become a homeowner and more and more policymakers have decided that the only way to preserve the value of these subsidy funds is to require homeowners to share with the jurisdiction the profit they receive when they choose to sell these homes. But while this type of shared equity program solves the problem of needing to provide ever growing levels of public subsidy just to keep the same homes affordable, it inevitably provokes a debate about assetbuilding. Is it fair to ask homeowners to limit their profits on the sale of their home? Is it fair to let homeowners earn enormous windfalls as a result of public assistance?

Given the controversy, it seems worth asking the question: how do shared equity programs compare as asset-building mechanisms? Do they offer a means for working families to accumulate meaningful wealth? How do the returns available in these programs compare with market-rate ownership? How do the returns compare with other asset-building and investment options available to working families?

# The Purpose of Affordable Homeownership

At its heart, the debate about how to handle appreciation in affordable homeownership programs is a debate about the very purpose of homeownership. For many working families, the chance to assume greater control of their living environment, have stable housing costs, build equity through the pay-down of principal and possibly take advantage of the mortgage interest deduction is sufficient motive to buy a home, even when their ability to profit from price appreciation is strictly limited. For this reason, many feel that it is appropriate and, increasingly necessary, for public programs to limit the "windfall" to assisted buyers in order to ensure that limited public funds can serve as many families as possible.

But this need to preserve public subsidies may not be the whole story. If our only goal is to produce stable, affordable housing that preserves public subsidy, affordable *rental* housing is a more effective tool. Affordable rental housing can provide safe and secure housing that offers families predictable and stable housing costs. It is clear that this kind of stability has an enormous impact on people's lives, especially the lives of children. And yet, there continues to be a demand for homeownership.

It is hard to avoid the conclusion that wealth creation is one of the key reasons for the continuing interest in homeownership. It seems safe to say that wealth creation is a good part of the reason that we have programs that subsidize ownership. It may not be the only reason for these programs, or even the primary one in every case, but it is an appropriate goal and it is, in truth, a motivating force behind many local homeownership programs. As much as we need to protect and maximize the impact of public subsidies, there is little reason to support homeownership programs if they cannot generate real, life altering wealth for the families who participate.

But too often policymakers fall into the trap of thinking that limiting appreciation has to mean housing programs that offer homebuyers *no* real wealth creation. Both critics and advocates for permanent affordability regularly overlook the real equity building that happens in most shared equity ownership programs. Policymakers do not have to choose between maintaining affordability and offering homeowners an opportunity for wealth creation. All permanently affordable homeownership programs generate assets for the homeowners. Some do a much better job than others. The challenge is to design programs that do a better job of *balancing* these two goals.

# A Continuum of Approaches

There are a number of different ways that public programs provide assistance to help working families move into homeownership. For the most part these programs involve some form of public subsidy intended to help lower income buyers afford market housing prices. Some programs provide assistance to developers to reduce the cost of newly constructed housing units, others provide loans or grants to homebuyers who use the assistance to buy homes that they find themselves. Some programs require developers of market-rate housing to sell some small percentage of their new units at prices that working families can afford. In each case, however, a subsidy is provided (or implicit), which makes it possible for lower income buyers to buy a house that they would never be able to purchase without such assistance.

Whatever approach is used, the general level of initial subsidy will be the same and the agency providing or controlling this subsidy will face a difficult policy choice related to the resale of these homes. When an owner of a subsidized unit sells it, what should the program expect from them? The expectations vary tremendously and fall along a continuum. At one end, **subsidy forgiveness** programs allow homeowners to keep the subsidy and all of the appreciation in the value of the home. **Subsidy recapture** programs, which loan subsidy funds to buyers with no

monthly payments but an obligation to repay the subsidy upon sale of the property, fall in the middle of this continuum. At the other end of the continuum, **shared equity** programs preserve affordability by recapturing a share of any appreciation (**shared appreciation loans**) or limiting an assisted owner's resale price to a level that will be affordable to future buyers (**subsidy retention**). Figure 1 graphically illustrates the continuum of homeownership programs. As points of reference, the figure also shows where traditional homeownership and permanently affordable rental housing fall on the same continuum.

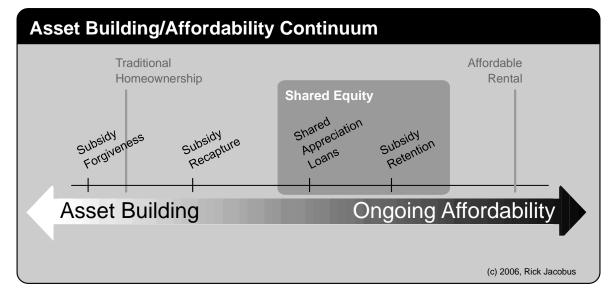


Figure 1: Asset-Building/Affordability Continuum

It should be clear that grant programs offer fantastic asset-building opportunities to the lucky buyers, but do little or nothing to preserve public subsidy. Subsidy recapture loan programs make more of an effort to preserve public resources, but most fail to keep up with rising housing prices and require ongoing investment of new subsidy in order to assist future homebuyers. Only shared appreciation loan programs and subsidy retention approaches attempt to ensure that the buying power of public resources invested today is preserved so those resources can serve additional families into the future. This paper focuses on these shared equity homeownership models in an effort to evaluate whether they can effectively balance the competing goals of asset-building for homeowners and preservation of long-term affordability.

### Shared Equity Homeownership Programs

Throughout this paper the term "shared equity" homeownership<sup>3</sup> is used to refer to any program that expects assisted homeowners to share the benefits of home price appreciation in a way that helps future buyers. The term "shared equity" has sometimes been associated with loans that require homeowners to pay the public sector lender a share of any home price appreciation.<sup>4</sup> Those loans, which this paper classifies as shared appreciation loans, are really only one example of a much broader class of programs that all involve splitting the benefit of home price appreciation between the assisted homeowner and the community that provided the assistance.<sup>5</sup>

This community benefit can be passed onto future buyers in one of two ways. Under one approach, the assisted family pays a share of home price appreciation upon sale of the property to the jurisdiction, which uses the funds to assist future buyers. Under the second approach, the public's share of home price appreciation is retained in the home through a resale formula that limits the sales price to future buyers. Only this second approach preserves the affordability of individual homes. However, when funds recaptured under the first approach are reinvested to produce new affordable units the affordable housing opportunity may be preserved for another family. In either case, the selling homeowner receives some appreciation, but generally less than if they had purchased the home without assistance. While there are many variations on this theme, this paper focuses on three common forms of shared equity homeownership: shared appreciation loans, AMI index resale formula and Affordable Housing Cost resale formula. These programs are described in the next section.

<sup>&</sup>lt;sup>3</sup> The use of the term "shared equity" homeownership to apply to a broad set of similar programs follows John Davis. 2006. *Shared Equity Homeownership: The Changing Landscape of Resale-restricted, Owner Occupied Housing*. Newark, NJ: National Housing Institute. However, Davis focuses principally on subsidy retention strategies – approaches that maintain affordability through resale price restrictions – while we examine both subsidy retention and shared appreciation loans.

<sup>&</sup>lt;sup>4</sup> This paper discusses only shared appreciation loans provided by public sector or nonprofit lenders. Private "shared equity mortgages" are somewhat common in England and have been proposed from time to time in the United States but are not included here because the equity that is shared is not available to be reinvested in the provision of affordable housing. For a recent proposal for privately financed shared equity mortgages in the US see: Andrew Caplin, James H. Carr, Fredrick Pollock, and Zhony Yi Tong. 2007. *Shared-Equity Mortgages, Housing Affordability, and Homeownership*. Washington, DC: Fannie Mae Foundation.

<sup>&</sup>lt;sup>5</sup> Among other names for shared equity homeownership are: below market rate (BMR) homeownership, limited equity homeownership, permanently affordable housing and resale-restricted housing.

# PART II: THE DETAILS MATTER: DESIGNING FOR BALANCE

To many, the variety of shared equity formulas appear quite similar. And, in fact, under certain circumstances, the more common formulas produce fairly similar results. All of them attempt to retain the value of public subsidies in order to serve future working families, and all do this by limiting the equity available to assisted homeowners when they sell their home. This apparent similarity obscures significant differences between the various approaches, however, which only become clear when we test the models under a wider range of assumptions.

At some point or another in the design of any homeownership subsidy program, someone will produce a chart that projects the resale price and/or ongoing affordability of the home at some point in the future. These charts always involve making certain guesses about what the trends in housing prices, incomes and interest rates will be over time. But, of course, we really have no idea what the future will look like. Each of the shared equity approaches has a somewhat different implication for who receives the benefit when things come out better than projected and who holds the risk when they turn out worse.

The only way to really understand these tradeoffs is to look at the numbers closely. While there are hundreds of distinctly different approaches to preserving affordability, a close comparison of a few of the most common approaches makes it clear how programs that look similar under certain economic circumstances can perform differently under other circumstances and

highlights some of the program design choices that most influence the effectiveness of any program at maintaining ongoing affordability and generating wealth for homeowners.

**Download the Spreadsheet:** Download the spreadsheet and compare these program models with your own assumptions.

www.nhc.org/housing/sharedequity

In order to compare these different approaches, I developed a spreadsheet that allows us to model

each individual program and then compare more than one approach side-by-side in terms of (a) the return to homeowners over a given time period, and (b) the relative affordability of the unit to future buyers. The spreadsheet allows comparison under different assumptions about future interest rates and rates of inflation. The results are often surprising. Some programs do a wonderful job of preserving affordability regardless of interest rates or home price inflation, but only by forcing homeowners to sell at a loss under certain circumstances (in some cases, even when the housing market as a whole has been rising). Others ensure a market-rate return to

the owners but only manage to preserve affordability so long as housing prices are not rising too quickly. Some approaches manage to balance between the two goals much better than others over a wider range of circumstances.

#### Alternative Models

The comparison below illustrates the relative performance of three different resale approaches under a range of conditions. This basic technique could be used to compare any two or more real or potential programs, but these three models were selected because they illustrate some of the more important program design choices. The models examined, and summarized in Table 1, are:

**Shared Appreciation Loan:** A family provided with a shared appreciation loan is required to repay the principal upon the sale of the house, plus a share of home price appreciation in lieu of interest. While the specific share of appreciation owed varies from one program to another, this analysis assumes an equity share that is calculated based on the percentage of the initial purchase price that was funded with the public sector loan. For example, if a starter home costs \$300,000 and local government provides a \$120,000 loan, the government has provided 40% of the purchase price and would expect to receive 40% of any appreciation at resale. In order to compare the results with the other approaches discussed below, we assume that both the initial principal and the recaptured appreciation are reinvested in a new deferred loan made available to a subsequent lower income buyer of the **same house**.<sup>6</sup> If the new second loan amount is insufficient to make the house affordable, we calculate the loss of affordability and the additional subsidy that would need to be invested to maintain affordability to a household at the same target income level.<sup>7</sup>

**AMI Index Resale Formula:** Under this approach, equity sharing is implemented through a resale restriction that limits the maximum sales price of the home to the next buyer. The AMI index formula calculates the maximum resale price based on the percentage change in the Area Median Income over the time since the homeowner purchased the house. Thus, if the AMI rises at 3% per year, the maximum resale price will rise (relative to the initial purchase price) at 3% per year as well. Indexing to the median income ensures that the home price will only rise in proportion with people's ability to pay. While an AMI index formula protects affordability over the long term, the exact affordability level at any point in time will fluctuate as mortgage interest rates rise and fall (because interest rates affect a family's buying power).

<sup>&</sup>lt;sup>6</sup> Most shared appreciation loan programs would not necessarily reinvest funds in the same homes, however this assumption allows for a side-by-side comparison with the resale restricted models. If recaptured funds were instead invested in a similar home in a similar neighborhood, the affordability of that unit (and the need for additional subsidy funds to maintain affordability) would be similar.

<sup>&</sup>lt;sup>7</sup> The loss or gain of affordability is expressed in terms of percentage points relative to the AMI. That is, if a home that was affordable to 80% of AMI buyers is now affordable to 85% of AMI buyers there has been a 5 percentage point loss of affordability.

Affordable Housing Cost Resale Formula: Another approach, which has become common in California as a result of its inclusion in state redevelopment law, involves limiting the resale price to the exact level that will make the unit affordable to a hypothetical buyer at the target income level at the time of sale. This approach works backward from the then-current tax rates and likely insurance costs, etc., to calculate the monthly funds a buyer can afford to spend on a mortgage payment and then, given the current interest rate, calculates the loan amount that the payment will support. This loan amount plus 3% for a modest downpayment produces the maximum "affordable" resale price. While this formula is less common in practice outside California, it provides a useful point of comparison because it is the only approach that preserves affordability precisely under all circumstances.

**Market:** For the sake of comparison, the analysis below also presents the returns to buyers of an unrestricted home. Of course, buyers who are eligible for significant public subsidies are generally not able to purchase similar homes on the unrestricted market. Nonetheless, policymakers often compare returns earned by shared equity homeowners to the returns that traditional homeowners earn in the unrestricted market.

Model	Initial Price	Resale Price
Market	Sells at market price	Resells at market price
Shared Appreciation	Sells at market price (with second loan from jurisdiction)	Resells at market price; jurisdiction receives a share of any appreciation <sup>8</sup>
AMI Index	Sells at affordable price (housing costs = 30% of 80% of median income)	Resells at initial price plus increase based on change in the AMI
Affordable Housing Cost	Sells at affordable price	Resells at affordable price (housing costs = 30% of 80% of median income)

Table 1: Comparison of Homeownership Models

<sup>&</sup>lt;sup>8</sup> There are also "appraisal based" resale price restrictions that are similar to the shared appreciation loan program described here, but involve selling the home for the affordable price and increasing the below market price based on a percentage of the change in the appraised market value. These programs offer homeowners the same equity as shared appreciation loans but protect affordability slightly better because resale at below market prices reduces some of the transaction costs.

### Six Scenarios

The only way to get a complete picture of the trade-offs involved in each of these different approaches is to watch how they perform under *changing* assumptions. Each of the following six scenarios describes a different economic environment (some hypothetical and some based on real historical situations) in which our three resale models will perform differently.

- 1. Static: Housing prices and incomes are growing at the same low rate
- 2. Modest Growth: Housing prices are growing faster than incomes; interest rates are stable
- 3. Price Spike: Housing costs are rising rapidly, incomes are rising more slowly
- 4. Housing Bust: Housing prices are falling while incomes continue to rise
- 5. Rising Interest Rates: Interest rates are much higher at the time of resale
- 6. Interest Rate Spike: Interest rates spike to historically high levels

#### Initial Pricing

Project Summary	
Development Cost/Market Price	\$300,000
Area Median Income	\$64,000
Target Income	80% of AMI
Downpayment	3% <sup>9</sup>
Maximum Housing Costs (35% of target income)	\$1,500
Taxes, Insurance, Homeowners Association	\$395
Maximum Mortgage Payment	\$1,105
Initial Mortgage Rate	6.5%
Affordable Mortgage	\$174,600
Subsidy Required	\$120,000

Table 2: Project Summary

Imagine an area where the median household income is \$64,000 and a new three-bedroom townhouse costs about \$300,000. In this kind of market, most working families will not be able to afford homeownership. Table 2 examines the subsidy required for a working family to purchase a home under a given set of market conditions. Affordable homeownership programs generally target families with incomes at or below 80% of the area median. These programs will assume that a family can afford to spend 30% to 35% of their monthly income on housing. So,

<sup>&</sup>lt;sup>9</sup> The market buyer pays 3% of the full market value and the affordable buyer pays 3% of the affordable price.

using 35%, a family earning 80% of \$64,000 can afford monthly housing costs of \$1,500. If taxes, insurance and any homeowner association fees add up to \$395, such a family would have \$1,105 leftover to pay their mortgage. At a 6.5% interest rate, this family could borrow \$174,600 and its payment would be \$1,105. This mortgage plus a 3% downpayment (\$5,400) would allow the family to buy a \$180,000 house. In this situation, a local government that wanted to help working families into homeownership would need to provide approximately \$120,000 in subsidy to "fill the gap" between what a family can afford and the \$300,000 price of a starter house. This subsidy could be provided directly to homebuyers or could be offered to developers who would use it to build affordable units. The subsidy might even be provided implicitly by a private developer who agrees to produce affordable units under an inclusionary housing program.

# Scenario 1: Static

If housing prices rise at the same rate as incomes and interest rates remain constant, the market, shared appreciation, AMI index and affordable housing cost models all generate about the same return for owners and the same ongoing affordability. Table 3 shows the performance of the three approaches assuming a family sells after 10 years during which incomes and home values have both risen at 4% annually and interest rates have remained at 6.5%.

Housing prices and incomes are grow	ving at the same	e low rate		
Inputs	10			
Holding period Median home price inflation	4.00%			
Median income inflation	4.00%			
	4.00%			
Initial mortgage interest rate			ion home stice inflation	
Interest rate at resale	6.5%	Med	ian home price inflation	
		<b>.</b>		
		Shared		
Outcomes	Market	Appreciation	AMI Index	AHC Formula
Initial Price	300,000	300,000	180,000	180,000
First Mortgage	291,000	174,600	174,600	174,600
Second Mortgage	-	120,000	-	-
Initial Affordability (% of AMI)	120%	80%	80%	80%
Resale Price	444,073	444,073	266,444	266,444
Homeowners Cash Out	170,730	91,780	102,438	102,438
Recaptured Subsidy - New 2nd Loan		177,629		
Affordability at Resale (% of AMI)	120%	80%	80%	80%
Gain/Loss of Affordability	0%	0%	0%	0%

Table 3: Static Scenario

Both the market buyer and the shared appreciation buyer purchase their homes for \$300,000 but the shared appreciation buyer borrows only \$174,600 from the bank and receives a shared appreciation loan of \$120,000 with no monthly payments. This loan makes the home affordable to a family earning 80% of Area Median Income while the market home requires 120% of AMI. The AMI index and AHC formula buyers pay only \$180,000 for their homes. At this price, the homes are affordable to buyers earning 80% of AMI without any second loan. At resale 10 years later, the market and shared appreciation homes sell for \$444,073 (a 4% annual increase), while the resale restricted units (AMI and AHC) sell for only \$266,444 (also a 4% annual increase on the lower initial purchase price). When the market owner sells after 10 years (under these assumptions) he or she is able to take \$170,730 in equity. This amount represents the appreciation in the home's value (\$144,073) plus the initial \$9,000 downpayment

and the amount that he or she had paid down the mortgage, less the transaction costs associated with selling the home.<sup>10</sup>

All three shared equity models offer roughly the same level of equity under these assumptions and all three would have protected affordability so that the home was still affordable to a new 80% of AMI buyer. You will notice that this is no great feat because, if housing prices and incomes rise together, unrestricted market-rate housing does not get less affordable either. The price restricted homeowners (AMI and AHC) would earn less equity than the market-rate homeowner, but only because they paid less for their homes. The market owner earns 4% of \$300,000 in appreciation annually, while the restricted owners earn 4% of \$180,000. The shared appreciation homeowner earns about the same return as the price-restricted owners, even though they paid \$300,000 for their unit.<sup>11</sup> Sharing 40% of the appreciation with the city has the effect of limiting the homeowner's appreciation to what the homeowner would have earned if he or she had purchased a home at a price that the homeowner could afford on his or her own (\$180,000 in this case).

#### Key Observations: Static Scenario

- When prices and incomes rise at the same rate, market units do not get less affordable over time.
- Subsidized buyers earn less equity only because they pay less for their homes initially.
- The shared appreciation buyer earns what they would have earned if they had purchased a \$180,000 house.

<sup>&</sup>lt;sup>10</sup> The model assumes that sellers pay 6% of the sale price for broker commission and other sales costs. In many cases, however, owners of below market rate units are able to resell their homes through the homeownership program, which will often maintain a waiting list of eligible buyers. In these cases the sales costs might be 2% or lower and homeowner net equity will be higher as a result.

<sup>&</sup>lt;sup>11</sup> The shared appreciation owner receives slightly less equity than the resale restricted owner because he or she pays transaction costs on a larger sale price (6% of \$444,073 instead of 6% of \$266,444).

# Scenario 2: Modest Growth

The difference between the approaches, and the reason we spend time designing complex affordability models, comes from the recognition that incomes and prices do not always rise at a uniform rate and interest rates do not always stay steady.

Modest Growth				
Housing prices and incomes are grow	ring, interest ra	tes stable		
Innuto				
Inputs Holding period	10			
Median home price inflation	6.00%			
Median income inflation	4.00%			
Initial mortgage interest rate	6.5%			
Interest rate at resale	6.5%	Mer	lian home price inflation	
	0.5 /6			
		Mec	lian income inflation	
		Shared		
Outcomes	Market	Appreciation	AMI Index	AHC Formula
Initial Price	300,000	300,000	180,000	180,000
First Mortgage	291,000	174,600	174,600	174,600
Second Mortgage	-	120,000	-	-
Initial Affordability (% of AMI)	120%	80%	80%	80%
Resale Price	537,254	537,254	266,444	266,444
Homeowners Cash Out	258,321	142,098	102,438	102,438
Recaptured Subsidy - New 2nd Loan		214,902		
Affordability at Resale (% of AMI)	140%	93%	80%	80%
Gain/Loss of Affordability	-21%	-13%	0%	0%
Additional Subsidy/(Cash Out)	n/a	55,909	-	-

Table 4: Modest Growth Scenario

In most of urban America, housing prices have been rising significantly faster than incomes over the past seven to 10 years. In this, more realistic, situation, the shared appreciation loan offers sellers more equity than the resale price restricted models, as shown in Table 4.<sup>12</sup> The shared appreciation homeowner receives a total of \$142,098 in equity from the sale. This is far less than the \$258,321 that an unrestricted seller of the same house would receive, but again is exactly what a market-rate seller would have received if he or she had purchased a \$180,000 house instead of a \$300,000 house. The shared appreciation program offers the homeowner the full market increase on the amount that he or she would have been able to afford. The resale price restricted units, however, offer less equity ("only" \$102,438) because they are tied to incomes rather than housing prices, but this is still a significant level of asset accumulation.

<sup>&</sup>lt;sup>12</sup> The AMI and AHC formulas generate exactly the same resale price so long as interest rates remain unchanged. We will see later that when we assume rising or falling rates, these two approaches perform differently from one another.

Under this set of assumptions, the resale price restrictions reduce the homeowner's equity by \$40,000 relative to the shared appreciation loan, but they do so for a reason. Because housing prices are rising faster than incomes, both the market-rate unit and the shared appreciation unit have become significantly less affordable over time. While the AMI and AHC units are still affordable to households earning 80% of Area Median Income, a buyer would need to earn 140% of AMI to afford the market-rate unit now. Similarly, for the shared appreciation model, even if the local government were to reinvest its \$120,000 plus all of the funds that it received as its share of equity from the first homeowner (\$94,902), the second buyer would need to earn 93% of AMI to afford the subsidized home. It would take an additional \$55,909 in subsidy (a total second loan of \$270,810) to keep this unit affordable to families earning 80% of Area Median Income. If these trends were to continue, each successive resale would require the jurisdiction to invest an even larger amount to keep the shared appreciation units affordable to the same target group. By reducing the homeowner's total gain by 30% (in this scenario), the resale price restrictions ensure that the home remains affordable to one buyer after another while still offering buyers over \$100,000 in equity accumulation over a 10-year period.

The return available to AMI and AHC homeowners is not affected by changes in housing prices, but it is dependant on the rate at which the Area Median Income grows. When incomes grow quickly, future buyers are able to pay higher prices. When incomes grow slowly or fall, future buyers cannot pay as much and the equity available to sellers will grow more slowly. Table 5 shows the homeowner's "cash out" under a range of possible values for the average annual change in the Area Median Income. While both declines or rapid increases in the AMI are not likely, they are possible. See below for an analysis of the historical trends in growth of the Area Median Income.

Annual Change in AMI	Homeowner's Cash Out
-1%	\$5,002
0%	\$21,181
1%	\$38,883
2%	\$58,235
3%	\$79,372
4%	\$102,438
5%	\$127,590
6%	\$154,992

Table 5: Impact of Changes in AMI Growth on Homeowner's Equity

#### Key Observations: Modest Growth Scenario

- When prices are rising faster than incomes, market priced homes become less affordable over time.
- The shared appreciation loans reduce the need for future subsidy but still require investment of \$55,000 after 10 years and greater amounts in the future.
- The AMI and AHC formulas keep the units affordable to 80% of AMI without any additional subsidy.

# Scenario 3: Price Spike

Under more extreme home price inflation, the resale-restricted approaches (AMI and AHC) fall further behind the market as wealth generators. Table 6 compares outcomes of different homeownership models for a period in which home price inflation is greater than income inflation. At 8% annual appreciation, the shared appreciation owner receives a total of \$201,727 in equity at resale while the AMI and AHC formulas still limit equity to \$102,438. But this extra wealth creation comes at the cost of either a 28-percentage point loss of affordability or an additional \$122,163 investment of public subsidy to make the home affordable to the next buyer. While the resale-restricted buyer seems further behind the shared appreciation buyer, the actual dollar value of *their* outgoing equity has not changed.

Housing Price Spike				
Housing Price Spike				
Prices growing much faster than incor	nes			
Inputs				
Holding period	10			/
Median home price inflation	8.00%			
Median income inflation	4.00%			
Initial mortgage interest rate	6.5%			
Interest rate at resale	6.5%	Med	ian home price inflation	
		Med	ian income inflation	
		Shared		
Outcomes	Market	Appreciation	AMI Index	AHC Formula
Initial Price	300,000	300,000	180,000	180,000
First Mortgage	291,000	174,600	174,600	174,600
Second Mortgage	-	120,000	-	-
Initial Affordability (% of AMI)	120%	80%	80%	80%
Resale Price	647,677	647,677	266,444	266,444
Homeowners Cash Out	362,118	201,727	102,438	102,438
Recaptured Subsidy - New 2nd Loan		259,071		
Affordability at Resale (% of AMI)	165%	108%	80%	80%
Gain/Loss of Affordability	-45%	-28%	0%	0%
Additional Subsidy/(Cash Out)	n/a	122,163	-	-

Table 6: Housing Price Spike Scenario

Only the market and shared appreciation homes are affected when housing prices spike. However, while the absolute wealth creation for the restricted approaches is the same, their relative wealth creation (in comparison to the market) is much less whenever prices are rising rapidly.

#### Key Observations: Price Spike Scenario

- The faster prices rise the greater the need for additional subsidy to maintain affordability with the shared appreciation loan.
- The AMI and AHC formulas retain affordability despite rapidly rising prices.
- The AMI and AHC formulas offer owners the same \$102,000 in equity at sale regardless of how quickly market housing prices rise.

# Scenario 4: Housing Bust

Both the AMI and AHC formulas tie homeowner's returns to changes in the Area Median Income. If the AMI rises rapidly, homeowners can earn higher-than-expected returns. It is possible that an affordable owner under one of these approaches could receive significant appreciation during a period when market home prices were actually falling. This was the situation in Los Angeles in the early 1990s. Following dramatic job losses, the Los Angeles region experienced a prolonged period of housing price deflation. Between 1990 and 1995, the average resale price for existing homes dropped by more than 20%, or 4.44% per year. At the same time the median income continued to rise at a modest rate. To mimic this situation, this scenario, depicted in Table 7, uses a five-year holding period instead of the 10-year period used in the previous examples.

Housing Price Bust Housing prices falling with rising inco	mes			
Inputs				
Holding period	5			
Median home price inflation	-4.44%			
Median income inflation	4.00%			
Initial mortgage interest rate	6.5%			
Interest rate at resale	6.5%	Med	lian home price inflation	
		Med	lian income inflation	
		Shared		
Outcomes	Market	Appreciation	AMI Index	AHC Formula
Initial Price	300,000	300,000	180,000	180,000
First Mortgage	291,000	174,600	174,600	174,600
Second Mortgage	-	120,000	-	-
Initial Affordability (% of AMI)	120%	80%	80%	80%
Resale Price	239,057	239,057	218,998	218,998
Homeowners Cash Out	(47,694)	(34,354)	42,413	42,413
Recaptured Subsidy - New 2nd Loan		95,623		
Affordability at Resale (% of AMI)	86%	59%	80%	80%
Gain/Loss of Affordability	34%	21%	0%	0%
Additional Subsidy/(Cash Out)	n/a	(75,563)	-	-

Table 7: Housing Price Bust Scenario

In this unusual, but not unheard of, environment, homes with prices tied to the median income rather than the housing market would have actually provided superior wealth creation. Put another way, while the resale restrictions prevent homeowners from realizing some of the dramatic windfalls in a housing boom, they protect them from some of the impact of a bust.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> If prices were to fall far enough it might not be possible to sell the shared equity homes for their formula price. In our example, the home is initially priced 40% below market. If market prices were to fall by 20%,

While housing prices tend to fluctuate dramatically, incomes tend to rise at a more steady and predictable pace. As a result, resale formulas tied to income tend to provide more predictable wealth creation. Note that this risk of falling housing markets is less pronounced the longer a household owns their home. Figure 2 illustrates the fluctuations in annual home price inflation using real data from Los Angeles over time. A family buying in Los Angeles in 1990 would have faced a 20% loss if they sold after five years and would have needed to hold on for 10 years to break even, but by 2004 they would have been able to sell at a 67% gain!

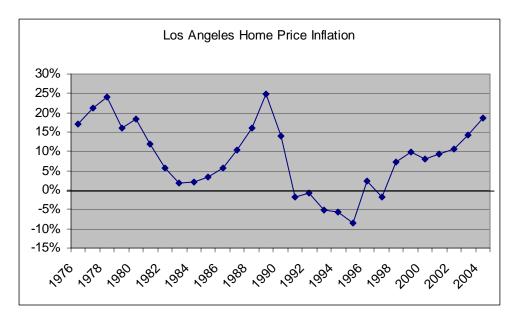


Figure 2: Annual Rate of Change in Home Values - Los Angeles, 1976-2004

#### Key Observations: Housing Price Bust Scenario

- Market homeowners face a real risk of declining prices.
- Shared appreciation owners also face this risk.
- AMI and AHC owners can earn equity if incomes rise while housing prices fall.

the shared equity price would still be below market – and at the same time above what the homeowner initially paid.

#### Scenario 5: Rising Interest Rates

Another important difference between the approaches is how they perform when mortgage interest rates change. As interest rates rise, everyone has a harder time affording the same prices. The key difference between the AMI index formula and AHC formula lies in how they each respond to rate changes. Under the AHC formula, when a homeowner sells, the homeowners' limited price is directly and proportionally impacted by any change in interest rates. When rates rise, the buying power of working families falls and therefore the formula price drops. The AMI index, however, ignores interest rates in calculating the resale price. When rates rise, the homes become less affordable. In the example depicted in Table 8, if interest rates rise from 6.5% to 8% the AHC formula keeps the home affordable to 80% of AMI while the AMI index unit is now only affordable to a household earning 90% of AMI. However, the AMI index seller would receive the same \$102,438 that they would have received if interest rates had remained stable (as in Scenario 2) while the AHC formula homeowner now only receives \$67,726.

Rising Interest Rates				
Interest rates higher, housing prices a	and incomes are	e growing		
Inputs				
Holding period	10			
Median home price inflation	6.00%			
Median income inflation	4.00%			
Initial mortgage interest rate	6.5%			
Interest rate at resale	8.0%	Mec	lian home price inflation	
		Mec	lian income inflation	
		Shared		
Outcomes	Market	Appreciation	AMI Index	AHC Formula
Initial Price	300,000	300,000	180,000	180,000
First Mortgage	291,000	174,600	174,600	174,600
Second Mortgage	-	120,000	-	-
Initial Affordability (% of AMI)	120%	80%	80%	80%
Resale Price	537,254	537,254	266,444	229,516
Homeowners Cash Out	258,321	142,098	102,438	67,726
Recaptured Subsidy - New 2nd Loan		214,902		
Affordability at Resale (% of AMI)	160%	105%	90%	80%
Gain/Loss of Affordability	-40%	-24%	-10%	0%
Additional Subsidy/(Cash Out)	n/a	91,729	35,820	-

Table 8: Rising Interest Rates Scenario

The same difference in interest rate sensitivity functions in reverse when rates drop. If interest rates were to drop from 6.5% to 5%, the AHC unit would still be affordable to households earning 80% of AMI, but the seller would receive \$146,876. By contrast, the AMI seller would still receive \$102,438, but now the AMI unit would be affordable to households as low as 71% of AMI. The AHC homeowner receives either the benefit or the consequence of rising rates, while the AMI owner is not exposed to this risk. Conversely, the program that creates these below market units under an AMI index formula faces some risk that units that were initially affordable will become less affordable due to rising rates. At the same time, there is a chance under the AMI index formula that the same units will become *more* affordable if rates fall, while the AHC program sponsor is protected from interest rate risk; no matter what happens to interest rates, the units will remain affordable at *exactly* the same level. Note that the shared appreciation loan, like the AMI index, places the interest rate risk on the program sponsor not the homeowner; when rates rise, the unit either gets less affordable or requires more subsidy.

#### Key Observations: Rising Interest Rates Scenario

- Only the AHC formula can maintain absolute affordability despite interest rate increases.
- Under the AHC formula, homeowner equity at sale is sensitive to changes in interest rates.
- AMI index homeowners receive the same equity regardless of interest rates, but affordability is impacted by rising rates.

# Scenario 6: Interest Rate Spike – Sale After Five Years

From the point of view of wealth creation, who holds the interest rate risk can make a big difference. When rates are constant, both the AMI and AHC formulas generate the same wealth creation, but with the AHC approach, the actual level of wealth creation for any homeowner is much less predictable. These homeowners are essentially gambling on interest rates. While this is true to some extent of all market-rate homeowners – rising rates could hold prices down – the AHC owners are extremely and immediately sensitive to rate changes. Week-to-week fluctuations in interest rates change the resale value of the home. This difference is especially important in the early years because, over time, increases in income eventually make up for some of the impact of rising interest rates. For a family with an AHC restricted unit selling after 10 years, a rate increase from 6.5% to 10% will reduce their total equity to only \$32,000 compared with \$102,000 for the AMI and \$142,000 for the shared appreciation. If the same interest rate increase occurred over a five-year period, the AHC formula would limit a selling family's sale price to a level \$22,000 *below* what they paid for the home (see Table 9). While the market value of their home has risen by more than \$100,000, this family will have to find \$15,000 in cash to be able to move out!

Interest Rate Spike - Sale afte Interest rates higher, housing prices a		e growing		
Inputs				
Holding period	5			
Median home price inflation	6.00%			
Median income inflation	4.00%			
Initial mortgage interest rate	6.5%			
Interest rate at resale	<b>10.0%</b>	Med	lian home price inflation	
		Med	lian income inflation	
		Shared		
Outcomes	Market	Appreciation	AMI Index	AHC Formula
Initial Price	300,000	300,000	180,000	180,000
First Mortgage	291,000	174,600	174,600	174,600
Second Mortgage	-	120,000	-	-
Initial Affordability (% of AMI)	120%	80%	80%	80%
Resale Price	401,468	401,468	218,998	157,732
Homeowners Cash Out	104,972	53,348	42,413	(15,176
Recaptured Subsidy - New 2nd Loan		160,587		
Affordability at Resale (% of AMI)	172%	112%	103%	80%
Gain/Loss of Affordability	-52%	-31%	-23%	0%
Gain/Loss of Anordability				

Table 9: Interest Rate Spike Scenario

While a jump in interest rates of 3.5 percentage points over five years seems somewhat unlikely in today's environment, it is not at all historically unusual. Between 1977 and 1982, interest rates on 30-year loans rose by 5.5 percentage points (from around 8.5% to over 14%). During that same period of time, home prices rose by an average of 7.7% annually! In our example, if rates rose by 5.5 percentage points and prices rose by 7.7% annually, the AHC seller would sell at a \$37,000 loss, while the market price of the home would have risen by \$135,000. While this loss is "necessary" to maintain the strict affordability of the unit, it does not result in any permanent increase in the affordability of the unit. The first family's loss will almost certainly translate into a gain for the second family. The second family will be able to buy a home with a market value of over \$400,000 for only \$135,000. When interest rates inevitably fall, the second family will receive a huge windfall made possible by the discount sale required of the first owner.

#### Key Observations: Interest Rate Spike Scenario

- When rates rise quickly, AHC formulas may require buyers to sell for significantly less than their initial purchase price.
- AMI formulas, instead, lead to a temporary loss of affordability when rates rise quickly.

# Balancing Wealth Creation and Affordability

If you are only interested in maintaining affordability, AHC is the best tool. If you are only concerned about wealth creation, market ownership is, of course, likely to generate the most wealth and shared appreciation loans do a good job of providing market-rate returns while retaining the dollar value (though not the full buying power) of public investment. However, if you want to balance the dual goals of maintaining affordability and generating predictable wealth for homeowners, the AMI index outperforms these alternatives.

When home prices are rising at only a modest rate, the AMI index offers homeowners a chance to earn the same kind of equity that they would earn in an unrestricted home. When prices rise rapidly, the AMI index protects the public investment by limiting the homeowner's return to what they **would have earned** in a more normal housing market. It provides predictable, though not always maximum equity. And unlike the AHC formula, the AMI index does not ask homeowners to bear all the interest-rate risk. The sponsors of AMI indexed homeownership programs must be comfortable with the risk that, when interest rates rise, these homes will become somewhat less affordable. They can reassure themselves with the observation that interest rates are reliably cyclical. They fall and rise only to fall again. Over time the exact affordability of an AMI indexed unit will rise and fall along with interest rates but it will cycle around a fairly steady average. If maintaining strict affordability is the only goal, than this is an unnecessary concession, however, if asset-building is even part of the rational for a program, then this concession allows homeowners to reliably earn significant equity without requiring any future investment on the part of the program sponsor or risking the permanent loss of the affordable units.

#### Selecting a Resale Formula

The challenge of balancing homeowner wealth creation with ongoing affordability is a key consideration for most affordable homeownership programs; however, it should not be the only consideration. There are a number of other objectives beyond the scope of this paper that may also be desirable for an effective shared equity homeownership program, including:

Simplicity: How easy is the program to administer?

Clarity: Can participants easily understand the program?

- Familiarity: To what extent is the program based on structures similar to what people already know?
- **Economic Mobility:** Should owners be encouraged to move up and out as soon as they can opening up spots for other families?
- **Residential Stability:** Or should owners be encouraged to stay put for as long as possible?

Choice: Should families have a maximum choice of homes in which to live?

**Mixed-Income Communities:** Or should the program focus on preserving the affordability of specific homes that help to preserve the mixed-income character of neighborhoods as prices rise?

- **Compatibility:** Is the program compatible with the requirements of other common financing sources?
- Quality Maintenance: Does the program encourage owners to maintain units in good condition?

While the Area Median Income index manages to balance the goals of asset-building and affordability more effectively than either the shared appreciation loan or the Affordable Housing Cost formula, it also suffers from some drawbacks, including:

- Most buyers are unfamiliar with the Area Median Income and have no sense of how it is likely to change over time.
- Sellers generally require help in calculating an AMI-indexed resale price.
- The AMI is produced by HUD according to a complex set of statistical procedures. Changes to the underlying methodology can result in changes in the AMI that do not reflect changes in actual earning power.
- Demographic shifts (like the influx of retirees into a resort area) can change the AMI without changing the buying power of real working families in the area.
- While the AMI generally rises at a modest annual pace, it is possible that it might decline in a given area over several years. (Some programs protect against this risk by considering only *increases* in the AMI when calculating the resale price.)

# PART III: HOW MUCH WEALTH IS ENOUGH?

While we have seen that different mechanisms for preserving affordability perform differently as wealth generators and that generating modest wealth is not necessarily incompatible with maintaining long-term affordability, it is clear that homeowners selling even AMI-indexed homes will leave under most circumstances with less equity than they would have earned if they had, somehow, bought an unrestricted home. So is the equity that these shared equity homeowners earn (taken together with the other social benefits) enough to justify the public investment? A judgment of this kind is inherently difficult. This section evaluates the return that owners of resale restricted homes earn from several different perspectives.

#### Anything Beats Renting; Nothing Competes with Boom-Market Housing

Advocates of permanently affordable housing often answer critics by pointing out that many shared equity homeowners would have no realistic ownership alternatives. Even shared equity, they argue, is far better than no equity at all, which is what these families would receive if they were to remain renters.

Critics respond that this is setting the bar too low. Because rental housing offers essentially no wealth creation for residents, outperforming rental housing is no great feat. If both policymakers and homebuyers are in part motivated by the asset-building power of ownership, then the point of reference, they say, should be traditional ownership. To these critics, any shared equity ownership that offers significantly less wealth creation than market ownership is not really homeownership at all. They will cite the fact that homeownership has historically been the most reliable generator of lasting wealth as an argument against any limitation on an owner's return. While a shared equity homeowner who earns over \$100,000 in equity over a 10-year period has more equity than the homeowner started with, his or her neighbor owning a similar house over the same period may sell with over \$300,000 in equity. In many parts of the country, home prices have been rising at over 10% annually for several years running. Given the high leverage achieved by 3% to 5% downpayment mortgages, homeowners are routinely receiving extremely high rates of return on their initial equity.

There is an enormous distance between the phenomenal wealth generation of homeownership in a boom market and the absolute lack of any wealth creation in rental housing. Some advocates will never see any reason to offer homeowners more than minimal equity while others will complain that any limitation whatsoever is un-American. Between these extremes there is no magic middle ground, no obvious line in the sand between "not enough" and "too much" equity. However, there are several milestones that can help policymakers keep their bearings as they wander this terrain in search of the right balance.

#### Historically Normal Wealth Creation

Over the last 30 years, home prices in America have risen 5.95% annually<sup>14</sup> while incomes have risen at 5.36%.<sup>15</sup> At this rate, shared equity and market-rate housing offer fairly similar rates of wealth creation. Either is vastly better than renting, and neither is nearly as profitable as owning an unrestricted home in the kind of wildly inflating markets that many parts of the country experienced in the past decade. When we say we want to design a homeownership program that supports wealth creation, we need to know whether we mean historically normal wealth or boom-market wealth.

The most common shared equity resale formulas offer significant wealth creation but slightly less than has been the historical norm for American market-rate homeownership. In exchange for public help, buyers give up the opportunity to make historically unusual profits but they do not have to give up the chance to build the kind of wealth that has long been seen as the pathway to the middle class.

Put another way, in markets where housing prices are not escalating rapidly, there is little interest in shared equity ownership models. A resale price restriction in such a slow market might generate prices that were not significantly below the market price – the restriction would not be necessary to maintain affordability. A price restriction, in this context, serves only as insurance against the day when prices might escalate more rapidly. Conversely, in a hot market, instead of understanding price restrictions as eliminating wealth creation, it is more accurate to see the well-designed price restriction as offering the kind of wealth that homeownership offers to people when the housing market is not booming.

<sup>&</sup>lt;sup>14</sup> Office of Federal Housing Enterprise Oversight, Housing Price Index 1974 to 2004. Available at http://www.ofheo.gov/HPI.asp. The OFHEO is the federal agency charged with oversight of Fannie Mae and Freddie Mac. Their Housing Price Index tracks the change in resale prices for homes with Fannie Mae or Freddie Mac mortgages.

<sup>&</sup>lt;sup>15</sup> U.S. Census Bureau Current Population Survey, Annual Demographic Supplements Table F-6. Regions--Families (All Races) by Median and Mean Income: 1974 to 2001. Available at http://www.census.gov/hhes/income/histinc/f06x1.html.

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#### Return on Investment

Another way to evaluate the returns that shared equity homeowners earn is to consider the equity that they are ultimately able to take from their home as a return on their initial investment (their downpayment and closing costs) and to see how this return compares with other investment/savings options that low- or moderate-income families could choose.

As much as demand for homeownership is driven by issues like security, stability and even pride of ownership, it is hard to ignore the fact that homeownership has historically been a great investment option for middle class families. A family that bought a market-rate home for \$300,000 with a \$9,000 downpayment and \$6,000 or so in closing costs, could expect to receive \$250,000 in equity when they sell 10 years later even if home prices rise by only 6% annually. If they had instead invested their downpayment and closing costs in the stock market (with an average rate of return of 9% annually) at the end of 10 years they would only have \$35,510 – a gain of only \$20,510. In fact, in this scenario, the market-rate homeowner earns the equivalent of a **33% annual rate of return on their initial investment.**<sup>16</sup> And when housing prices rise faster than 6% their return could be much greater.

If we accept that asset-building for working families is an appropriate goal for affordable homeownership programs, it is only fair to ask how shared-equity ownership programs compare as investment vehicles.

Table 10 shows that under the modest growth scenario (See scenario #2 in Section II above), while the market-rate owner earns the equivalent of a 33% annual return on his or her investment, the shared equity homeowners earn a 28% to 30% rate of return.<sup>17</sup> While the shared equity restrictions have reduced the return, a 29% return is still a phenomenally great investment opportunity for anyone. A savings account might offer the same family 1% or 2% interest per year; a Certificate of Deposit could offer 3% or 4%. Mutual funds, still the middle class investment strategy of choice, have historically earned their investors an 8% to 9% annual

<sup>&</sup>lt;sup>16</sup> When a home appreciates by 6% in a given year, a homeowner who may have paid only 5% of the purchase price will receive 100% of the appreciation – even though the price only rises 6%, they more than double their equity in one year.

<sup>&</sup>lt;sup>17</sup> Because some of the equity the seller receives at resale is principal that they paid down on their loan this is further investment on the homeowner's part and not "return" on their investment. Ignoring the principal reduction, the AMI index formula, for example, would generate a 23% return rather than 28%.

return. There is simply no other reasonably safe investment that provides the kind of return on investment that shared equity housing offers – except, perhaps unrestricted homeownership.

Outcomes	Market	Appreciation	AMI Index	AHC Formula
Initial Investment	15,000	11,400	9,000	9,000
Return	258,321	142,098	102,438	102,438
Approx Rate of Return	33%	29%	28%	28%

Table 10: Annualized Rate of Return

## **Risk-Adjusted Return**

Under most circumstances, all of our shared equity models generate high rates of return on the homeowner's initial investment. However, every business school student learns that returns on any investment should be proportional to the level of risk, and the risk that buyers face under different resale formulas are really quite different. These programs increase owners' exposure to certain risks while protecting them from other risks that traditional homeowners face. During periods of unusually high home price appreciation, these programs necessarily limit the homeowner's "upside risk" – the chance that they will earn returns above what would be expected under normal market conditions. However both the AMI and AHC formulas protect homeowners against the risk that home prices might fall. Prices would have to fall a long way before the limited resale prices were above the market rate.

But the shared equity formulas substitute new risks. Under the Affordable Housing Cost formulas, homeowners face the risk that their resale price might be less than their purchase price due to rising interest rates – even when other home prices might be increasing. Under both the AMI and AHC formulas, homeowners face the risk that formula resale prices will fall due to drops in the AMI. Even slower than expected growth in the Area Median Income could dramatically reduce the homeowner's return on investment. Table 11 presents the return on initial investment for each alternative under each of the economic scenarios discussed in Section II.

Scenario								
				Housing Price		Rate Spike - 5		
	Static	Modest	Price Spike	Bust	Rising Rates	year sale		
Economic Environment								
Holding Period	10	10	10	5	10	5		
Price Inflation	4.00%	6.00%	8.00%	-4.44%	6.00%	6.00%		
Income Inflation	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%		
Initial Rate	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%		
Rate at Resale	6.5%	6.5%	6.5%	6.5%	8.0%	10.0%		
Homeowners' Cash Out at Resale								
Market	170,730	258,321	362,118	(47,694)	258,321	104,972		
Shared Equity	91,780	142,098	201,727	(34,354)	142,098	53,348		
AMI Index	102,438	102,438	102,438	42,413	102,438	42,413		
AHC Formula	102,438	102,438	102,438	42,413	67,726	(15,176)		
Homeowners' Return on Investment								
Market	28%	33%	37%	-226%	33%	48%		
Shared Equity	23%	29%	33%	-225%	29%	36%		
AMI Index	28%	28%	28%	36%	28%	36%		
AHC Formula	28%	28%	28%	36%	22%	-211%		

Table 11: Comparison of Returns

Given different investment options with different risk profiles, an investor should focus any comparison not on the total returns available under each option but, instead, on what is called the risk-adjusted return. All other things being equal, we should prefer a somewhat lower return investment that is more of a sure thing to a long shot that pays slightly more. However, if the long shot pays much more and is only moderately more risky, at a certain point, we should choose it over the safe bet. The question is which option has the higher return, *given the relative risks*. This is an easy question to ask but a hard one to answer in practice.

With all of the concern about whether shared equity homeownership programs offer a fair return on investment, Table 11 is surprising in that the AMI index formula, for example, is not clearly worse than market ownership. Sure, AMI owners earn slightly lower rates of return on their investment in most circumstances, but they are also less likely to lose their investment. It is quite possible that AMI index resale-price-restricted-units offer a much better risk-adjusted investment than market-rate ownership.

We are all somewhat familiar with the risks involved in traditional homeownership. Over the long term, prices have risen at a fairly reliable pace. Sometimes, prices rise quickly; sometimes, they remain "flat" for many years in a row. Historically, however, they do not often fall by much or for long. However, recent research has been highlighting the possibility that homeownership may be a riskier and less effective investment for lower income families.

Carolina Katz Reid<sup>18</sup> used data from the Panel Study of Income Dynamics to analyze the homeownership experiences of a nationally representative sample of lower income households. She found that homeownership performed well as an investment for households at all income levels, but that lower income homebuyers were likely to realize significantly less appreciation, face higher monthly costs relative to income and were more likely to lose their investment entirely through foreclosure, among other factors. Because of the general lack of ownership options at the lower end of the price spectrum, working families tend to stretch more financially in order to attain ownership. Reid found that half of lower income homebuyers committed more than 50% of their household income to mortgage payments alone. Despite spending a high share of their income for housing, lower income buyers were generally forced to buy older, less well-maintained properties and to buy in the least desirable neighborhoods. As a direct result, their homes appreciated less than those of middle-income homebuyers.

Over the 10-year period ending in 1993, Reid found that the average household in the survey saw a 50% increase in home value while lower income homeowners saw an average increase of only 30%. The homes of lower income minority owners actually declined in value relative to inflation. High loan to value ratios, high debt to income ratios and slower price appreciation combine to make lower income homeowners much more likely to lose their homes. The relative lack of equity in their homes makes banks less likely to restructure debt when lower income owners face periods of unemployment and makes it harder for lower income owners to refinance to take advantage of falling interest rates. Reid found that only 47% of the lower income homebuyers in her study remained homeowners five years later while nearly 80% of higher income buyers did. It is clear from this and other research<sup>19</sup> that traditional homeownership is both riskier and less profitable for lower income buyers than it is for middle-income buyers.

While it is not clear how the returns that lower income families can earn in shared equity ownership compare with what they would likely earn in traditional ownership (both are less than

<sup>&</sup>lt;sup>18</sup> Achieving the American Dream? A Longitudinal Analysis of the Homeownership Experiences of Low-Income Households, CSD Working Paper number 05-02, Center for Social Development, St Louis, MO, 2005. Available at http://gwbweb.wustl.edu/csd/Publications/2005/wp05-02.pdf.

<sup>&</sup>lt;sup>19</sup> G. McCarthy, et al. 2001. *The Economic Benefits and Costs of Homeownership: A Critical Assessment of the Research*. Arlington, VA, Research Institute for Housing America. Available at http://www.housingamerica.org/docs/RIHAwp01-02.pdf.

what middle income families earn in traditional ownership), it is clear that shared equity programs can be designed to expose homeowners to far less overall risk for several reasons:

- Shared equity ownership programs make it possible for working families to purchase higher quality homes, often in better locations than they could access without public support.
- At the same time, these programs limit the buyer's monthly payments to a reasonable percentage of their household income, resulting in debt-to-income ratios far better than the current average for even middle income buyers on the traditional market.
- While buyers are able to buy resale restricted homes at affordable prices, the collateral for their bank loans is generally the unrestricted market value of these homes, which can be as much as twice the affordable price. While this improved ratio does not directly benefit homeowners, it provides considerable security to lenders, which makes it easier for homeowners to refinance to take advantage of lower interest rates or to restructure debt in the event of temporary unemployment.
- Most importantly, the best shared equity programs offer home price appreciation that is far more predictable than traditional ownership. By tying the resale price to an index like Area Median Income, these programs insulate homeowners from some of the fluctuations of the market. The median income moves at a more steady and predictable rate than home prices and is averaged over a metropolitan region, protecting homeowners from block-by-block price fluctuations.<sup>20</sup> (Shared equity owners still face some risk of losses, however, either because of falling median incomes or the unlikely situation where market prices fall below the subsidized affordable price.)

## Predictable Appreciation

Most people are less familiar with the risks involved in shared equity homeownership. The AHC formulas expose homeowners to dramatic price fluctuations based on interest rates. Historically, interest rates have been far more volatile than home prices, rising and falling somewhat unpredictably. Compared with traditional homeownership, AHC buyers appear to face a much greater chance that their homes will sell for less than they paid – especially if they sell after a short time. At the same time, these homeowners also might earn especially large windfalls if they sell after a short time and interest rates have fallen. However, over the long term they are much less likely to earn large windfalls than traditional homeowners.

<sup>&</sup>lt;sup>20</sup> McCarthy et al. show that home values in many low-income census tracts fall even as regional housing markets are rising.

The AMI index formula exposes homeowners to changes in the Area Median Income, a variable that has historically been significantly more predictable than home prices and certainly much more predictable than interest rates. Table 12 shows the annual average change in the median income for the nation and each of four regions for each year since 1954. While there are individual years when the national median income dropped and periods of time when it grew slowly for several years in a row, on average, over any period of several years, the median income has grown by significantly more than 3%. The average annual change for every region is over 5%. While there may be years of decline and short periods of slow growth, for the purpose of designing this kind of program, we are primarily concerned about the trend over substantial periods of time. The average family in America moves every seven years. There is no seven-year period in this dataset during which the national median income increased by an average of less than 3.35%.

## Annual Average Change in Median Income

Year	US	NORTHEAST	MIDWEST	SOUTH	WEST
2001	1.33%	2.39%	-0.20%	1.76%	1.53%
2000	3.96%	7.13%	5.43%	2.29%	4.33%
1999	4.74%	3.61%	4.47%	5.31%	4.48%
1998	4.87%	4.63%	6.03%	4.17%	2.70%
1997	5.36%	3.81%	3.95%	5.92%	7.10%
1996	4.16%	6.02%	3.42%	5.68%	1.43%
1995	4.72%	2.25%	9.33%	3.50%	4.14%
1994	4.93%	4.77%	4.79%	6.06%	3.64%
1993	1.06%	0.72%	2.37%	1.77%	0.92%
1992	1.76%	1.06%	0.83%	2.65%	3.64%
1991	1.66%	1.96%	1.58%	0.67%	1.32%
1990	3.33%	0.02%	4.55%	4.03%	2.77%
1989	6.28%	8.31%	5.25%	5.35%	7.91%
1988	3.94%	6.37%	5.78%	1.98%	3.31%
1987	5.13%	6.56%	5.09%	6.30%	3.41%
1986	6.21%	5.29%	5.92%	6.50%	3.99%
1985	4.93%	7.22%	4.40%	4.08%	6.06%
1984	7.54%	6.78%	8.18%	7.11%	9.71%
1983	4.89%	7.06%	2.11%	4.63%	3.93%
1982	4.67%	5.11%	4.76%	4.46%	3.15%
1981	6.49%	8.46%	6.36%	7.52%	7.15%
1980	7.33%	5.98%	5.66%	9.07%	7.69%
1979	11.04%	13.37%	10.60%	10.07%	12.38%
1978	10.19%	8.25%	10.41%	9.45%	11.49%
1977	7.03%	9.08%	5.66%	8.56%	6.64%
1976	9.03%	6.38%	9.63%	9.67%	8.16%
1975	6.33%	3.81%	5.89%	8.07%	8.17%
1974	7.06%	8.56%	7.02%	6.54%	6.13%
1973	8.41%	7.60%	9.44%	9.92%	8.27%
1972	8.08%	8.37%	8.71%	7.66%	7.61%
1971	4.24%	3.03%	4.43%	5.00%	4.19%
1970	4.60%	6.77%	3.06%	5.52%	2.35%
1969	9.28%	10.22%	10.07%	9.76%	7.14%
1968	8.81%	7.03%	10.27%	8.88%	7.10%
1967	5.32%	7.79%	4.59%	8.81%	8.13%
1966	8.27%	5.50%	8.61%	12.59%	6.72%
1965	5.91%	3.28%	6.17%	3.92%	3.99%
1964	5.12%	5.09%	4.11%	6.16%	3.39%
1963	4.92%	4.61%	5.20%	8.45%	4.55%
1962	3.85%	5.32%	7.06%	4.66%	-2.33%
1961	2.05%	3.34%	1.02%	0.84%	5.23%
1960	3.75%	2.88%	4.62%	0.83%	6.58%
1959	6.49%	5.65%	7.18%	5.89%	8.49%
1958	2.44%	1.96%	0.37%	4.61%	3.77%
1957	3.89%	2.96%	0.47%	4.89%	4.71%
1956	8.19%	12.35%	7.53%	4.35%	8.52%
1955	6.02%	3.11%	8.99%	7.49%	7.72%
1954	-1.77%	-0.07%	-4.86%	0.85%	-2.87%
		/-			_ ,_
Average	5.37%	5.45%	5.34%	5.71%	5.22%

Table 12: Average Annual Change in the Area Median Income by Region

Source: U.S. Census Bureau, Current Population Survey, Annual Demographic Supplements.

Of course, there are specific metro areas where the median income has declined or grown slowly for extended periods of time. To get a clearer understanding of the risk AMI index buyers will face, we have to look at the change in median incomes at the county or metropolitan level. HUD publishes the "Area Median Income" for every county and metropolitan statistical area in the nation each year. An analysis of all 3,184 counties in the United States shows that between 1996 and 2004, median incomes increased by an average of 4.3% annually. Of course some counties saw incomes grow much faster, while some experienced much slower growth - 4 counties even saw declines in income over the eight-year period. However the majority of counties (53%) saw their median income grow by between 4% and 6% per year. Only 9% experienced AMI growth of less than 3% annually.

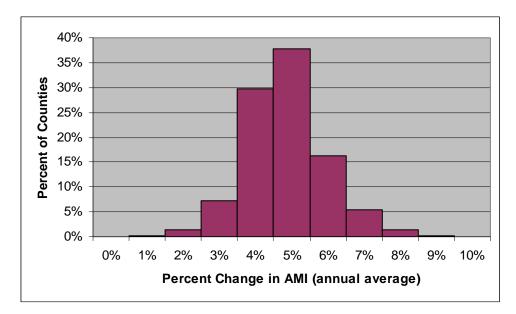


Figure 3: Distribution of Counties by Annual Change in AMI, 1996 – 2004

Over the past few decades, median incomes have been more stable than either home prices or mortgage rates. Figure 4 compares the seven-year average change in national median home price, median income and mortgage rates. Rather than charting mortgage rates directly, the figure shows the buying power of \$1 in mortgage payments given changing interest rates.

For example, in 1980 home prices were 115% higher than they had been seven years earlier (an increase of 11.6% annually). Over the same period the median income rose by an average of 8.3% annually and mortgage rates on 30-year loans rose from 8% to almost 13%. This reduced the amount of money that could be borrowed with any given mortgage payment. In 1973, for every \$1 that a buyer had available for their monthly mortgage payment they could borrow \$136, but with higher rates in 1980 that same dollar only supported \$91 in debt. This

spike in interest rates did not keep home prices from rising more than 11% annually, but it may have kept them from rising even faster. However, for a family with a resale restriction tied to mortgage rates (AHC index) the change in interest rates would have lowered the borrowing power of buyers by 33% over this period – an average decline in borrowing power of 5.6% annually. Rising median incomes more than offset this loss allowing AHC buyers in 1980 to sell at a slight profit, but Figure 4 clearly shows how much more volatile prices tied to mortgage rates will be than prices tied to the AMI alone.

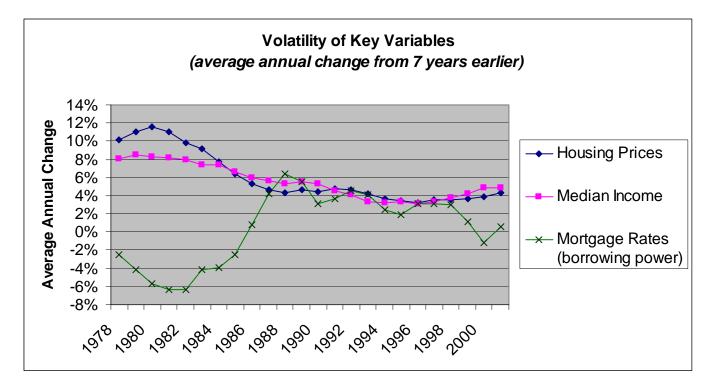


Figure 4: Average Change in Value Compared with Seven Years Earlier

While the AMI has clearly been growing at a more stable (predictable) rate over recent decades, it also grows at a slightly lower rate. It is not entirely clear from this data whether traditional homeownership or (AMI index) shared equity ownership offers a greater risk-adjusted return. It is clear that, on average, both offer similar returns – traditional owners are likely to earn slightly more than AMI owners but not much more. It is clear that traditional owners have a far greater chance of earning high returns (above 30% annual return on their investments). At the same time, the AMI buyers are far less likely to lose money or earn low returns (below 15%). The question that is difficult to resolve, is whether the slightly lower average return for AMI owners is proportional to the lower risk that they face (or to put it another way, does the extra profit that traditional homeowners receive make up for the extra risk that they face?).

In the face of persistent criticism that shared equity ownership is "unfair" to homeowners, however, this analysis suggests that AMI based resale restrictions offer not only a fair riskadjusted return but an uncommonly high return; a rate of return that, adjusted for relative risks, is quite similar to that of traditional homeownership and vastly superior to all other investment opportunities that potential shared equity homebuyers could ever access.

# Moving Up to Market

One of the common concerns with limiting appreciation is that it will trap homeowners in the subsidized units because, if their resale price rises more slowly than the general housing market, they will never be able to afford a new house in the same market.

In an ideal world, the equity that homeowners earn through shared equity ownership would provide enough of a head start for those families to move into the unsubsidized market when they move out. A study of resales of shared equity homes in Burlington, Vermont, suggests that this is possible.<sup>21</sup> Despite the fact that participants in the Burlington program retained only 25% of home price appreciation, approximately 75% of the families who sold their shared equity homes went on to purchase unsubsidized, unrestricted single-family homes.

If homeowners' incomes are rising at a rate close to the rate of growth in market housing prices, the equity that shared equity owners generate through their restricted homes reduces the need for debt, making their next home more affordable. In this environment, shared equity homeownership can serve as a stepping stone, giving families a powerful savings mechanism that keeps them from falling further and further behind rising housing prices.

While there are many programs that encourage renters to save for many years in order to access homeownership, the fact is that unless a renter's income is rising faster than home prices, the renter's buying power is being reduced by rising prices faster than it is likely to be improved through savings. Shared equity housing can improve this situation – substantially in many cases. Because the homeowner's savings is leveraged by debt and public subsidy, their ability to accumulate equity rapidly can put them ahead of the housing price curve. When home prices are rising at moderate rates, buyers who are initially priced out of the private market can

<sup>&</sup>lt;sup>21</sup> John Emmeus Davis and Amy Demetrowitz. 2004. *Permanently Affordable Homeownership: Does the Community Land Trust Deliver on Its Promises?* Burlington, VT: Burlington Community Land Trust. Available at http://www.bclt.net/pdf/summary.pdf.

accumulate enough equity through shared equity ownership to make market ownership attainable some years later.

While this process can be a powerful rational in favor of shared equity ownership in modestly appreciating markets, it should be clear that the dynamics will be different in rapidly appreciating markets. If housing prices are rising much faster than incomes, even the leveraged savings available through shared equity ownership will not be enough to keep up with the runaway market. This is a valid argument against resale price restrictions: should home prices escalate much faster than incomes, some families living in resale-restricted homes may not be able to accumulate enough equity to purchase another house of similar size and quality in the same market.

While this is a legitimate concern, it is mitigated by several considerations. First and foremost, some families will experience real income growth that exceeds the average growth in median incomes as they build skills and experience and benefit from promotions. Their increased incomes, combined with the pay-down of principal on their mortgage and their share of home price appreciation may very well enable them to move and purchase another equivalent home even if home prices rise faster than median incomes.

Second, it is important to note that private market buyers are not immune from this concern. If homeowners' incomes are not rising as fast as housing prices, their purchasing power will fall relative to the market even if the value of their current home rises fully with the market. Certainly, home price appreciation will give them options that they would not have if their appreciation were more limited, but their only options for moving may still require trading down to less valuable houses – smaller, older or further out into the suburban fringe.

Finally, it is important to remember that local jurisdictions can choose to provide additional subsidies to facilitate mobility if and when they are needed. Waiting to see whether particular buyers need additional help when they are ready to move may be a more efficient use of public subsidy than forgoing equity sharing on the assumption – possibly unfounded – that this is the only way to facilitate mobility.

# Transformative Wealth

If income is what we use to **get by** day-by-day; assets are what help us to **get ahead**.<sup>22</sup> Wealth is not just about money. It is a means to freedom, opportunity, a wider range of life choices and, perhaps most importantly, the ability to take risks without worrying that your whole life will fall apart if you go without pay for a few months.

On the one hand, affordable rental housing provides a way to stabilize families' lives. Homeownership, on the other hand, has proven to be a fairly reliable way to help people get ahead – to improve not just their options, but also those of their children and grandchildren because it builds the kind of wealth that gives kids a head start and changes the choices that they can make. "Affordable" homeownership must aspire to the same kind of lasting impact. If it does not help families get ahead and put their kids on a different path, it may not be worth doing.

Thomas Shapiro, in *The Hidden Cost of Being African American*, describes how differences in family assets completely change the life opportunities for children. He uses the term "transformative assets" to refer to the kinds of assets that really change people's lives and the outcomes for their children. He is not talking about trust fund babies who have the kind of family money that means that they never have to work; he describes how gifts or "loans" of \$20,000 to \$50,000 from parents to their children can make the difference in the education, housing and career options of middle class families. He profiles families with nearly identical educational backgrounds, professional achievements and annual incomes and shows how those who receive relatively small "advances on the inheritance" end up with their kids in better schools, taking more career risks that frequently result in greater pay later and owning more valuable homes, which in turn, appreciate faster.

In the wake of Shapiro's earlier book with Melvin Oliver, *Black Wealth/White Wealth*, and Michael Sheridan's *Assets and the Poor*, there has arisen a small cottage industry of "assetbuilding" programs designed to help low wealth families and individuals build the kinds of assets that are likely to stabilize and improve their lives. The centerpiece of this movement is the Individual Development Account (IDA). IDAs are matched savings accounts where participants are encouraged to save money for education, homeownership or a small business and their

<sup>&</sup>lt;sup>22</sup> Melvin L. Oliver and Thomas M. Shapiro. 1995. *Black Wealth/White Wealth.* New York: Routledge.

savings are then matched with donated money (sometimes by as much as 4-to-1). IDAs are popular across the political spectrum: conservatives love them because they promote "personal responsibility" while liberals appreciate them because they offer the poor a chance to build assets that would otherwise be far beyond their means.

But to put IDAs in context, every program has a limit on the level of match money available to any participant, which means that the total value of the "asset" that someone can save for is fairly limited. An evaluation of one of the early IDA programs, the American Dream Demonstration, for example, found that the average participant accumulated \$1,543 in combined savings and matching funds.<sup>23</sup> Individual IDA participants and programs may have significantly higher asset accumulation rates, but it is quite rare for families to save more than \$10,000 through an IDA. This is not enough to start a well-capitalized business in America. College costs more than this for most students. And while \$10,000 may be enough for a downpayment on a home, in much of the country, people with incomes low enough to qualify for an IDA program often cannot come close to affording a home even with a \$10,000 downpayment. They may need \$75,000 or \$100,000 or more to bring the cost of a starter home down to the level where they can afford the mortgage payments. IDA programs simply do not offer the opportunity to build *that kind* of wealth.

Shared equity affordable homeownership programs, however, despite the limitations on wealth creation, can predictably generate significant wealth – many times what IDA programs offer – and they provide that opportunity not only to the first buyer but to subsequent generations of homeowners. Rather than providing a lottery in which a limited number of lucky families are able to buy homes and cash in on unlimited windfall appreciation, well-designed shared equity homeownership programs offer a stable and sustainable mechanism to provide *limited*, but nonetheless life altering, wealth creation to *unlimited* numbers of families over the long term.

<sup>&</sup>lt;sup>23</sup> Boshara. 2005. Individual Development Accounts.

### **CONCLUSION: UNFINISHED BUSINESS**

Given the modest risks of traditional homeownership, there is no investment that reliably provides the kind of financial returns that Americans routinely realize through homeownership. There are lower-risk investments and there are those that offer much higher returns but none generally offer such high returns with such modest risk. It is this special risk profile that has made homeownership such a powerful institution in American life. Widespread homeownership virtually transformed a generation of working families who were living paycheck to paycheck into an asset-owning stable middle class. This unique opportunity to generate wealth with low risk is the direct result of a broad set of programs, policies and institutions established in the 1930s with the explicit goal of creating the exact kind of "ownership society" that has since developed. But not everyone has been able to take advantage of this unparalleled avenue to wealth. The success of homeownership as an investment strategy has made it increasingly difficult for many working families to become homeowners.

While our homeownership rate is near all time highs, ownership has never been as important as it is today. The dismantling of our social safety net, the decline in union membership and the loss of job stability all make the stability of family assets more and more of a basic requirement of life in America. Where wealth was once a luxury, it is fast becoming a necessity. The dramatic rise in the number of exotic and subprime mortgages in the last two years illustrates the great power of the homeownership dream, but also increases significantly the risk profile of homeownership. Unfortunately, many families who are stretching in this way to purchase a home will end up in foreclosure or with significant equity loss.

Just as it took public action to create the institutions that support widespread homeownership, it will take public action to extend homeownership in a sustainable fashion to those who are increasingly priced out of its benefits. Public subsidy is necessary to bridge the growing gap between renting and ownership. But it does not seem realistic to imagine that the public sector can afford to grant the necessary funds to every family in need no matter how great the public benefits.

Permanently affordable, shared equity homeownership offers a practical tool for extending the reach of sustainable homeownership as a wealth creation vehicle for generations of working families who would otherwise be left permanently behind. By offering real equity to families who would otherwise remain renters, and providing a safer vehicle for accessing homeownership,

these programs provide a predictable and reliable avenue for advancement. By ensuring that the units remain affordable over the long term, the programs preserve a stock of housing so that it can play an asset-building role in the lives of one family after another.

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