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# Housing Policy in Developing Countries: Conjectures and Refutations

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*This article discusses housing policy in developing economies. It examines recent research findings in light of earlier arguments as to the benefits of more market-oriented approaches. It also looks at whether the recommendations of earlier work have been refuted or developed in subsequent analyses and policy measures. In particular, it reviews the empirical analysis of the effects of policy on housing supply, the richer understanding of the effects that land market regulations have on housing affordability and the functioning of urban areas, and the alleged mysterious effects that researchers claim effective property rights have on housing policy and on development more generally. It also examines the effects of the increased emphasis on community participation, showing how it helps to more fully reconcile the incentives faced by beneficiaries of housing policy and donors. Finally, it examines recent literature on the welfare effects of rent control. The article shows that some of the conjectures as to the likely benefits of more market-based policy have been refuted, but large welfare gains for poor people can still be realized by adapting this approach. Furthermore, this approach appears to be gaining ground as the consensus approach to effective housing policy.*

In a 1986 article Mayo and others summarized research on housing economics in developing countries. At that time empirical work on housing was a relatively new field, with the first cross-country econometric study by Burns and Grebler (1977) less than a decade old.<sup>1</sup> Since then, research has grown rapidly, and the policy framework that governs the approach to providing shelter has evolved considerably. This article is an attempt to give shape to the changing consensus on housing policy in light of the research findings and broader changes in perspectives on public policy. The first section captures the broad changes in the world over the past 20 years that have significantly affected public policy and traces the implications of these changes for housing policy. The second section provides a brief overview of the research consensus on developing country housing problems in the 1980s. The

third section reviews the implications of more recent research on housing economics for housing policy strategy. The final section highlights some evidence of the effects of the research on the emerging policy consensus.

## The Changed Housing Policy Environment in Developing Countries

Much has changed in the 19 years since the Mayo and others (1986) review of housing policy in developing areas. First, and perhaps most important, is the change in perspective on what constitutes effective forms of public governance. There are now twice as many democratic governments in the world, and they are overwhelmingly much more decentralized. Developing country policymakers now operate in a more open and generally stable, if sometimes volatile, policy environment.<sup>2</sup> Second, with the fall of the Soviet Union in 1989 and the adoption of market-oriented economic policy in China and India during the 1990s, the central planning approach to policy has largely been discarded. Most countries now rely on a public policy approach that augments and complements market processes rather than substitutes for them. These changes mean that arguments about the comparative advantages of the public and private sectors are considerably less likely to cloud discussion. Third, most developing economies now have more sophisticated and diversified economies and financial systems that often include emerging housing finance systems. This was not the case in the 1980s.<sup>3</sup>

But by no means have all the changes been benevolent. Financial crises have led to capital flight and massive simultaneous mortgage defaults, as in Mexico in the mid-1990s. In some cases overheated real estate markets seem to have precipitated these crises (see Quigley 2001 on the role property markets played in the Asian financial crisis). Moreover, the correlation between urbanization and rising per capita incomes in developed economies was found to be absent in some developing countries, particularly those in Sub-Saharan Africa. Instead, as Fay and Opal (2000) argue, urbanization without growth characterized many Sub-Saharan African countries in the 1990s, creating a new type of housing demand in a much more urbanized, if poorer, world.<sup>4</sup>

One of the most notable recent changes in housing policy in developing areas is the fundamental change in the spatial dimension of poverty. Though the majority of the world's poor people continue to live in rural areas, poverty is rapidly becoming an urban phenomenon. Today, unlike in the mid-1980s, most poor people in large developing countries such as Brazil, Mexico, and Russia already reside in urban areas. Moreover, although most poor people in India remain in the countryside, in many of the country's larger states the poverty rate is higher in urban areas than in rural areas for the first time (see India, Planning Commission 2002). By some

estimates, more than 50 percent of the world's poor people will be living in urban areas by 2035 (see Ravallion 2002).

In this environment it is not surprising that urban slums are not being absorbed into formal urban economies. Surveys in Brazil and India, for example, find that in many places slum dwellers are no longer participants in the temporary demographic transition process that was earlier thought to be the case. Many slum dwellers are not recent immigrants from rural areas in search of better livelihoods. Today, many of the 100,000 pavement dwellers in Mumbai, for instance, are second-generation residents (SPARC 2002; Baker and others 2004), as are many of the residents in Rio's Favelas (Perlman 1976, 2002).

Since the fall of the Soviet Union, the world has become a very different place, and the understanding of what constitutes effective public policy has been transformed. At the same time, there is a more robust understanding of how housing and land markets in both developed and developing economies work. As Renaud (1999) argues, there is now an active body of research on real estate economics in general and for developing countries in particular. How this new environment and evolving policy perspective affect strategies to improve the conditions of the millions who live in substandard housing is reviewed here.

## The Evolution of Housing Policy in Developing Countries: A Brief Overview

The overarching idea of housing policy in the 1970s was that public assistance could be used to build on the strengths of the sector rather than to replace the informal sector. Although this may seem a relatively straightforward notion now, it faced considerable resistance at the time. Most developing areas still produced expensive and heavily subsidized housing that could meet only a fraction of demand.<sup>5</sup> Moreover, demolishing squatter settlements was a widely practiced, if not explicit policy, in many countries.

As Turner (1976) argues, providing only basic services and shelter allowed poor families to expand their units over time as their savings and resources permitted and to use their own labor to maintain and increase their wealth. By the time Mayo and colleagues (1986) wrote, this perspective had been further developed after research on

- The regularity of housing demand across time and space.
- The importance of providing formal property titles.
- The important role of developing housing finance in expanding shelter opportunities for poor people.
- The effects of land market regulations on the efficacy of specific low-income housing projects.

- The distortive and often counterproductive effects of rent control on the functioning of housing markets and the housing opportunities of poor people.

The first research finding—that housing demand across the world was highly regular—provided perspective on how governments and international institutions could help effectively structure the components of housing projects. This work, in two studies by Malpezzi and Mayo (1987a, 1987b), examined cross-country evidence of housing demand and found a great deal of evidence of comparable trends in housing demand in both the medium term (within cities) and the long term (across cities). For instance, within cities, income elasticity for housing demand was less than one. But across cities, when average per capita incomes were accounted for, the average share of income spent on housing by all households increased as the average level of development increased. In other words, it was possible to make generalizations of the regularity of housing demand across countries based on per capita incomes and levels of development, in contrast to the alarmist views about housing demand in developing countries (see Bairoch 1988 for a review of this large set of literature).

In retrospect, this finding may now seem almost naive. But it was made less than 10 years after the first cross-country empirical study of housing investment. More important, when the study was completed public housing production and ownership were the main vehicles of housing assistance throughout many developing areas. In effect, most countries' housing policy at the time was the public sector attempting to replace or control the private sector rather than to complement it. For instance, in the late 1980s the 15 countries established from the former Soviet Union as well as Argentina, China, India, the Republic of Korea, Mexico, and many African countries had very active public housing programs. At the same time, many of them proscribed or actively discouraged private housing production.

The work on housing demand also provided a basis for understanding the standards and units that low-income families could afford. It sought to demonstrate how and why the high standards pursued in most countries not only left the public sector unable to meet housing demand but also drove so much housing supply into the informal and illegal sectors. It also showed the importance of focusing on such details as the kind of housing units that poor people could afford without subsidies. That is, the work emphasized why the units produced could be sustainably financed only if lower and more modest housing standards appropriate to beneficiaries' income levels were used.

The second research finding stressed the importance of providing security of tenure and title to those in the informal sector (see Doebele 1983; Jimenez 1984; Friedman and others 1988). It often involved empirically estimating how much value low-income beneficiaries placed on having title, foreshadowing the later work of de Soto (1989, 2000), which sparked a lively debate on the importance of property rights in transforming the economic opportunities of poor people.

The central policy implication of this work was the importance of clear property title—a view that was in many respects at odds with what might be described as the mainstream property rights literature in economics, such as Demsetz (1967), and the anthropological literature, such as Peattie and Aldrete-Hass (1981). Demsetz argued that property rights develop when there is sufficient demand for them, that is, when the benefits of internalizing the externalities exceed the costs of not doing so. Based on this perspective, the absence of property rights reflects the absence of demand for them—not a supply constraint. The anthropological perspective of Peattie and Aldrete-Hass suggested that the notion of property rights is not a discrete choice but a spectrum of choices that depend on idiosyncratic circumstances.

The concern with housing finance arose because it had become increasingly apparent by 1986 that not only were the details of the asset being financed important but also how effectively funds were being mobilized to support demand for them. In a sense, this shift recognized that in virtually all developing economies, not only was housing of unaffordable dimensions being produced by the public sector but also little finance was available to support the funding of housing investments (see Mehta and Mehta 1989 for a discussion of housing finance systems in India in the 1980s). Besides public production of housing, equity finance had to be used to finance almost all housing purchases. Renaud (1984) documents how the interest rates charged by specialized, usually public lenders were unsustainable and often hindered the entry of private financial institutions. These findings required an emphasis on unlocking lenders' ability to compete for the financial resources to on-lend.

In some ways the notion that competitive financial systems could generate more resources now appears to be an almost foregone conclusion. But it is once again useful to consider how much conditions have changed. In the 1980s, as Boleat (1985) notes, most European financial systems operated under extensive controls—credit controls, limits on the terms for loans, and often public ownership of the financial institutions involved—that were also segmented and subsidized. At the same time the United States was in the middle of a savings and loan crisis. Against this backdrop the view that developing economies should move to liberalize housing finance systems could in many ways be viewed as more market-oriented than the systems of market-oriented developed economies existing at that time.

Like interest in finance, interest in land market regulations arose with the realization of how important the physical layout of sites and service projects were to the success of low-income housing projects (see Bertaud and others 1988). This work showed that land use regulations, such as rights of way and requiring land for community facilities, could cumulatively increase costs markedly, making housing affordable only for higher income groups. Ultimately, this work suggested that projects that did not consider the broader dimensions of land policy were likely to become enclaves that could not be replicated.

Finally, although rent control is widely practiced in both developed and developing countries, empirical work on rent control by Tewari and Kumar (1987) and Struyk (1988), among others, provided empirical support for the somewhat polemical view of Lindbeck (1977) that “next to bombing, rent control seems in many cases to be the most efficient technique so far known for destroying cities” (p. 39). This work largely buttressed the arguments made 40 years earlier by Friedman and Stigler (1946), as well as the survey results by Kearn and others (1979), which found that rent control was the one policy issue on which there was the most consensus among economists; they overwhelmingly saw it as a highly ineffective and counter-productive policy option.

## Subsequent Research Findings

In recent years there has been a burgeoning body of literature on the economics of housing markets in developing countries. This section highlights seven areas of research that are significant to any discussion on housing policy.

### *Evidence on the Effects of Policy on Housing Supply*

In contrast to earlier empirical work on housing demand by Reid (1962), little was known about housing supply in the 1970s and 1980s. To address this, a data collection effort called the Housing Indicators Program was initiated in 1989 by the World Bank and the United Nations Human Settlements Programme to collect more empirically based, cross-country data on housing sector performance. Data on basic urban and housing indicators were collected for a sample of 53 cities in both developed and developing countries. The program provided the first empirical basis on which to analyze the cross-country effects of policies on housing market supply conditions and, like the earlier work on housing demand, resulted in a variety of published works, including Hegedüs and others (1997), Malpezzi and Mayo (1997), Angel (2000), and Murray (2001).

Their basic proposition was that the effects of policy on housing supply matter—in some cases a great deal (see Angel 2000). Policies that restrict the housing market or building industry decrease housing supply elasticity. When supply is inelastic, an increase in demand—driven by, say, rapid urbanization—results in a much larger increase in price and a much smaller increase in quantity supplied. These results imply that public sector controls to limit the private supply of housing can more than offset direct assistance to poor people, as argued by Das and Lobo (2001) for India.

Though the intuition behind the notion of public sector interventions creating an inelastic supply curve was straightforward, the empirical support for it was not—until the late 1980s when Mankiw and Weil (1989) argued that because of the

combination of low housing supply elasticity and a housing market that operated with less than perfect foresight that the demographic changes in the United States were likely to have extraordinary effects on house prices. Their argument generated a cottage industry concerned with estimation techniques, which, in turn, had the salutary effect of producing sufficient evidence of both supply inelasticity and of the degree to which policy contributed to inelasticity (see Woodward 1992; Green and Hendershott 1996).

The literature on the subject continues to grow and to improve in terms of its analytical rigor. For example, Cheshire and Sheppard (1989) cover the United Kingdom, Maclennan and others (1998) several European countries, and Glaeser and Gyourko (2003) the United States. Glaeser and Gyourko's work, for instance, was the first time that the data permitted fully specified hedonic models to estimate the effects of regulations on the value consumers place on the underlying land.

Similar, if less robust, quantitative results on the effect of policy on housing supply elasticity have also been obtained for developing areas. For instance, Malpezzi and Mayo (1997) use a simple regression model to compare housing supply elasticities in the Republic of Korea, Malaysia, and Thailand to show how various public interventions constrain supply elasticity, particularly in Malaysia's housing market. They find that interventions, such as the provision of publicly constructed housing and inappropriate building and land use standards, cause supply to be considerably less elastic. Admittedly, their empirical analysis is basic and almost certainly suffers from omitted variable bias of the sort posed by Baken and van de Linden (1993), meaning that it ignores political and cultural frameworks within which land markets function. Nevertheless, the finding is so stark that it is hard to deny the causality between regulation and housing prices.

But perhaps the most serious criticism of this work is that supply inelasticity is caused not only by regulations but also by the broader policy framework that governs land supply. As long as the public sector continues to own and control large amounts of the supply of serviced land, as is the case in many developing economies, one of the key inputs into housing production will be less responsive to increases in demand. Consequently, increased demand will be accompanied by rising prices. For example, Son and Kim (1998) examined whether urban land shortages exist in the Republic of Korea and found that 35 percent of the 171 cities studied experienced them. They then use city-specific characteristics to find the roots of the shortages, examining both natural and regulatory constraints as well as infrastructure, population, population growth, and regional dummy variables. Their conclusions on the important role of Greenbelt restrictions in house price determination are similar to those of Green and others (1994) and Hannah and others (1993), both of whom found similar results for the Republic of Korea. Thus the high housing prices are clearly a direct result of misdirected policy that not only makes supply of housing inelastic but also constrains the absolute level of housing available in the market.

Admittedly, the empirical work considered here covers only a very small part of the developing world, in particular middle-income countries of Southeast and East Asia. But the regulatory characteristics of the low-income countries are if anything more stringent than in the countries considered in the studies just mentioned. A larger failing in much of this work is that the authors do not consider the potential endogeneity of the regulatory framework, that is, whether regulations are a reflection or a cause of underlying scarcity. Only a deeper study of the political economy of these countries can answer this question. However, as the study comparing Malaysia and Thailand found, a harsh regulatory framework worsens already existing scarcity.

To sum up, recent research on the effects of housing policy on the supply of housing has provided empirical support for the view that having the public sector enable rather than control or displace the private sector is essential to improving the affordability of housing in general—and thus for low-income groups as well. This work suggests that if public assistance is to help more than the limited number of direct beneficiaries of programs, much more attention must be paid to the often idiosyncratic and city-specific policies that affect the type, location, and standards of housing. Payne (2004) provides a practical method for local communities to obtain a clearer understanding of just how constraining their specific policies are.

### *Emphasis on Community Participation*

The implications of finding strong regularities in housing demand focused more attention on affordable design standards and understanding beneficiaries' expected willingness to pay. But for the most part, these results did not lead policymakers to increase attention on involving beneficiaries in projects in any way other than as direct consumers. The result was that even the policy innovations of the 1970s—with the emphasis on producing low-cost sites and service projects—were in effect usually a lower cost public housing program instead of an exercise to capture beneficiaries' initiative. In many ways, as Baross (1990) finds, in the early shelter sites and service projects the aspirations for enabling and empowering poor people remained unfulfilled.

This orientation has changed. In recent years the importance of community involvement and using social capital to leverage resources has become increasingly evident, and governments have started shaping policy that integrates them as crucial parts of shelter projects. Efforts to stimulate community-driven development have grown rapidly as studies, such as Galasso and Ravallion (2000), have shown the positive effects of community groups and nongovernmental organizations on poverty alleviation. Consequently, many countries now adopt a community-based perspective—rather than the engineering, technocratic approach embodied in early shelter projects—that focuses on providing what might be termed the local public goods involved. Under this approach nongovernmental organizations and community-based



organizations help address questions about the provision of shared goods, such as water and sanitation, as well as help with shelter design and targeting (see Burra and others 2003 for a discussion and Mitlin and Satterthwaite 2004 for some case studies).

But an emphasis on community participation has to be tempered with caution and an understanding about the challenges of increased participation. Community participation can also provide an opportunity for rent-seeking, which only augments the social capital of the most aggressive members of the community groups (see Conning and Kevane 2002). In addition, without a lot of information about the nature of groups active in communities, community programs can be captured by local elites whose preferences may not match the donor government's.

### *Land Markets and Urban Spatial Structure*

For many years the overriding analytical perspective governing urban and housing economics was based on an abstract model of the urban economy supported by what Mills and Tan (1980) refer to as “one of the most pervasive and best documented trends in the developed world” (p. 316), that is, the monocentric city model (developed by Alonso 1964, Muth 1969, and Mills 1967, 1972). This model predicts a radial city with residences in rings around a central business district. The rent and land price gradient (and density) fall as the distance from the central business district increases. Land use in a monocentric model is determined by a tradeoff between the desire for space and the desire to minimize commuting costs. Housing supply elasticity, as Muth (1969) inferred, is close to infinitely elastic.

Mohan (1994) shows that this simple, if abstract, model has characterized both developing and developed economy cities over time. His results, as well as that of Asabere and Owusu-Banahene (1983), support the aphorism of Clark (1951) that all cities west of Budapest and east of Los Angeles—that is, market-based cities—have had the negative density gradients implied by the model. This finding, in turn, implied that policymakers could affect the structure of cities and the functioning of housing markets only at a very high cost to the public coffers or through prohibitive restrictions.

Not surprisingly, given this result, many countries' land market concerns in shelter strategy focused on the microeconomic aspects of land use regulations. Like the focus on the empirical regularity of housing demand, this perspective led to a neglect of idiosyncratic, localized market conditions. Subsequent world events, however, such as the fall of the Soviet Union and the end of apartheid in South Africa, permitted cities outside Clark's ambit to be subjected to empirical analysis. Based largely on the analysis of these cities as well as on the first set of comparable spatial density data on more than 50 cities, it became clear that urban spatial patterns diverge substantially from those predicted by the standard urban models.<sup>6</sup> Moreover, the divergences are particularly strong in environments where policymakers could ignore

the high political and economic costs of, for example, ignoring the underlying land values in construction decisions or providing enormous mass transit subsidies, as in the former Soviet Union and South Africa.

Figure 1 shows some of these patterns. The top two graphs are the density gradients for two very different market-oriented cities, Atlanta and Paris, and the bottom two are from more extreme policy-controlled cities, Johannesburg and Moscow. These four graphs together provide some sense of how much policy can disrupt the functioning of land markets and the underlying structure of cities and housing markets. They also suggest how idiosyncratic urban spatial patterns can be across cities.

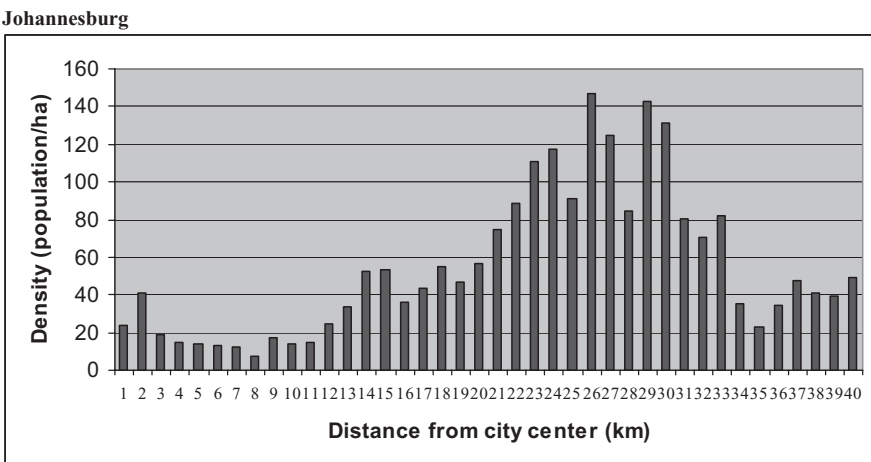
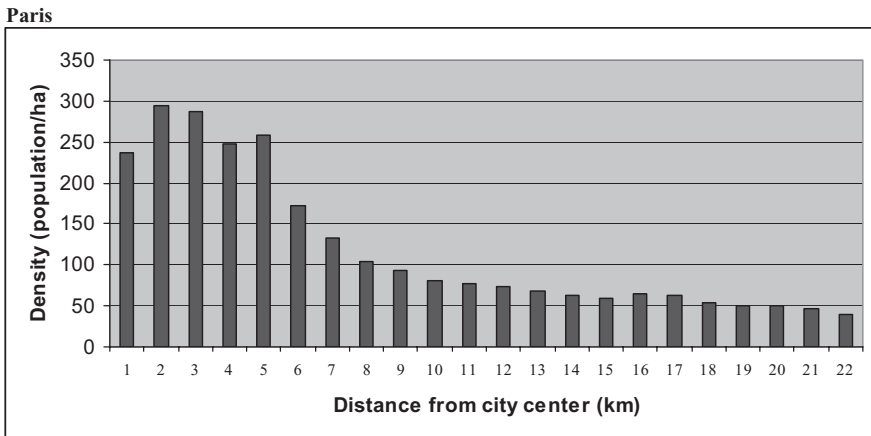
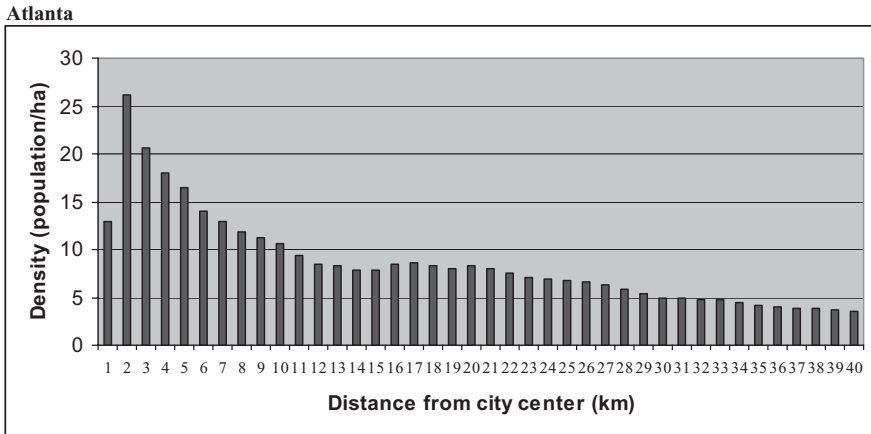
The first two graphs depict cities that are very different but that are characterized by negative gradients over most of their built-up area. Atlanta is among the least densely populated cities in the world, and its automobile-based spatial structure is significantly different from that of Paris. But the patterns observed in both cities generally follow the predictions of the monocentric city model.

This consistency of the model disappears in the next two graphs. In both Johannesburg and Moscow the negative gradient disappears. The data on Moscow are from a study by Bertaud and Renaud (1997) that examines the spatial structure of Moscow after 70 years of nonmarket planning. They found that a tightly controlled government investment and rationing system created dilapidated factories in prime locations and high-density residential areas in distant suburbs. This spatial outcome, they argue, reduced economic and social efficiency and worsened the city's environment.

Brueckner (1996) models the welfare gains from the repeal of the Group Areas Act in 1991, an apartheid era law that required black workers to live in dormitory towns separated from the white core cities by buffer zones, resulting in extremely long commutes and economic hardship for black South Africans. Brueckner finds that allowing all South Africans the freedom to locate would increase aggregate welfare. He also implies that apartheid policies were also highly inefficient. (Bertaud and Renaud concluded the same thing about government-controlled policies in Moscow.)

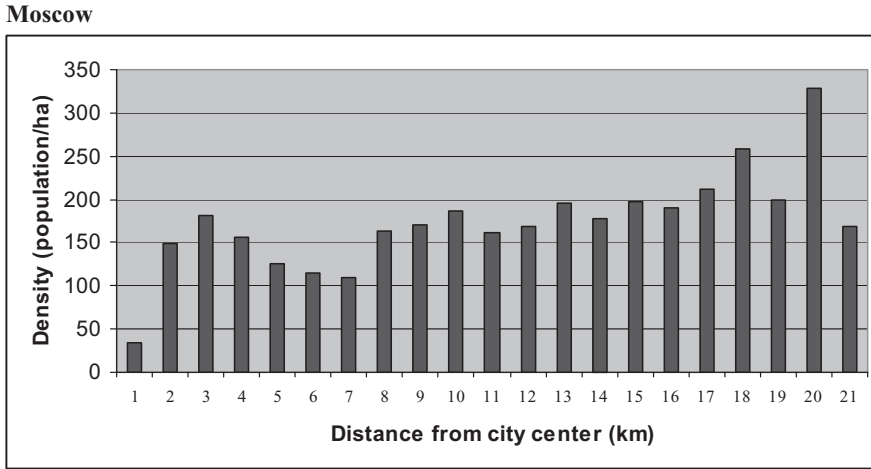
From the perspective of the effects of land market restrictions the fundamental points suggested by these graphs are that land use restrictions have imposed heavy costs, which have decreased both efficiency and equity and are undoubtedly highly variable across cities and history. To gain a sense of how variable these costs can be, it is useful to contrast the work of Bertaud and Brueckner (2005), who examine the welfare impact of floor area ratio restrictions in Bangalore, India, with that of Bertaud and others (2003), who analyze the same sorts of restrictions in Mumbai. In both cities policies that restrict the density of jobs and population in the city center led to the expansion of the cities, which resulted in longer commute times and inefficient energy use. In Bangalore the authors found that the restrictions imposed welfare costs of 3–6 percent of average household consumption. That is a costly result, but it is nowhere near as costly as the estimates for Mumbai. In that severely

**Figure 1.** Population Density Gradients for Various Cities



(Continued)

**Figure 1.** (Continued)



Source: Bertaud (2003) for Atlanta and for Paris; Bertaud (2004) for Johannesburg; Bertaud and Renaud (1997) for Moscow.

topographically constrained city the same simple modeling approach finds that regulatory restrictions impose much higher welfare costs and contribute to Mumbai being one of the most expensive housing markets in the world (see *The Economist* 1995).<sup>7</sup>

The main lesson from this literature is that land market policies go well beyond the project-specific concerns previously given so much prominence in policy formulation. These policies can fundamentally restrict cities' ability to provide agglomeration economies and thereby serve as growth centers. In so doing, they can constrain not only housing opportunities but also higher more equitable economic growth.

### *A New Form of Market Failure*

The fall of the Soviet Union has posed perhaps the biggest conceptual challenge faced by housing policymakers in recent years because the resulting problems are so different. For instance, in transition economies migrations of rural poor people do not rapidly envelop urban areas. In fact, the exact opposite has usually occurred (see Tosics 2004). Lower-income workers were often already in cities, and in the case of the former Soviet Union often in one-industry cities where they experienced some of the worst recessions recorded in the past century. As a result, low-income workers quickly became the unemployed poor as the manufacturing base imploded. At the same time, there was no physical shortage of housing. By international standards, as shown by Hegedüs and others (1997), the urban population could even be

described as overhoused, even if administrative rationing systems caused severe misallocations.

Analysis of the problems involved with these problems led to a growing body of research, for example, Struyk (2000), Hegedüs and Várhegyi (2000), Lux (2002), and Lowe and Tsenkova (2004), and to the discovery of one of the first new forms of market failure observed in the past 50 years. The failure was identified by Heller (1998) in an analysis of the factors constraining the privatization of real estate in Moscow. He argues that the way transition governments transferred property rights—by not endowing anyone with a bundle of rights representing full ownership—prevented effective resource use. In other words, in Russia the transition produced a contractual situation that in many ways is the opposite of the traditional “commons problem” in which no one has clear ownership rights to a shared good. In the Russian case too many people were given some form of claim on a particular piece of property. Just as too little control leads to overuse of a resource in the commons situation, too much control in an anticommons situation leads to underuse and undermaintenance. Heller’s work was subsequently formalized in an economic model by Buchanan and Yoon (2000) and applied to other industries, such as the pharmaceutical industry (see Heller and Eisenberg 1998).<sup>8</sup>

Looking at the continuing problems with privatizing the \$1 trillion worth of residential real estate estimated by the World Bank (2001) to be in the transition countries during the 1990s, an anticommons problem would certainly seem to be at work. In most transition economies the government privatized individual apartment units under essentially giveaway terms, but the fabric of the buildings—the roofs, elevators, and general energy efficiency—remained unmanaged. Congested and ambiguous ownership rights to common property areas continue to constrain effective property management throughout the region, giving the sense (but not yet the evidence) that Heller’s argument has considerable force. Given the scale of the resources involved, this would appear to be a fruitful area for future research.

### *Is Capitalism So Mysterious?*

*The Mystery of Capital*, Hernando de Soto’s (2000) most recent book, makes a widely cited claim that ensuring secure property rights to land is in fact the answer to the mystery of why capitalism is such a productive economic system. A corollary to this argument is that the absence of secure tenure explains the failure of capitalism to take hold in developing economies. On first reading, de Soto makes a compelling case that property rights as embodied in titles are an essential mechanism for converting assets to usable wealth. Titles, he argues, “capture and organize all the relevant information required to conceptualize the potential value of an asset and so allows us to control it” (p. 47). He estimates that if developing countries provided secure property rights to residential property, they would effectively “unlock” \$9.3 trillion

worth of what he calls “dead capital.” He blames the absence of such well-defined property rights for the failure of capitalism in developing economies, and as noted earlier, his views in this regard echo and appear to confirm early research on the topic.

But on closer study the strength of de Soto’s claims is more problematic (see Gilbert 2002; Woodruff 2001). Though there is reason to agree that improving property rights should be an essential part of reform, a growing body of analysis reviewed by Woodruff (2001) finds a range of practical problems that reduce the seemingly large gains. First, titling is often a costly process. It is not just a matter of formalizing informal arrangements that already exist. Very often contradictory claims of ownership succeed the announcements of titling programs. As Woodruff (2001) shows, the costs of adjudicating these claims may abrogate the gains from titling. Second, an apparent paradox accompanies any titling program for informal residents. Much of the land on which informal houses are built is obtained through illegal squatting on private property without any compensation to existing owners. Therefore, any titling program has to consider providing amnesty for those who benefit from invasions. Whether such a process will result in greater respect for property rights is open to debate. Third, as Lee-Smith’s (1997) analysis of property contracts in Kenya shows, this sort of contract’s value depends in large part on other existing and often unwritten contracts, such as women’s degree of access to property. The broader web of societal contracts and constraints may reduce the value given to property titles in isolation.

There is also less value to a title if it cannot offer value as collateral. This occurs in most of Sub-Saharan Africa—and in many other developing areas—because no effective formal financial system exists to help realize the value of the collateral. Moreover, even when a formal financial sector is functioning, many who live in informal housing are often self-employed or work in the informal sector, so it is difficult for them to show proof of income, which is a necessary condition to obtain credit from formal financial institutions. The result is that the collateral value of property title in most developing economies remains low.

Finally, the articles cited by Payne (2002) persuasively argue that in most developing countries what might be called the anthropological perspective on tenure—that is, the existence of a continuum of tenure categories that have different levels of security of tenure—applies. Across this spectrum some may value titles much more than others, and no simple policy reform will change the situation.

The problems with title reform do not mean that housing policy should not include reforms to improve tenure and the legal framework for individual ownership. But promoting formal titling programs as the sole solution to the problems of urban poor people will rarely be sufficient. Undoubtedly, formal titles will often be a necessary condition for a fully functional housing market to develop—particularly a housing finance system—but they are not a sufficient condition to unlock the trillions

of dollars that are allegedly locked up in dead assets. A set of interlocking, complementary reforms is also necessary. In short, poor people are not impoverished because a simple housing market panacea has been ignored or simply misunderstood.

### *Housing Finance*

The need to develop a sustainable supply of finance to fund housing investments continues to be an important part of any set of policy measures to improve housing affordability. However, the change in the opportunities and problems confronting financial sector policymakers has changed the focus of research. In the 1980s the central mortgage finance problems had to do with contracting problems and the risks posed by high inflation rates. Based on arguments by Friedman (1974) and Modigliani and Lessard (1975), as well as the period's high inflation rates, a considerable amount of work focused on ways to change mortgage contracts to accommodate higher inflation, for example, Alm and Follain (1984) and Fishlow (1974).

By contrast, in the lower-inflation world economy of more recent years, globalization and the ability of the financial sector to withstand economic shocks have emerged as more important concerns. Indeed, as mortgage markets liberalized and became increasingly integrated into the broader financial markets, the supply of mortgage credit expanded, and new financial instruments, such as securitization, are being increasingly used to provide broader access to mortgage credit (see Chiquier and others 2004 for a review of recent innovations).<sup>9</sup> Research in this more expansionary but perhaps more cautionary period has focused on new ways to allocate the risks of mortgage lending to those with comparative advantages in such risk-bearing (see Case and Shiller 1996). It has also focused on the macroeconomic implications of the links between financial and housing market policies (see Maclennan and others 1998).<sup>10</sup>

Nevertheless, Mitlin (1996) shows that housing finance for poor people has developed on the scale conjectured in the 1986 review in only a few cases. This does not mean that housing finance is not emerging in developing area, though. In fact, because many of the countries where housing finance has developed in recent years are so populous—such as China, India, the Republic of Korea, Malaysia, Mexico, and Poland—a majority of people in developing countries, if not a majority of the countries, now have access to market-based mortgage credit. But the real promise for assisting low-income families with housing finance is emerging slowly through one of the most promising financial innovations of recent years: the success of microfinance institutions, which offer the possibility of finance for poor people and are increasingly being used to improve the housing conditions of poor people (see Ferguson and Navarette 2003). For instance, such housing loans account for the largest single asset in the portfolio of one of the largest and most successful microfinance institutions, Grameen Bank of Bangladesh.<sup>11</sup>

This financial innovation offers the possibility of sustainable, leveraged finance in ways not possible even a decade ago. But just as local housing market supply conditions are highly idiosyncratic, microfinance operations are even more so: they have been successful only when built on locally developed methods that have ensured that repayment incentives are grounded in local mores (see Christen and others 1995). This is not to say that microfinance is the sole solution to the housing finance problems of poor people. Microfinance institutions are only beginning to enter the housing finance arena, and there is still no clear verdict on their success. Furthermore, whether housing microfinance will be a tool to address the scale of the problem also remains to be seen. The Grameen experience has shown that in at least some instances microfinance tools can successfully finance shelter improvements of poor people.

### *Rent Control*

Recent work on rent control by Arnott (1995) and Basu and Emerson (2000, 2003) has moved the analysis of this widely used and even more widely disparaged public policy in two new directions. First, Arnott (1995) calls for a revision of the rent control consensus, distinguishing between highly distortive rent control regimes and what he calls second-generation controls (p 102). Unlike binding rent ceilings, second-generation controls attempt to limit rents by allowing landlords to choose a nominal rent when taking on a new tenant but not allowing rent increases (above a predetermined level) for sitting tenants. He argues that these second-generation controls often arise as a way to respond to the unavailability of a market for insurance against unanticipated sharp rent increases. In other words, the controls can often be seen as the public sector's fulfilling a failure of private markets rather than as simply the binding control mechanism seen by earlier analyses. He concludes that the welfare effects of these policies should be evaluated on a case-by-case basis, that is, whether the rent control regime improves welfare by more than the absence of insurance reduces it.

Although taking a very different approach, Basu and Emerson share Arnott's view that economists' traditional disdain for rent control should be reconsidered. Based on an asymmetric information perspective, they argue that many of the problems associated with rent control arise from the lack of perfect information and the costs of acquiring information. Second-generation rent controls lead landlords to prefer short-tenure tenants, a preference that results in an asymmetric information problem because tenants know more about their likely length of tenure than does the landlord. Accordingly, in Basu and Emerson's view rent control reform should focus on alternative contractual possibilities rather than outright elimination of the controls. In sum, long-held unambiguous views on the evils of rent control as one of the prime examples of unfettered and highly inefficient public sector interventions



have become more qualified. Both the likely welfare effects of this policy and the approaches taken to reform it have become considerably more nuanced.

## Conclusion

The main argument of much of the early research, and particularly the economics research, on developing country housing markets was that distortions of markets, often well intended, created many of the shelter-related problems faced by poor people. The literature argued that with such a long-lived, spatially specific, socially freighted good it was important to clarify whether the public or private sector had a comparative advantage in carrying out specific functions. The public sector, according to this view, was unlikely to be a good producer, owner, or financier of housing. Nor would it be an effective designer of subdivisions or developer of land.

The research reviewed here indicates that recent empirical evidence has been accumulated largely (but not completely) to support these views. Indeed, some of the earlier, most strongly held conjectures about the efficacy of various public policies, such as rent control and the importance of secure titles, have been at least substantially revised, if not refuted. This is not to say that the shelter problems faced by low-income families in poor countries can be completely addressed by simply adopting more market-oriented housing and land market policies. Rather, as the research on the effect of regulations on housing supply and on urban spatial patterns shows, many interventions do indeed exacerbate rather than improve the shelter situation of poor people, as suggested, for example, by Bertaud and Brueckner (2005), and improved policies by themselves, without additional resources, can often improve poor people's situation, as shown by Glaser and Gyourko (2003).

Finally, and unfortunately, the research has also shown that there is no mysterious, straightforward capitalist panacea that can address all the shelter problems faced by low-income families in developing economies. Circumstances vary widely, and policy must be designed to exploit local conditions. Just providing titles, for instance, will not magically transform the housing situation of poor people, although in the right circumstances it can be very important. Instead of just providing titles it is necessary to incorporate the views of poor people on how to effectively address their concerns. Increased community involvement not only improves projects, it can also, in Appadurai's (2004) words, give poor people "the capacity to aspire" (p. 59).

Ultimately, however, the relationship between research findings and policy outcomes is never straightforward. Examples abound of research demonstrating the beneficial effects of a particular reform but not leading to reform implementation (see, for example, Raghuran and Zingales 2000). The important role that luck, crises, and political economy can play in determining what kinds of policies are pursued—or in the kind of scientific paradigm adopted—has long been known and is

difficult to exaggerate. Nevertheless, the question of whether anyone uses research for policy design remains an important measure of the usefulness of the research. That is, is there any evidence of a shared consensus by policymakers on the main elements of effective housing policy, and are they derived from research findings?

For housing policy, the answer appears to be that policymakers have indeed adjusted policies in a manner that is consistent with both what the research has suggested and the earlier conjectures about the efficacy of adopting more market-oriented housing policy. To highlight some examples:

- When the Soviet Union fell, President Mikhail Gorbachev's main advisers argued that the public sector's extensive control over housing—its production, ownership, design, and allocation—caused the sector to be the least efficient one in the economy and that market-oriented reforms were essential to change this situation.<sup>12</sup> Certainly the housing sector reforms enacted in almost all of the more than 25 transition economies, though not always successful, can be described as a refutation of a public sector that replaces and extensively controls private incentives.
- Similarly, in 2002 the government of India began urban real estate reforms supported by a fund to reward states that eliminate the regulatory constraints, such as binding rent control, and severe urban land market ownership restrictions that had long been the hallmarks of a deeply interventionist policy. This new approach, like the broader reforms in the Indian economy, is extremely different from the perspective of the public role that characterized India's shelter policies for more than 30 years.
- In addition, China, Chile, Colombia, Malaysia, and Mexico all appear to have adopted a much more market-friendly public housing policy. In all these countries much more attention is now being paid to enabling consumers to borrow or use public resources to shop for the kind of housing they want. Similarly, housing vouchers, a market-oriented subsidy instrument, have been widely adopted as the central vehicle to provide housing subsidies across almost all developed economies (see Boelhouwer 1997). This implies broad recognition of the superiority of transfer mechanisms that use incentives to complement markets over public ownership and production of social housing that attempt to replace them.
- Finally, slum dwellers themselves, who by force of circumstances have always been among the most market-oriented of all consumers because they have no other options, have recently established an organization to share experiences and approaches across the more than 20 member countries of the Slum Dwellers International (SDI) Federation. Policymakers in developing areas are increasingly seeking their views and perspectives on how to address low-income shelter problems.<sup>13</sup>

Thus, a consensus about the appropriate shelter policy does indeed appear to have evolved over recent years, and it is certainly consistent with the findings of recent research, which supports most (but certainly not all) of the conjectures made about the use of market-friendly policies. This improved empirical understanding of how housing markets work, along with the more widespread commitment to a reliance on private markets, should enable governments to shape policy that more effectively addresses the shelter needs of the urban poor.

## Notes

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1. There is of course, a much longer history of analyses of housing policy. See, for example, the work of Grebler (1955), Abrams and Koenisberger (1957), Abrams (1964), Currie (1966), and Turner (1968), among others. But this work rarely had an empirical orientation.

2. Freedom House (2003) measures indicate that 46 percent of the countries were “not free” in 1973. This figure fell to 25 percent in 2003. At the other end of the spectrum, only 29 percent were free in 1973, which increased to 46 percent in 2003. Between 1986 and 2002 the number of democracies in the world doubled to just over 120. As for decentralization, World Bank (1999) reports that 95 percent of democracies had initiated some form of decentralization by 2000. With respect to macrostability, 23 countries had inflation rates over 30 percent in 1985 or 1986, compared with 14 countries in 1999 or 2000, and the median inflation rate fell from 7 percent to 3 percent over the same time period. By contrast, shocks like those in Mexico, East Asia, and Russia in 1986 had not been experienced since World War II, nor had the Great Depression levels of recession experienced by the transition countries in the 1990s affected such a large portion of population (Buckley and Mini 2001).

3. Although there has been rapid growth in financial sectors across the world, many remain small. In 1973 more than half of developing economies had financial systems smaller than the World Bank employees’ credit union. By 2001 less than one-third did. In recent years new housing finance systems have been established in Chile, China, Estonia, India, Malaysia, Mexico, Singapore, Jordan, Kazakhstan, the Republic of Korea, Latvia, Lithuania, and Poland, among others. In the 1980s of all developing economies, only Colombia had a functioning system. Thus, the situation has changed from one where few residents of developing areas have access to market-based mortgage finance to one where most do.

4. There is debate on this finding. Because few censuses are available for recent years, the data used in many studies on the topic are projections of urban population growth from the 1970s and 1980s and therefore might exaggerate urbanization rates. For a more detailed discussion of these issues, see Satterthwaite (2004). Even with this qualification, though, in many large African countries, including Ethiopia, Kenya, and Nigeria, increased urbanization accompanied declining incomes.

5. “As recently as 1975 there were few countries willing to contemplate the types of projects that the World Bank was sponsoring. [In 1980] the Bank has helped finance more than 32 projects in 26 countries and has projects in preparation in 11 additional countries” (Churchill and Lycette 1980, p. 16).

6. The most comprehensive source is the Web site <http://alain-bertaud.com>, which provides similar treatments of a variety of cities in Asia, Africa, and Latin America, as well as Europe and North America.

7. As both articles discuss, the monocentric city modeling approach is a simple way of attempting to gain a sense of the costs of regulations rather than empirical estimates of the costs, which are not available, although progress is being made on such data collection (see, for example, Baker and others 2004).

8. Though the formalization of Heller's work by a Nobel Prize-winning public choice theoretician and its application to another industry suggest that his anticommons problem is an interesting one, most of the same arguments were raised more than 50 years earlier by von Mises (1949).

9. In the newly liberalized European financial systems of the 1990s the supply of mortgage credit grew more than twice as rapidly as GDP, after not having expanded as a share of GDP in the prior decade (see Mercer 2003). On the increased integration of mortgage finance and financial markets, see Hendershott and Van Order (1989).

10. The links between housing finance and restrictive land use regulations were identified by the U.K. government as one of the major risks in joining the European Monetary Union, and house price volatility concerns led to a study of structural conditions in the housing markets of 15 countries by the European Central Bank (2003).

11. See [www.grameen-info.org/annualreport/2003/loanactivities.html](http://www.grameen-info.org/annualreport/2003/loanactivities.html).

12. This report was prepared by Grigory Yavlinsky and Stanislav Shatalin for Gorbachev as part of the early efforts to focus on what reforms should be undertaken in the first 500 days (see Kosareva and Struyk 1993 for discussion).

13. See [www.sdinet.org](http://www.sdinet.org) for examples of their work with various state governments and municipalities in India and across many countries in Africa.

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