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Land and the City

Edited by George W. McCarthy, Gregory K. Ingram, and Samuel A. Moody



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Edited by

*George W. McCarthy, Gregory K. Ingram,
and Samuel A. Moody*

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CONTENTS

<i>List of Illustrations</i>	<i>ix</i>
<i>Preface</i>	<i>xv</i>
1. <i>Introduction</i>	1
George W. McCarthy and Samuel A. Moody	
Urban Planning	9
2. <i>Demographic Change and Future Urban Development</i>	11
Dowell Myers and Hyojung Lee	
COMMENTARY	59
Ann Forsyth	
3. <i>Monitoring the Share of Land in Streets: Public Works and the Quality of Global Urban Expansion</i>	62
Shlomo Angel	
COMMENTARY	102
Michael B. Teitz	
4. <i>Climate Change and U.S. Cities: Vulnerability, Impacts, and Adaptation</i>	105
William Solecki	
COMMENTARY	125
Matthias Ruth	
Taxation	129
5. <i>The Past and Future of the Urban Property Tax</i>	131
Grant Driessen and Steven M. Sheffrin	
COMMENTARY	166
John Yinger	

6. <i>Local Government Finances During and After the Great Recession</i>	171
Adam H. Langley	
COMMENTARY	197
Michael A. Pagano	
Housing Finance	201
7. <i>Foreclosures and Neighborhoods: The Shape and Impacts of the U.S. Mortgage Crisis</i>	203
Dan Immergluck	
COMMENTARY	232
James R. Follain	
8. <i>A Realistic Assessment of Housing Finance Reform</i>	235
Laurie S. Goodman	
COMMENTARY	274
William Apgar	
9. <i>An Evaluation of China's Land Policy and Urban Housing Markets</i>	277
Joyce Y. Man	
COMMENTARY	292
David Geltner and Xin Zhang	
Housing Policy	299
10. <i>Housing Policies and Urban Development: Lessons from the Latin American Experience, 1960–2010</i>	301
Eduardo Rojas	
COMMENTARY	357
Stephen Malpezzi	

11. <i>The Relationship Between the Rise of Private Communities and Increasing Socioeconomic Stratification</i>	361
Evan McKenzie	
COMMENTARY	390
Gerald Korngold	
12. <i>Socioeconomic Segregation Between Schools in the United States and Latin America, 1970–2012</i>	394
Anna K. Chmielewski and Corey Savage	
COMMENTARY	424
Tara Watson	
<i>Contributors</i>	427
<i>Index</i>	429

PREFACE

The majority of the world's population now lives in urban areas and depends on urban systems for housing and social and economic goods and services. This number will only increase as cities blossom and expand to accommodate new residents, particularly in developing nations. What remains unchanged, however, is the key role of cities as engines of economic growth, social activity, and cultural exchange. In an effort to support the success and sustainability of cities, this volume explores how policies regarding land use and taxation affect issues as diverse as the sustainability of local government revenues, the impacts of the foreclosure crisis, and urban resilience to climate change.

This collection, based on the Lincoln Institute of Land Policy's 2014 annual land policy conference, addresses the policies that underlie the organization, financing, and development of the world's cities. It is the final volume in the Institute's land policy conference series. Over the years, these meetings have addressed land policy as it relates to a range of topics, including local education, property rights, municipal revenues, climate change, and infrastructure.

We thank Armando Carbonell, Martim Smolka, and Joan Youngman for their advice on the selection of topics and on program design. The conference was organized by our exceptional event team, comprising Brooke Burgess, Sharon Novick, and Melissa Abraham. Our special thanks go to Emily McKeigue for her exemplary management of the production of this volume, to Peter Blaiwas for the cover design, to Nancy Benjamin for maintaining the publication schedule, and to Barbara Jatkola for her tireless and reliable copyediting.

George W. McCarthy
Gregory K. Ingram
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10

Housing Policies and Urban Development: Lessons from the Latin American Experience, 1960–2010

Eduardo Rojas

A house provides protection from the environment, privacy to its users, and access to urban services. In Latin America, not everyone has access to adequate housing, especially low-income households.¹ Traditionally, profit-seeking private real estate developers supplied houses for high- and middle-income households, with financing available from government-sponsored mortgage banks or savings and loans institutions. This system could not satisfy the housing needs of all the urban households whose numbers grew rapidly in the second half of the twentieth century. Households unable to find housing in the formal markets resorted to informal solutions by either invading land or purchasing illegally subdivided lots and building their houses incrementally. Today, the informal sector produces on average one out of every four houses added to the housing stock (two out of four in some cases), which is a significant contribution to the housing supply (Bouillon et al. 2012).

The welfare consequences of poor housing are linked directly to problems such as poor health and low educational achievement. Over the years, governments in Latin America have experimented with a variety of approaches to address the housing problem, ranging from expanding the housing supply through the

1. This study refers only to Latin America and does not include the English-speaking countries of the Caribbean, which have taken a different approach to housing.

direct provision of new houses to accepting informal settlements and incremental housing construction as legitimate ways of obtaining a home. Over the past three decades, some governments have provided direct subsidies to lower-income families wishing to save to buy a home by way of private mortgage financing.

While these housing policies have been effective in reducing the region's housing deficits, they have not sufficiently considered the housing sector's impact on urban development patterns. The evidence presented in this chapter suggests that formal and informal housing production and consumption have occurred in a weak urban development management framework with mostly uncoordinated and sector-focused institutional arrangements for the planning and implementation of network infrastructure, transportation services, and the provision of basic urban services and amenities.

In most Latin American countries, housing policy formulation and implementation occur quite independently of urban development policy and implementation. The most evident result of this state of affairs is that the activities of private developers, government housing institutions, and informal settlers have contributed to the acceleration of urban sprawl, without any concomitant interventions to prevent or mitigate its negative effects. Among the most significant impacts are the growing consumption of natural resources; increased pressure for public budgets to extend urban infrastructure and services; poor living conditions in new suburban subdivisions due to the lack of urban services and nearby employment; and limited access to urban centers due to lack of good roads and inadequate public transportation. Contrary to what housing policy advocates seek through the implementation of public housing programs, the overall effect of these conditions is a poorer quality of life for a significant proportion of urban households.

This chapter reviews the outcomes of the housing sector in Latin America over the past 50 years and the socioeconomic events and housing policies that have affected its performance. Due to limitations of information and space, the focus is on one aspect of the housing problem that is not well documented in the literature: the urban impacts of housing sector outcomes over the past 15 years. Further, the chapter suggests measures to prevent or alleviate the negative effects of the current housing situation.

Data on the housing policies and outcomes of 18 Latin American countries come from Cuenin et al. (2012) and Rojas and Medellín (2011). The analysis of the urban impacts of housing construction relies on data provided by Angel et al. (2011) for 15 cities and on more detailed data for four countries (Argentina, Chile, Colombia, and Mexico) in Rojas (2010a) and information from the websites of the countries' housing institutions.

The analysis of the data shows that government housing policies—a major determinant of housing outcomes—to a large extent have been designed with little or no consideration of their urban impacts and have been implemented with little regard for other policies and plans impacting urban development. They do not mitigate production biases of stakeholders operating in the formal housing sector that exacerbate urban sprawl and create poorly served housing subdivi-

sions that do not provide households with all the services that they require. New housing is generally the product of discrete, uncoordinated projects undertaken by a multitude of developers and national public housing institutions. Private developers find it more profitable to build new houses in the periphery of cities where land is cheap and public housing institutions do the same to save resources in the purchase of land and build more houses with their allocated budgets. The activities of informal land providers and incremental house builders add to these urban problems. There is an urgent need to closely link residential construction with urban development interventions so that new houses are located in compact, livable, and diverse neighborhoods that contribute to building better cities and not simply to fulfilling the objective of adding more houses to the stock.

This chapter is broken down into five main sections that discuss (1) the rapid urbanization process that has resulted in the housing problems in Latin America today; (2) the evolution of the housing sector and housing conditions in the region over the past 15 years; (3) the housing policies and programs that have influenced these conditions; (4) the urban impacts of the housing sector; and (5) arguments for reforming housing policies to improve the living conditions of the urban population.

Urbanization and Housing in Latin America —————

Latin America is the most urbanized developing region in the world. In 2011, 78 percent of the region's 600 million inhabitants lived in urban areas, compared with 72 percent of the population in Europe and 82 percent in North America, the most developed regions of the world. By contrast, only 39 percent of the population in Africa and 45 percent in Asia live in cities (UN 2012).² The urbanization process has been very rapid; Latin America reached Europe's current level of urbanization in 50 years, moving from 41 percent in 1950 to 75 percent in 2000, compared with the more than 150 years the process took in Europe. During that time, the region's cities incorporated 324 million inhabitants, 4.5 times the population they had in 1950 (70 million) (UN 2012).

HOUSING CONDITIONS AT THE TURN OF THE CENTURY

This rapid growth in population put a significant strain on the cities' capacity to provide housing and urban services. A house is a complex good whose production and consumption occur in several interrelated markets. Angel (2000, 14) writes that the housing market "is not a single, unfettered market—houses vary by location, quality, design, quantity, form of tenure, degree of legality, and

2. In compiling these statistics, the United Nations uses each country's definition of *urban*. Most of the countries in Latin America classify settlements of 2,000 or more as urban, some use 5,000, and a very few use 20,000.

neighborhood amenities. It is composed of a number of fragmented submarkets.” Furthermore, these markets are affected by government regulations and interventions (Malpezzi 1999).

A dual structure of housing production and consumption exists in the housing sectors of Latin America’s economies. On one hand, there is a formal housing market, with land developers and builders that abide by the land subdivision and building controls of the government and with households capable of buying the houses, either with savings or through long-term mortgage financing. By the mid-twentieth century, the formal housing sector provided finished and legally registered houses only for upper-income and a few middle-income residents, or about 40 percent of the population (Perry et al. 2006). This forced low-income households to find housing by squatting on land, acquiring illegally subdivided land to build houses incrementally, or doubling up with other households in informal settlements located on the urban periphery or in inner-city slums.

There are many stakeholders in the housing sector, including suppliers of building materials, land developers and builders, the government (which sets up housing regulations), and the households that purchase or rent homes. Some of these stakeholders operate formally (abiding by the government’s subdivision, building, tax, sale, and rental rules) and others informally (not complying with one or more of the government’s regulations). The key stakeholders in the formal and informal components of the housing sector are listed in table 10.1.

Toward the end of the twentieth century, the performance of the housing sector in Latin America was not very encouraging. According to information provided by Van der Rest and López (1980), in the late 1970s between 50 and 70 percent of the urban population could not afford to buy or rent finished and fully serviced houses offered by private stakeholders operating in the formal sector. Therefore, this population resorted to the housing solutions provided by the informal sector. The situation a decade later did not show much improvement. Angel (2000) reports that in 1990, 27 percent of the housing stock was “unauthorized housing” and 25 percent was “squatter housing,” both in the informal sector. Information for some countries indicates that around 2007, the informal sector was still providing 37 percent of the new housing stock in Argentina, 56 percent in Colombia, and 30 percent in Mexico (see table 10.4 later in the chapter). To a great extent, the high incidence of poverty among the urban population and the underdevelopment of housing finance mechanisms explain these outcomes.

RECENT TRENDS IMPACTING URBAN DEVELOPMENT AND HOUSING

Toward the end of the first decade of the twenty-first century, housing conditions in Latin America showed some improvement. This was the result of both a reduction in poverty and government housing policies and programs.

Notwithstanding the slow increase in per capita income and its unequal distribution over the past thirty years, Latin America has made significant progress in reducing poverty and incorporating a significant number of households into

Table 10.1
Key Stakeholders in the Housing Sector

Stakeholder	Characteristics and Activities
Formal Stakeholders	
Landowners	Provide land for residential development
Land developers	Subdivide land for housing
Public utility companies	Supply basic infrastructure: water, sanitation, etc.
Government entities (local, regional, and national)	Provide roads, drainage, waste collection and disposal, and urban healthcare, education, and recreation services
Home builders	Build houses for sale on the market
Real estate financing institutions	Provide mortgage loans for home buyers
Home buyers	Purchase houses with savings and mortgage loans
Home renters	Rent formally built and managed residences
Public housing institutions	Build, distribute, and finance finished homes and residential lots as part of the government's housing policies and programs
Informal Stakeholders	
Squatters	Squat on public or private land to secure a residential plot
Illegal land sellers	Subdivide land for sale outside the government's subdivision regulations
Illegal land buyers	Purchase illegally subdivided land for residential use
Self-builders	Build and improve their homes on legal or illegal land
Renters of space in informal housing	Rent residential space in houses built in informal settlements
People doubling up	Live in friends' or relatives' households in informal settlements

the middle class. ECLAC (2014) reports that in 2012 28.2 percent of the population was poor, down from 48.4 percent in 1990. Extreme poverty affected 11.3 percent of the population, a substantial decrease from 22.6 percent in 1990. One of the consequences of the increase in per capita income and the reduction of unequal distribution of income has been the growth of the population falling in the middle-income bracket of the income distribution structure. According to the World Bank (2013, 5), "In 2011, for the first time in recorded history, the Latin American region had more people in the middle class than in poverty. The threshold for the middle class of \$10 [US\$] a day per capita reflects a level of income at which the probability of falling back into poverty is less than 10 per cent. . . . Faster and more equitable income growth helped expand the middle

class to 32 per cent of the region's total population in 2011. For the first time, this grouping surpassed the poor, who numbered 27 per cent based on the \$4 [US\$] a day moderate poverty line."³

The World Bank (2013) reports that from 1995 to 2009, the middle class—households earning between US\$10 and US\$50 per day (purchasing power parity)—increased by 50 percent and represented a population of about 160 million (27 percent of the total population). The number of nonpoor but still vulnerable (earning between US\$4 and US\$10 per day) grew steadily, reaching approximately 220 million, or 38 percent of the population. The number of people with incomes below the US\$4 poverty line decreased to 165 million, or 28 percent (Ferreira et al. 2013).

The urban consequences of the greater purchasing power of the emerging middle class and nonpoor low-income population are significant. Middle-income households demand larger houses and more and better services. They aspire to have more access to personal motorized transportation, thus consuming more energy and using the urban road network more intensively. The higher income of the nonpoor low-income population enables them to consume more goods and services, the majority of which are provided by the city. As discussed later in this chapter, with appropriate policies the government could channel the growing purchasing power of middle-income and nonpoor low-income households to partially pay for improving their housing situations and thereby lessen the government's burden of providing them with adequate housing.

Urbanization has been accompanied by changes in the structure and dynamics of the population. The most significant change has been that in spite of a steady decline in the annual population growth rates—from over 2 percent in the 1950s to just above 1 percent in the 2010s—there is a growing demand for houses due to growing rates of household formation. In urban areas, it is expected that the population will grow at a slower rate over the next 40 years, having reached a turning point in 2000–2005, when for the first time there were fewer new urban residents (36 million) than in the previous five-year period (41 million) (UN 2012). Very significant for the housing sector is the steady decline in average household size, which is expected to fall from 3.52 persons in 2010 to 2.78 persons in 2030. Rojas and Medellín (2011) estimated that the total number of urban households will increase from 130 million in 2010 to 190 million in 2030 and 230 million in 2050. This growth will translate into a demand for

3. The World Bank (2013) defines the middle class based on economic security, or the low probability of falling into poverty. This approach leads to the identification of a class between the low and middle classes, called the vulnerable due to the higher probability that its members will fall into poverty. Therefore, the four economic classes are (1) the poor (per capita income below US\$4 per day); (2) the vulnerable (income of US\$4–10 per day); (3) the middle class (income of US\$10–50 per day); and (4) the high class (income of more than US\$50 per day), all in 2005 purchasing power parity. The high-income class represents less than 3 percent of the population in Latin America.

approximately 3 million new homes each year over the next 20 years, a total of 60 million new homes needed.

Another significant demographic trend involves two changes in the structure of the population: the entry into the workforce of the large cohorts born in the 1980s and 1990s, and the reduction in the birthrate that occurred in later cohorts. These changes represent an economic development advantage commonly called a *demographic dividend* and a future economic burden for households and the government. The combination of the larger number of working-age members of households and the smaller number of dependents enables people to create and accumulate more wealth. This, among other advantages, should facilitate their access to formal housing and housing-related services. Over time, the demographic dividend will disappear as the workforce decreases in size and the dependency ratio increases due to an aging population (OECD 2014).

Housing Sector Outcomes and Housing Conditions —————

The outcomes of housing sector activity on the economy and its impact on the housing conditions of the population can be studied from different perspectives.⁴ The economic perspective emphasizes the role of home ownership in households' accumulation of wealth and the impacts of housing construction on the economy. The focus on housing conditions explores the services provided by a house to its occupants, in particular those that are significant from a public policy point of view. The second perspective guides the analysis that follows.

HOUSING SHORTAGES: A SERVICES PERSPECTIVE

This analysis looks at the lack of housing services experienced by households, namely the quantitative and qualitative housing shortages (table 10.2).⁵ Measuring the quantitative shortages offers insight into the capacity of the housing sector to provide adequate houses for all households. Measuring the qualitative

4. The housing sector outcome estimates used in this study are updates of the estimates provided by Rojas and Medellín (2011). The data set and methodology used here are the same as those described in that work.

5. The definitions used for this analysis focus on the essential services provided by a house. The lack of one or more of these services constitutes a shortage. Households that unwillingly share a shelter (typically more than two households living under the same roof but not sharing food expenses) are considered to be facing a *quantitative* housing shortage. Also included in this type of shortage are households living in shelters that cannot be upgraded given the poor quality of the building materials. Any household deprived of at least one essential service is considered to be facing a *qualitative* shortage: protection from the environment, access to potable water, and the sanitary disposal of waste products. Households also need to be able to satisfy their physiological need for privacy; thus, overcrowded homes (more than three occupants per room) are considered inadequate. Households need the continuous supply of these services; thus, those with insecure tenure are considered to be facing a shortage as well.

Table 10.2
Definitions of Housing Shortages

Type of Shortage	Origin of Shortage	Category	Definition
Quantitative	Lack of shelter	Quantitative	Households doubling up with other households (excluding the principal household) Households living in non-upgradable shelters
Qualitative (excluding households affected by quantitative shortages)	Shelter conditions	Poor-quality building materials and overcrowding	Roof made of nonpermanent materials Walls made of nonpermanent materials Dirt floors Overcrowding: more than three persons per room
	Neighborhood conditions	Lack of infrastructure	Lack of piped potable water Lack of sanitary disposal of waste products Lack of electricity
	Tenure status	Lack of secure tenure	Insecure tenure on the house or land

Source: Rojas and Medellín (2011).

shortage offers insight into the capacity of the housing sector to provide all households with houses that supply all the basic services they require. Security of tenure relates to the assurances that households have of receiving the flow of services provided by the house on a continuous basis, that is, that they are not threatened with eviction or dispossession of their houses.

It is useful to analyze the various shortages independently given that their solution requires different combinations of household expenditures and activities, and government policies, programs, and investments. For instance, the solution to the quantitative and qualitative shortages of adequate building materials and overcrowding rests mostly on the household's capacity to save money to pay for a new house or to expand and improve the quality of an existing house; the solution to the shortage of infrastructure rests on the capacity of the public sector to provide potable water, sanitation, drainage, and electricity; and the solution to insecure tenure rests on regulatory measures passed and enforced mostly by the central government.

HOUSING OUTCOMES, 1995–2009

Housing conditions in urban areas improved between 1995 and 2009, as shown in table 10.3. The proportion of urban households facing housing shortages decreased for all shortages except security of tenure. Quantitative shortages dropped slightly, from 8 percent in 1995 to 6 percent in 2009, when approximately

Table 10.3
Urban Households Facing Housing Shortages, 1995, 2000, and 2009

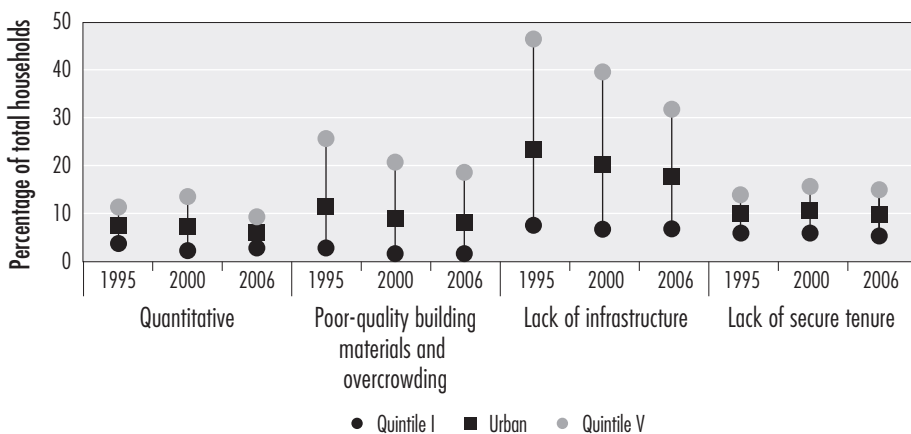
	1995		2000		2009	
	Percentage of Total Households	Number of Households (millions)	Percentage of Total Households	Number of Households (millions)	Percentage of Total Households	Number of Households (millions)
Quantitative	8	6.0	7	6.6	6	7.3
Qualitative						
Poor-quality building materials and overcrowding	12	9.0	8	7.9	7	8.6
Lack of infrastructure	24	18.4	20	19.2	16	20.2
Lack of secure tenure	10	7.7	11	10.3	11	13.4

Source: Author update of Rojas and Medellín (2011).

7.3 million households were sharing dwellings with others or living in shelters that could not be improved. Qualitative shortages declined significantly, particularly infrastructure shortages, which dropped from affecting 24 percent of households in 1995 to affecting 16 percent (20.2 million households) in 2009. Nevertheless, this is still the biggest housing challenge facing Latin American households. The incidence of poor-quality building materials and overcrowding also declined, from 12 percent to 7 percent (8.6 million households). The only shortage that did not improve was security of tenure, which increased from 10 percent to 11 percent (13.4 million households). As shown in figure 10.1, the gap in housing shortages between the poorest and the richest households, though still wide, narrowed between 1995 and 2006. For instance, in 1995 the difference in the percentage of households facing infrastructure shortages was 39 percent, while in 2006 it was 26 percent. A similar trend occurred for the other shortages.

Notwithstanding the improvements, Latin America is still far from being able to solve the quantitative deficits resulting from the rapid urbanization that has occurred since the 1960s. Practically speaking, the production and financing shortcomings of the formal housing sector are compensated for by activity in the informal sector. Data compiled by Rojas et al. (2010) on the actors contributing to the housing stock in Argentina, Chile, and Colombia in 2007 reveal that out of the total number of new houses added, the contribution of the informal sector was dominant in Colombia (producing 56 percent of all new houses), significant in Argentina (37 percent), and nonexistent (according to central government

Figure 10.1
Gap in Housing Shortages Between the Poorest and Richest Households, 1995–2006



Source: Rojas and Medellín (2011, 10, fig. 3).

Table 10.4
New House Production by Submarket in Argentina, Chile, Colombia, and Mexico (%)

Stakeholder	Argentina (2007)	Chile (2007)	Colombia (2007)	Mexico (2013)
Formal sector				
Private developers	42	48	24	6
Government-supported programs	21	52	19	64
Informal sector	37	0 ^a	56	30

^aAccording to official statistics.

Sources: Rojas et al. (2010, 70, table 14) for Argentina, Chile, and Colombia; author calculations based on data from CIDOC (2012) for Mexico.

statistics) in Chile (table 10.4).⁶ Data for Mexico suggest that in 2010 the informal sector accounted for at least 30 percent of the new housing stock (CIDOC 2012).

Note that government-supported programs were responsible for financing or building 64 percent of the new houses in Mexico and 52 percent of them in Chile. These figures are more than double the government-supported segment in Argentina (21 percent) and Colombia (19 percent). Without public support, the private sector produced 48 percent of the new houses in Chile, 42 percent in Argentina, 24 percent in Colombia, and only 6 percent in Mexico.

Table 10.5 displays significant variations in Latin American countries' housing problems for the years 2000 and 2009, suggesting that there is no one-size-fits-all solution to urban housing problems in the region. Rather, each government should base its interventions on detailed and well-documented diagnoses of the country's specific housing situation.

Gilbert (2003) reports that in the late 1990s, 69 percent of urban households throughout Latin America owned their homes and only 20 percent rented. The proportion of renters was just over 38 percent in Colombia and only 6 percent in Nicaragua.⁷ Latin America is essentially a region of homeowners, a situation in sharp contrast to other regions of the world, where renting is more common.⁸ The predominance of owner-occupied housing in Latin America constitutes a

6. Irarrázabal (2013) reports that 1 percent of the Chilean population lives in informal settlements.

7. These percentages change slowly, possibly as a result of long-term social and economic trends, and the long-term impacts of housing policies.

8. The United Nations reports that in the late 1990s, the percentage of households that rented was much higher in some OECD member countries than in Latin American countries: 60 percent of households in Germany, 50 percent in Austria, 47 percent in the Netherlands, 39 percent in Sweden, and 34 percent in the United States (UN-Habitat 2003).

Table 10.5
Housing Shortages by Income Level Across Latin America, 2000 and 2009 (percentage of total housing stock)

	Quantitative		Poor-Quality Building Materials and Overcrowding		Lack of Infrastructure		Lack of Secure Tenure	
	2000	2009	2000	2009	2000	2009	2000	2009
		5	3	2	1	4	2	13
Chile (CHL)								
Mexico (MEX)	2	2	10	9	11	8	14	15
Argentina (ARG)	3	4	11	9	16	10	13	16
Uruguay (URY)	2	0	3	3	3	8	14	22
Panama (PAN)	10	8	9	6	24	21	17	15
Venezuela (VEN)	6	7	6	13	11	7	8	7
Costa Rica (CRI)	2	2	8	5	4	1	7	6
Brazil (BRA)	8	6	3	1	28	23	8	7
Colombia (COL)	11	8	7	7	8	9	9	10
Peru (PER)	15	13	33	31	30	22	22	25
Dominican Republic (DOM)	11	3	7	5	35	25	11	9
Ecuador (ECU)	12	10	23	14	25	19	12	13
El Salvador (SLV)	6	7	26	21	32	30	15	16
Paraguay (PRY)	6	6	17	12	35	20	9	12
Guatemala (GTM)	12	11	39	32	36	32	12	10
Bolivia (BOL)	27	30	29	27	38	32	13	11
Honduras (HND)	3	2	26	16	35	20	14	11
Nicaragua (NIC)	13	7	42	31	63	53	12	8

Note: The countries are arranged in descending order of GDP per capita (2009 purchasing power parity).
Source: Author update of Rojas and Medellín (2011).

problem as it reduces households' mobility (if they feel they may lose their houses if they rent them to others).⁹ A well-functioning housing market needs a substantial supply of rental units for all income levels in order to cater to the needs of households in different stages of the family life cycle, to those who are changing jobs or cities of residence, or to those who cannot afford or do not want to buy a house. According to Gilbert (2003), the high percentage of owner-occupied dwellings in this region can be attributed to the number of housing policies that promote home ownership, mostly through government-sponsored programs, as well as the policies that limit the development of rental markets by protecting tenants and imposing rent controls.

SECTOR AND URBAN FACTORS IMPACTING HOUSING OUTCOMES

Income is arguably the main constraint on the ability of households to buy a finished home, but access to credit and the prices of houses play determinant roles as well. This combination of factors is measured by the "affordability" of housing. Bouillon et al. (2012) calculated this indicator for 41 Latin American cities. They concluded that on average 57 percent of the households could afford to pay a mortgage that would allow them to buy the lowest-priced dwelling offered by the private sector (provided there were enough dwellings available at that price and the financial institutions were willing to lend). The affordability level varies considerably across cities. For example, in the city with the highest affordability—San Jose, Costa Rica—74 percent of the households could afford to buy the lowest-priced house, while in Caracas, Venezuela, only 21 percent could afford that house.¹⁰

The cross-country analysis of the housing shortages in Latin America by Rojas and Medellín (2011) shows that there is a strong negative relationship between per capita income and percentage of households facing housing problems. This relationship holds for all types of shortages except lack of secure tenure. The higher the per capita income of a country is, the better the general housing conditions of the population. The relationship is particularly strong for shortages related to poor-quality building materials and lack of infrastructure. Given this relationship, increases in per capita income could be expected to result in improvements in housing conditions. Using the same rationale, the housing situation

9. Such a situation may arise where there is little enforcement of rental contracts, where laws favor tenants, or where beneficiaries of government housing programs are prevented from renting out their subsidized houses.

10. The factors that hamper affordability vary considerably among cities. The high price of formally produced houses is the main affordability constraint in Buenos Aires, São Paulo, Santiago, Montevideo, and Caracas, counteracting the positive effects of the relatively high average household incomes of these cities. Conversely, low housing prices improve affordability in cities with lower average household incomes, including La Paz, Recife, Managua, Guayaquil (Ecuador), and Bogotá (Colombia).

of a particular country should correspond to its per capita income, but this is not always the case. Figure 10.2 shows that some countries with a relatively high per capita income have larger qualitative or quantitative housing shortages than some countries with a lower per capita income. Based on this finding, it could be argued that the housing sectors of countries with housing conditions above the prediction line are doing worse than their income level would suggest, and those with housing conditions below the prediction line are doing better. For instance, the housing shortages related to building materials and access to infrastructure in Costa Rica, Colombia, Honduras, Paraguay, and Uruguay are better than what would be expected given the per capita income in those countries. It is also remarkable that Brazil, Argentina, Panama, and Mexico—all with a relatively high per capita income—have a greater percentage of dwellings lacking infrastructure than would be expected. This observation led Rojas et al. (2010) to assert that housing policy is a determining factor in housing sector outcomes.

The availability of low-cost, serviced land for residential use is critical for the supply of housing at prices accessible to the low-income population. The cost of land is strongly affected by local factors, including the availability of developable raw land; the availability of trunk infrastructure; the volume of urban land demanded in the city; and the structure of land ownership, land taxation, and land use regulations. Given the mostly local nature of land issues, the analysis presented here focused on the capital cities of three of the four countries studied in detail: Buenos Aires, Santiago, and Bogotá. Table 10.6 presents data on the price of raw land outside these cities (that is, rural land without infrastructure and not officially designated for urban uses by land use regulations) and the price of serviced land on the urban periphery. Also presented is the price of the lowest-priced dwelling sold by the private sector and the average income of households in the lowest quintile of the income distribution. This information was used to calculate the land conversion multiplier¹¹ and indicators related to the affordability of serviced land for low-income households based on the price of the minimum-size lot legally allowed in the city.¹²

The land conversion multipliers for the three cities in the late 2000s are highly related to those reported by Angel for the 1990s (Angel 2000), indicating that land markets continue to place a high premium on serviced land—or, from a different perspective, that it is expensive (and perhaps not easy) to develop land legally in these cities. The cost of the minimum-size serviced lot for residential use would consume 1.22 times the annual median income in Buenos Aires,

11. The land conversion multiplier measures the increase in the land price resulting from its conversion to urban uses (that is, the change in land use status and the provision of infrastructure that allow the legal subdivision of the land into residential lots).

12. The total cost of the minimum-size lot is calculated on the basis of the cost of serviced land and the minimum size required for a lot to be legally registered as a residential lot in the city.

Figure 10.2
Per Capita Income and Housing Shortages by Country, 2009

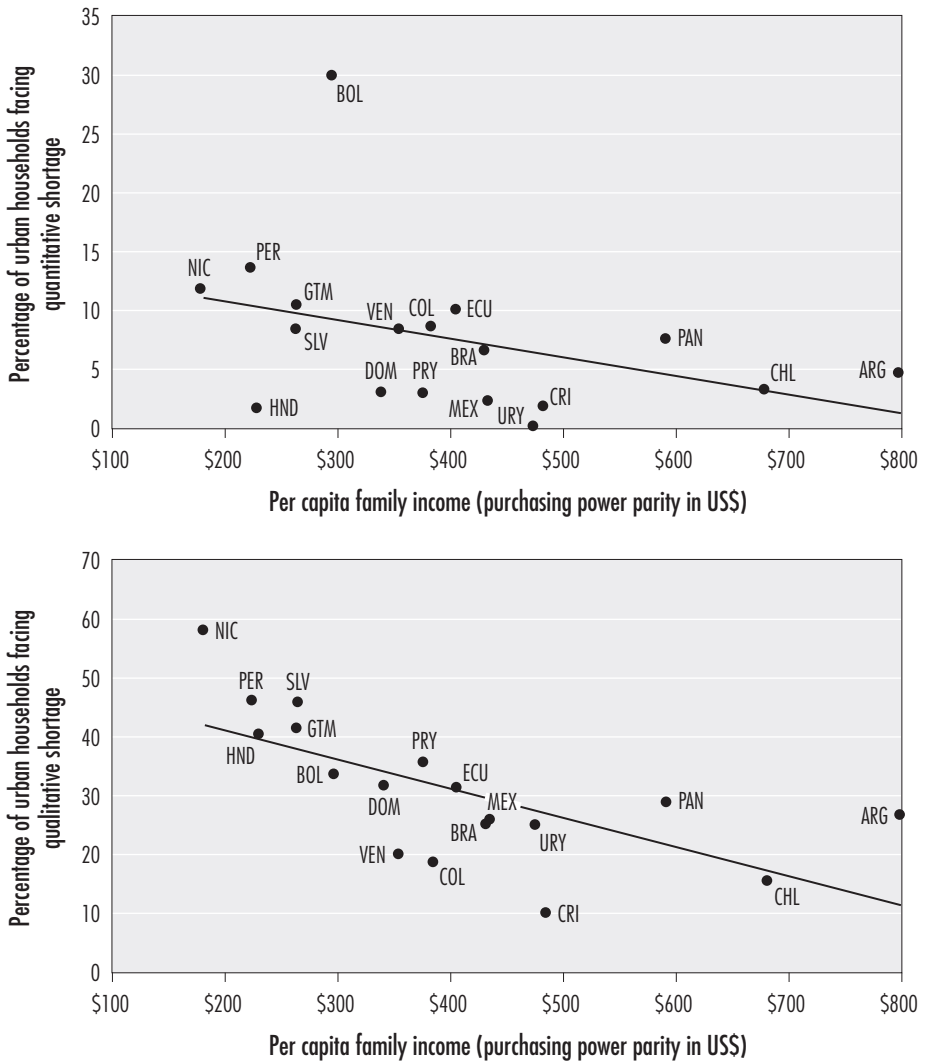


Table 10.6
Selected Indicators of Land Markets in Buenos Aires (2011), Bogotá (2007), and Santiago (2010)

Indicator	Buenos Aires	Santiago	Bogotá
Price of rural land (US\$ per square meter)	1.5	5.8	2.4
Price of serviced land on urban periphery (US\$ per square meter)	36	80	76
Land conversion multiplier	24	14	32
Minimum-size serviced lot (square meters)	300	120	35
Minimum lot price (US\$)	10,800	9,600	2,660
Annual median income (US\$)	8,853	11,712	4,045
Lowest-quintile mean income (US\$)	1,573	2,669	1,249
Ratio of price to median income	1.22	0.82	0.66
Ratio of price to lowest quintile mean income	6.86	3.60	2.13
Lowest-priced dwelling (US\$)	40,000	28,000	17,500
Land as a percentage of the selling price of the lowest-priced dwelling	27	34	15

Sources: Author calculations based on Casazza et al. (2011) for Buenos Aires; Trivelli (2010) for Santiago; and Garza (2007) for Bogotá.

0.82 times the income in Santiago, and 0.66 times the income in Bogotá.¹³ The situation is worse for the low-income population. The price of a minimum lot would consume 6.86 times the annual median income of the lowest-quintile households in Buenos Aires, 3.6 times the income in Santiago, and 2.13 times the income in Bogotá. These ratios are within the range reported by Angel (2000) for cities in countries with a similar per capita income. They highlight the unaffordability of legally subdivided land for low-income populations and also call into question the large minimum lot size in Buenos Aires, a situation that also exists in other cities.

The price of serviced land is a major component of the change in housing prices. As table 10.6 shows, the price of land represents around 30 percent of the cost of the lowest-priced dwelling in Buenos Aires and Santiago, and 15 percent of the cost in Bogotá (mostly due to the small minimum lot size). Efforts to make housing more affordable to households at all income levels must include,

13. The low price-to-income ratio in Bogotá is highly dependent on the small minimum size of a legal residential lot (35 square meters). If the minimum size in Bogotá were the same as in Santiago (120 square meters), the cost would consume 1.9 times the median income, and if it were the same as in Buenos Aires (300 square meters), it would consume 5.6 times the median income. These ratios are greater than the ratios for cities with a similar per capita income, underscoring the fact that residential land is also expensive in Bogotá.

out of necessity, urban land management policies that favor the production and sale of serviced residential lots at prices compatible with the purchasing capacity of households and the ability of governments to support households in need of housing.

Another factor related to the modest performance of the housing sector in Latin America is the underdevelopment of the housing finance system. The relative size of the mortgage portfolio of Panama (in 2005 the largest portfolio in relation to GDP, 27.7 percent) is just a little more than half the size of the average portfolio of the 15 countries that initially formed the European Union (48.9 percent) and well below the average in the United Kingdom (80 percent) and the United States (71.2 percent) (Cohen et al. 2007). In addition, Badev et al. (2014) estimate that Latin America is well below the optimal mortgage market in depth and penetration, using the level of social, economic, and institutional development as a benchmark.¹⁴ According to Cohen et al. (2007), this lack of development is the result of persistently high and poorly mitigated credit and collateral risk, along with the incidence of significant term-mismatch risk in Latin America's housing finance systems, all of which counteract the reduction in interest rate risk attained in the past two decades as a result of the region's sustained macroeconomic stability and control of inflation (Rojas 2004).

Housing Policies and Programs

During the 1960s, the poor housing conditions in the rapidly growing cities of Latin America prompted the concern of governments, which began to implement policies and introduce reforms to improve the performance of the housing sector and assist low-income households in accessing housing. Today, in most countries the housing sector is the target of significant public interventions, a fact that also helps explain many of the housing sector outcomes discussed in this chapter.

A TYPOLOGY OF POLICIES

Almost all governments in Latin America consider the housing sector to be a critical area of public policy with vast social and economic impacts.¹⁵ Governments also use public expenditures on housing as a means to jump-start stalled economies. There are ethical and ideological arguments for intervening in the

14. The benchmark is based on “certain state variables that cannot be changed in the short term and that include both the structural variables [macroeconomic environment, institutional development, market size, and demographic factors] . . . as well as long-term institutional factors” (Badev et al. 2014, 21).

15. Housing is commonly considered a merit good, prompting some governments to assume the responsibility to ensure that people have access to a minimum level of housing services. This approach is grounded in the premise that good housing is necessary for individuals to realize their full potential, as it affects health, safety, and education, among other important public goods.

Table 10.7
Constitutional Provisions Concerning Housing

Constitutional Provision	All Persons Have the Right to Live in Adequate Housing	Housing Is a Merit Good	No Mention of Housing	
Government commitments	The government will provide social benefits, including housing. The government will guarantee access to decent and proper house for all.	The government will promote social housing programs through adequate financing mechanisms, with a focus on low-income, rural, and vulnerable households.	The government will facilitate the construction of houses and the development of financing mechanisms accessible to the largest possible proportion of households, with priority given to low-income households.	
Countries committed	Argentina Ecuador	Bolivia Brazil Colombia Costa Rica Dominican Republic Guatemala Honduras Mexico Nicaragua Paraguay Peru	El Salvador Panama Uruguay	Chile

Source: Bouillon (2012, 240, table 9.1).

housing sector as well. Cuenin et al. (2012) report that the constitutions of thirteen of seventeen countries surveyed in this study state that all people have the right to live in adequate housing, and another four state that housing is a merit good (table 10.7).¹⁶ The countries have experimented with a vast array of housing policies and programs, ranging from the direct production of houses through

16. The constitutions declaring housing as a right emphasize one of two means of attaining this objective: (1) the government must “guarantee” access to a decent and proper house (*vivienda digna*) for all (Argentina and Ecuador); or (2) the government must “promote” housing programs for low-income and vulnerable households (the rest of the countries). The constitutions conceiving housing as a merit good say that the government needs only to “facilitate” the construction and financing of housing accessible to people at all income levels.

public institutions to the implementation of reforms that facilitate the functioning of the housing markets (also known as the “enabling markets” approach).

The housing programs studied in Cuenin et al. (2012) can be separated according to whether they involved the direct intervention of the government in the provision of housing or were more “pro-market,” focusing on facilitating the functioning of key aspects of the housing market (the supply of serviced residential land, provision of housing finance, and the functioning of the building industry). Table 10.8 summarizes this analysis, listing the public housing programs according to their level of government intervention.

The left side of the table includes the programs that involve the most direct forms of government intervention to compensate for the formal housing sector’s shortcomings in providing minimum housing for all. These interventions include the direct construction and financing of housing by public institutions and the provision of subsidized financing by public entities using workers’ retirement savings. The beneficiaries of these programs—usually a minority of those in need due to budgetary and savings constraints—receive heavily subsidized houses.

In the center of the table are the government programs that provide subsidized financing to middle- and low-income households, mostly through public institutions funded with workers’ retirement savings.

On the right side of the table are the pro-market programs that attempt to promote private sector involvement in housing production and finance through housing market reforms and targeted interventions. These programs seek to leverage beneficiaries’ resources in order to expand housing production and better direct public resources to very low income households. Pro-market programs usually involve a more limited commitment on the part of the government in regard to housing finance. This approach was pioneered by Chile in 1976 and Costa Rica shortly thereafter. The United Nations advocated it in the late 1980s (UN-Habitat 1989), and it was later adopted as a policy by the World Bank (World Bank 1993) and the Inter-American Development Bank (IDB 1995).¹⁷

17. Two efficiency considerations underlie the promotion of this approach by international organizations. The first relates to the need to reduce the burden taken on by governments in the direct supply and financing of houses. Financing mortgages with public resources or workers’ savings, though expedient in the short term, generates long-term liabilities for the government, which must continue supplying liquidity to the lending mechanism or be required to pay for the shortfall in funding when workers are ready to tap their savings for retirement. The second consideration is the convenience of attracting to the housing sector resources from the private finance sector to expand the volume of resources flowing to the housing sector of the economy. Competitive mortgage lending in a secure transaction environment will attract long-term savings to fund loans, affordable payment terms will keep defaults low, and a well-financed demand should attract investors to expand supply. All these developments will contribute to the long-term sustainability of housing production and consumption. Furthermore, expanding the range of households participating in the market will contribute to expanding the proportion of the population served by the private sector, liberating the resources of the public sector to assist the poor, who cannot access private financing.

A REVIEW OF HOUSING PROGRAMS IN ARGENTINA, CHILE, COLOMBIA, AND MEXICO

This section explores some of the characteristics of housing programs in Argentina, Chile, Colombia, and Mexico. These countries have a long-standing commitment to improving housing conditions; are relatively rich by regional and worldwide standards; and have for many years and through various stages of their development maintained a strong and constant interest in the housing sector, devoting significant public resources to housing and developing dedicated institutions to intervene where necessary. The four countries have different approaches to housing policy—three (Chile, Colombia, and Mexico) emphasizing programs that support the demand for housing, and the fourth (Argentina) showing a preference for programs that support the supply of houses.

The tables in the Appendix identify the government housing programs in each of these countries in 2014. Table 10.9 lists the programs according to the housing policy approach, distinguishing between those that entail more direct government involvement and those that are more pro-market. In regard to the territorial scope of the programs, some individual households, and others are area focused, supplying neighborhood services to groups of households.

Programs Benefiting Individual Households Government interventions in housing that benefit individual households range from supply-oriented programs that direct provision of finished houses by the government to eligible beneficiaries, such as Argentina's Programas Federales (Federal Housing Programs), to demand-oriented programs that facilitate access to housing finance for low-middle- and middle-income households, such as the subsidies provided by Chile's *Compra tu Vivienda* (Buy Your House) program. The second group of programs also includes those fostering the development of housing finance markets, such as Mexico's second-tier mortgage finance facility run by the *Sociedad Hipotecaria Federal*, or SHF (Federal Mortgage Society), and Colombia's program to promote household savings, *Vivienda para Ahorradores* (Housing for Savers).

In terms of their objectives, all of these programs focus on the provision of a formal housing solution to households in need. They differ, however, in their means of achieving that objective. In the supply-oriented approach, the objective is achieved through the direct action of public agencies that build and distribute housing solutions. In the demand-oriented approach, private for-profit developers provide the houses, and individual households choose the ones they want to purchase with public support.

In Argentina, housing programs tend to rely on the direct intervention of the government, while in Mexico they rely more on the private sector, with the government supporting demand through subsidized loans. The programs in Chile and Colombia are more widely distributed across the spectrum presented in table 10.9. These countries have programs in which the government is directly involved in supplying or fully financing affordable houses for low-income households like

Table 10.9
Public Housing Programs in Argentina, Chile, Colombia, and Mexico by Type, 2014

Approach	Government Guarantees Access to Good Housing			Direct Public Interventions and Pro-market Interventions						Government Facilitates Operation of Housing Markets		
Type of Program	Government Provision of Finished Houses	Government Provision of Incremental Houses	Government Provision of Serviced Land for Residential Use	Government Subsidies and Financing for Affordable Houses	Government Provision of Subsidized Housing Finance	Settlement Upgrading and Tenure Regularization	Housing Upgrading	Housing Vouchers	Government Financing for Incremental Houses	Regulations to Facilitate Subdivision of Land for Residential Use	Interventions to Expand Private Housing Finance	
Argentina	Programas Federales			FONAVI	PROCREAR	PROMEBA PROMHIB	Mejorar tu Barrio, Secciones I, II, III, and IV	Mejorar tu Vivienda				
Chile		Compra tu Vivienda, Section I					Mejorar tu Vivienda, Secciones I, II, and III	Compra tu Vivienda, Secciones II, III, and V				
Colombia	Vivienda Gratuita		Macroproyectos		Subsidized mortgages	Mejoramiento Integral de Barrios		Vivienda para Ahorradores			Ahorro Programado	
Mexico				Esta Es Tu Casa FONHAPO	FOVISSTE INFONAVIT ISSFAM	HABITAT Espacios Públicos Rehabilitación de Conjuntos Habitacionales Desarrollos Certificados	Vivienda Digna FONAGAVIP		Vivienda Digna FONAGAVIP		Sociedad Hipotecaria Federal (SHF)	

See text for translations of program names.
Sources: Data from SEDATU (2014) and FONAVI (2014).

Colombia's *Vivienda Gratuita* (Free Housing) and Chile's *Compra tu Vivienda*, Section I, and programs that support the demand for houses produced by the private sector like Colombia's *Vivienda para Ahorradores* and Chile's *Compra tu Vivienda*, Sections II, III, and IV.

The programs also have different beneficiaries. Some respond to the inability of very low-income households to pay for a house, and others respond to the barriers encountered by low-middle- and middle-income households to access private sector mortgages to purchase a finished home (new or old). The latter programs supplement household savings in order to reduce the size of the loan needed to finance a home, thereby enabling families to qualify for a mortgage supplied by private banks. One example is *Compra tu Vivienda*, Section III, in Chile and *Vivienda para Ahorradores* in Colombia. Chile also has a program that helps middle-income households build a house on their own lot (*Compra tu Vivienda*, Section V). A significant portion of the loans issued by Mexico's FOVISSTE (Housing Fund of the Public Servants' Social Services and Social Security Institute), INFONAVIT (Workers' National Housing Fund Institute), and ISSFAM (Mexican Armed Forces Social Services Institute) benefit middle- or low-middle-income households with subsidized interest rates and access to several complementary loans to pay for a house produced by a private developer. Argentina's PROCREAR program serves the same purpose.

To address qualitative housing deficits, which in some countries are numerically and proportionally larger than quantitative deficits, there are programs to assist households in improving their current home, such as *Mejorar tu Vivienda* (Improve Your House) in Chile and *Mejor Vivir* (Better Living) in Argentina. As shown in table 10.8, Costa Rica, Ecuador, Guatemala, Honduras, Panama, and Uruguay also have this type of program.

Area-Focused Programs Area-focused programs benefit groups of households by improving the quality of urban services. Neighborhood improvement programs such as PROMEBBA and PROMIHB in Argentina, Programa Integral de Mejoramiento de Barrios (Integrated Neighborhood Improvement Program) in Colombia, *Mejorar tu Barrio* (Improve Your Neighborhood) in Chile, and HABITAT and Rehabilitación de Conjuntos Habitacionales (Rehabilitation of Housing States) in Mexico are responses to the large qualitative shortages documented by Rojas and Medellín (2011). Area-focused programs target individual settlements—most commonly substandard squatter settlements and illegal subdivisions inhabited by low-income households—and do not contribute to improving the living conditions of formal urban neighborhoods that also may have similar infrastructure and urban services deficits (Couriel 2010). An exception is Chile's *Mejorar tu Barrio*, which is aimed at improving neighborhoods created by government-sponsored affordable housing programs that have deteriorated over time—an emerging issue affecting the quality of housing stock, social relations among residents, and the value of real estate assets (Nieto 2010).

THE BIASES OF CURRENT HOUSING PROGRAMS

There is a strong sector bias in the government interventions in Argentina, Chile, Colombia, and Mexico. One dimension of the bias is the predominance of programs focused on the provision of new homes to individual households. This contrasts with the scarcity of programs aimed at improving neighborhood services and the quality of the housing stock, as is shown in table 10.10. This bias leads housing programs to finance only the costs of building houses and the most basic infrastructure (road access, water and sanitation services). Only a few programs benefit groups of households or communities by improving the general amenities of neighborhoods. Yet even those programs are restricted in their urban impacts, as they mostly target informal settlements with high concentrations of poor households, thus remaining aligned with the social welfare focus of the countries' housing policies (Rojas et al. 2010), and do not contribute to the provision of infrastructure and urban services to the expansion areas of cities.

Another bias is that these countries' housing policies pay little or no attention to rental units (Gilbert 2003). This shortcoming forcefully argues for a change in outlook to encompass the many advantages of rental housing and to advocate for its promotion, or at least to adopt a tenure-neutral shelter policy. Given the central role rental housing plays in a well-functioning housing market, the United Nations supports a more proactive position on the part of governments concerning the development of rental markets (UN-Habitat 2011).

A third bias of these countries' housing programs is that in promoting the benefits of these programs, almost invariably the governments mention the number of jobs the programs will create. In some cases, programs are explicitly designed with this economic objective in mind. That is the rationale used by the Colombian government in allocating resources for interest rate subsidies for housing loans and by the Argentinean government in determining the number of houses it will build each year through its Programas Federales (Rojas et al. 2010). Consequently, in many cases the resources allocated to housing programs are estimated on the basis of the jobs created and not on actual housing needs. Designing hous-

Table 10.10
Focus of Housing Programs in Argentina, Chile, Colombia, and Mexico, 2014

Country	Number of Programs Targeting Households	Number of Programs Targeting Communities
Argentina	4	2
Chile	8	4
Colombia	4	2
Mexico	9	4

Sources: Data from SEDATU (2014) and CONAVI (2013, 2014).

ing programs with this in mind does not help target resources to, or guarantee their effectiveness in, improving housing conditions.

As can be appreciated from this analysis, the housing problems of most cities are complex and cannot be solved simply by government interventions focused on building more houses, no matter how badly needed they are.

THE LESSONS LEARNED FROM CURRENT HOUSING POLICIES

There is neither a preferred approach to housing policies in Latin America nor a recommended one. Some countries show a marked preference for the direct production of houses by public entities to supply the needs of the poor. Argentina, and to a large extent Venezuela and Brazil, are strong proponents of this approach. Such programs are effective in reaching the poor but need to be adjusted to avoid oversubsidizing households capable of paying part of the cost of a house (Cuenin et al. 2012). Furthermore, they make only limited contributions to provide the urban services and amenities that are central to improving residents' quality of life.

Other countries focus instead on exploiting private sector resources (provided by for-profit developers and home buyers themselves) to finance and pay for new houses by giving direct, one-off subsidies to beneficiaries to increase their savings and thus make private mortgages affordable. Two early adopters of this policy, Chile and Costa Rica, have reduced their quantitative shortages in this way. Such policies, however, do not reach low-middle-income households that cannot save enough for a mortgage or do not have regular incomes to qualify for one (Cuenin et al. 2012). Improved access to private sector financing for households that are able to pay has freed up public resources to assist households that cannot access private financing or that need assistance in upgrading their homes.

Programs that rely on workers' savings to fund subsidized mortgages are intrinsically limited by the availability of funds. In addition, they provide below-market returns on savings. In Brazil and Mexico, where quasi-governmental institutions have a significant presence in the housing sector, subsidized lending crowds out potential private lenders that cannot compete with subsidized loans. The gradual abandonment of this model could increase opportunities for private capital to participate in the housing sector, thereby expanding the scope and depth of the private housing finance system and making it possible to satisfy pent-up demand for mortgages, albeit at higher interest rates.

Finally, while there is nothing intrinsically wrong with associating public expenditures for housing with the creation of employment and boosting stagnant economies, it is important to keep in mind that these objectives are attained when the housing sector is functioning well. When housing production is entirely in the hands of government entities and the production and distribution mechanisms do not mobilize the paying capacity of beneficiaries, housing instruments used to boost the economy are inefficient, as they misdirect resources and do not mobilize all the potential resources available to the housing sector. Furthermore,

when the objectives of housing policies and programs are narrowly confined to the production of more houses—as is the case in most of Latin America—more public expenditures in housing exacerbate the negative urban impacts of housing production.

The Urban Impacts of the Housing Sector ---

The most significant urban impact of the housing sector is the incorporation of new residential land into a city's footprint. There are no reliable data on land added annually for residential use to the cities in Latin America, but the scant information available indicates that it is very significant. Estimates based on data provided by Cuenin et al. (2012) indicate that in 2006, the total land incorporated into residential use in Argentina was approximately 3,000 hectares and in Chile at least 1,800 hectares.¹⁸ If annual new house production in Argentina and Chile stays at levels similar to those in 2006, within a decade the total incorporation of land for new houses will be 30,000 and 18,000 hectares, respectively, not counting the land required for roads, parks, and urban services. Official estimates for Mexico indicate that if current urban development trends hold, the expansion of its cities over the next 30 years will require incorporating an additional 340,000 hectares into urban uses (SEDESOL 2011) and at least 70 percent of that land—on average 8,000 hectares per year—will be used for housing and related urban services.¹⁹

Programs that finance new housing construction—either directly by government institutions or indirectly by the government supporting the demand for privately produced houses—have established incentives for the housing sector *not* to contribute to building better cities. These programs provide further encouragement of the essentially short-term perspective of real estate developers seeking to maximize their profits and public housing institutions to reduce costs. The cost of land is the most significant variable affecting both outcomes. To achieve lower land costs, they subdivide large plots on the urban periphery, where land is cheaper and easier to develop. Then they make the minimum investments in infrastructure and urban amenities required by the planning authorities, paying little or no attention to the mid- or long-term consequences of their actions.

18. In 2006, annual house production in Argentina—including homes built and financed by both the government and the private sector—was just under 100,000 units. If all houses were built on the 300-square-meter minimum-size lot allowed, total land consumption for that year would have been 3,000 hectares. The estimate for Chile is based on the same parameters. This estimating procedure yields very conservative results, as only some of the new houses each year are built on minimum-size lots. Condominiums, which represent approximately 30 percent of the new houses in Chile, may compensate for this bias.

19. Housing and residential related services use between 60 and 80 percent of the urban land depending on location, central areas or the periphery.

The activities of home self-builders who meet their housing needs in the informal housing market also pull urban growth out to the periphery, where most of the land that can be illegally subdivided or squatted on is located. In fact, most of the informal housing developments in Latin America contribute to expanding the footprints of cities.

Municipalities have a vested interest in the construction of houses, as most of their revenue comes from taxes on developed land or government transfers tied to the size of their population. Cities are quite willing to facilitate housing development even when they have limited institutional and financial resources to manage urban growth and to provide services to the new population. In most Latin American cities, the traditionally weak urban planning and management mechanisms are unable to counterbalance the strong pressures for peripheral housing expansion.

Under the current set of incentives originating in the interplay of housing markets, government housing policies and programs, and weak urban planning institutions, the most common urban outcomes of existing housing policies are

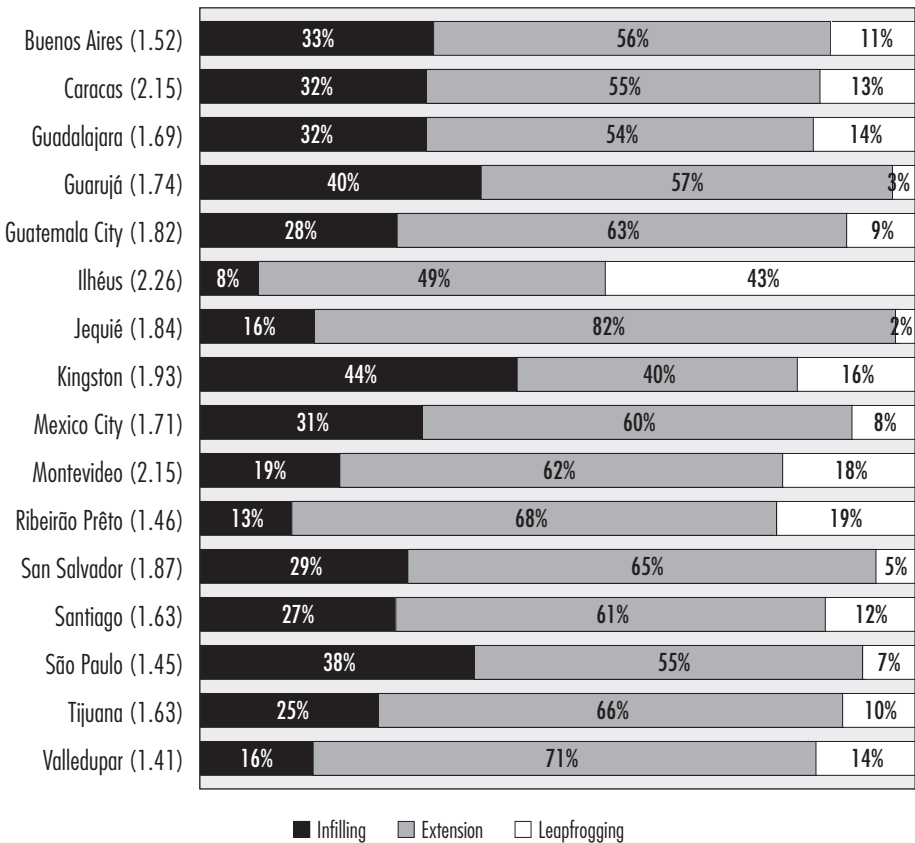
1. urban sprawl;
2. the growth of underserviced residential areas;
3. the concentration of affordable housing on the urban periphery;
4. little variety in housing types; and
5. the abandonment of inner-city neighborhoods.

The following sections examine these outcomes and identify possible solutions.

URBAN SPRAWL

Cities around the world are becoming less dense. This is the conclusion of a study documenting the global decline of urban densities (Angel et al. 2011). The trend holds for land-rich and land-poor countries in both the developed and developing worlds. Besides a decline in the density of built-up areas, other manifestations of urban sprawl include fuzzy boundaries between city and countryside, large expanses of single-use (i.e., residential) areas, leapfrogging development, and excessive fragmentation of open space. Cities in developing countries have considerably lower densities than cities in developed countries. Latin America—the most urbanized developing region—is no exception, as Angel et al. (2011) found (see table A10.6). The data indicate that between 1990 and 2000, most of the new developments occurred either (1) in open-space areas of the urban periphery (on land located less than 100 meters from the open countryside) in a process called growth by *extension*; or (2) outside the periphery in a process called *leapfrogging*. This sprawl occurs even when there is space inside the city to grow by *infilling*, defined by the authors as new development in open spaces within the city footprint. As figure 10.3 shows, most of the new land added to cities from 1990 to 2000 was by extension, representing 70–80 percent of the total growth.

Figure 10.3
New Land Developments by Location Relative to the City Footprint, 1990–2000



Note: Ratio of city footprint to built-up area in 1990 in parentheses. Percentages are rounded.

Source: Author calculations based on Angel et al. (2011).

An analysis of the expansion of Mexican cities in the past three decades (1980–2010) indicates that the urbanized area increased nine times faster than the population, expanding urban development on the territory of the surrounding municipalities (SEDESOL 2012). This creates a complex governance problem for the management of city growth. For instance, the urbanized area of Puebla-Tlaxcala grew at nearly eight times the rate of its population, and did so mostly in the municipalities on the periphery, where residential development took place at great speed (see figure 10.4) (OECD 2013a).

Several of the incentives discussed previously are at work in the push to extend cities, and they are strong and persistent. Private developers and landowners

Figure 10.4**Expansion of the Footprint of the Puebla-Tlaxcala Metropolitan Area, 1980–2010**

Source: OECD (2013a, 118, fig. 3.1).

profit from the development of low-cost rural land, and the government is able to build more housing within a given budget when it develops cheap land on the periphery. Leapfrog development brings even more profits to landowners and developers, so this approach is used whenever possible. In this type of growth, municipalities increase their tax revenue (particularly when they are not directly responsible for the provision of water, sanitation, education, and healthcare services) and/or benefit from the population increase to capture more transfers from national and state governments. Some institutional structures, such as the sale of communal land surrounding cities in Mexico, favor this process. In other cases, such as in Santiago, Chile, developers take control of significant portions of the land available for expansion at the beginning of the process and continue to purchase land in order to ensure a steady supply of developable land (Donoso and

Sabatini 1980). Incidentally, urban sprawl does not reduce the price of serviced land. Trivelli (2010) documented this phenomenon for Santiago, a city that saw increases in land prices for almost three decades, despite the expansion of its footprint (figure 10.5). From 1982 to 2010, the median price of serviced land increased by almost seven times (prices adjusted for inflation).

The low incidence of infill development was most likely due to the higher cost of serviced land in inner-city areas. Institutional issues may also be at work. Underutilized areas of cities often have complex land tenure structures or are held by public or private institutions that are not inclined to redevelop them.

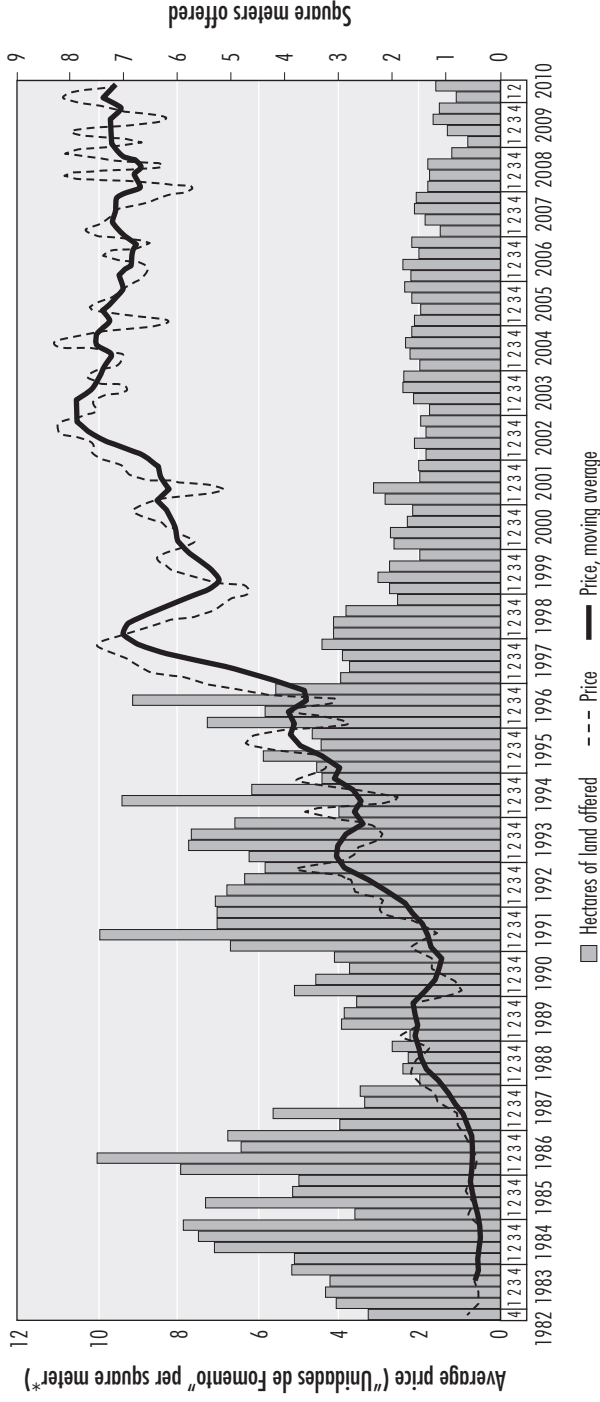
THE GROWTH OF UNDERSERVED RESIDENTIAL AREAS

The housing construction bias of national and regional policies and programs leave the task of dealing with the urban development issues that emerge from new residential construction to municipalities. This effort is hampered by national legislation and norms aimed at promoting the construction of affordable housing that exempt developers (private and public) from providing many of the urban amenities required in other residential subdivisions, in the expectation that the local governments will supply them incrementally over time. Often private developers circumvent government regulations requiring the provision of other amenities, commonly parks and land reserves for schools and healthcare facilities, in large subdivisions by building small adjacent subdivisions that are below the size requiring enhanced amenities. Unless government regulations explicitly forbid this behavior (and the regulations are enforced), this strategy results in the construction of vast neighborhoods with only the most basic public amenities—secondary access roads, sidewalks, and public lighting—as illustrated in figure 10.6.

Most municipalities in Latin America are hard-pressed to provide the other necessary amenities, such as schools, public transit access, and healthcare services. But for a few exceptions—including large and midsize cities in highly decentralized countries such as Brazil, Colombia, and Ecuador—most local governments lack the institutional and financial resources to fully meet their responsibilities. They find it difficult to expand trunk infrastructure to new formal and informal subdivisions. In highly centralized countries such as Chile, some of these services are provided by the central government (trunk roads, education, healthcare services) or by private utilities (water and sanitation), further exacerbating the difficulty of coordinating new house construction with the provision of adequate services (OECD 2013b).²⁰ In addition, government housing policies are usually driven by national objectives that usually are not well matched to local needs.

20. Of the four countries discussed in detail in this chapter, Argentina, Colombia, and Mexico are far more decentralized than Chile, with the subnational governments responsible for a higher percentage of public expenditures: more than 50 percent in Argentina and Colombia and 30 percent in Mexico, compared with only 15 percent in Chile (Daughters and Harper

Figure 10.5
Changes in Price and Volume of Land Offered for Sale in Santiago (Quarterly) 1982–2010



*"Unidad de Fomento" is a unit of account that follows inflation in the economy, changing according to changes in the price index.

Source: Tivelli (2010, 5).

Figure 10.6
New Neighborhoods Without Full Urban Amenities in Torrejón, Mexico



Source: Topelson (2009).

Most municipalities face significant challenges in managing urban development. With limited manpower and institutional resources—including good-quality urban development plans, development control procedures and personnel, and agile judiciary procedures for punishing noncompliance—they are ill equipped to cope with the cumulative impact of the operations of private and public developers in the formal housing sector. This leads to mostly uncoordinated developments that have long-term impacts on the efficiency and sustainability of cities and on their capacity to provide good living conditions. There are only a few cities in Latin America where the planning, coordination, and implementation capacities of local authorities are able to counterbalance the spontaneous sector and institu-

2007). States and provinces control most of these resources; the municipal share is only around 15 percent in Argentina, Colombia, and Mexico, and as low as 7 percent in Chile (OECD 2013b).

tional bias of developers. In these cases, the city is able to pursue a long-term vision of its desired development path, safeguard the common interest, and ensure the sustainability of its urban development process.²¹

THE CONCENTRATION OF AFFORDABLE HOUSING ON THE URBAN PERIPHERY

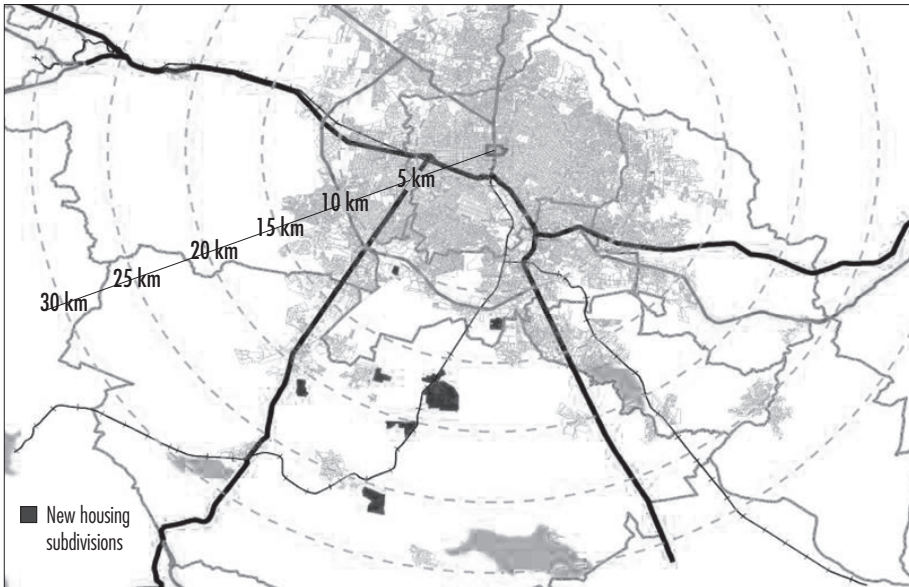
The search for cheap land drives the decisions of private and public housing developers. New housing developments tend to be located in areas that are far from city centers or other areas that concentrate services and employment. Topelson (2009) reports on new housing estates in Mexico built on land located up to 25 kilometers from Guadalajara's city center, using cheap communal land in municipalities willing to grant building permits (figure 10.7). This process also takes place in Santiago, where according to Trivelli (2010) almost all affordable housing built in the last decade is in locations 20 kilometers or more from the city center where the cost of land allows building houses within the cost ceiling set by the government subsidy schemes.

One of the consequences of developing affordable housing on the urban periphery is the concentration of houses all of the same type and price. An example of this situation is found in Santiago. Over the past several years, most of the new houses for low-income households financed by the public sector were built in neighborhoods where house prices were below US\$28,000 (the lowest price on the market in 2014). These houses are attractive only to low-income households that cannot afford to buy homes in any other location. Due to the low prices of the homes, residents are exempt from paying land taxes and do not contribute to the financing of the municipal services they require.

Municipalities in Chile cannot count on their own resources to address the deficits in urban services. The combination of property tax exemptions for low-cost houses and inadequate central government transfers results in a shortfall in revenue. In Chile's highly centralized public management structure, the national government agencies in charge of the provision of trunk infrastructure, healthcare services, education, and recreation facilities do not coordinate their programs with the municipalities or with the national housing agencies; thus, these services are not normally provided in sync with the construction of houses (OECD 2013b). Worse still, the amenities in these areas do not improve over time, leaving the residents stuck in low-quality neighborhoods. The lack of amenities contributes to the unattractiveness of the neighborhoods and the low value of their housing. This situation is not unique to Chile; all Latin American cities have residential areas with below-average amenities.

21. The best-known cases are Curitiba, Brazil, and Medellín, Colombia. In the past, other cities—such as Belo Horizonte and Porto Alegre, Brazil; Bogotá, Colombia; and Montevideo, Uruguay—have also managed to coordinate urban development and housing policies.

Figure 10.7
Location of New Housing Developments Outside Guadalajara



Source: Topelson (2009).

Another common policy that contributes to this outcome is special subdivision ordinances that seek to reduce the cost of residential land for affordable housing developments. Such developments are often allowed to use low-cost house designs and provide limited neighborhood amenities. Special land subdivision regulations, such as Brazil's *Áreas Empeçilhais de Interesse Social*, or AEIS (Special Areas of Social Interest), exist in almost all countries. In some cases, as in El Salvador, these subdivisions are built by the private sector taking advantage of provisions in the law that allow the subdivision of rural lands with little or no services (Ruiz 2010). As a result, these legally subdivided neighborhoods lack urban amenities in much the same ways that squatter and other informal settlements do (Couriel 2010).

In sum, with the exception of a handful of neighborhoods housing mostly high-income households, most of the residential space in most Latin American cities is taken up by formal and informal neighborhoods with significant shortages of infrastructure and urban services. The lack of services and amenities has a significant impact on quality of life, given that most of the services provided by a house to its users come from the neighborhood. Out of the nineteen housing services listed in table 10.11, the individual house provides residents with only five

Table 10.11
Services Provided by a House, Classified by Source

Source	Service
House	Access to a plot of land
	Protection from the weather
	Bathroom and kitchen facilities
	Privacy
	Sufficient living space
Subdivision	Access roads
	Drainage
	Public lighting
	Community parks
Neighborhood	Piped water
	Sewerage
	Waste collection
	Healthcare services
	Education
	Recreation facilities
	Parks
	Resident security
City	Resident security
	Secure tenure
National government	Secure tenure
	Land title

services, and the subdivision or neighborhood provides eleven services. The remaining three services are the responsibility of the city or national government.

Housing programs that are area focused are mostly concerned with the problems of squatting or illegal settlements. Settlement upgrading programs, such as those in Argentina and Colombia, solve the environmental, infrastructure, urban services, and land tenure shortages of specific settlements, usually selected for intervention due to their high concentration of households living in extreme poverty. These programs do not accommodate the needs of the urban areas surrounding the informal settlements (providing only connections from the settlements to the trunk infrastructure), a situation that tends to create islands of well-served neighborhoods amid seas of urban shortages (Couriel 2010). This shortcoming of the current programs begs for a shift to a citywide approach that would result in the upgrading of all substandard residential areas, not just illegal settlements. Such an approach has yielded good results in Medellín, Colombia, for example (Brand and Davila 2011).

Current practices pertaining to the design, implementation, and management of public spaces in affordable housing subdivisions are problematic. Although land reserves are required in these subdivisions for the provision of recreation and community facilities, they are almost invariably not supplied with the required equipment or put under the ownership and control of local stakeholders. They remain in a sort of limbo between the public spaces that are controlled by the municipalities—fundamentally, the streets and public parks—and the houses or apartments that are the private property of the households. The lack of amenities and the ambiguity of ownership and control over this common land, when coupled with the lack of municipal resources to operate and maintain its own public spaces, contribute to the rapid physical deterioration of the neighborhoods (Rojas 2010b). In 2010, an estimated 3,000 affordable housing neighborhoods in Chile were in advanced stages of deterioration (Nieto 2010). This harsh reality led the government to implement the *Quiero mi Barrio* (I Love My Neighborhood) program, which is an attempt to mitigate the physical and social ill effects of such neighborhoods.

LITTLE VARIETY IN HOUSING TYPES

Another detrimental feature of Latin American housing programs is the tendency to build a limited number of housing types that are inexpensive and easy to construct. Public and private developers behave similarly in this respect. Figure 10.8 shows such a housing tract built by private developers in Mexico for sale to households receiving loans from government-sponsored institutions. The size and features of such houses are mostly determined by government regulations and budget considerations, and they rarely meet all the needs of the residents, who would generally prefer larger houses or at least houses that could be easily expanded to suit their needs.

THE ABANDONMENT OF INNER-CITY NEIGHBORHOODS

Although inner-city neighborhoods have urban services and better access to employment than the periphery, very few affordable houses are built there. This trend is in part responsible for the low proportion of city growth that takes place through infill development in Latin America (see figure 10.3). The higher land prices and complex land tenure structure of the consolidated areas of cities are strong disincentives for private developers and public housing agencies, as they are extra costs that will reduce profits for developers and prevent housing agencies from building the maximum number of affordable houses at the minimum cost. If, however, an analysis of the costs and benefits of new housing on the urban periphery includes the expenditures that homeowners must make on a daily basis to access their employment or urban services from the homes far from the city center, those extra costs may not be that high. Residents of subdivisions on the periphery end up paying for developers' and agencies' lower costs in the form of travel time and transportation expenses, both of which exact a high price on

Figure 10.8
The Repetition of Housing Types in Mexico



Source: Topelson (2009).

the productivity of the urban economy.²² In this regard, an Inter-American Development Bank study on the sustainability of urban development states, “In . . . five surveyed cities, 28.1 million people travel 1 hour and 30 minutes or more a day. This is equivalent to 10 working weeks per year per person” (IDB 2014, 7).

Redeveloping land located in inner-city areas is not that much more expensive than developing land on the periphery if the costs of extending network infrastructure and other urban services are taken into account. It is the taxpayers and users of this infrastructure who take on these costs, not the developers or housing agencies. Most cities have unused or underused land close to the center that can be captured for affordable housing; unused infrastructure such as railroad yards

22. Martim Smolka of the Lincoln Institute of Land Policy calls this transportation expense “the mortgage payment of the poor” (personal communication with the author).

or decommissioned airfields, ports, or military bases; unused land controlled by large institutions such as hospitals, education centers, or charitable organizations; abandoned industrial facilities; and underoccupied, deteriorated residential neighborhoods. Often there is also vacant land in the outer growth rings of the city, a great deal of which is in the first and second rings, still close to employment and services located in the core inner city.

In the late 1990s, 40 percent of Rio de Janeiro's net urbanized area (total area minus streets, parks, and protected areas) was underutilized or empty. The great majority of the empty land (70 percent) was in large parcels of one hectare or more (Furtado and Leal de Oliveira 2002). Similarly, in 1994 almost half the parcels in the metropolitan area of Buenos Aires were vacant (Clichevsky 2002). Though dated, this information gives some indication of how the situation may look at present: there might still be a significant proportion of such land, most of it controlled by institutions or companies that have relocated to new areas.

There is also undeveloped land in the outer development rings of most cities, some of which was retained for speculation, and some kept in reserve by developers. In 2010, there were an estimated 120,000 hectares of unused land within the urban footprints of the cities of Mexico (SEDATU 2013), which would be sufficient to cover one-third of the total land area in that country expected to be incorporated into urban uses by 2040, if current city growth trends persist (SEDESOL 2011).

Developing this inner-city land poses significant institutional challenges. The three most important are (1) the need to establish institutional mechanisms to take control of this land and to promote its development, which would require creating effective public-private partnerships (Rojas 2004); (2) using taxes and incentives to prevent the retention of undeveloped land, including attaching idle-land surcharges to the property taxes for unused plots (Ravindra 1996); and (3) undertaking land readjustment projects to provide the infrastructure required to put the land into residential use. The redevelopment of former industrial sites, or brownfields, poses environmental hazards that private developers find difficult to address and finance. Government assistance could be justified for environmental cleanup on the basis of the multiple social benefits and positive externalities generated by redeveloping such sites (Iannone 1995; Wright and Davlin 1998).

THE URBAN LIABILITIES OF SECTOR-FOCUSED HOUSING POLICIES

As discussed in the preceding sections, cities are the main casualties of the system of incentives established by the narrowly sector-focused housing policies and programs currently being implemented in Latin America. The urban impacts of the housing developments documented here constitute important urban liabilities. The most significant impact is the lack of good access to jobs and services, which drives households to abandon their homes, leading to the deterioration of the neighborhoods, with consequent private and public losses.

The distance of the new subdivisions from employment and service centers forces people to spend a significant amount of time and money moving from home

Table 10.12
Commuting Travel Times to Work or Urban Services (round trip) in Selected Cities, 2014

City	Average Travel Time	Percentage of People Traveling 1.5 Hours or More per Day
Mexico City	1:36	44
Buenos Aires	1:11	27
Bogotá	1:34	50
São Paulo	1:37	40
Lima	1:21	38

Source: IDB (2014).

to work, school, and healthcare facilities. A large number of Latin American cities report increasing travel times. In extreme cases, travel to work and other services takes nearly three hours each way, and residents spend 40 percent of their income on transportation costs. One study found that “on average, inhabitants of . . . five surveyed cities travel 1 hour and 28 minutes to make their most frequent commute (round trip)” (IDB 2014, 7). Table 10.12 displays the results of this survey. Households are paying with travel time for the savings in land costs realized by private developers and public housing institutions.

Distant and underserved neighborhoods provide but a small number of the services expected from a house (see table 10.11). The absence in the new housing subdivisions of many of the traditional services provided by neighborhoods or the city lead many households to develop a profound dissatisfaction with their homes. They often find that they are not able to live in peripheral locations, as they continue to work for their former, faraway employers and have very limited or no access to essential urban services. Many unsatisfied residents end up renting out or abandoning their homes. From 2000 to 2010, the number of empty units in Mexico’s housing stock increased from three million to five million units (table 10.13). Such a high proportion of empty houses is similar to that of Argentina and more than double the percentage in the United States and Germany and is only comparable with that of Spain, Portugal, and Ireland at the peak of the 2008 financial crisis (OECD 2015).

Latin American cities are facing a growing challenge posed by housing policies and programs that focus exclusively on residential financing and production and that do not pay attention to the full array of urban services required to provide a good quality of life. Governments are investing large sums to develop the network infrastructure and urban services and amenities required by subdivisions on the urban periphery, but they are neglecting underutilized and empty urban land, particularly in inner-city areas. Unless there is a change in the way the housing sector relates to the development of cities, these trends are likely to continue

Table 10.13
Use of Housing Stock in Mexico, 2000 and 2010

Use	2000		2010	
	Number of Units (millions)	Percentage of Stock	Number of Units (millions)	Percentage of Stock
In use	21.9	84.5	28.6	80.4
Empty	3.0	11.6	5.0	14.0
In temporary use	1.0	3.9	2.0	5.6
Total	25.9	100	35.6	100

Source: CIDOC (2012).

and even increase, based on the fact that most of the region's countries have experienced sustained economic growth over the past decade and a rise in purchasing power that will drive people to consume more housing and more housing-related urban services.

Arguments for an Urban-Based Approach to Housing Policies

Latin America's experience with housing—particularly the progress made over the past two decades in improving access to better housing and thus reducing the absolute and relative numbers of households facing quantitative and qualitative housing shortages—indicates that any government concern for improving the living conditions of urban populations must include a concern for a well-functioning housing sector. The region's experience also shows that when housing policies and programs are designed and implemented with little regard for their urban impacts, they provide only a partial solution to the problem. By focusing only on the set of housing services provided by a house, these policies end up exacerbating urban development trends that are detrimental to the urban population's quality of life.

URBAN HOUSING DEVELOPMENTS MEET RESIDENTS' NEEDS

The main driver of informal settlements and meager living conditions in many cities is the inability of the formal housing sector to produce enough houses to satisfy the demand from new households and to reduce the backlog of unsatisfied needs. It is also true that the houses produced by the formal sector are mostly unaffordable for low- and middle-income households. The informal production of houses—outside regulations and mostly substandard—will continue to exist as long as the formal sector produces an insufficient number of affordable houses.

But these problems also are related to the housing sector's unintended urban impacts. The most significant of those impacts is the exacerbation of urban sprawl, which stresses the capacity of cities to provide network infrastructure and urban services to rapidly expanding peripheral neighborhoods. This situation promotes the emergence of legally developed but underserved neighborhoods. These new residential areas, when poorly connected with the rest of the city, impoverish residents, making it difficult for working-age members of households to have access to new and better sources of income and personal development opportunities, and for other members of households to access basic urban services such as schools and hospitals.

It follows that government policies aimed at improving housing conditions must focus not only on expanding the flow of affordable houses and improving the quality of the existing housing stock, but also on ensuring that new residential areas are supplied with the necessary infrastructure and urban services and have good access to transportation, sources of employment, and other amenities. This study shows some of the social and economic losses brought about by sector-focused housing policies. The demographic and economic trends that will affect urban development in the coming years point to an escalation of these losses unless a change in policies takes place.

This study shows that there is a real opportunity to add more resources to the housing sector by channeling part of the incomes of the expanding middle class to pay for most of the cost of a house. The development of housing finance programs will induce private developers to produce a diversity of housing solutions catering to the needs and purchasing capacity of households in all income brackets capable of paying for a home. Expanding housing finance options and access to them for middle-income groups is possible, as the success attained by countries such as Chile, Colombia, Costa Rica, Ecuador, and Mexico proves.

Despite such down-market movement on the part of the private sector, ensuring wider access to credit and a reasonable supply of low-cost dwellings remains a significant challenge, particularly for the high proportion of workers who are self-employed, small entrepreneurs with irregular incomes, or employed in the informal sector. More challenging still is guaranteeing that the new housing products directed to various segments of the housing market have the urban amenities required to provide residents with all the services they need.

There is also a real opportunity to improve the housing conditions of low-income households with well-targeted and efficiently implemented public programs, particularly those that allow people to tap into their household resources in order to incrementally build and improve their homes. Incremental housing construction and home improvement programs exist in most Latin American countries, but they need to be brought to scale to help households that still cannot access long-term financing to purchase good-quality homes (Azevedo, Bouillon, and Chevalier 2012).

To make lasting improvements in people's living conditions and to ensure that investments in housing contribute to enhanced economic and social development

opportunities, the housing sector should create programs that encourage cooperation with city governments in directing developers to build new housing subdivisions in suitable areas, provide these neighborhoods with good accessibility and transportation to city centers, and put in place all requisite urban amenities.

LINKING HOUSING PROGRAMS AND URBAN DEVELOPMENT MAKES SENSE

One of the most significant findings of this study is that improving the functioning of the housing sector and assisting the very poor to get houses may not be an effective strategy if the urban impacts of housing production and consumption are ignored. For decades, governments in Latin America have focused unilaterally on increasing the production of new houses within the constraints imposed by available resources. Yet massive housing production on the urban periphery has created many of the urban problems described in this chapter.

Countries would do much better to link the production of new houses with the provision of urban amenities: good transportation; healthcare, education, and recreation facilities; community parks and services; citizen safety; and employment opportunities. This strategy calls for breaking away from the traditional sector-focused housing programs and moving instead to a more city-focused set of policies aimed at improving the living conditions of the urban population and promoting the growth of the urban economy.

This call for a policy shift reflects the significant changes in housing conditions experienced in Latin America over the past decade. The most significant type of housing shortage today is a lack of network infrastructure and urban services in neighborhoods. The second-largest shortage is related to the size and quality of houses. Governments should significantly shift their priorities from building new houses to implementing programs that will improve the infrastructure and the quality of the existing housing stock.

The expansion of new housing production and the related commercial and recreation services that will be required over the next two decades to meet the demand of middle-income households will put additional pressure on the supply of serviced land and will result in price increases. The price of serviced land is already beyond what governments can afford to pay for building subsidized housing, and even beyond what middle-income households can afford, even with access to long-term financing. Further increases in land prices could slow down or arrest the progress made in improving the affordability of housing.

A new set of goals to improve the living conditions of the urban poor must have the scope required to make a significant dent in the problem. It would be unwise not to take the experience of the past two decades into account in the design and implementation of a new generation of housing policies and programs. This study indicates that these new policies should be based on the following goals: (1) attract more private resources (from both entrepreneurs and households) to the housing sector in order to expand production; (2) adopt a citywide approach to improve the living conditions of the population in addition to providing houses

for the poor and upgrading substandard informal settlements; and (3) promote a greater convergence of the different urban land development processes, especially the residential land development process and the public and private investment process that contributes to building better cities.

Goal 1: Attract More Private Resources A comprehensive approach to addressing the housing problems of all income groups and their related urban impacts requires increasing the mobilization of private sector resources, from both investors and households, to finance new houses. Housing policies should be expanded to include not just low-income households but also underserved, non-poor low-income and lower-middle- and middle-income households to assist them in accessing private financing that captures their capacity to pay for part of the costs of housing. This study shows that this approach can achieve the goal at a lower cost to the public sector than directly supplying these groups with houses and neighborhood services. The public resources that would be liberated by this approach could be targeted to assist the very poor who cannot pay for even a basic house. Supporting middle-income and other nonpoor low-income households in accessing private mortgages could greatly increase the resources devoted to housing and to the economy, boosting employment in the related industries.

Each income group faces different challenges in accessing housing, and each country has different fiscal capacities to provide public support for housing, so the instruments to assist these groups should differ, too.

In middle-income developing countries with larger pools of fiscal and institutional resources, these objectives could be accomplished with direct subsidies for households that are on the verge of qualifying for private sector financing. The subsidies could help households secure private loans to pay for new houses or to expand or improve their current homes. These countries have sufficient public resources to provide basic houses for the very poor and to assist them in improving their current homes incrementally.

In low-income developing countries with limited public resources, this approach would be more difficult to implement, and the targeting of public funds would have to be very precise. These countries would probably benefit greatly from reforms to the regulatory environment affecting the development of housing financing to expand the supply of credit to middle-income households, a low-cost strategy that could bring more resources to the housing sector. A complementary strategy would be to facilitate the self-construction process commonly used by households in the lower-middle- and low-income brackets. According to Greene and Rojas (2008), housing programs could then focus on expanding the supply of serviced land, good-quality building materials, and technical support to households willing to devote their savings and hard work to building and improving their own homes.

Goal 2: Adopt a Citywide Approach Substandard neighborhoods are not confined to areas that have been informally developed. With the exception of a

handful of neighborhoods with mostly high-income households, most cities in the developing world have formal and informal residential areas with varying degrees of infrastructure and service shortages. These shortages have significant impacts on residents' quality of life, given that the majority of the services provided by a house to its users come from neighborhood services. Furthermore, government programs concerned only with squatting and illegal settlements tend to create islands of well-serviced neighborhoods in seas of urban infrastructure shortages.

An integrated approach to improving substandard areas of the city requires a wide variety of interventions implemented in both illegal and legal residential areas lacking municipal services such as a continuous supply of potable water, healthcare and education facilities, good drainage and sanitary disposal of waste products, paved roads, street lighting, telecommunications, transit access, and parks and recreation areas. Housing policies need to take into account these needs. Governments must promote the convergence of the different institutional and financial mechanisms available to provide cities with a good quality of life. Investments in urban infrastructure and services should be done in consonance with residential expansion. The integrated planning of new developments must be emphasized. Planning and policy tools can be used to accomplish this objective, including area plans, adequate facilities ordinances, transit-oriented development, neighborhood improvement programs, urban rehabilitation, and urban heritage conservation. Rapidly growing cities, such as middle-size cities throughout Latin America, need to plan their expansion areas with a long-term perspective in mind that will protect the environment and enhance the efficient functioning of the city. Within the bounds defined by this long-term perspective, planning authorities can designate the land needed in the middle and short terms to accommodate the needs of private and public housing developers.

Also critical is for city governments to have the resources to provide urban infrastructure and services. Much progress has been made in the provision of sanitation services with both the consolidation of well-run and well-financed public utilities and the direct government support given to low-income households to ensure they can afford a minimum level of consumption of these services. The provision of healthcare and education is still a challenge for city governments and for relevant central and regional government institutions. A gradual elimination of the deficits in urban services will allow these entities to plan their investments in anticipation of housing developments.

Although most Latin American cities are still incapable of fully implementing planning instruments such as "adequate facilities ordinances," which limit new housing developments in underserved districts, housing policies can contribute to the objective of building adequate urban infrastructure and amenities in advance of developing residential land by providing city governments with the resources to do so. Central or regional governments can provide municipalities with block grants to attend to the demands made by new residential areas. This means that in addition to the need to provide support to individual households, which is at

the core of the enabling markets approach, there is a need to provide city-building support to local governments. Block grants matching own-source local contributions can accomplish this objective, preventing the pitfall of fiscal laziness that comes with too much support from national and regional governments.

Goal 3: Promote a Greater Convergence of the Different Urban Land Development Processes

The expanded demand for housing and urban services from the emerging middle class and the more empowered low-income households will increase the demand for urban land for residential use. Unless something is done to curb the increase in land prices, consumers and developers will have to pay more for urban land, diverting resources from consumption and investment, respectively. To protect the common interest, improve living conditions, and facilitate urban economic growth, governments must put in place measures to promote the development of residential land at affordable prices.

To moderate land price increases, governments need to invest in trunk infrastructure in order to put more land into residential use. However, this strategy requires complementary measures to prevent inefficient speculative behaviors by landowners, promote public-private cooperation in the development of residential areas, and facilitate the efficient use of underused land in inner cities. Measures to curb land prices can include capital gains taxes, special assessments that capture unearned land price increases to help defray infrastructure costs (Iracheta and Smolka 2000; Sandroni 2011; Smolka and Iracheta 1999), and other tax measures that enable the government to transfer to landowners the social costs of their decisions. Idle-land taxes are one example of the measures that can help prevent owners from keeping land off the market for speculative purposes.

Other strategies are needed to ensure a sufficient supply of affordable residential land. Inclusive planning ordinances, in conjunction with the development of residential land for the market, can help generate some affordable residential land. Public intervention in land development may work if it is well managed. For example, expanding the supply of affordable land is the main objective of Colombia's Macro-Projects, government-sponsored land development projects that are financed through the sale of large-scale lots to commercial developers while retaining a proportion of the developed land for affordable housing. Public-private cooperation is also possible, as successful land readjustment projects in Bogotá and other cities show (Torres and García 2010). Under the right political and institutional conditions, even informal land developers can be induced to cooperate in the construction of better cities, as demonstrated by the municipality of Porto Alegre, Brazil. Its Social Urbanizer scheme induced illegal land developers to produce better-quality residential subdivisions (Smolka and Damasio 2005).²³

23. According to Smolka and Damasio (2005, 1), "A Social Urbanizer is a real estate developer registered with the municipality who is interested in developing in areas identified by the government as suitable for low-income housing, and who agrees to operate according to certain

Another important strategy is to put on the market more serviced land in infill areas and other suitable expansion areas. To do this, cities need to establish institutional mechanisms that promote fruitful cooperation among private and public stakeholders in urban land management. As discussed by Garay et al. (2013) and Rojas (1995) among others, public and mixed-capital land development institutions, as well as other forms of strong public-public and public-private partnerships, have had good results. These models should be adapted and incorporated more broadly into the urban land management mechanisms of Latin American cities.

AN URBAN-BASED APPROACH TO HOUSING IS VIABLE

All the measures detailed here are viable. Countries and cities in Latin America currently use them individually or in conjunction with other policies. These measures must be used together with housing policies to ensure that underserved residential areas and price increases for fully serviced residential land do not jeopardize achieving housing policy objectives. Latin American countries have come a long way in their concern for the living conditions of urban populations, but unfortunately they have taken a unilateral approach, focusing almost exclusively on housing conditions and downplaying the role of urban infrastructure and services. This oversight is costing citizens a great deal. The solution requires a bold change in outlook. Instead of focusing on the production of more houses and relying on the automatic responses of public utilities, government entities, and municipalities to the demands of new residential areas, housing policies and the entities in charge of their design and implementation need to focus on the full array of services required by households that are provided jointly by the house, the neighborhood, and the city. Public support for housing must turn into public support for good urban living conditions through the coordination in time and space of the interventions of all the entities providing housing services. If this coordination requires additional financing, government allocations for housing policies and programs must include it.

Housing policies and programs must shift away from individual entitlements implemented by central government entities and toward area-focused policies that seek to improve the living conditions of the entire urban population. They would still be financed mostly by the central government, as they are income-distributing as well as city-building policies. However, local governments and regional entities in charge of managing urban development would be better at

negotiated terms, including the affordability of the serviced plots. The process contemplates a public-private partnership through which the municipality commits to make certain urban norms and regulations more flexible, to speed up the licensing process, reduce the legal requirements, and recognize progressive, step-by-step urbanization. It also anticipates using the transfer of development rights as a stimulating mechanism for private developers. Other incentives may take the form of access to specific lines of credit or certain direct public investments in urban infrastructure so the costs are not passed on to the final buyer.”

implementing them. This condition poses the challenge of devising the appropriate fiscal and institutional mechanisms needed for the efficient implementation of national policies by local governments. But it is doable.

REFERENCES

- Angel S. 2000. *Housing Policy Matters: A Global Analysis*. New York: Oxford University Press.
- Angel, S., J. Parent, D. L. Civco, and A. M. Blei. 2011. *Making Room for a Planet of Cities*. Cambridge, MA: Lincoln Institute of Land Policy.
- Azevedo, V., C. Bouillon, and O. Chevalier. 2012. "Doing It Yourself." In *Room for Development: Housing Markets in Latin America and the Caribbean*, ed. C. P. Bouillon, 211–237. Washington, DC: Inter-American Development Bank.
- Badev, A., T. Beck, L. Vado, and S. Walley. 2014. "Housing Finance Across Countries: New Data and Analysis." Policy Research Working Paper No. 6756. Washington, DC: World Bank.
- Bouillon, C. P., ed. 2012. *Room for Development: Housing Markets in Latin America and the Caribbean*. Washington, DC: Inter-American Development Bank.
- Bouillon, C., V. Azevedo, N. Medellín, and C. Boruchowics. 2012. "Two Bedrooms, Two Bathrooms, and a Big Yard?: Housing Demand in Latin America and the Caribbean." In *Room for Development: Housing Markets in Latin America and the Caribbean*, ed. C. P. Bouillon, 51–85. Washington, DC: Inter-American Development Bank.
- Brand, P., and J. Davila. 2011. "Mobility Innovation at the Urban Margins." In *City: Analysis of Urban Trends, Culture, Theory, Policy, Action* 15(6): 647–661.
- Casazza, J., P. Monkkonen, E. Reese, and L. Ronconi. 2011. "Regulations and Land Markets in the Peripheries of Three Argentine Cities: Buenos Aires, Córdoba and Rosario." Unpublished paper. Buenos Aires: Centro de Implementación de Políticas Públicas para la Equidad y el Crecimiento (CIPPEC).
- CIDOC (Centro de Investigación y Documentación de la Casa). 2012. "Estado Actual de la Vivienda en México." Mexico City: Fundación CIDOC and Sociedad Hipotecaria Federal. www.shf.gob.mx/estadisticas/costoanualtotal/CAT2010/Documents/Entrega%202012.pdf.
- Clichevsky, N., ed. 2002. *Tierra Vacante en Ciudades Latinoamericanas*. Cambridge, MA: Lincoln Institute of Land Policy.
- Cohen, R., J. Dana, B. Gerli, D. Koutsoupakis, and E. Sisti. 2007. "Promoting Private Sector Participation in Low-Income Housing Finance: Diagnosis and Policy Recommendations for Latin America and the Caribbean." Working paper. Washington, DC: Sustainable Development Department, Inter-American Development Bank. http://publications.iadb.org/handle/11319/1086?scope=123456789/1&thumbnail=false&order=desc&rpp=5&sort_by=score&page=0&group_by=none&etal=0&filtertype_0=author&filter_0=Cohen%2C+Remy&filter_relational_operator_0>equals.
- CONAVI (Comisión Nacional de Vivienda). 2014. "Decreto por el que se aprueba el Programa Nacional de Vivienda 2014–2018." In *Diario Oficial*, Cuarta Sección 1–44. Mexico City (April 30). www.conavi.gob.mx/images/documentos/plan_nacional_desarrollo_2013/2014/programa_nacional_de_vivienda_2014-2018.pdf.

- Couriel, J. 2010. "Interventions in Precarious Urban Areas of Uruguay." In *Building Cities: Neighbourhood Upgrading and Urban Quality of Life*, ed. E. Rojas, 117–122. Washington, DC: Inter-American Development Bank, Cities Alliance, and DRCLAS Harvard University.
- Cuenin, F., C. Piedrafitra, E. Rojas, and N. Medellín. 2012. "Hammering Out a Housing Policy That Works." In *Room for Development: Housing Markets in Latin America and the Caribbean*, ed. C. P. Bouillon, 239–280. Washington, DC: Inter-American Development Bank.
- Daughters, R., and L. Harper. 2007. "Fiscal and Political Decentralization Reforms." In *The State of State Reform in Latin America*, ed. E. Lora, 213–262. Washington, DC: Stanford University Press and Inter-American Development Bank.
- Donoso, F., and F. Sabatini. 1980. "Santiago: Empresa Inmobiliaria Compra Terrenos." *Revista EURE* 7(20): 22–54.
- ECLAC (Economic Commission for Latin America and the Caribbean). 2014. *Economic and Social Panorama of the Community of Latin American Caribbean States, 2013*. Santiago. www.cepal.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/5/52075/P52075.xml&xsl=/publicaciones/ficha-i.xsl&base=/publicaciones/top_publicaciones-i.xsl.
- Ferreira, F. H. G., J. Messina, R. Jamele, L. Lopez-Calva, M. A. Lugo, and R. Vakis. 2013. *Economic Mobility and the Rise of the Latin American Class*. Washington, DC: World Bank.
- Furtado, F., and F. Leal de Oliveira. 2002. "Tierra Vacante en Rio de Janeiro: Aproximación a la situación actual y bases para la formulación de una política." In *Tierra Vacante en Ciudades Latinoamericanas*, ed. N. Clichevsky, 13–46. Cambridge, MA: Lincoln Institute of Land Policy.
- Garay, A., L. Wainer, H. Henderson, and D. Rotbart. 2013. "Puerto Madero: A Critique." *Land Lines* 25(3): 2–7. www.lincolninst.edu/pubs/2257_Puerto-Madero--A-Critique.
- Garza, N. 2007. "Globalisation and Land Prices in Bogota." Presentation to the Urban Research Symposium, World Bank, Washington, DC (May 14–16).
- Gilbert, A. 2003. *Rental Housing: An Essential Option for the Urban Poor in Developing Countries*. Nairobi: United Nations Human Settlements Programme.
- Greene M., and E. Rojas. 2008. "Incremental Construction: A Strategy to Facilitate Access to Housing." *Environment and Urbanization* 20(1): 89–109.
- Iannone, D. 1995. "Redeveloping Urban Brownfields." *Land Lines* 7(6).
- IDB (Inter-American Development Bank). 1995. *Operational Guidelines for Housing*. Publication No. SOC-111. Washington, DC.
- . 2014. "Mega Cities and Infrastructure in Latin America: What Its People Think." Washington, DC. <http://publications.iadb.org/bitstream/handle/11319/16415/MegacitiesSurvey.pdf?sequence=3>.
- Iracheta, A., and M. Smolka, eds. 2000. *Los Pobres de la Ciudad y la Tierra*. Cambridge, MA: Lincoln Institute of Land Policy.
- Irarrázabal, F. 2013. "Towards Inclusive Cities: Public Policies on Neighborhood Upgrading in Chile." Webinar, World Bank e-Institute (November 12). https://worldbankva.adobeconnect.com/_a833642795/p8r5woxal57/?launcher=false&fcsContent=true&pbMode=normal.

- Malpezzi, S. 1999. "The Regulation of Urban Development: Lessons from International Experiences." Background paper for 1999 World Development Report. Washington, DC: World Bank.
- Minvivienda. 2014. Website. Ministerio de Vivienda, República de Colombia. www.minvivienda.gov.co.
- MINVU. 2014. Website. Ministerio de Vivienda y Urbanismo de Chile. www.minvu.cl.
- Nieto, M. 2010. "Quiero Mi Barrio, Chile." In *Building Cities: Neighbourhood Upgrading and Urban Quality of Life*, ed. E. Rojas, 123–135. Washington, DC: Inter-American Development Bank, Cities Alliance, and DRCLAS Harvard University.
- OECD (Organisation for Economic Co-operation and Development). 2013a. *OECD Territorial Reviews: Puebla-Tlaxcala, Mexico*. Paris: OECD Publishing.
- . 2013b. *OECD Urban Policy Reviews: Chile*. Paris: OECD Publishing.
- . 2014. *Latin American Economic Outlook 2014*. Paris: OECD Publishing.
- . 2015. *OECD Urban Policy Review Mexico: Transforming Urban Policy and Housing Finance*. Paris: OECD Publishing.
- Perry, G., O. Arias, J. López, W. Maloney, and L. Servén. 2006. *Poverty Reduction and Growth: Virtuous and Vicious Circles*. Washington, DC: World Bank.
- Ravindra, A. 1996. *Urban Land Policy: Study of Metropolitan City*. New Delhi: Concept Publishing.
- Rojas, E. 1995. "The IDB in Low-Cost Housing: The First Three Decades." Washington, DC: Inter-American Development Bank. <http://publications.iadb.org/bitstream/handle/11319/715/The%20IDB%20in%20Low-Cost%20Housing%3A%20%20The%20First%20Three%20Decades.pdf?sequence=1>.
- . 2004. *Volver al Centro: La Recuperación de Áreas Urbanas Centrales*. Washington, DC: Inter-American Development Bank.
- , ed. 2010a. *Building Cities: Neighbourhood Upgrading and Urban Quality of Life*. Washington, DC: Inter-American Development Bank, Cities Alliance, and DRCLAS Harvard University.
- . 2010b. "Preventing New Informality." In *Building Cities: Neighbourhood Upgrading and Urban Quality of Life*, ed. E. Rojas, 101–116. Washington, DC: Inter-American Development Bank, Cities Alliance, and DRCLAS Harvard University.
- Rojas, E., F. Cuenin, C. Piedrafitra, and N. Medellín. 2010. "Housing Policy Matters for the Poor: A Study of the Housing Sector and Housing Policies in Argentina, Chile and Colombia." Unpublished paper. Washington, DC: Inter-American Development Bank.
- Rojas, E., and N. Medellín. 2011. "Housing Policy Matters for the Poor: Housing Conditions in Latin America and the Caribbean, 1995–2006." Working Paper No. IDB-WP-289. Washington, DC: Inter-American Development Bank. www.iadb.org/wmsfiles/products/publications/documents/36562448.pdf.
- Ruiz, V. 2010. "Salvador: Land Subdivision (Lotification)." In *Building Cities: Neighbourhood Upgrading and Urban Quality of Life*, ed. E. Rojas, 89–99. Washington, DC: Inter-American Development Bank, Cities Alliance, and DRCLAS Harvard University.
- Sandroni, P. 2011. "Recent Experience with Land Value Capture in São Paulo, Brazil." *Land Lines* 23(3): 14–19. www.lincolninst.edu/pubs/dl/1929_1252_Land%20Lines%20July%202011.pdf.

- SEDATU (Secretaría de Desarrollo Agrario, Territorial y Urbano). 2013. "Política Nacional Urbana y de Vivienda." Mexico City.
- . 2014. Website. www.sedatu.gob.mx/srawebl/.
- SEDESOL (Secretaría de Desarrollo Social). 2011. "Estado Actual de la Vivienda en México." Mexico City.
- . 2012. *La expansión de las ciudades, 1980–2010*. Mexico City: Secretaría de Desarrollo Social, Gobierno de los Estados Unidos de México.
- Smolka, M., and C. Damasio. 2005. "The Social Urbanizer: Porto Alegre's Land Policy Experiment." *Land Lines* 17(2): 11–14.
- Smolka, M., and A. Iracheta. 1999. "Mobilizing Land Value Increments to Provide Serviced Land for the Poor." *Land Lines* 11(4): 6–7. www.lincolninst.edu/pubs/347_Mobilizing-Land-Value-Increments-to-Provide-Serviced-Land-for-the-Poor.
- SSDUDV (Sub-Secretaría de Desarrollo Urbano y Vivienda). 2014. Website. www.vivienda.gob.ar/programas.php.
- Topelson, S. 2009. "Perfeccionamiento de los desafíos de la calidad de vida en las ciudades Mexicanas." Unpublished presentation at the Inter-American Development Bank, Washington, DC (March 28).
- Torres, P., and M. C. García, eds. 2010. *Las ciudades del mañana: Gestión del suelo urbano en Colombia*. Washington, DC: Banco Interamericano de Desarrollo.
- Trivelli, P. 2010. "Urban Structure, Land Markets and Social Housing in Santiago, Chile." Unpublished paper commissioned by the Inter-American Development Bank, Washington, DC.
- UN (United Nations). 2012. "World Urbanization Prospects: The 2011 Revision." New York.
- UN-Habitat (United Nations Human Settlements Programme). 1989. *A Global Shelter Strategy Towards the Year 2000*. Nairobi.
- . 2003. *Rental Housing: An Essential Option for the Urban Poor in Developing Countries*. Nairobi.
- . 2011. *A Policy Guide to Rental Housing in Developing Countries*. Nairobi.
- Van der Rest, J., and J. López. 1980. "Vivienda para el 30% de los más pobres de América Latina." *CIAS: Revista del Centro de Investigaciones y Acción Social* 29(297): 13–27.
- World Bank. 1993. "Housing: Enabling Markets to Work." Housing Policy Paper. Washington, DC.
- . 2013. "Shifting Gears to Accelerate Shared Prosperity in Latin America and the Caribbean." Washington, DC. www.worldbank.org/content/dam/Worldbank/document/LAC/PLB%20Shared%20Prosperity%20FINAL.pdf.
- Wright, T., and A. Davlin. 1998. "Overcoming Obstacles to Brownfield and Vacant Land Redevelopment." *Land Lines* 10(5): 1–3. www.lincolninst.edu/pubs/396_Overcoming-Obstacles-to-Brownfield-and-Vacant-Land-Redevelopment.

APPENDIX: NATIONAL HOUSING PROGRAMS IN ARGENTINA,
CHILE, COLOMBIA, AND MEXICO

Table A10.1
Public Urban Housing Programs in Argentina, 2014

Focus	Entity	Program	Description
Household	Programas Federales de Vivienda, Crédito (Federal Housing Loans Programs)	Fondo Nacional de Vivienda FONAVI (National Housing Fund)	Funds from the federal government to finance affordable housing projects undertaken by the Institutos Provinciales de Vivienda (Provincial Housing Institutes) state-level entities. Currently, federal funds account for 50% of the financing, with the remaining coming from the provinces. Beneficiaries must repay the cost of the houses.
		Programa Crédito Argentino PROCREAR (Argentinean Loan Program for the Bicentennial)	Mortgage financing for 400,000 low-interest home loans; initially a four-year program launched in 2012 and financed with resources from workers' retirement savings.
		Programa Federal de Solidaridad Habitacional (Federal Housing Solidarity Program)	Federal grants to low per capita income provinces or municipalities to support the construction of affordable houses (FONAVI standards) by private construction companies that hire local labor.
		Programa Federal de Construcción de Viviendas (Federal Housing Construction Program)	Federal grants for the construction of affordable houses by the Provincial Housing Institutes.
		Mejor Vivir (Better Living)	Federal grants to finance subsidies for households in need of improving their homes due to the lack of in-house piped water or an in-house bathroom; inadequate flooring, roofs, and walls; and insufficient rooms to prevent overcrowding.

(continued)

Table A10.1 (continued)

Focus	Entity	Program	Description
Neighborhood	Federal Neighborhood Improvement Grant Programs	Programa de Mejoramiento de Barrios PROMEBA (Settlement Upgrading Program)	Federal grants for improvement of infrastructure and urban services in substandard urban neighborhoods.
		Programa Mejoramiento Habitacional e Infraestructura Básica PROMHIB (Housing and Basic Infrastructure Improvement Program)	Provides financing for improvement of infrastructure and urban services in substandard neighborhoods of small towns, rural areas, and native settlements.

Source: Data from SSDUV (2014).

Table A10.2
Public Urban Housing Programs in Chile, 2014

Focus	Program	Description	
Household	Compra tu Vivienda (Buy Your House)	I Subsidy for emerging groups without loan	Up-front subsidy for low-income households contributing their savings to purchase of minimal house: Savings = 2%; Subsidy = 98%
		II Subsidy for emerging groups with optional loan	Large up-front subsidy for low-income households with capacity to save requiring them to contribute their savings and the proceeds of a mortgage loan for the purchase of a small affordable house: Savings = 6%; Subsidy = 52%; Mortgage = 42%
		III Subsidy for middle-income households with optional loan	Small up-front subsidy for middle-income households contributing their savings and the proceeds of a mortgage loan for the purchase of medium-size affordable house: Savings = 8%; Subsidy = 20%; Mortgage = 72%
		IV Subsidy for construction of house for emerging groups	Large up-front subsidy for low-income households contributing their savings and the proceeds of a mortgage loan to build house on land owned by the beneficiaries or their families: Savings = 6%; Subsidy = 52%; Mortgage = 42%

(continued)

Table A10.2 (continued)

Focus	Program		Description
		V Subsidy for construction of house for middle-income households	Small up-front subsidy for middle-income households contributing their savings and the proceeds of a mortgage loan to build house on land owned by the beneficiaries or their families: Savings = 8%; Subsidy = 2%; Mortgage = 72%
	Mejorar tu Vivienda (Improve Your House)	I Expansion and improvement	Up-front subsidy for low-income households willing to expand and improve their minimal or affordable housing.
		II Expansion	Up-front subsidy for low-income households willing to expand their minimal or affordable housing.
		III Thermal insulation	Up-front subsidy for low-income households willing to improve insulation of their minimal or affordable housing.
Neighborhood	Mejorar tu Barrio (Improve Your Neighborhood)	Neighborhood rehabilitation	Central government grants for the provision of infrastructure and urban services in deteriorated neighborhoods containing government-supported affordable housing.
		Improvement of neighborhood and community facilities	Central government grants to improve the public spaces, common areas, and community facilities in neighborhoods containing government-supported affordable housing.
		Street and sidewalk paving	Central government grants to pave roads, sidewalks, and pedestrian walkways in low-income neighborhoods.
		Improvement of public spaces	Central government grants for improving or rehabilitating public spaces in heritage neighborhoods and other urban heritage sites.

Source: Data from MINVU (2014).

Table A10.3
Public Urban Housing Programs in Colombia, 2014

Focus	Program	Description
Household	Vivienda Gratuita (Free House)	Provides 100,000 low-cost houses for low-income households that cannot access credit and for displaced and vulnerable households.
	Vivienda para Ahorradores, or ABC (Housing for Savers)	Provides up-front subsidies for middle- and low-middle-income households to supplement household savings and private bank loans to purchase finished homes.
	Subsidized mortgages	Interest rate subsidies for a limited number of mortgages to purchase Priority Interest Houses (VIP) and Social Interest Housing (VIS). Number of mortgages defined annually in line with the government's economic recovery goals.
Neighborhood	Ahorro Programado (Programmed Savings)	Promotes savings for home purchase linked to the Family Housing Subsidies.
	Macro-proyectos (Macro-projects)	Large integrated land subdivisions to supply residential lots for fully subsidized houses (VIP), partially subsidized houses (VIS), and market houses.
	Mejoramiento Integral de Barrios (Integrated Neighborhood Improvement Program)	Provides financing for improvement of infrastructure and urban services in substandard neighborhoods.

Source: Based on data from Minvivienda (2014).

Table A10.4
Public Urban Housing Programs in Mexico, 2014

Focus	Entity	Program	Description
Household	Federal Housing Grant Programs	Consejo Nacional de la Vivienda CONAVI (National Housing Council)	Provides up-front subsidies and mortgage payment subsidies to low-income households to purchase an affordable house (new or existing), to improve an existing house, to acquire a lot with services, or for self-construction. For beneficiaries with a monthly income of five times the minimum salary.

(continued)

Table A10.4 (continued)

Focus	Entity	Program	Description
		Fideicomiso Fondo Nacional de Habitaciones Populares FONHAPO (National Affordable Housing Fund Trust)	Provides subsidies for very low-income households (below the five times the minimum salary line) to acquire a new house or to expand or improve an existing one. Federal funds are matched by local government funds and a small in-kind contribution from the beneficiary.
		Programa Tu Casa (Your House Program)	Provides subsidies to low-income households for home improvements.
		Vivienda Digna (Good Housing)	Provides housing loans to public servants.
	Federal Housing Loan Programs	FOVISSTE (Housing Fund of the Public Servants' Social Services and Social Security Institute)	
		Instituto del Fondo Nacional de la Vivienda para los Trabajadores INFONAVIT (Workers' National Housing Fund Institute)	Provides housing loans to private sector employees using the mandatory employers' contribution of 5% of the salary paid to workers. Loan programs Purchase of new or used houses Build a house House improvements
		Instituto de Seguridad Social de las Fuerzas Armadas de México ISSFAM (Mexican Armed Forces Social Services Institute)	Provides housing loans to members of the armed forces.
		Fondo Nacional de Garantías a la Vivienda Popular FONAGAVIP (National Guarantee Fund for Low-Income Housing)	Provides guarantees for loans provided by private financial institutions (which manage funds provided by public institutions) to low-income households willing to self-build or improve their existing home.
		Sociedad Hipotecaria Federal, SHF (Federal Mortgage Society) Mortgage rediscount facility	Second-tier financial institutions provide liquidity to private mortgage originators: private general banks and SOFOLES (limited-purpose financial institutions).
Neighborhood	Federal Neighborhood Upgrading Programs	HABITAT Program	Provides financing for upgrading infrastructure in substandard city blocks together with social infrastructure.

(continued)

Table A10.4 (continued)

Focus	Entity	Program	Description
		Rescate de Espacios Públicos (Public Spaces Rehabilitation)	Builds or rehabilitates public spaces such as parks, community centers, and sports facilities.
		Rehabilitación de Conjuntos Habitacionales (Rehabilitation of Housing States)	Improve the living conditions of affordable housing neighborhoods by means of building or rehabilitating public spaces.

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Sources: Data from SEDATU (2014) and CONAVI (2013, 2014).