

## Prime Property Institutions for a Subprime Era: Toward Innovative Models of Homeownership

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**Abstract:** *This Article breaks new ground toward contractual and institutional innovation in models of homeownership, equity building, and mortgage enforcement. Inspired by recent developments in the affordable housing sector and other types of public financing schemes, we suggest extending institutional and financial strategies such as time- and place-based division of property rights, conditional subsidies, and credit mediation to alleviate the systemic risks of mortgage foreclosure. Two new solutions offer a broad theoretical basis for such developments in the economic and legal institution of homeownership: a for-profit shared equity scheme led by local governments alongside a private market shared equity model, one of “bootstrapping home buying with purchase options.”*

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Prime Property Institutions for a Subprime Era

## Prime Property Institutions for a Subprime Era: Toward Innovative Models of Homeownership

### INTRODUCTION

The subprime crisis has vividly demonstrated the risks of relying on rising market values to prevent debt from surpassing the value of the security, and the severe collective action problem embedded in the securitization of mortgage-backed loans.<sup>1</sup>

However, the recent turn of events raises more fundamental questions about the way in which land-related property rights and credit markets are designed. This Article explores these broader-based concerns, and seeks to break new ground toward contractual and institutional innovation in models of homeownership, equity building, and mortgage enforcement that may overcome some of the systemic problems in the real estate market.

Numerous scholarly endeavors have been made to correct the failures of the market.<sup>2</sup> In a recent article, Eric Posner and Luigi Zingales identify the broad-based deadweight loss of foreclosures, and call to force a renegotiation between the homeowner and the mortgagee in cases of negative equity (when the amount of the debt exceeds the home value). Importantly, they propose to do this without making any of the contracting parties worse off or increasing the systemic cost of credit.<sup>3</sup> Homeowners in ZIP codes where housing prices have dropped below a certain threshold would have a right to a mortgage reduction to the current value in exchange for a percentage of the home's future appreciation above the current level.<sup>4</sup>

We view Posner and Zingales's model of binding together mortgage restructuring with a shared equity scheme as holding great potential for reforming the market, and we develop this idea more extensively in this Article to include both the public and private sectors. In addition, whereas Posner and

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1. See, e.g., Yuliya Demyanyk & Otto Van Hemert, *Understanding the Subprime Mortgage Crisis* (2008), available at <http://ssrn.com/abstract=1020396> (Last visited, July 16, 2010) (offering empirical evidence for their analysis of the subprime crisis as a "classic lending boom-bust scenario, in which unsustainable growth leads to the collapse of the market"); Stephen Labaton & Edmund L. Andrews, *In Rescue to Stabilize Lending, U.S. Takes Over Mortgage Finance Titans*, N.Y. TIMES, Sept. 8, 2008, <http://www.nytimes.com/2008/09/08/business/08fannie.html> (discussing the federal government's bailout of "the nation's two largest mortgage finance companies," Fannie Mae and Freddie Mac).

2. See, e.g., Todd J. Zywicki & Joseph Adamson, *The Law & Economics of Subprime Lending*, 80 U. COLO. L. REV. 1 (2009) (analyzing the reasons for the crisis, and calling to regulate the mortgage market so as to curb abusive practices, while preserving the benefits of high levels of homeownership, especially among young, low-income, and minority households).

3. Eric A. Posner & Luigi Zingales, *A Loan Modification Approach to the Housing Crisis*, 11 AM. L. & ECON. REV. 575 (2009).

4. *Id.* at 589-96.

Zingales's model focuses on the *ex post* scenario of mortgage default, we offer innovative models for housing development and finance that would *ex ante* address the broader prospects and perils of the real estate market and the legal institution of homeownership.

In so doing, we build on the institutional insights obtained by analyzing two innovative forms in current real estate development and finance. First, community land trusts (CLTs), which are non-profit community organizations that supply affordable housing based on long-term shared equity, divided-ownership schemes.<sup>5</sup> Second, tax increment financing (TIF), in which a local government, working through a subsidiary agency, designates an area for for-profit development or redevelopment, incurs up-front expenditures (e.g., land assembly, public infrastructure), and issues revenue bonds that are paid back over time by earmarking future incremental increases in property taxes in the designated area.<sup>6</sup>

These two forms substantially diverge, and may even be considered outright opposites. CLTs are designed to perpetually maintain housing units at below-market affordable prices. Conversely, TIF districts rely on stimulating market value appreciation following the area's redevelopment as the *raison d'être* of the project, thereby enabling the agency to repay the bonds. However, each of these forms offers broader-based institutional lessons that, suitably adapted, enrich the range of design options for the conventional for-profit housing sector.

Our Article has two main objectives. First, it offers a tentative outline for a type of a CLT/TIF hybrid in the form of a For-Profit Shared Equity (FPSE) development model that would allow consumers to acquire full homeownership through a gradual, two-phase purchase and finance process. Second, it illuminates a broader range of issues that typify the current for-profit real estate development and finance market, by pointing to instances of institutional myopia and refutable conventional wisdom. Among these topics, we address the insufficient design alternatives for building equity from zero, an all-or-nothing approach to homeownership, and inefficient risk-shifting in case of mortgage foreclosures. These insights in turn play an important role in suggesting general institutional and legal design principles that go beyond the suggested CLT/TIF hybrid and may inspire improvements to existing private market products in the real estate industry.

As Part I explains, US local governments currently play an established role in the real estate industry having broad powers in land use regulation and access to property taxation as their most prominent own-revenue resource. We argue that local governments can also play a substantial role in other issues that

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5. *See infra* Part II.

6. *See infra* Part III.

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up until now have generally been considered to be within the realm of either individual and market activity or of higher-level government policy and finance. As a low-level entity that nevertheless enjoys established powers of collective action, the local government can engage in a variety of activities that would provide better access to credit from financial institutions, efficient risk management at the local level, and diversity of property formations.

Parts II and III of the Article elaborate on the institutional and legal features of CLTs and TIFs, respectively, and shed light on ways in which local governments could take on a more central role in designing innovative models of homeownership and housing finance, including the use of various taxation mechanisms to facilitate development.

Our Article, however, does not solely advocate growing intervention by local government. More fundamentally, it seeks to inform private entrepreneurs about real estate development possibilities that they might have viewed skeptically until recently, but which may gain currency in the aftermath of the mortgage crisis. Specifically, our suggested CLT/TIF hybrid scheme may inspire both entrepreneurs and middle to upper income private consumers to adopt new market products which would allow for a gradual, multi-phase purchase of homeownership. These new market mechanisms can improve opportunities for developing and disseminating property models that have been traditionally associated with low-income households, while at the same time addressing persistent failures stemming from irresponsible lending, inefficient risk deflection, and over-fragmentation of interests that have often plagued real estate markets.

Thus, following the detailed discussion of our suggested for-profit shared equity scheme in Part IV, we present in Part V an alternative *private* model entitled “bootstrapping home buying with purchase options.” This model likewise builds on key insights learned from the CLT/TIF settings, but applies them to an innovative, private contractual framework. In so doing, the theoretical and institutional analysis offered in this Article could be appealing and useful for both advocates of public intervention in the supply of for-profit housing and those who remain loyal to developing private market, non-subsidized products.

### I. LOCAL GOVERNMENT STAKES IN HOUSING DEVELOPMENT AND FINANCE

Before we set out to explore new models for local government involvement in the real estate market, it is essential to briefly survey the current role of government in this field. This survey follows the traditional distinction between the non-profit and for-profit sectors, with the purpose of arguing that these two allegedly distinctive spheres of activity can be successfully combined, or at the least gain inspiration from one another, in promoting innovative mechanisms for real-estate development and finance.

The non-profit sector has seen different generations of government involvement, most prominently on the federal level, starting with European-inspired direct construction of public housing as of the 1930s. Subsidies for privately-developed affordable housing were a product of the 1950s, and the 1970s brought Section 8 demand-side housing vouchers for tenants and mixed-income projects in which government subsidizes private developments that set apart a number of units at below-market prices.<sup>7</sup> These different mechanisms share the policy goal of facilitating affordable housing for low- and moderate-income families. The success of different strategies undertaken over the years to achieve this goal has been, and continues to be, much debated.<sup>8</sup>

In contrast to its activities in the non-profit sector of the housing industry, government involvement in the for-profit market is more difficult to conceptualize. This is so because government regulatory intervention in the for-profit sector does not adhere to a clearly-defined public policy framework, but is rather an amalgam of various types of issue-specific laws and policies adopted by different levels of government.

Two dominant aspects of local government power over the real estate market are land use regulation and property taxation. These spheres of government activity are to a large extent interrelated. Specifically, local governments “fiscalize” zoning and other land use decisions by leveraging their access to the lion’s share of property taxes within their jurisdiction. This means that local land use regulators that attach great weight to the public revenue/public expenditure tradeoff use their land use powers as a primary fiscal tool.<sup>9</sup> Such interconnectivity may have implications that go beyond the fate of a specific project, resulting in potential extra-territorial effects such as exclusionary zoning.<sup>10</sup>

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7. See, generally, Robert C. Ellickson, *The False Promise of the Mixed-Income Housing Project*, 57 UCLA L. REV. 983, 988-95 (2010). The constant changes in government policy are not unique to the U.S. A 2007 survey of the 27 EU member states demonstrates the enormous changes in these countries since housing began to systematically emerge as a social issue in the mid-nineteenth century. West European countries have come a long way from the direct provision of public housing to working classes and later on to socio-economically disadvantaged groups, with East European countries making their own dramatic shifts from the socialist era of predominantly state-owned rental housing. Whereas few generalizations are equally applicable to all European states, one can identify a number of general trends in recent decades, such as the decentralization of housing policy from state to local governments, and gradual privatization of existing social housing stock alongside more recent government commitments to promote the construction of new affordable housing units (including through public-private partnerships). See CECODHAS (European Social Housing Observatory), HOUSING EUROPE 2007: REVIEW OF SOCIAL, CO-OPERATIVE AND PUBLIC HOUSING IN THE 27 EU MEMBER STATES (2007).

8. Ellickson, *supra* note 7, at 1012-21 (calling into question the wisdom of many of the different strategies employed over the years, and arguing that housing vouchers are superior to mixed-income projects).

9. See Helen F. Ladd, *Land Use Regulation as a Fiscal Tool*, in LOCAL GOVERNMENT TAX AND LAND USE POLICIES IN THE UNITED STATES: UNDERSTANDING THE LINKS 55 (Helen F. Ladd & Wallace E. Oates eds., 1998); Amnon Lehari, *Intergovernmental Liability Rules*, 92 VA L. REV. 929, 948-52 (2006).

10. See WILLIAM A. FISCHER, THE HOMEVOTER HYPOTHESIS: HOW HOME VALUES INFLUENCE

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This land use fiscalization policy may have a systematic property design effect on the for-profit housing sector. A leading example is the highly favorable treatment that residential community associations (RCAs) or “private communities” have been receiving from local governments. Cities such as Las Vegas now mandate that every new residential development must be governed by an RCA, thus facilitating growth and increased tax revenues with minimal public expenditures.<sup>11</sup>

The mortgage market presents a different kind of significant governmental intervention in the real estate industry. As we now show, while intervention to date has been orchestrated from the federal level, the public costs of failures and high foreclosure rates in the mortgage market fall to a significant degree on the shoulders of local governments.<sup>12</sup> This may justify a reevaluation of the allocation of responsibilities, or at least of the level of ongoing involvement, among the different levels of government.

The federal government has played a central role in what is considered a *national* real estate credit market since the introduction of the Federal Housing Administration (FHA) mortgage insurance programs in 1934. In 1938 and 1970, respectively, Fannie Mae and Freddie Mac were established to supply liquidity to the mortgage market by buying mortgages from lending institutions. In 1975 the Home Mortgage Disclosure Act (HMDA)<sup>13</sup> aimed at stimulating private investment in poor areas through targeted public spending. More recently, the federal government placed Fannie Mae and Freddie Mac under conservatorship in 2007, and undertook a massive purchase of “toxic” mortgage-related securities under The Emergency Economic Stabilization Act

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LOCAL GOVERNMENT TAXATION, SCHOOL FINANCE, AND LAND-USE POLICIES 184–206 (2001). The term “exclusionary zoning” refers to land use regulation that seeks to indirectly monitor the socioeconomic composition of residents, especially by zoning out residents with relatively low income but with high demand for public services such as schools or welfare. A minimum-lot-size requirement is a quintessential example of exclusionary zoning. Since the property tax in the US is *ad valorem*, that is, based on a certain fraction of the property’s value, such a regulatory demand would generally keep out, through the price mechanism, low-income families that would have decreased the average property tax base. For the broad-based societal implications of “exclusionary zoning,” see, e.g., Richard Briffault, *Our Localism: Part II—Localism and Legal Theory*, 90 COLUM. L. REV. 346, 365–74, 382–84 (1990); Sheryll D. Cashin, *Localism, Self-Interest, and the Tyranny of the Favored Quarter: Addressing the Barriers to New Regionalism*, 88 GEO. L.J. 1985, 1993–95 (2000) (pointing to the ever-present, even if currently implicit, racial motives for exclusionary zoning); Richard Thompson Ford, *The Boundaries of Race: Political Geography in Legal Analysis*, 107 HARV. L. REV. 1841, 1894–97 (1994) (same).

11. Evan McKenzie, *Constructing The Pomerium in Las Vegas: A Case Study of Emerging Trends in American Gated Communities*, 20 HOUSING STUDIES 187 (2005). For RCAs, see generally Sheryll D. Cashin, *Privatized Communities and the “Secession of the Successful”*: Democracy and Fairness beyond the Gate, 28 FORDHAM URB. L.J. 1675 (2001); Paula A. Franzese, *Privatization and its Discontents: Common Interest Communities and the Rise of the Government for “The Nice,”* 37 URB. LAW. 335 (2005).

12. See *infra* notes 16–17.

13. Pub. L. No. 94-200, §§ 301-310, 89 Stat. 1124, 1125 (1975) (codified as amended at 12 U.S.C. §§ 2801-2810 (2006)).

of 2008.<sup>14</sup> Thereafter, in 2009, the federal government sought to alleviate effects of the mortgage crisis with the Home Affordable Modification Program, under which the government provides partial fund matching to reduce homeowners' monthly mortgage payments.<sup>15</sup>

The 2007-08 crisis has raised, however, fundamental concerns about the appropriate scope and content of the above-mentioned government intervention. For example, should government intervene more extensively, and how, in the real estate credit market to prevent allegedly predatory lending? Moreover, it has raised questions about the prevailing division of labor among different levels of government, and the sustainability of traditional distinctions drawn between the for-profit and non-profit sectors in designing law and policy.

Regarding the mortgage market, states have recently started to pursue a more active role in trying to investigate past mistakes and correct persistent failures in this market.<sup>16</sup> But the focus on government involvement should perhaps be taken one further level down to the realm of local governments. Recent empirical research demonstrates that high mortgage foreclosure rates are a problem not only for individual homeowners, lending institutions, holders of mortgage-backed securities, and national-level agencies such as Fannie Mae or Freddie Mac. Foreclosures also harm neighbors by reducing the value of nearby properties, especially when the aggregate rate of physically adjacent foreclosures crosses a certain threshold, and this in turn reduces local governments' tax bases way beyond tax delinquency for foreclosed assets.<sup>17</sup>

Accordingly, we argue that local governments may play a role in issues that, until recently, have been considered to be within the realm of either individual and market activity or of higher-level government policy and finance. The identification of substantial jurisdictional public effects of what is

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14. Pub. L. No. 110-343, 122 Stat. 3766 (2008) (to be codified at various sections of 5, 12, 31 U.S.C.).

15. US Department of Treasury, Home Affordable Modification Program Guidelines (2009), available at: [http://www.ustreas.gov/press/releases/reports/modification\\_program\\_guidelines.pdf](http://www.ustreas.gov/press/releases/reports/modification_program_guidelines.pdf) (visited, July 16, 2010). Under this program, the borrower first has to reduce payments on mortgages to 38% Front-End Debt to Ratio (DTI). The US Treasury then matches further reductions in monthly payments, dollar-for-dollar, with the lender/investor, down to a 31% Front-End DTI. The program's success has been questioned, however, since it has been implemented only with a small fraction of borrowers. The federal government is currently devising yet another initiative, aimed at encouraging delinquent borrowers to shed their houses through a "short sale" in which the property is being sold for less than the balance of the mortgage, based on a self-binding real estate valuation commissioned by the lender. See David Streitfeld, *Program to Pay Homeowners To Sell at a Loss*, N.Y. TIMES, Mar. 8, 2010, at A1.

16. See, e.g., Joe Nocera, *The States Take On Foreclosures*, N.Y. TIMES, Oct. 29, 2010 (reporting that all 50 states agreed to conduct a joint investigation into the bank practices that led to the foreclosure scandal).

17. Jenny Schuetz, Vicki Been, and Ingrid Gould Ellen, *Neighborhood Effects of Concentrated Mortgage Foreclosures*, 17 J. HOUSING ECONOMICS 306 (2008); Posner & Zingales, *supra* note 3, at 575-76.



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allegedly a private market issue does not, however, dictate a single type of solution. More coercive regulatory intervention in the market may not necessarily result in more efficient provision of housing or finance. Instead, local governments may opt for an advisory, mediatory, or otherwise non-coercive role in broadening the possibilities for homeowners.

Moreover, local governments could initiate and lead institutional innovation in the real estate market. For example, other scholars suggest that municipalities serve as a conduit for matching homeowners and investors for the purpose of home equity insurance against fluctuations in local home values, or for selling off their upside potential.<sup>18</sup> But municipalities could pursue other innovative alternatives as well, and the Article seeks to identify them.

Specifically, the Article gains inspiration from existing types of development, including Community Land Trusts (CLTs) and tax increment financing (TIF) districts, and studies how these models can be adapted and applied to other sections of the real estate industry. We start by analyzing non-profit Community Land Trusts (CLTs), which show impressively low foreclosure rates even though their beneficiaries are low-income people. We identify the organizational and contractual features that make this possible, with a view to transplanting some of these features to the for-profit housing sector.

## II. THE GROWTH OF COMMUNITY LAND TRUSTS (CLTs)

### A. *The Institutional and Legal Features of CLTs*

One type of housing development in which local governments have been playing a growing role in the past few years is Community Land Trusts (CLTs). As of 2010, there are over 240 CLTs, which include more than 6,000 housing units across the US.<sup>19</sup>

The CLT is a community-based, non-profit organization that acquires land for the purpose of retaining perpetual ownership in it to facilitate affordable housing. The individual homeowner leases the land for a long period of time (typically, 99 years) and becomes the owner of the building erected on the land. The lease agreement on the land divides the property bundle between the

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18. See Lee Anne Fennell & Julie A. Roin, *Controlling Residential Stakes*, 77 U. CHI. L. REV. 143 (2010).

19. See John Emmeus Davis, *Origins and Evolution of the Community Land Trusts in the United States*, in THE COMMUNITY LAND TRUST READER 1, 3 (J.E. Davis ed., 2010) [hereinafter Davis, 2010]. In addition, much of the information included in this Part is based on conversations and correspondence with Michael Brown, Burlington Associates in Community Development, LLC; John Davis, Burlington Associates in Community Development, LLC; Allison Handler, Executive Director, Portland Community Land Trusts; and Roz Greenstein, Lincoln Institute of Land Policy. We thank all of them for their help.

individual and the CLT both during the tenancy and upon its transfer by inheritance or resale. Thus, for example, the homeowner must occupy the land as her primary residence, may not sublease the land without the CLT's consent, is required to receive permission for major capital improvements, and is obligated to properly maintain the building.<sup>20</sup>

To keep the land available for affordable housing in perpetuity, the CLT repurchases the property or monitors its direct transfer from seller to buyer when the homeowner decides to sell the housing unit. In both cases the CLT ensures the resale price is restricted to a set formula. Although there are several generic approaches to setting the price, the most prevalent mechanism in CLTs is one of appraisal-based formulas. These formulas establish the resale price of the house by adding to the original price a certain percentage (typically, 25 percent) of any increase in the home's market value.<sup>21</sup> The declared goal of this resale formula is to divide the gains from market appreciation, so that the exiting homeowner receives a reasonable return on her investment, while concurrently granting future income-eligible homebuyers fair and affordable access to this housing unit.<sup>22</sup> Since the formula establishes a value ceiling and not a floor, the homeowner is nevertheless exposed to the economic risks resulting from declining property values or deterioration in the asset's condition such that the formula-determined price may not be guaranteed.<sup>23</sup>

Another intriguing facet of the CLT concerns its governance structure. The CLT is typically an open-membership organization for all those who live within the wider geographic area that the CLT defines as the relevant community. It is governed by a tripartite board: one-third of board members are representatives of the leaseholders/homeowners; one third are elected representatives of other community residents outside the CLT; and the final third are co-opted by the first two-thirds, with some of these seats often being reserved for local government representatives, private lenders, and other major

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20. See Amnon Lehari, *Mixing Property*, 38 SETON HALL L. REV. 137, 199-202 (2008) [hereinafter Lehari, *Mixing*].

21. Other methods include indexed formulas, which link upward adjustments in the original purchase price to a specific index such as the Consumer Price Index (CPI) or the Area Median Income (AMI). Yet other formulas are "itemized," meaning that the price is adjusted by adding or subtracting specific factors such as the value of owner-made capital improvements; maintenance, repairs, and depreciation; or inflation adjustments. While self-standing, itemized formulas are quite rare, some measure of itemization (e.g., owner-made improvements) usually accompanies the more prevalent appraisal-based formulas. See Burlington Associates in Community Development, LLC, *Community Land Trust Resource Center: Comparing the Four Major Approaches to Resale Formulas, 2005*, available at <http://www.burlingtonassociates.net/resources/ResaleFormulaComparisons.pdf> (Last visited July 16, 2010) [hereinafter *Burlington Associates*].

22. See John Emmeus Davis, *Shared Equity Homeownership: The Changing Landscape of Resale Restricted, Owner Occupied Housing*, NAT'L HOUSING INST. 18-23 (2006) [hereinafter Davis, 2006], available at <http://www.nhi.org/pdf/SharedEquityHome.pdf> (Last visited, July 16, 2010); Rosalind Greenstein & Yesim Sungu-Eryilmaz, *A National Study of Community Land Trusts 4* (Lincoln Inst. of Land Policy, Working Paper WP07YS1, 2007).

23. Davis, 2006, *supra* note 22, at 64-65.

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players.<sup>24</sup>

CLTs are welcomed by local governments as a means to foster effective, long-term aid to needy families. In 2006, the City of Irvine, California, set up the Irvine Community Land Trust (ICLT), with the purpose of establishing nearly 10,000 CLT housing units by 2025.<sup>25</sup> More broadly, in a growing number of CLTs, the entire one-third of external board members is now affiliated with and appointed by the local government.<sup>26</sup>

CLTs have proven a durable affordable housing development strategy even throughout the subprime crisis. Though CLTs are intended for and used by low- and moderate-income families, their foreclosure rates are consistently low at 0.52 percent in 2008, compared with the significantly higher national rate of 3.3% estimated by the Mortgage Bankers Association in early 2009.<sup>27</sup> These outcomes can be attributed not only to the typically lower up-front prices of CLT housing units, but also to dynamic front- and back-end measures taken by CLTs aimed at mitigating the risks of insolvency and avoiding inadequate foreclosure procedures.

We identify four broad institutional features of CLTs that point to their success, including 1) unbundling rights and subsidies in property configuration, 2) mediation of access to credit, 3) risk management for prevention of insolvency and 4) lowering the cost of insolvency through the CLT structure.

### *1. Affordability through Unbundling of Rights and Subsidies*

The property product designed by CLTs is located at an intermediate point along the landownership/lease continuum. It divides the bundle of property rights between the individual homeowner and the land trust in an innovative manner, rather than opting for the conventional “own all or nothing” strategy.<sup>28</sup>

Given that CLT homeowners purchase only the housing unit and do not acquire the land, buyers pay much less upfront for the property, typically in the 25-30 percent range.<sup>29</sup> Thus, unbundling rights in land and housing creates affordability due to the significant proportion of the property value usually attributable to the land component, especially in cities and neighborhoods with

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24. Lehari, *Mixing*, *supra* note 20, at 199-202.

25. See IRVINE COMMUNITY LAND TRUST, <http://www.irvineclt.org/resources/news> (Last visited July 16, 2010).

26. See JOHN EMMEUS DAVIS & RICK JACOBUS, *THE CITY-CLT PARTNERSHIP: MUNICIPAL SUPPORT FOR COMMUNITY LAND TRUSTS* 33-38 (2008).

27. National CLT Network, *Community Land Trusts at Lower Risk of Losing Homes to Foreclosures* (report dated Mar. 17, 2009), accessed at [www.cltnetwork.org](http://www.cltnetwork.org).

28. We do not discuss here the largely anachronistic estate system, which still exists in the US and in other common law countries, but has lost most of its importance in the modern era. Conventional housing in the US is currently governed by the fee simple, which grants full ownership in both the land and the home. See JESSE DUKEMINIER ET AL., *PROPERTY* 185-96 (7th ed. 2010)

29. See sources in *supra* note 19.

high demand for real estate. In addition, buyers usually enjoy a subsidy on their purchase price, their monthly rent, or both. CLTs tend to provide greater subsidies when the land is donated to them. When the CLT has to acquire the land, some of these acquisition costs are typically passed on to consumers. This cost may be reflected in the up-front price of the housing unit, or, more typically, in the monthly lease fee that is collected by the CLT. As a matter of public policy and as part of the incentive structure for potential homeowners, subsidies offered by the CLT must be substantial enough to justify the legal and economic limits placed on CLT homeowners during and after their tenure.<sup>30</sup> At the same time, the pairing of subsidies with the unique property structure of the CLT creates an institutional setting that makes the housing affordable for long periods of time, including upon resale.

## 2. Credit Mediation

In mediating and facilitating a loan agreement for the house vis-à-vis lenders, the CLT assists by narrowing down informational asymmetries between the parties to the loan agreement, and by better assessing *ex ante* the financial ability of the borrower to pay back the loan. This is done typically by requiring homeowners to undergo training and orientation to explain to them the structure of rights and duties in a CLT project as compared to conventional home buying, different options for gaining access to credit from commercial lenders, the proper ratio to be maintained between the value of the property and the amount of the debt, and so forth. As far as commercial lenders are concerned, the CLT is instrumental in clarifying the unique features of the loan for banks, including: (1) that the collateral for the CLT home purchase mortgage is the leasehold estate—the value of home improvements plus the value of the leasehold interest in the land, and (2) the favorable loan-to-value ratio in CLT leasehold mortgages (because the CLT's write-down of the home purchase price is regarded as equity).<sup>31</sup> Thus, in making both parties to the loan transaction—the homebuyer and commercial lender—better informed about their respective rights and duties, the CLT harmonizes the parties' expectations and facilitates a transaction whose details, including the interest rate, reflect the true prospects and risks assumed on both sides.

Although the CLT is not a direct party to the loan agreement, it typically retains a privilege to step in, in case of mortgage default, to forestall the foreclosure process for a few months in order to work with the borrower to avoid foreclosure, to take over the borrower's interests, or to remove the resale restrictions in case of foreclosure or the taking of the deed in lieu. As a result, local banks, who become engaged in repeat play vis-à-vis the CLT, are more

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30. Davis, 2006, *supra* note 22, at 19-20.

31. See sources in *supra* note 19.

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willing to originate mortgages at lower interest rates.<sup>32</sup>

### 3. *Prevention of Insolvency*

CLTs play a preventive or backstopping role in mortgage defaults not only during the pre-leasehold negotiation, but also throughout the tenure period. Since the leaseholders pay the CLT a monthly lease fee, and homeowners typically default on a mortgage only after failing to make other types of payments, noncompliance with the lease fee payment may serve as an alarm device warning the CLT that the homeowner is nearing default on her mortgage loan.

Whereas at this stage the CLT is formally entitled to terminate the lease and evict the lessee from the land, it may work either to adjust the leasehold scheme vis-à-vis the borrower or, if this is impracticable, to purchase the home from the borrower. In the latter case, the CLT would bring the account current vis-à-vis the lender, and place a lien on the property for the amount of that payment, which is then recouped at resale.<sup>33</sup>

### 4. *Lowering Costs of Insolvency*

Finally, in the case of insolvency triggering action by the lender, the CLT may take a number of steps to prevent court foreclosure, including exercising its prerogative to take over the homeowner's interests (which is a right of first refusal over the home). Even in cases of formal foreclosure, the CLT still owns the underlying land and thus has a strong bargaining power vis-à-vis the lender or any future buyer of the home.<sup>34</sup> Given that the model CLT ground lease allows the CLT to charge market-rate rent if the eventual homeowner is not a low-income household, in a few real cases of foreclosures, the new homeowners voluntarily agreed to re-impose the CLT resale restrictions in exchange for being charged below-market lease fees.<sup>35</sup>

Put differently, the CLT structure alleviates the “anticommons” fear that may be embedded in splitting ownership between the land and the house.<sup>36</sup> The CLT has leverage to repurchase the specific home in case of foreclosure, or to

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32. *See id.*

33. *See id.*

34. One may wonder about the incentives of lenders to lend when considering this power. Two factors may be important. First, CLTs are repeat players so they have incentives not to behave opportunistically in any particular deal. Second, U.S. lenders, especially local ones, may be under regulatory pressure to lend to low-income mortgage applicants. At the same time, the low foreclosure rates in CLTs may encourage lenders to keep engaging in lending as compared to the perils of conventional markets.

35. This was the case, for example, in a number of instances involving the Burlington Community Land Trust in Burlington, Vermont. We thank John Davis for this information.

36. For the concept of “anticommons,” see Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 628 (1998).

otherwise prevent a “checkerboard” scenario, in which a number of foreclosures in a CLT area will create a divide among CLT and non-CLT homes, a significant issue also for the ongoing collective governance of the entire CLT development.<sup>37</sup>

### *B. CLT Lessons for the For-Profit Market*

The organizational structure and achievements of CLTs are informative for rethinking the needs of homebuyers and the solutions applicable in the home buying market. CLT-derived general design principles might therefore be instrumental in expanding the range of options in the for-profit housing and finance market. We focus on four main themes that arise in this context: (1) extending the possibilities for the gradual building of equity among consumers in the housing industry, (2) internalizing the risks and benefits of real estate development and finance within the local community, (3) expanding the variety of contractual structures in the for-profit real estate market, including in the extension of credit, and (4) addressing the potential problems resulting from new property format creation, especially of long-term divided ownership in the asset.

#### *1. Equity Building*

The *ex ante* partitioning of rights in a CLT between the housing unit and the land parcel enables consumers to better build equity from zero. Unlike the dynamics of high-leveraged loans that were available through the subprime market, the CLT model allows low-income families with little or no equity to enjoy the benefits of tenure security and internalization of house improvements at a more favorable loan-to-value ratio. At a later stage, once the homeowner has paid back the loan and accrues more capital, she can choose whether to sell the CLT home and buy into conventional homeownership at a different location, or to channel the additional capital to another activity that she deems

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37. The problem of over-fragmentation of property rights is one of the major practical impediments to the development and redevelopment of land, at times necessitating the use of government coercion through the power of eminent domain. But the scope of this power remains a highly controversial issue. Thus, following the U.S. Supreme Court’s decision in *Kelo v. City of New London*, 545 U.S. 469 (2005), which validated the use of coerced land assembly through eminent domain for purposes of “economic development” as meeting the “public use” requirement of the Takings Clause, many states passed legislative reforms limiting to various extents the use of this power. See Edward J. Lopez, *Pass a Law, Any Law, Fast! State Legislative Responses to the Kelo Backlash*, 5(1) REV. L. ECON. 101 (2009). But under the latter approach, the problem of “anticommons” would remain intact. For proposals to create new mechanisms to curb eminent domain abuse while at the same time preventing an “anticommons” deadlock, compare Michael Heller & Roderick Hills, *Land Assembly Districts*, 121 HARV. L. REV. 1465 (2008) (calling to subject the group of landowners to a majority rule in deciding whether to accept a buy-out offer) with Amnon Lehavi & Amir N. Licht, *Eminent Domain, Inc.*, 107 COLUM. L. REV. 1704 (2007) (suggesting an alternative compensation mechanism, by which landowners would be allocated shares in a Special Purpose Development Corporation that would consolidate ownership in the project’s designated land).

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to be more valuable than the residual value of regular homeownership. Resorting to a useful terminology in the literature, homeowners in CLTs can choose the extent to which they would like to separate the “homeownership as consumption” component from the “homeownership as investment” one (i.e., the gamble on the property future value), which in conventional homeownership are inherently intertwined.<sup>38</sup>

Although under the typical resale formula the CLT homeowner has some exposure to the upside potential of market value rise (i.e., the percentage of the property appreciation that she keeps to herself), as well as to the downside (to the extent that declining property values attach to the housing unit or the leasehold rights), the up-front costs of buying into the investment component and the consequent exposure to exogenous risks are more moderate in CLTs than in regular homeownership, as was explained in Part IIA(1). This allows the CLT homeowner to build and invest equity more gradually, while at the same time retaining the flexibility to re-bind consumption and investment should she decide to sell the CLT unit and transition to conventional homeownership.

We argue that the mechanism of gradual equity building along a certain time horizon can be conceptually extended in the context of the for-profit market to the *same physical asset*. Consider, for example, an innovative development model that would allow a homeowner at first stage to purchase the home only and to take a loan against it. Then after repaying this portion of the loan, she would be entitled to purchase the residual portion of the asset (the land, future development rights, and any other attributes that attach to full-scale ownership) and to take a new loan against it.

Such an option would, however, have to consider an entire array of issues pertaining to the interim period (i.e., who holds the land rights during this timeframe), as well as the possibility of continuous asset fragmentation and potential deadlock if the second stage of purchase does not materialize. In Part IV, we suggest a tentative institutional solution, focusing mainly on the role that local governments could play to provide a viable organizational and financial framework. This development model could also support private contracting in home financing, as explained in Part V.

### *2. Internalizing Risks and Prospects within the Local Community*

Two prominent lessons of the subprime crisis have been the moral hazard and bargaining problems embedded in mortgage-backed securities. The moral

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38. See Lee Anne Fennell, *Homeownership 2.0*, 102 NW U. L. REV. 1047, 1054-63, 1070-88 (2008) [hereinafter Fennell, *Homeownership*] (suggesting a scheme by which landowners would transact with commercial investors. These investors would ensure homeowners against “offsite” risks such as general market trends resulting in decline in their home values, and may also possibly retain a share in any “offsite” asset value appreciation).

hazard problem generally refers to the possibility that the behavior of a person would change after the purchase of insurance so that the probability of loss or the size of the loss increases because of the insured's indifference to the loss.<sup>39</sup> In the context of the subprime crisis, this problem was caused because the risk was shifted away from the original parties to the loan and on to national and international investors who had poor information about the risks and prospects for each loan. Bargaining difficulties emerged because securitization made it harder to renegotiate in case of market decline and default.<sup>40</sup> In particular, it made it impossible to internalize the effects of foreclosure decisions on neighboring properties and the community.<sup>41</sup>

Conversely, CLTs are committed to internalizing both risks and prospects within the relevant local area—which can be flexibly designed to include a single neighborhood, multiple neighborhoods, a city, or an entire metropolitan area. This means that the CLT tripartite board structure represents a broad range of interests within the community beyond CLT residents and immediate neighbors, but is nevertheless integrated with the local basis of CLTs. Accordingly, CLT managerial decisions, e.g., about which projects to develop, terms of leasehold contracts, resale formulas, and which modes of action to pursue in case of insolvency or foreclosure, are bound to consider the broader-based effects of such instances on the “community.”

Admittedly, given their governance structure, CLTs may suffer potential biases of their own in decision-making. Domination by local interests and partly by debtors may motivate CLTs to defer foreclosures in hard times and be slow to accept changes in market conditions up to the point of exhausting their endowment. In this sense, although CLTs show very low incidence of default and foreclosure,<sup>42</sup> their numbers are somewhat hard to interpret given the novelty, the presence of capital (land) and labor (volunteering) donations, as well as possible favorable regulatory treatment by municipalities.

With these caveats in mind, the potential benefits of the CLT structure might be reflected in adaptation of the role of local governments in housing

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39. See ROBERT COOTER & THOMAS ULEN, *LAW & ECONOMICS* 53 (5th ed. 2008).

40. See David A. Dana, *The Foreclosure Crisis and the Anti-Fragmentation Principle in Property Law*, 77 U. CHI. L. REV. 97 (2010).

41. This is not to say that we rule out the potential benefits of bundling rights to different debt, as is done in other context of securitization. This is done, for example, in Special Purpose Vehicles (SPVs) that pool together yielding financial assets such as mortgage-backed loans, credit card accounts, or auto loans in a separate legal entity. For these financial structures, see Steven L. Schwarcz, *The Alchemy of Asset Securitization*, 1 STAN. J.L. BUS. & FIN. 133, 134-44 (1994) (describing how securitization works and how companies benefit from it). We also recognize the general sense behind geographical risk diversification by a provider a mortgage-backed loans. However, as was explained in the text accompanying *supra* note 17, outright alienation from the local basis of mortgages may easily result in suboptimal risk management. This is so especially because a significant number of foreclosures within a certain geographical area results in substantial adverse externalities to local governments and neighboring residents—a cost that tends to be disregarded by remote lenders

42. See text accompanying *supra* note 27.



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finance. Like CLTs, local governments have an incentive to consider the broader-based effects of inefficient risk deflection and consequent high foreclosure rates on the local real estate market and, moreover, on the local economy.<sup>43</sup> Local governments may thus be more prone to intervene to prevent distress, e.g., by subsidizing credit *ex ante* or stepping in, in case of mortgage delinquency, to prevent the snowball effect of foreclosures. In parallel, local governments are generally motivated to internalize a portion of the upside effects resulting from the collective action, such as by increased tax revenues in case of market value rise.<sup>44</sup> To the extent that a CLT-inspired institutional structure could be devised, it would systematically motivate localities to better internalize both negative and positive effects. As a result the current scope of local government activity in the provision of housing supply and finance could be made more effective. Part IV of the Article presents the institutional role that local governments could play in what we term For-Profit Shared Equity (FPSE) real estate developments.

As for potential lessons from CLTs for private developers, we do recognize that the governance of CLTs may involve substantial costs and be unsuited to the market. For example, CLTs are arguably administratively lean, enjoy subsidies, and focus on the purpose of providing affordable housing. But potential adaptations of CLT features to the for-profit market and the increasing involvement of government agencies may make CLT-like institutions more costly to operate. We address some of these concerns in Parts IV and V, when we analyze the potential expansion of for-profit shared-equity institutional structures to public agencies or to private entrepreneurs through new contractual models for housing finance.

### *3. The Scope for Greater Variety of Contractual Structures*

The current for-profit mortgage market has been built around a standard model of unified homeownership in which owners-borrowers purchase both the land and the building – an inseparable bundle of consumption and investment services – thus bearing the whole economic risk of the purchase. CLTs show that there might be utility in developing new formulas that allow homebuyers to separate these components of homeownership, thereby tailoring their purchase decisions more closely to their means and their financial profile.

Furthermore, assuming a public policy of favoring affordable homeownership, CLTs are starting to demonstrate in the context of non-profit

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43. See Fennell & Roin, *supra* note 18, at 147-50 (portraying the high stakes that local governments have, in effect, in foreclosure rates within their territories).

44. For the centrality of ad valorem (value-based) property taxation in the economy of local governments, and the effect this has on their policy-making, as well as on the fundamental concepts of homeownership, see Amnon Lehari, *The Taking/Taxing Taxonomy*, 88 TEX. L. REV. 1235, 1266-1275 (2010).

housing that an innovative institutional structure may aid not only needy families, but can also alleviate the risk of mortgage insolvency and address actual foreclosures effectively. This may consequently make CLTs attractive to for-profit lenders, especially local banks that are better acquainted with a specific development.<sup>45</sup> Thus, a richer array of alternatives expanded to the for-profit sector might promote the interests of lenders, borrowers, government, neighbors, and other affected stakeholders, including holders of mortgage-backed securities.

#### 4. *Difficulties of Divided Ownership*

A potential deterrent of formulas resembling the CLT model is that market participants may be reluctant to divide ownership. Division can be effectuated by different means, such as allocating among different persons the ownership of land and building, or granting purchase options to lenders, as suggested in Part V below. This reluctance is exemplified by Robert Ellickson's argument that any legal design, based inherently on a long-term lease rather than on full-scale homeownership, would result in higher ongoing transaction costs between the landowner and the tenant.<sup>46</sup>

More broadly, the reluctance toward the division of ownership seems to be based on the fundamental concerns rooted in the *numerus clausus* doctrine: multiplicity of property rights may discourage trade, especially when these are designed in a very specific fashion. In our case, the exceptionality of divided ownership could hinder subsequent trade in land or mortgages, therefore deterring the introduction of such formulas. Because of the prominence of these arguments against any suggestion for institutional innovation that breaks ranks from current property forms, we find it important to address these concerns in some detail. We do so by pointing to the success of some previous forms of unconventional property formats in the real estate market, while emphasizing the need to affect such changes through legislation or another type of systematic regulation.

Let us first examine the logic of the *numerus clausus* doctrine and then review some other innovations in divided ownership, to illustrate that there is room for introducing innovative arrangements in this area without hindering trade.

The *numerus clausus* principle is explicit in civil law systems but is also highly indicative, even if more implicitly so, of the Anglo-American legal tradition. According to this principle, only certain forms of property rights are

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45. Some mortgagees hold these loans in their portfolio, while others sell these loans on the secondary market or to state/local housing authorities. We thank Michael Brown for this information.

46. ROBERT C. ELLICKSON, *THE HOUSEHOLD: INFORMAL ORDER AROUND THE HEARTH* 88-90 (2009).

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recognized as such by the legal system. This limited recognition prevents private parties from exercising their otherwise nearly unbound transactional freedom to shape their legal relationships.<sup>47</sup> Current theory seeks to ground such design limits in “optimal standardization,” that is, balancing economic and social demand for different types of property interests against the need to economize on information costs imposed on third parties that have to accommodate to such diversity, in view of the *in rem* nature of property rights.<sup>48</sup>

This does not necessarily mean that recognized types of property rights included in the “closed list,” such as ownership, should essentially adhere to a single blueprint, i.e., an indivisible fee simple interest in both the land and the home.<sup>49</sup> At the same time, for new models that “rearrange” ownership to become formally institutionalized, the new format needs not only to become *de facto* familiar to various stakeholders, but should also be supported by enabling legislation and regulation. This support and familiarity would allow actors such as lenders to fully understand the nature of the property configuration and the type of collaterals, and consequently to be willing to extend credit. We argue that such systematic changes may, and do, take place when the introduction of innovative design models is shown to effectively address new or adapted patterns of market demands, as the following examples illustrate. In this sense, although the *numerus clausus* principle imposes a structural constraint, it should not be understood as blocking dynamism and innovativeness.<sup>50</sup>

An early example of a non-conventional housing form, which started in the US in the late nineteenth century and has been applied in both the non-profit and for-profit sectors, is cooperative housing (co-op). The owner of the building is the cooperative corporation, and each shareholder of the co-op corporation is entitled to a proprietary lease in a unit within the building

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47. See UGO MATTEL, *BASIC PRINCIPLES OF PROPERTY LAW: A COMPARATIVE LEGAL AND ECONOMIC INTRODUCTION* 39 (2000).

48. See Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 *YALE L. J.* 1, 24-42 (2000). But this approach has had its critics. Henry Hansmann and Reinier Kraakman argue that third party considerations might require contracting parties to effectively publicize nonstandard arrangements, alongside the employment of other verification rules, but that these considerations do not justify an overall ban by the legal system on creating new and efficient proprietary forms. Henry Hansmann & Reinier Kraakman, *Property, Contract, and Verification: The Numerus Clausus Problem and the Divisibility of Rights*, 31 *J. LEGAL STUD.* 373, 395-409 (2002).

49. For actual and normative differences that exist in the design of “recognized” property rights in various social contexts or for different types of resources, see, respectively, Hanoch Dagan, *The Craft of Property*, 91 *CAL. L. REV.* 1517, 1558-70 (2003) (discussing “institutions of property” ranging from those regulating arm-length market transactions to marital property); Amnon Lehari, *The Property Puzzle*, 96 *GEO. L. J.* 1987, 1997-2000 (2008) (noting that different values implicate the ordering of rights to various resources).

50. Nestor M. Davidson, *Standardization and Pluralism in Property Law*, 61 *VAND. L. REV.* 1597, 1600-02 (2008) (portraying *numerus clausus* as “the common framework through which legal systems define and mediate property interests,” thus enabling dynamism and change in the closed list’s content over time).

(typically for 99 years). Since the purchaser of a co-op unit actually purchases shares in the corporation, when she borrows money for this purchase, the mortgage is secured by a pledge on the shares. In addition, most co-op corporations also borrow money secured by a mortgage on the real property (“blanket mortgage”), so that the owner of a co-op unit makes two types of periodic payments: one on her own mortgage, and another for her pro rata share in the blanket mortgage. Co-ops are still prevalent in the affordable housing sector, but at the same time are persistent also in New York City’s luxury market because of their stronger control over tenant selection.<sup>51</sup>

This co-op arrangement was made popular by private initiative alone.<sup>52</sup> In contrast, condominiums became an established property phenomenon only after the different states had passed enabling statutes during the 1960s, and the FHA had started to provide mortgage insurance for this type of tenure in 1961.<sup>53</sup> The demand for enabling statutes resulted from the need to incorporate into property law the then-innovative condominium legal structure. Statutes enabled the condominium owner to own her unit in fee simple absolute but share a pro rata undivided interest in the common elements (inner streets, parks, joint facilities) as a tenant in common with the other condominium owners. Within about a decade after these Acts, condominium developments started to emerge as the most prevalent form of multi-family buildings across the US. The success of condominiums thus serves as a vivid illustration to our claim that innovating housing forms should not be blocked outright simply because of the *numerus clausus* principle.<sup>54</sup>

A third type of common interest community, the Residential Community Association (RCA)—a planned-unit development that is governed by a homeowners’ association—has also become a roaring success throughout the US. The growth of this type of development was helped by state-enabling legislation and general judicial support for the RCA’s governance mechanisms. The core of the community property governance lies in the conditions, covenants, and restrictions (CC&Rs) included in the RCA’s governing documents. These reciprocal obligations, recognized as equitable servitudes, control and regulate commonly-owned assets and amenities as well as the use

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51. See Michael H. Schill, Ioan Voicu, and Jonathan Miller, *The Condominium versus Cooperative Puzzle: An Empirical Analysis of Housing in New York City*, 36 J. LEGAL STUD. 275, 282-86 (2007). We do not discuss here the social desirability of such screening mechanisms, and whether these attributes should be imported in any way to the new FPSE model suggested in Part IV of the Article.

52. *Id.*

53. *Id.* at 277-78.

54. See Henry Hansmann, *Condominium and Cooperative Housing: Transactional Efficiency, Tax Subsidies, and Tenure Choice*, 20 J. LEGAL STUD. 25, 26-30 (1991). We do not refer here to the potential comparative advantages of condominiums over cooperative housing, and vice versa—an issue which has been addressed to some extent in the literature. See Hansmann, *supra*; Schill et al., *supra* note 51. Our intention here is only to show that innovative housing forms are not being blocked outright simply because of the *numerus clausus* principle.

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of privately-owned housing units. Beyond enforcing CC&R pre-fixed provisions, the association is empowered to make managerial decisions, lay down rules, and even amend at times the governing documents without the need for unanimous homeowners' consent.<sup>55</sup>

The lessons deriving from these types of innovative institutional design of housing development and finance are:

- That models that deviate from the “classic” fee simple homeownership have merit not only in the affordable housing sector, but also in the for-profit market, in which consumers have a genuine choice among property forms and may moreover attach a market premium to certain types of developments that involve some level of shared ownership and governance.
- Any type of “bottom-up” innovativeness must not only take firm root among consumers, lenders, and governmental agencies, but also usually gain top-down authorization and support to overcome economic and legal hurdles. This is true as a matter of both economic reality (i.e., the potential of a new institutional product to penetrate the market) and legal design. This has been vividly demonstrated in the essentiality of enabling legislation for both condominiums and RCAs.

In principle, private entrepreneurs or local governments looking to design innovative property regimes that divide homeownership property rights along a certain time horizon could resort to types of defeasible estates or future interests in the Anglo-American legal system or to existing types of legal trusts for the interim periods during such multi-phase housing projects. However, it seems that for such new housing patterns to become widespread and clearly identifiable to developers, consumers, financiers, and other third parties, new legislation would have to be tailored to the specific traits of such projects. Government support would not only address property aspects but also special tax considerations that may be involved in a multi-stage model of real estate purchase.

This need may be even more acute in civil law systems, which are traditionally detached from the fragmentary estate system and have aimed at designing ownership as a “unified box.”<sup>56</sup> In legal reality, property rights in land in civil law countries are less “pure” than conventionally depicted. Spain, for example, legally enables separating the ownership of land from that of buildings erected on it (“*derecho de superficie*”), as is also the case with the

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55. See LEE ANNE FENNELL, *THE UNBOUNDED HOME: PROPERTY VALUES BEYOND PROPERTY LINES* 67-95 (2009); Lehari, *Mixing*, *supra* note 20, at 160-66.

56. See John Henry Merriman, *Ownership and Estate*, 48 TUL. L. REV. 916, 927 (1974) (explaining that under the Romanic theory of property, the “box of ownership” contains rights, “including that of use and occupancy, that to the fruits or income, and the power of alienation”).

*Erbbaurecht* in Germany.<sup>57</sup> And yet some initiatives to use this separation in affordable housing have been viewed unfavorably by potential buyers as producing “imperfect” or “crippled” rights.<sup>58</sup> Thus, since CLT-like schemes do not fit comfortably within the property forms that are widely known and understood by developers, consumers, and third parties, an enabling top-down reform would probably be essential to make the form viable. This would facilitate a genuine competition among property forms, a competition which does not sacrifice clarity and stability for the sake of allowing consumers and real estate developers a wider range of choices.

### III. TAX INCREMENT FINANCING DEVELOPMENT

We now move on to examine a different kind of development or redevelopment scheme, which might be used as a complement to CLT-like initiatives: the Tax Increment Financing (TIF) district. Although municipalities have always used policy tools aimed at fostering local economic development,<sup>59</sup> TIF schemes have dominated since their origination in California in 1952.<sup>60</sup>

A TIF scheme enables a redevelopment corporation, which is a subsidiary of the local government, to incur expenses, including up-front costs of assembling land and setting up public infrastructure. In order to finance these significant costs, the redevelopment agency raises capital from the general public by issuing revenue bonds in securities markets. These revenue bonds are paid back over time by earmarking future incremental increases in property taxes within the designated area. This means that throughout the period, until the bonds are paid in full (typically around twenty years from issuance), the redevelopment agency does not have to share the incremental revenues resulting from increased property values with all other taxing agencies that regularly receive a share of the property taxes (such as counties, school districts, and special service districts).<sup>61</sup> Thus, because the property tax is calculated at a certain percentage of the property’s market value, and since the redevelopment allegedly fosters an overall increase in real estate prices, the

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57. See Uría Menéndez, *Issues in Ownership of Real Estate—Spain* (Lex Mundi Publication, 2008), available at <http://lexmundi.com/images/lexmundi/PracticeGroups/RealEstate/Survey2/Spain.pdf> (visited, July 16, 2010). For the Roman law origins of the legal institution of hereditary building rights on another person’s land, see HEINRICH VOGT, *DAS ERBBAURECHT DES KLASSISCHEN ROMISCHEN RECHTS* (1950).

58. For the lengthy process of learning to accept the CLT model, with its “unusual characteristics of ownership,” as a legitimate option in the American real estate industry, see Davis, 2010, at 26-39.

59. See, generally, DOUGLAS C. NORTH, *GROWTH AND WELFARE IN THE AMERICAN PAST* (1966).

60. See J. Drew Klacik & Samuel Nunn, *A Primer on Tax Increment Financing*, in *TAX INCREMENT FINANCING AND ECONOMIC DEVELOPMENT: USES, STRUCTURES, AND IMPACTS* 15, 17 (Craig L. Johnson & Joyce Y. Man eds., 2001).

61. See Rachel Weber, *Tax Increment Financing in Theory and Practice*, in *FINANCING ECONOMIC DEVELOPMENT IN THE 21ST CENTURY* 53, 55 (Sammis B. White et al. eds., 2003).

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initial investment is covered over time by increased property tax revenues.

The redevelopment agency typically enters into agreements with different developers for the sale of land and its development in accordance with the redevelopment scheme. In states such as California, redevelopment agencies are entitled at times to participate directly with the developer in the profits of the project, beyond the receipt of taxes.<sup>62</sup> This may be so when the parties disagree on the value of the land because of differing estimates about the project's future economic value so that part of the payment is deferred to actual performance. The agency's participation in the project's cash flow allows it to recover expenditures, such as for parking and highway interchanges, which could not have been recouped as part of the price of the land.<sup>63</sup>

TIFs have also been a source of controversy. Critics argue that TIFs often do not generate net municipality-wide gains that could not have been otherwise attained.<sup>64</sup> They further argue that TIFs are used merely to shift existing economic activity to the TIF district, so that the alleged gains are offset by negative impacts on non-TIF parts of the municipality.<sup>65</sup> Other research does point to genuine appreciations within TIFs.<sup>66</sup>

Regardless of disputes over the cost-effectiveness of local government action in certain TIF districts, the TIF scheme relies on institutional traits that place local governments in a unique position to provide real estate markets with the benefits of collective action. Further, the scheme can be better attuned to local characteristics, the interconnectivity among different projects, and the

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62. See DAVID F. BEATTY ET AL., REDEVELOPMENT IN CALIFORNIA 199–218 (3d ed. 2004)

63. For the legal validity of TIFs, see, for example, *In re Request for Advisory Opinion on Constitutionality of 1986 PA 281*, 422 N.W.2d 186, 191–96 (Mich. 1988) (rejecting the argument that TIF is a constitutionally impermissible diversion of school districts' tax funds under Michigan law). Some states do, however, limit the ability of redevelopment agencies to receive all tax increments generated from the project's area. See, e.g., BEATTY ET AL., *supra* note 62, at 212–18 (describing such mitigating constitutional and statutory provisions in California).

64. In many states, including California, the legal authority to set up a TIF district hinges on the "but for" criterion, meaning that the local government is required to demonstrate, when it formally establishes a TIF district, that private investment in the designated TIF area would not occur "but for" the stimulus provided by public investment. See Jan K. Brueckner, *Tax Increment Financing: A Theoretical Inquiry*, 81 J. PUB. ECON. 321 (2001). Naturally, since this "but for" determination is regularly made at the initial point of designating the TIF district, a retrospective analysis may yield different conclusions. This potential gap is thus one source of the criticism of the TIF structure, discussed in the text accompanying *infra* note 65.

65. See Michael Dardia, *Subsidizing Redevelopment in California* 29 (1998), available at <http://www.ppic.org/main/publication.asp?i=70> (visited, July 16, 2010) (noting that where an increase in tax revenue is due to general trends in the real estate market, TIFs act as involuntary subsidies from counties and school districts to cities); Richard F. Dye & David F. Merriman, *The Effects of Tax Increment Financing on Economic Development*, 47 J. URB. ECON. 306, 307 (2000) (arguing that competitive government bidding could be a zero-sum game with gains to some, offset by losses to others); Weber, *supra* note 61, at 63 (noting studies showing evidence that a positive effect on growth in property value in TIF districts is offset by a negative impact in non-TIF districts of the same city).

66. See Brent C. Smith, *If You Promise to Build it, Will They Come? The Interaction between Local Economic Development Policy and the Real Estate Market: Evidence from Tax Increment Finance Districts*, 37 REAL ESTATE ECONOMICS 209 (2009).

public/private interplay within a defined geographical area. We do not claim, of course, that local governments are inherently superior to either private entrepreneurs or to state or federal agencies in crafting any type of development and finance scheme. In particular, local governments have encountered financial hardships in the aftermath of the recent economic crisis.<sup>67</sup> Thus, our basic assumption is that private developers are generally more efficient producers of for-profit housing units for conventional homeownership or the renting market. But at the same time, we do suggest that local governments, low-level collective action, and property tax mechanisms can be employed more broadly to provide new design options.

#### *A. Low-Level Collective Action and Securitization*

The work of municipal-level entities in assembling land, providing public infrastructure, and accessing up-start credit by issuing earmarked municipal bonds can be adjusted to different types of development models. Nevertheless, attention should be paid to the potential abuse of such powers, e.g., in the coercive use of eminent domain for the hidden purpose of rent-capturing at the expense of landowners.<sup>68</sup> This fear should not entirely block the potential for innovativeness. But it may justify constraining and monitoring new schemes involving local governments as entrepreneurs, direct or indirect financiers, or developers, so as to prevent such abuse.

Special focus should be given here to the ability of local governments to build equity through the use of specific-revenue municipal bonds.<sup>69</sup> In examining the pros and cons of securitization in the real estate market, municipal bonds do seem to be an attractive option for risk management, since their scope is not too small to result in financial breakdown following a small number of foreclosures, but not too dispersed to create a kind of subprime, inefficient risk-deflecting. Moreover, to the extent that the collective debt of the agency can be conceptually and legally separated to some extent from debts incurred for individual housing units, i.e., in the collateral for the loans, such collective bonds could actually be combined with the extension of additional credit to developers and consumers.

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67. See, e.g., Mary Williams Walsh, *Cities in Debt Turn to States, Adding Strain*, N.Y. TIMES, Oct. 4, 2010 (describing the growing hardships of municipalities to pay back debts and to meet other obligations such as pensionary ones, due to a variety of reasons, including a dramatic decline in tax revenues).

68. See sources in *supra* note 37. See also Daniel B. Kelly, *The "Public Use" Requirement in Eminent Domain Law: A Rationale Based on Secret Purchases and Private Influence*, 92 CORNELL L. REV. 1, 18–31 (2006) (arguing that the ability of secret buying agents to overcome holdout problems associated with assembling large tracts of land mitigates private parties' need for eminent domain).

69. For the way these municipal bonds work, in the land development context, see BEATTY ET AL., *supra* note 63, at 233-241.



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### *B. The Development Planning Function of Taxes*

The TIF mechanism points to the multi-faceted development potential of taxes. This potential takes multiple forms, as a passive incident in an existing private economic activity, and also as a full-fledged planning tool. The TIF mechanism allows local governments to create incentives for development and to diversify the sources of equity by seemingly reversing the order of events: obligating part of the future stream of public revenues up front as a market-reliable mechanism for raising private capital.<sup>70</sup>

However, as is the case with government collective action, such innovative use of tax mechanisms should tread the fine line between not sticking stubbornly to a conservative view of taxing as future contingent capital, and not rushing into *ex ante* adventurous gambles on this source of revenue at the expense of the taxpaying general public. This design principle is especially challenging in the context of *ad valorem* property taxation,<sup>71</sup> since it relies on what is allegedly exogenous to both government and individual actors: the price equilibrium of the real estate market, influenced also by extra-local variables.

Accordingly, the use of tax innovation to create new types of development and finance models should always identify the optimal scale of economic stakeholding. Factors to be considered are: (1) whether chief risks and prospects should be managed at the local or sub-local (neighborhood) level, (2) the type and scope of the public collateral for the up-front equity raising, and (3) how future prospects and risks would be shared between the government and private developers or consumers upon actual implementation of the project.<sup>72</sup> With these considerations in mind, we borrow some of the institutional features of TIF districts for our design of a new tentative model for housing supply and finance, which we now present.

#### IV. A SUGGESTED PUBLIC MODEL: FOR-PROFIT, SHARED EQUITY (FPSE) DEVELOPMENT

As stated at the outset, the various institutional insights from both CLTs and TIFs suggest possibilities for creating two new types of financial and legal design models. Part IV describes a model for innovative public initiatives, and Part V will develop an application for the private sector.

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70. For the tax mechanism as a chief planning tool for local governments, see sources in *supra* notes 61-63.

71. For the principles and mechanisms of *ad valorem* property taxation in the US, see generally JOAN YOUNGMAN, *LEGAL ISSUES IN PROPERTY VALUATION AND TAXATION: CASES AND MATERIALS* (1994).

72. See Fennell & Roin, *supra* note 18 (discussing “understating” and “overstating” of the various actors in residential choices and outcomes, both within the boundaries of local governments and beyond them).

At this point, it is important to emphasize once again that, even if our suggested model involves a public initiative, this does not stem from any sort of general proposition by which the public sector is superior to the private market in developing and financing housing. In general, we are inclined to believe it is the other way around. Our model below is based, rather, on an “institutional engineering” perspective, which seeks to take advantage of existing mechanisms and institutions that are currently available to the public sector and to local governments in particular. Further, it explores the possibilities of adapting them to a different setup. Any similar economic and legal engineering devices developed through private institutions would be truly commendable. The model developed below should thus be seen as a general invitation for institutional innovativeness and not as praise for the public sector as such.

That said, what we entitle a For-Profit, Shared Equity (FPSE) scheme seeks to integrate some of the key features of CLTs and TIFs, and designates an important role to local government in facilitating this type of development. Under the FPSE, a development agency, which is a subsidiary of the local government, would acquire land and approve a detailed land use plan for development. These up-front costs would be covered by the issuance of bonds and secured by the revenue stream of property taxes in the manner detailed below.

The FPSE would involve two main phases. During the first stage (which starts at time 0), buyers would be entitled to purchase the building and a market-rate, long-term leasehold on the land. The buyer would be able to approach any commercial lender and take a mortgage loan that would be secured by the value of the building and the leasehold. At this stage, the development agency retains ownership of the land and entitlement to all future development rights.

If at any time during the first stage the homeowner fails to pay the mortgage or the leasehold rent, the development agency would have the right to step in, in a similar manner to CLTs, including a right to evacuate the homeowner or to purchase the house from the borrower and bring the loan current vis-à-vis the lender.

At the end of the first stage’s designated period,  $t$ , (which could typically be somewhere between five and ten years), if the homeowner is able to demonstrate to the development agency that she is meeting her contractual commitments to both the agency and the lender, she would be entitled to exercise an option to purchase the residual components: i.e., fee simple on the land, entitlement to future development rights, and all other rights that attach to fee simple ownership (the “residual ownership”).

We suggest that whereas the option would be legally granted at time 0, its price would be determined at time  $t$  and would be set at the difference between the asset’s full market price and the current value of the rights that are already

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held by the FPSE homeowner at this point.<sup>73</sup> In case of disagreement between the parties, the price of the option for the purchase of the residual ownership would be set by third party arbitration, the procedural terms of which would be determined in advance by statute. Whereas the option would be of some value at time 0, because it would grant the homebuyer the right of first refusal to purchase the residual ownership at time  $t$  for an *objective* market value (rather than for a price subjectively agreed to by the development agency), such an option's value at time 0, before any specific investments are made by the homebuyer (such as, for example, having friends and schooling children in the neighborhood), would be low, so that it does not impinge on the affordability of the original FPSE transaction. Setting the exercise price at the market level also makes the option as profitable in downturns as in upturns.

There are two possible outcomes depending on the ability and willingness of the homeowner to exercise the option:

- If the homeowner decides to exercise the option, she would be entitled to take a second loan with any commercial lender. At this stage, the collateral could be the entire fee simple right of the homeowner, subject to a priority of the first lender over the rights to the leasehold and the housing unit, if the first loan has not yet been paid in full. As with the first loan, the development agency would be entitled to intervene in cases of mortgage default.
- Conversely, if at the end of the first stage, the homeowner is solvent but nevertheless declines the option, the development agency would be granted a right of first refusal of its own to repurchase the home and the leasehold upon any instance of resale by the homeowner. In addition, the agency would elect whether to retain the residual ownership, or to sell its rights onwards to a third party, including the said right of first refusal on the home and the leasehold.

Consider Martha, who contemplates whether to buy a conventional home in the market, or an otherwise identical house in a FPSE project, both located in the city of Summerville. The price of a regular home is \$100,000. The price of the FPSE home is \$60,000, reflecting the fact that during stage 0, Martha doesn't have to buy the residual ownership components—including the land—which are valued in the market at \$40,000. Assuming, for simplicity, a 10% interest rate, no debt amortization, and a \$10,000 down-payment, the annual interest paid on the mortgage would decrease from \$9,000 to \$5,000 when

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73. We do not suggest to restrict the sale of the homeowner's rights before time  $t$  in the way it is done with the formula-based sale in CLTs. Thus, to the extent that these rights would increase in value when the homeowner sells between Time 0 and time  $t$ , the homeowner would enjoy this appreciation. The subsequent buyer would be subjected, however, to the rights and duties of the original buyer vis-à-vis the agency.

moving from a conventional transaction into a FPSE. The difference would provide for the rental fee and would provide a smoother path into homeownership, alleviating the risk of insolvency.

The decision regarding the second stage, which starts at time  $t$ , should also implicate the tax revenue scheme, which secures the bond that had been issued upfront by the development agency. One possible scheme could be that during the set first stage, the development agency would be entitled to receive *all* property taxes from the asset that are paid by the homeowners. If at the second stage the homeowner exercises her option to buy the residual ownership, the municipal development agency would be entitled to receive exclusively from then onwards only the *incremental* property tax for the duration of the bond, as with TIFs, but the pre-development tax baseline would be allocated among the different taxing jurisdictions (including counties, school districts, and special service districts). If the homeowner does not exercise the option, the development agency would be able to continue receiving *all* tax revenues from the asset up to the duration of the bond, unless it passes on the residual ownership to a private purchaser during the term of the bond.

Moreover, the entitlement of the development agency to receive all property taxes if the homeowner fails (willingly or unwillingly) to exercise the option, and the dependence of the agency on tax revenues to pay back the bonds, provide incentives for the local government to act promptly and effectively against homeowners/leaseholders who fail to pay either the monthly rent payment or the mortgage, and to avoid lengthy foreclosures proceedings and/or long-term vacancy or abandonment of the property, shifting the property to more efficient use as fast as possible.

Overall, the FPSE system would provide an *additional* option to current development and finance formats. In essence, it would grant prospective homeowners a better opportunity to gradually build equity and to make a reasoned decision about the investment of incremental capital to purchase the residual ownership at the end of the first stage. Accordingly, the potential deviation from a conventional ownership model need not result in excessive over-fragmentation of rights in the asset, once mitigating measures such as a right of first refusal are introduced.

Moreover, the fact that the development agency would select the type of housing covered by the FPSE system precludes the possibility that homeowners' individual decisions might defeat its goals. In other systems that also attempt to increase affordability and reduce homeowners' risk, homeowners may hypothetically react by purchasing bigger houses, ending up with more or less the same level of risk of insolvency. This risk would be substantially, even if not entirely, countered under the FPSE through the discretion of the development agency in selecting the size of houses included in the designated development project.

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In so doing, the FPSE model would be better able to systematically attain two different but related social policy goals: (1) increasing the affordability of housing in the for-profit sector by breaking up the property's purchase into two distinct stages (buying the home at time 0 and deciding only later whether to exercise the residual ownership option at time  $t$ ); and (2) lowering the level of insolvency risk as compared to conventional homeownership models in the for-profit sector.

From the local government's perspective, an FPSE-like model allows it to engage in an economically feasible plan to foster growth and guard against the ill-effects of badly regulated lending (with respect to, for example, the volume of lending being provided to subprime borrowers) and negative, community-wide externalities of concentrated mortgage foreclosures. Further, the model can improve the incentives for local government to act more efficiently in both its regulatory and fiscal capacities. Even if such schemes are not feasible for all kinds of local governments, the possibilities of designing new models that borrow some of these institutional insights from both the for-profit and non-profit sectors can reinvigorate the real estate market and expand consumers' genuine choices, especially in separating the consumption and investment components in housing decisions.<sup>74</sup>

### V. A SUGGESTED PRIVATE MODEL: BOOTSTRAPPING HOME BUYING WITH UPTURN OPTIONS

The core feature of CLTs—providing affordability without increasing the risk of default—could be usefully introduced into private home buying contracts. This could be achieved by lowering down-payments and granting options to lenders, in a manner that would decrease the chances of default and foreclosure in an economic downturn. Observe that CLTs develop their strategy by:

1. allocating to the CLT initial ownership of the land and most elements of home appreciation;
2. contracting several conditional options, which include, at least, an option for the CLT to intervene in case of default; and
3. managing a complex contractual arrangement by which the CLT selects and monitors purchasers, administers the prices of land and rentals, and performs sophisticated default-avoidance procedures.

At its core, the CLT strategy is grounded in sharing the increased value that homes reach during economic upturns in order to finance partial homeownership. It is unclear what the cost of CLTs' administration would be and, consequently, to what extent they need subsidies to operate. However,

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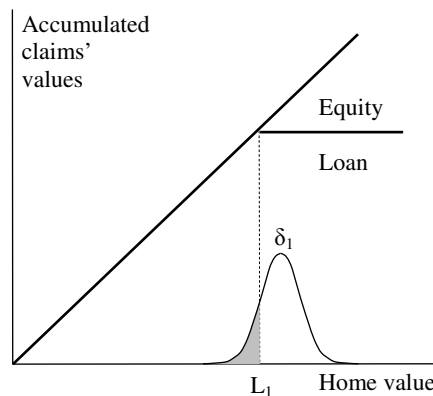
74. Fennell, *Homeownership*, *supra* note 38, at 1054-63, 1070-88.

whatever the level of these subsidies, a pure unsubsidized for-profit solution would likely have to be institutionally simpler to be self-sustainable in the market.

Private markets could achieve a similar “bootstrapping” effect by granting lenders (or other agents) an option to buy the home in economic upturns.<sup>75</sup> The value of this option would therefore finance better access conditions for home purchasers. It would lower down-payments or debt, possibly setting the level of debt below the minimum value that the home is expected to reach in a recession, thereby minimizing exogenous default.

To explain how the system might work, let us use the graphical tool often used in finance to represent options. Figure 1 depicts the conventional home purchase arrangement in which the purchaser borrows to buy the home. The horizontal axis represents the market value of the home, which is assumed to be a random variable with distribution  $\delta_1$ . There is a positive probability of default when home value is lower than  $L_1$ , the amount of debt, this probability being graphically represented by the gray area in Figure 1. The vertical axis also represents the same market value of the home, with the different functions representing the accumulated values (with the total being represented by a 45° line), and the areas between the functions representing the value achieved by each party (lender and borrower), which vary with home value.

Figure 1: Distribution of claims under conventional home buying with mortgage financing

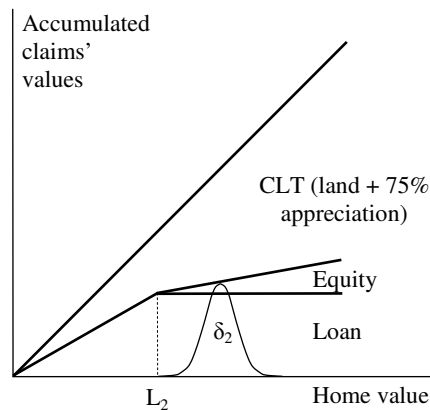


75. For the legal structure of options implicating property rights, and a useful guide to “call options” (options to buy) versus “put options” (options to sell) in this context, see IAN AYRES, *OPTIONAL LAW: THE STRUCTURE OF LEGAL ENTITLEMENTS* 1-38 (2005).

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In turn, Figure 2 represents a highly stylized version of the CLT model, in which (1) the CLT owns the land; (2) the buyer borrows  $L_2$  (lower than  $L_1$ , as CLT buyers do not buy the land) and (3) purchases the building, acquiring also a lease on the land. Buyers also get an option to sell their rights to a subsequent buyer receiving a certain fraction (typically 25 percent) of the appreciation in the home's market value.<sup>76</sup> Parameters in Figure 2 are set so that the probability of default is zero considering  $\delta_2$ , the probability distribution of the value obtained by the purchaser when entering the deal. This is only a minor exaggeration of the common prudent practices followed by CLTs. Obviously, the complex contractual structure defining a CLT can make the equity portion greater or smaller to compensate for the size of down-payments.<sup>77</sup>

Figure 2: Distribution of claims under a CLT arrangement

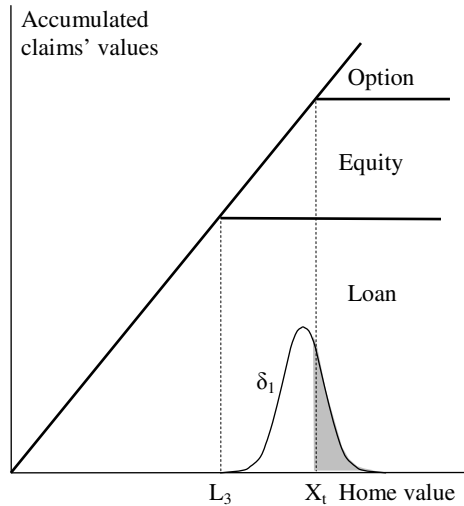


Lastly, Figure 3 represents a possible purely private arrangement in which the purchaser buys the home, financing it with a loan  $L_3$  plus the present value of a call option granted to the lender or a third party (not necessarily private), to be exercised at strike price  $X_t$  in a future moment  $t$ . The home value distribution in this case is the same as in Figure 1. The value of the option is driven by the substantial positive probability that the home value will be above  $X_t$  (the gray area to the right of the distribution). This positive probability should make the initial purchase considerably more affordable, by lowering either the down-payment or the loan.

76. Under the appraisal-based formula, appraisals are typically done for the building alone, not for the combined value of the land and the building. Some CLTs, however, appraise the value of both the land and the building, use a ratio to determine how much of the property's value is owned by the homeowner, and then apply the said percentage to the appreciation. *See Burlington Associates, supra* note 21.

77. We assume that the 25 percent appraisal-based resale formula does not have a further ceiling that is applied to extraordinary increases in value.

Figure 3: Distribution of claims under mortgage financing with buyer selling an option to purchase at strike price  $X$



This third system would therefore provide affordability and at the same time limit the investment component in home buying. Its main cost would result from the fact that, in order to make homes affordable, the call option would need to be valuable and, therefore, the strike price would need to be low enough, so that the option would often be exercised, triggering eviction or renegotiation of a similar agreement at time  $t$ .

However, the system would offer a substantial advantage to the conventional arrangement: renegotiations would take place in times of bonanza instead of ruin and with homeowners receiving a substantial amount of money (the difference between  $X_t$  and  $L_3$ ), which they could use to buy the same or a different home.

Nonetheless, as explained up to here, the system would provide little incentive for homebuyers to invest in their property. The option facilitates bargaining at time  $t$  but discourages any home-specific investment by buyers, including home maintenance; investments could easily be expropriated at moment  $t$  by the option holder. Therefore, a necessary but incomplete palliative is for the contract to add verifiable maintenance expenses to the option strike price so that the homeowner is reimbursed for undertaking these specific investments. This element would be somewhat reminiscent of the repurchase formulas in CLTs. In addition, to encourage a more balanced renegotiation at  $t$ , the buyer could retain an option to repurchase the home at a later time, let us say  $2t$  at strike price  $X_{2t}$ . In case the holder of the first option decides to exercise it at  $t$ , the previous buyer would be evicted, paid  $X_t - L_3$  and given an option to buy the house at time  $2t$  at price  $X_{2t}$ . Parties could obviously



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renegotiate such a repurchase as early as time  $t$ , thus avoiding eviction in the first place and allowing the homeowner to obtain fee simple rights in the land and structures on it.

This secondary option should not be of much value at time 0, as it is conditional on two consecutive upturns in the market in the two periods under consideration. Its introduction in the original contract would somewhat reduce but not eliminate the affordability provided by the system. However, it would be valuable at time  $t$ , in case the first option is being exercised, and generally before  $t$ , when the market goes up and exercise of the first option becomes likely. This should at least provide buyers with better incentives to invest in the home.

Our scheme is partly similar to the “shared-appreciation mortgage” developed in the US during the late 1970s and also sold in the UK in the 1990s, in which borrowers pay back both the loan and all or part of the interest with a share of the future increase that the value of the property may enjoy at the end of the loan period.<sup>78</sup> The two models differ substantially, however, in several respects, making our scheme generally more flexible.

First, our model allocates to the lender the whole of the appreciation above a certain threshold, if she exercises the call option at time  $t$ , enhancing both affordability and simplicity in the design and implementation of the transaction. As in shared-appreciation mortgages, the principal of the loan is an unconditional obligation, so that if the property’s value decreases, the borrower would still owe it. However, under our model the exercise price of the option can be set up low enough to make it very unlikely that the value of the home will be lower than that of the loan.

Second, our scheme does not require third-party appraisals. This is important, considering that the difficulties of appraisals has hampered other schemes, such as shared-appreciation mortgages.<sup>79</sup> The simpler structure of our model would facilitate valuation and make both mortgages and options attractive to the secondary markets. Shared-appreciation mortgages might also suffer from adverse selection and moral hazard problems which, to be cured, require even more complex structures, such as a gradually-increasing “shared-equity rate” in favor of the lender, as proposed by Caplin et al.<sup>80</sup>

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78. As hinted by Andrew Caplin et al., *Shared-Equity Mortgages, Housing Affordability, and Homeownership* (Fannie May Foundation, 2007), available at <http://ssrn.com/abstract=983100> (visited, July 16, 2010), at 1-2 [hereinafter Caplin et al., 2007]; Anthony B. Sanders & V. Carlos Slawson, Jr., *Shared Appreciation Mortgages: Lessons from the UK*, 14 J. HOUSING ECON. 178 (2005) (describing a version developed in the 1990s by banks in the UK).

79. Andrew Caplin et al., *Facilitating Shared Appreciation Mortgages to Prevent Housing Crashes and Affordability Crisis 9* (Discussion Paper 2008-12, The Brookings Institution, September 2008), accessible at [www.brookings.edu/~media/Files/rc/papers/2008/0923\\_mortgages\\_caplin/0923\\_mortgages\\_caplin.pdf](http://www.brookings.edu/~media/Files/rc/papers/2008/0923_mortgages_caplin/0923_mortgages_caplin.pdf) [hereinafter Caplin et al., 2008].

80. Caplin et al., 2007, *supra* note 78, at 10-14.

Finally, our suggested model may, at first glance, create unease in view of the possibility that the homebuyer would have to evacuate if the lender decides to exercise the call option and the homeowner does not exercise her own repurchase option. But the shared-appreciation mortgage may inadvertently cause much harsher results. Under such a scheme, at the end of the loan period, the borrower would have to pay back a substantial lump-sum amount reflecting the paper-gain appreciation at a time when she would typically have little liquidity. This would force the homeowner-borrower to either take a new conventional loan to cover the original one or sell the house to a third party to meet her obligation. This would typically result in the same threat of evacuation, but with the addition of excessive searching, negotiation, and transaction costs. Conversely, under our model, the two parties are already well acquainted, and can start renegotiating in advance of time  $t$ . Moreover, in our model, it is the lender—and not the borrower—who has to generate the financial resources to exercise the call option, if she so elects.

#### CONCLUSION

The US housing industry is in dire need of institutional innovativeness for alternative development and finance schemes. Specifically, it needs schemes that do not systematically result in the ill effects of irresponsible lending, inefficient risk shifting, and high foreclosure rates that have broader-based snowball effects for local economies.

This Article delineates the legal and economic contours of two new solutions, which could be applied for restructuring both public initiatives and private contracting. The solutions build on empirical observations from the non-profit sector, and identify more general institutional design principles. Some design principles we examine are the unbundling of property rights, gradual equity building, conditional subsidies, internalizing of risks and prospects within the local community, and employment of tax mechanisms to foster development. In so doing, the Article makes a major step toward developing innovative legal models of homeownership, ones that would be sustainable and enduring for both downturn and upturn eras in the American economy.

Our two proposals overcome some of the common defects in alternative systems. In particular, both are superior to the mere provision of information to home buyers. Information alone is insufficient when incentives are intrinsically unsound. In such cases, no amount of information would improve the outcome—a change of incentives is needed. Our proposals set out two possible routes toward such a change in both the public and private spheres.