

# **Inclusionary Housing in International Perspective**

Affordable Housing, Social Inclusion,  
and Land Value Recapture

Edited by  
**Nico Calavita and Alan Mallach**

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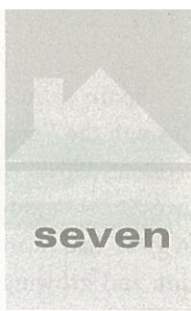


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## **Spain's Constitutional Mandates** **The Right to Housing, Land Value Recapture,** **and Inclusionary Housing**

Nico Calavita, Joaquim Clusa, Sara Mur, and Robert Wiener

Francisco Franco, Spain's dictator for more than 35 years, gained power at the end of the 1936–1939 Spanish Civil War. During the initial period of his long tenure, Spain was isolated from the rest of the world and excluded from the United Nations. In 1955 Cold War politics prompted the United States to renew relations with Spain, which then opened its territory to American military bases. Franco ended his autarchic economic policies in 1959, stimulating a period of economic growth. As millions of people migrated to the major cities from the south and the countryside, Spain experienced the rapid expansion of cheaply built high-rise towers on the urban periphery and increased densification in city centers.

Following Franco's death in 1975, the transition to democracy led to national elections in 1977 and, the following year, the establishment of the Spanish Constitution. The new constitution attempted to settle age-old issues of centralism, nationalism, and separatism that Franco's dictatorial regime had buried, but certainly not resolved. The result was the creation of 17 autonomous communities, of which four—Basque Country, Catalonia, Galicia, and Andalusia—were more autonomous than the others. High levels of autonomy, however, have not quelled aspirations for complete separation in Basque Country and the region of Catalonia.

The Partido Socialista Obrero Español (Socialist Workers' Party; PSOE) won the elections in 1982 and governed the country for 14 years. In 1996, a series of scandals brought to power the rightist Partido Popular (People's Party; PP), which then lost to the PSOE in 2004, in part because of its handling of the railway bombings that shook Madrid a few days before the elections.

Spain joined the European Union (EU) in 1986. With EU support through the European Regional Development Fund and the liberalization of its economy, Spain increased its GDP, improved its infrastructure, attracted foreign investment, and reduced its unemployment rate. A real estate boom that began in 1997 had nearly tripled housing prices by 2007, contributing to rising inflation and growing family indebtedness. This affordability crisis led the ruling PSOE to create the Ministerio de Vivienda (Housing Ministry) to address the situation. National planning legislation passed in 2007 included minimum mandatory inclusionary housing requirements.

This chapter begins with an analysis of the evolution of the Spanish planning system from the period of the Franco regime until the present, with particular emphasis on the mechanisms utilized to recapture increments in land value. It also describes the Spanish housing system, which is characterized by having the highest home ownership rates and smallest social housing stock in western Europe. It then explains how regions have approached inclusionary housing with a particular emphasis on the Catalonia and Basque Country regions. Two case studies, Barcelona's La Marina project in Catalonia and Vigo, a city in Galicia, demonstrate the economic feasibility of inclusionary housing within each region's particular political and economic context.

## THE PLANNING FRAMEWORK

The planning system in Spain is sophisticated, formally rigid, and obsessed with both curtailing speculation and assigning development value equitably to landowners who are awarded development rights. Faced with inadequate fiscal resources, however, municipalities have encouraged growth and, at the same time, used the development process as a revenue-generating device, both legally and illegally. Each new national law has attempted to redress past problems, only to create new ones (García-Bellido 1999; Riera et al. 1997).

### Planning Under Franco

The legislative basis of Spanish planning was set during the Franco period with the 1956 Planning Act, *Ley sobre el Régimen del Suelo y Ordenación Urbana* (*Ley del Suelo*). Although this law was initiated by Franco's regime—especially the reformist national-syndicalistic Falange movement—to reduce land speculation,<sup>1</sup> in subsequent years technocrats in charge of developing planning legislation transformed it

1. Generally, *land speculation* is defined as the withdrawal from the development process of land in areas undergoing urbanization in the expectation of attaining higher prices. In Spain, however, the word *speculation* is used quite liberally to attack development in general, but most often development perceived by critics as harmful to the environment, a neighborhood, or both.

into a “complete, integrated, systematic and hierarchical urban planning and management system” (González Pérez 2007, 31). Departing from a tradition in which property rights were sacrosanct and local government paid for all infrastructure costs, a drastic new approach was devised, founded on four main principles.

1. *Social function of property.* The right to land ownership and development is accompanied by obligations and duties.
2. *Distributive equity.* The increases in land values resulting from plan designations for development are to be shared equally among property owners.
3. *Discretionary power of law.* Urban planning is a public function expressed through the municipal (or, rarely, multijurisdictional) general plan, which distinguishes three juridical categories of property: urbanized, urbanizing, and nondevelopable, each with its own rights and duties.
4. *Juridical security of administrative acts.* Arbitrary acts by the public sector are limited, and future land values are ensured through the systematic assignment of uses, values, rights, and duties. In exchange, property owners are responsible for the urban infrastructure and public facilities (García-Bellido 1999, 239–240).

By establishing a division between developable and nondevelopable land, the 1956 law created a distinction similar to what is known in the United States as an urban growth boundary. Ironically, areas designated as nondevelopable are often used for large projects, such as regional shopping centers or airports (Riera et al. 1997). This law soon became the victim of the economic growth pressures of the 1960s, which led to the degradation of historic centers and coastal areas. In the absence of standards for the provision of public facilities, Barcelona, Madrid, and other cities built a series of high-rise developments (*polígonos de viviendas*) that lacked public facilities and became highly segregated areas. Subsequent neighborhood protests led to the eventual provision of public infrastructure and facilities (Calavita and Ferrer 2001).

### Post-Franco Reforms

The fall of the Franco regime ushered in significant reforms in urban planning and land use. Legislation passed in 1975 and 1976 attempted to address the deficiencies of the 1956 law by eliminating development rights in areas designated as nondevelopable and separating urbanizing land into two categories: (1) *suelo urbanizable programado* (land planned for development), which must be built immediately in accordance with two successive four-year plans; and

(2) *suelo urbanizable no programado* (land phased for development), which will be built in the future. Development on the *suelo urbanizable programado* was to be organized through partial plans prepared for sectors of the city also known as *polígonos de actuación urbanística* (urban development sectors; PAUs), roughly corresponding to neighborhoods, which provided for reparcelization or land adjustment to implement the plan.

To ensure that all landowners receive similar benefits from the assignment of development rights, an average profit is calculated on the basis of the proposed land uses and densities for the area. As part of this reparcelization, landowners are required to provide the public facilities needed, including parkland, as established in the general plan. The land remaining for private development is usually less than 50 percent of the area (Riera 2000, 14).

The 1975 legislation also required a donation to the municipality of land equivalent in value to 10 percent of the profit from the development. This requirement was increased to 15 percent in 1990, but reflecting the shift from a socialist to a conservative government, returned to 10 percent in 1996. The donation can be seen as a betterment tax on the benefits of urban development. The 1975 law also introduced a new procedure considered to be of great importance in areas designated for future development. It permitted the government to give development rights to developers (known as *agentes urbanizadores*) who had the power to expropriate land in PAUs or work with current landowners (García-Bellido 1999, 257). While this provision was eliminated in 1997, it was retained in many regional laws and reinstated nationally in 2007.

### The 1978 Constitution

The 1978 Spanish Constitution represented a dramatic break with the country's long-held tradition of centralism. It delegated to the regions many powers, including urban planning, that were previously held by the central government in Madrid. Article 148.1 of the constitution clearly states that "town and country planning and housing" are the prerogative of Spain's regions, or "autonomous communities." Article 47 of the 1978 Constitution contained other important provisions, including an unusual, perhaps unique, constitutional anti-speculation mandate, linked to the right to housing:

*All Spaniards have the right to enjoy decent and adequate housing. The public authorities shall promote the conditions necessary and establish the pertinent norms to make this right effective, regulating the use of land in accordance with the general interest to prevent speculation.*

Article 47 continues, "The community shall have a share in the benefits accruing from the town-planning policies of public bodies." Thus, Spain has adopted a constitutional mandate that *plusvalías*—increments in land value resulting from planning—shall, at least in part, benefit the community. Inclusionary housing is viewed in Spain as a mechanism to help recapture *plusvalías*.

By 1990 the economy was booming, leading to significant increases in urban land and housing prices. In 1990 and 1992 the socialist-led coalition, in keeping with the constitutional mandate, enacted measures designed to fight speculation. The 10 percent of land value that was to be given to the municipalities was increased to 15 percent, while rigorous deadlines were set for the process of urbanization by restricting the time within which buildings had to be constructed after approvals had been granted.

Although in 1997 the Constitutional Court struck down some features of the 1990 and 1992 versions of the *Ley del Suelo* because they were interpreted as violating the constitutional provisions concerning the respective roles of the central government and the autonomous regions, almost all regions soon passed legislation very similar to the earlier national law. The court stated clearly that the regions are the entities in charge of urban and regional planning, whereas the central government is in charge of legislation on property rights, compulsory expropriation, general economic planning, and environmental protection.

### Problems

By the end of the 1990s, the urban planning system in Spain had generated tremendous benefits for the public sector by producing the public infrastructure and facilities necessary to maintain or improve the quality of life in growing cities at little cost to the public. The requirement that roughly 50 percent of the land in PAUs be donated to municipalities had largely eliminated the need for expropriation by localities. However, by restricting the amount of land that could be developed and by assigning and establishing an exact value for each parcel of land, the price of developable land increased to one of the highest levels in Europe.

Ironically, this happened even though creating new development rights is fiscally advantageous for local government, and many municipalities have actively promoted growth. Ferrer (2005, 11) observes that one reason for the urban planning problems in Spain is the municipal fiscal crisis, in which the search for revenues drives planning practice. He asks, "How many development initiatives, either proposed or strongly supported by local administrations, are

the result of the foreseeable contribution to the general financing of the city, independently from the appropriateness of the proposal?”<sup>2</sup>

The Spanish planning system may seem very rigid and formal. As the prominent Spanish urban planning practitioner and theoretician Javier García-Bellido (1999, 245) points out:

*[It] establishes what can be built and how, fixes the date of the start and end of construction, determines the return to landowners resulting from the overall building capacity of the sector area, estimates the value of each parcel, apartment, balcony, even prohibiting what has not explicitly been permitted. Plans then become detailed and encyclopedic documents inaccessible to non-experts but always susceptible to changes.*

That is, plans can be changed to make so-called nonurbanizable areas developable, development rights can be added and transferred, and large facilities (such as regional shopping centers, airports, and industrial plants) can be built in the nonurbanizable areas, which then creates pressures for adjacent properties to be built (Riera et al. 1997, 86).

Such uncertainty motivates land speculators to seek plan changes and for local administrators to obtain benefits from those changes. The result is something very similar to the growth machine model proposed by Harvey Molotch (1987) to describe urban governance in the United States, where politicians and landowners manipulate the planning process to foster growth and increase land use intensities. In Spain, officials do not only seek public sector financial benefits from growth. They also engage in widespread corruption through urban planning (*corrupción urbanística*), especially in coastal areas and particularly in Valencia (Melián Marrero 2007). By the mid-1990s, the Spanish growth machine, while successful in many respects, had also become highly problematic.

### Attempts at Liberalization

In the mid-1990s, a center-right coalition led by José María Aznar’s *Partido Popular* came to power. The new government amended the 1976 *Ley del Suelo* in 1998 to allow development almost anywhere outside environmentally protected areas, but the law had little effect (Riera 2000). A royal decree in 2000 eased the process by which developers could obtain permission to build in the

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2. About 12.6 percent of local government revenues come from development taxes and the 10 percent share of development value. This is a small but significant amount for financially struggling localities (Puig-Ventosa 2009).

nonurbanizable areas.<sup>3</sup> Increasing land supply, the administration believed, would cause the cost of real estate to decline (González Pérez 2007, 36).

In the late 1990s and early 2000s housing production and prices increased in all developed countries, but they rose even more dramatically in Spain, where developers built more housing than in Great Britain, France, and Germany combined. The higher levels of housing production resulted from many factors, including demand for vacation and retirement homes, cheap money, a rapid increase in immigration, and the effects of demographic convergence with other EU countries.

Unlike the other countries, Spain has also suffered from high levels of speculation, by both individuals and real estate companies (González Pérez 2007). Carme Trilla, the head of the housing department for the Catalonia government, stated in a 2006 interview that according to her department's calculations, only about half of the housing being produced at the time responded to normal market demand (Trilla personal communication 23 July 2006). The remaining share was being produced to satisfy a speculative demand. This explains why the real estate market has crashed more disastrously in Spain than elsewhere. While the bursting of the bubble since 2007 has lowered housing prices and made housing more affordable to middle-class households, housing problems for lower-income people persist, and will worsen as the economy suffers.

The policy of increasing land supply to lower housing prices appears to have failed. According to Jesús González Pérez (2007, 37), "many entities and associations can demonstrate the total failure of this governmental policy, which has profited speculating developers on all accounts by giving them more land on which to build." Conversely, proponents of liberalization believe that for a variety of reasons, including municipal resistance and failure of landowners to appreciate the possibilities offered by the law, its potential was not fully realized (Pere Riera personal communication 8 October 2008).

Javier García-Bellido (1999) had predicted the failure of the liberalization of land markets. For many years, he had contributed to improving the 1956 *Ley del Suelo*, making it increasingly more sophisticated and consistent, but in the 1990s he realized that the system he helped fashion also was seriously dysfunctional. Land values created through the planning system had increased the cost of developable land far above acceptable levels, and so-called free public facilities came with high social costs. The entire Spanish planning paradigm needed to change. A first step should be the separation of the right of land ownership

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3. *Real Decreto-Ley 4/2000 de Medidas Urgentes de Liberalización en el Sector Inmobiliario y de Transporte* (Act 4 on Urgent Liberalization Measures in the Real Estate and Transport Sectors).

from the right to develop, as is done in Great Britain (Clusa and Mur 2007). The right to develop would be granted through competitions among developers or negotiations with local administrations. Only by doing so could land costs be kept low (García-Bellido 1999).

In 2004, the Socialist Workers' Party (PSOE) returned to power. With the failure of the liberalization process and the frenzy of the housing market, a new *Ley del Suelo* was inevitable. The question was whether it would be a further refinement of the existing system or a new paradigm for land use planning and regulation.

### **The 2007 *Ley del Suelo***

The 2007 *Ley del Suelo* represents an attempt by Prime Minister José Luis Rodríguez Zapatero and his Socialist Workers' Party to address the interconnected phenomena of planning corruption, unbridled development, and skyrocketing housing costs. Advocated by the newly appointed minister of housing, Maria Antonia Trujillo, the new law gained wide parliamentary support, with the exception of that of the conservative People's Party members. The objectives of the law are to increase land supply for affordable housing through *vivienda de protección oficial* (social housing; VPO), make land markets more efficient, combat speculation, make urban and regional development more sustainable, and increase transparency and participation in development decision-making processes (Berges and Ontiveros 2007; Leal Maldonado 2007).

The law is grounded in a more literal and meditated application of Article 47 of the constitution, in which the right to housing is linked to urban planning processes aimed at eliminating land speculation and recapturing the unearned increments generated by urban development. To this end, the law requires that a minimum of 30 percent of the floor area designated for residential development in development plans be dedicated to a land bank (*reservas*) for VPO housing. The law also provides for greater flexibility in meeting the requirement that land equivalent to 10 percent of the profit from development be given to the municipality, and instead sets a range from 5 percent to 15 percent (20 percent in exceptional cases) that reflects various circumstances and entitlements affecting increments in land values. Given the legislators' intention of recapturing a higher proportion of profits from development, it is likely that, when development resumes, the localities will also choose a higher percentage, which in most cases will be dedicated to VPOs.

As we discuss later, several regions had already passed legislation requiring land reserves for protected housing. The national 30 percent requirement is a minimum, and regions and localities can require higher percentages. To avoid a

concentration of VPOs, Article 10 establishes that in urbanizing areas, the distribution of social housing must “respect the principle of social cohesion.”

The law included many other important points, including increased transparency and public participation in the planning and land use decision-making process; provisions requiring that land uses be based on sustainability principles and protect areas designated as natural spaces; limitations on a locality’s ability to require land for public facilities to those uses required by the impact of the proposed development; and, perhaps most significantly, changes in the system of valuing land to one based on existing rather than potential use. Finally, Article 6 of the 2007 law re-established the role of the *agentes urbanizadores* by granting them the power to expropriate land and process the development of other people’s property.

It is too early to assess how the new law is working, especially in light of the collapse in real estate development activity since 2007, but one issue is worth noting: whether or not the right to develop has indeed been separated from ownership rights. While the law allows for all land to be expropriated at existing use value, appraisers have been uncertain about how to appraise land designated for development when it is being used for agriculture or is vacant. A 2008 directive from the Economy and Finance Ministry (Ministerio de Economía y Hacienda 2008) establishes that, unless there is a threat of expropriation, the appraisal value should be based on the municipal plan designation.

While the law provides that the value of the land should be based on existing use value, it seems that in practice land is generally being appraised by assigning the differential in value between existing and future land use to land ownership. Given this inconsistency, it appears that banks are reluctant to make loans to developers seeking to acquire land if there is a real risk of expropriation. In Italy, the Italian Constitutional Court found similar legislation that allowed expropriation at agricultural use values to be unconstitutional, which may occur in Spain as well.

It remains to be seen how other aspects of the law will be implemented. For example, how will agencies approach the requirements noted previously with regard to transparency and public participation; sustainability principles; nexus for land for public facilities; valuation based on existing use; and the role of *agentes urbanizadores*? The part of the law requiring dedication of 30 percent of residential space to VPOs is being implemented, but with considerable variations across regions and cities.

The law’s critics—particularly the developers and members of the Asociación de Promotores Constructores de España (APCE)—have sounded the recurrent theme that, by practically eliminating private property rights in favor

of greater political control of the development process, the new law will encourage even more speculation, thus limiting the amount of developable land and increasing local government discretion. Other criticisms are that (1) eliminating the guarantee of land values associated with general plan designations will reduce small property owners' ability to borrow, thus favoring large, well-capitalized development corporations and fostering an oligopoly in the development industry; and (2) the cost of the 30 percent VPO requirement will be passed on to market buyers, thus making housing even more expensive for those who cannot benefit from VPOs and discouraging development in general and the production of VPOs in particular. As the president of APCE, Melián Marrero pointed out, "30 percent of nothing is nothing." The role of the *agentes urbanizadores* was seen as yet another intrusion by the state in the private property regime, "making political arbitrariness and discretionality the modus operandi of the new system" (Melián Marrero 2007, 1).

## HOUSING CONDITIONS AND TRENDS

Spain has made remarkable strides in housing policy and programs over the last several decades and has achieved one of the highest home ownership rates among Western countries. Until the recent worldwide recession, this period also coincided with huge growth in economic prosperity, population increases primarily due to immigration, increasing demand for housing, and decreasing housing affordability, especially in major cities and metropolitan areas. These changes raise profound questions concerning where young people will live, how new immigrants will be integrated, and how change will be managed to address Spain's housing needs.

### The Tenure Imbalance

Perhaps the most unique characteristic of the Spanish housing system is its strong orientation toward owner occupation. In 2005 Spain boasted a home ownership rate of 85.3 percent, the highest in Europe. In contrast, France's was 63.1 percent, and the majority of households in Germany were renters (Chaney and Emrath 2006). This was not always the case. In 1950 Spain's owner-occupancy rate was 46 percent, and it has risen steadily since then. The country now has one of the smallest rental housing rates on the continent. In urban and suburban areas, most owner-occupants have flats in multistory buildings rather than single-family homes (Pareja-Eastaway 2002).

The large percentage of owner-occupied housing in Spain is due to the central role of the extended family in providing housing access to its members

(usually at the time of matrimony) and the symbolic importance of “patrimony” a word that in the southern European context “refers directly to the specific stock of housing and land owned by a family” (Allen et al. 2004, 5).

Beginning with the Franco regime, however, the state has played a crucial role in “using deep subsidies to promote home ownership among low-income groups that would otherwise live in social rented housing elsewhere in Europe” (Allen et al. 2004, 165). This approach has worked well until recently, but current changes have made the tenure imbalance unsustainable and heightened the need for rental housing:

1. Housing costs have skyrocketed and household size has shrunk, creating the need for more housing in general and affordable housing in particular;
2. Job seekers have become more footloose, bringing about the need for rental housing away from their hometowns; and
3. The immigrant population is growing rapidly.

The most prominent groups affected, and those that garner the most public empathy, are the young and newly formed families. High home sale prices coupled with inadequate supplies of affordable rental housing have caused young people to postpone economic emancipation from their parents and delay marriage (Zaldivar and Castells 1992). From 1980 to 1987, the average age at marriage rose from 24.9 to 26.3. By 1991, the average age of economic emancipation was older than 27. By the late 2000s, it was not uncommon to find adult children in their early to mid-30s still unmarried and living with parents, especially in the more expensive cities and suburbs.

Some observers have argued that the low rates of new household formation can be explained not only by the lack of affordable starter homes, including units for rent, but also by demographic and cultural factors. Spain has one of the lowest replacement fertility rates in the world. Small family size makes it easier for adult children to remain at home for longer periods than when families were larger making overcrowding more frequent. The centrality of the family in Spanish culture and an unwillingness to move long distances from parents and extended family also limit housing options. Whatever the reasons, many Spanish young people delay marriage and childbearing until they are able to purchase a first home near their families of origin, and many of them never occupy a place in the rental housing market.

Less acknowledged, and less likely to arouse calls for publicly supported housing interventions, are the increasingly severe shelter problems of new

immigrants. For centuries, Spain was considered an economic backwater and was a net exporter of labor and population to other parts of Europe and other continents. Until recently, however, the country had experienced unparalleled economic prosperity, which made it a magnet for foreign immigration. An estimated 4.5 million foreign residents, about 10 percent of the total population, lived in the country in 2007. Most were from North and Sub-Saharan Africa, South America, and Eastern Europe (Duncan 2008). Spain accounted for about 25 percent of immigration to Europe, but only 11 percent of the population of the European Union.

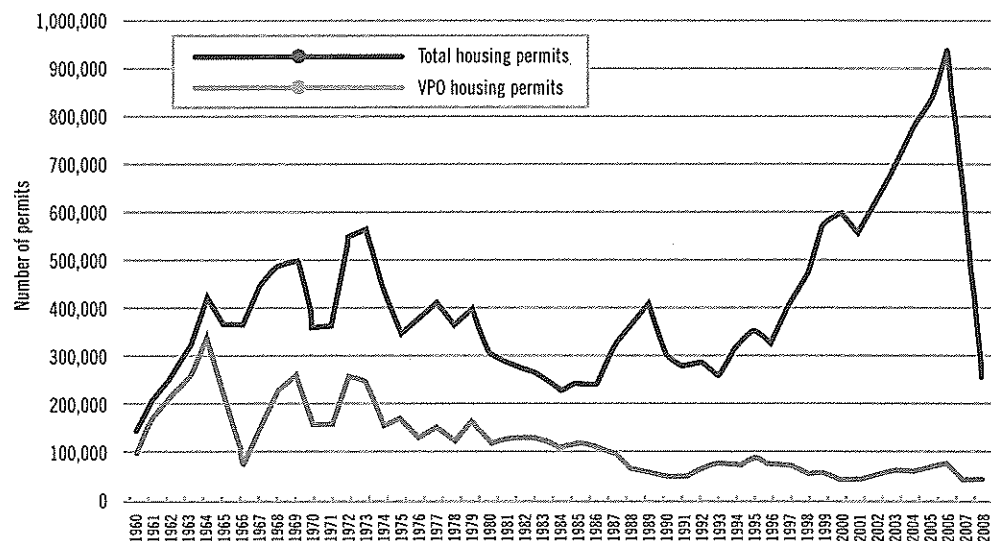
Given the low fertility rate of native-born Spanish families, immigration has fed population growth, which peaked in 2003. Many immigrants are crowding into older neighborhoods in city centers and housing estates on the peripheries of cities. Immigration shows no sign of abating, and immigrants are not likely to return to their home countries even as a result of the economic downturn. However, this pattern might change if the economic situation worsens and Spaniards reclaim for themselves jobs they previously relinquished to immigrants. Lack of a coherent government strategy to ensure decent and affordable rental housing for new immigrants limits social and economic integration and increases the potential for civil unrest in the future.

### **Housing Prices and Production**

The housing market in Spain has been notable for high rates of price appreciation, at least until 2007, when the situation changed dramatically. From 1997 to 2007, housing prices nearly tripled. The growth rate of 184 percent (about 11 percent per annum) was the fourth highest among 20 countries surveyed and the third-highest rate in Europe after Ireland (251 percent) and the U.K. (205 percent) (*Economist* 2007). During the same period, prices in the United States only doubled, growing at a rate of 107 percent.

Price appreciation occurred during this period despite enormous unit production (*Economist* 2007). Figure 7.1 shows that housing permits peaked in 2006, with 915,000 units licensed nationwide—an extraordinary 20 units per 1,000 in population. Permits declined by more than 70 percent in 2008, to 253,000 units. By contrast, California, a jurisdiction comparable to Spain in population (an estimated 38 million in 2007) and growth rates, permitted only 164,300 units in 2006 and 112,300 in 2007 (California Building Industry Association 2009). Despite efforts to increase affordability, the average Spaniard still spends more on housing than other Europeans. In 1999, household outlays for the purchase and service of debt on a new home in Spain consumed 25.3 percent of income (European Liaison Committee for Social Housing 2007).

Figure 7.1 Total and VPO Housing Permits in Spain, 1960–2008



Source: CSCAE (2009).

With so many housing units produced in Spain, one can question why prices continued to escalate so dramatically and why availability has not kept pace with demand. One explanation is that many privately owned units are held outside of the market. For example, in 1991, the percentage of vacant units not occupied as main homes was more than 31 percent of total units: 15.8 percent were unoccupied and 15.4 percent were second homes (Zaldivar and Castells 1992).

Several possible reasons may be posited for this phenomenon: the importance of patrimony as a form of investment; the inflexibility of the rental market, which, until recently, was highly protective of tenants; and the speculative nature of investment in the country, both domestic and foreign. Moreover, landlords are able to gain higher, unreported income by renting bedrooms, and even just beds, on a temporary or informal basis, rather than renting whole units. This further limits the supply of dwellings available for long-term lease.

### The Evolution of Spanish Housing Policy

Over the past 70 years, Spain has moved from being a largely agrarian, underdeveloped, and authoritarian society to a thriving modern economy with a strong body of housing law and a sophisticated land use and housing finance regime (Belsky and Retsinas 2004). The right to housing is enshrined in the Spanish Constitution and is central to this achievement.

After the devastation of the Spanish Civil War, the Franco regime sought to restore social control and satisfy domestic demand by creating institutions and passing laws to stimulate the private sector and, beginning in 1963, to create the VPO program, an inventory of “protected” housing (Belsky and Retsinas 2004). With VPOs, both the builder and the buyer can obtain financial incentives. Builders receive low-interest loans (generally around 3 percent up to a maximum of 80 percent of costs) and direct subsidies, depending on location, size, and affordability of the VPO units. Buyers are able to reduce the purchase price to as low as one-third of market price through various instruments including down payment assistance and mortgage payment subsidies lasting between five and ten years, depending on household income. Different types of VPO assistance are targeted to different income groups.

The increase in Spain’s rate of home ownership continued long after the end of Franco’s rule, especially for baby boomers and internal migrants, but the level of social rental housing remained one of the lowest in Europe at only 1 percent of total units in 2002 (Pareja-Eastaway 2002). As a result, until very recently housing policy in Spain has been identified with the different manifestations of the VPO program, all of which are aimed at creating home ownership opportunities for almost all income groups.

VPOs are built either by private builders or public-private corporations, such as the Institut Catala del Sol in Catalonia or Videsa and Orubide in the Basque Country. Usually, private developers build VPOs mostly during recessionary periods, when the demand for market-rate housing declines drastically. While those houses must be sold at below-market prices, it is profitable for builders to build VPOs because of the financial subsidies and the certainty that the units will be sold quickly without advertising and other costs associated with selling market-rate units. VPOs thus perform a countercyclical function, allowing developers to survive in down markets. As shown in figure 7.1, VPOs reached a high share of housing production during the recession of the 1970s and the lowest in the 2000s. The VPO share is likely to grow over the next few years due to the collapse of the housing market and the increase in *reservas* dedicated to VPOs.

## A REGIONAL PERSPECTIVE ON INCLUSIONARY HOUSING

With all the emphasis on increased production of VPOs, the establishment of *reservas* dedicated to inclusionary housing holds great promise. Especially because the real estate crisis ensued at the same time, it is too early to assess how the 2007 *Ley del Suelo* mandate of 30 percent of *reservas* is working. Consideration of several regions that passed legislation before 2007, however, can

provide insight into the effectiveness of the *reservas* in generating inclusionary housing units.

Fifteen regions have passed legislation mandating *reservas* for various types of VPOs, including the Basque Country in 1994, Madrid in 1997, Castille and León in 1999, and both Galicia and Catalonia in 2002 (Ponce Solé 2004).<sup>4</sup> Recently, many of them have increased their percentages: Madrid from 30 percent to 50 percent and Galicia from 20 percent to 40 percent, for example. (The Catalonia and Basque Country experiences are discussed below in more detail.)

Major differences in the production of VPOs apply among the Spanish regions. Catalonia, the Balearic Islands, and the Canary Islands have some of the worst records (Burón Cuadrado 2008). On the other hand, the Basque Country, Navarra, and Madrid have produced one VPO for every five new housing units, much more than the Spanish average of about one in ten. The regions with high numbers of VPOs have been more active in using the *reservas* over a longer time period. The Madrid region, for example, has seen a tremendous increase in VPO construction since 2003, when *reservas* started to be utilized, with a VPO production of 2,300 units in 2006 (Perez 2007). The Basque Country is the most successful region in producing VPOs, accounting for 30.6 percent of its total housing, compared to 9.7 percent in the rest of the country.

### Catalonia

Since the late sixteenth century, Catalonia's history has been marked by struggles to maintain its independence in the face of the continuing centralization of the Spanish state. Franco mercilessly tried to stamp out Catalan identity, most notably by suppressing the Catalan language, which is now passionately supported by the region's *Generalitat* (government). With a population of 7.3 million inhabitants, Catalonia is a major contributor to the Spanish economy, along with the Madrid and Basque regions.

Barcelona, the capital of Catalonia, has a population of approximately 1.4 million. It is famous in planning circles for successfully transforming itself from an industrial city experiencing a deep economic crisis in 1980 to an international success story a decade later. That triumph, however, has made Barcelona's housing the most expensive in Spain, with an average price of €3,700 per square meter (approximately US\$480 per square foot).

By the mid-1990s, it became apparent that conventional housing policies in Catalonia were not effective in dealing with new circumstances. A change of

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4. In 1984 the City of Madrid mandated different inclusionary housing percentages in new developments. The Supreme Court abolished the measure because "IH was not a specific zoning" and because "there was no State Law to support the measure" (Ponce Solé 2004).

direction was made necessary by increasing affordability problems, especially for young people, and rapid in-migration—from 1997 to 2007, the population grew from 6.2 million to 7.2 million. As affordability problems deepened, a large and increasing number of households could not afford home ownership, not even VPOs. This has necessitated government assistance to social strata that historically never needed it.

A major policy shift made VPOs more flexible by helping families with incomes both higher and lower than that required for the typical VPO. This program, termed *Vivienda de Protección Oficial de Régimen General*, has three levels of assistance that are based on sale prices and household incomes: *régimen especial* for those with the lowest incomes; *régimen general* for low- to moderate-income families; and *precio concertado* for moderate-income households. Another level, *concertado catalán*, priced just below market-rate housing, was added in fall 2008. Income ceilings are pegged to the IPREM (*Indicador Público de Renta de Efectos Múltiples*), or weighted minimum salary, which was €7,455 per year.<sup>5</sup> Generally, the VPO prices are approximately one-third those of market-rate housing (table 7.1).

**Table 7.1** Income Ranges and Maximum House Prices for VPO Housing in Barcelona, 2010

| Category                  | Maximum household income | Maximum price per m <sup>2</sup> | Maximum price for 70 m <sup>2</sup> unit |
|---------------------------|--------------------------|----------------------------------|------------------------------------------|
| <i>Especial</i>           | €17,445                  | €1,705                           | €119,500                                 |
| <i>General</i>            | €31,293                  | €1,940                           | €135,834                                 |
| <i>Concertado</i>         | €45,282                  | €3,001                           | €210,118                                 |
| <i>Concertado Catalán</i> | €52,115                  | €4,000                           | €280,000                                 |

Source: Ajuntament de Barcelona, Departament de Medi Ambient i Habitatge (2010).

Recently, Catalonia has become extremely active in promoting social housing—mostly rental housing—that is built by the private sector, cooperatives, nonprofit organizations, and INCASOL, the regional agency dedicated to the development of social housing. This activism reflects both a huge housing crisis and a shift in the regional government to a center-left coalition that has given high priority to the provision of social housing. In a speech given to the Catalonia Parliament in 2007, Francesc Baltasar i Albesa, regional counsellor for the

5. In Spain, income cited is net of taxes.

Environment and Housing, spoke of 200,000 households having difficulty in accessing housing and 60,000 more having difficulty making house payments (Baltasar i Albasa 2007, 6).

*Implementing inclusionary housing requirements.* The inclusionary legislation Catalonia enacted with Law 2 of March 14 of 2002 required 20 percent of residential square footage to be dedicated to VPOs. With Law 10 of December 24 of 2004, the 2002 law was modified to increase the percentage to 30 percent and to “establish the necessary mechanisms to ensure the effective use of the *reservas* for the construction of VPOs . . . by setting dates for the beginning and the end of the construction of this housing.” It also created an enforcement mechanism: “failure to meet these requirements can lead to expropriation of these parcels by the municipal administration” (Article 58, no. 9). Decree/Law 1 of 2007 further specified that 20 percent of *reservas* be dedicated to VPOs *general* and *especial* in toto and 10 percent to VPO *concertado*. The decree reiterated that development plans must specify the start and end dates for construction for the affordable units.

This legislative frenzy has produced little housing, even at a time of intense development activity. To avoid building VPO units, developers negotiated with some municipalities so they could swap the 10 percent of the land designated for market-rate housing, which they were required to donate to the city as per national legislation for the 20 percent inclusionary housing requirement intended for VPOs *general* and *especial*. As a result, land for VPO housing has accumulated in municipal hands, but little housing has been built. The exception is in Barcelona, where the administration has pushed for set-aside percentages higher than those required by law in redevelopment areas.

Developers that initiated these swaps have probably come to regret them. With the bursting of the housing bubble in 2007, they have few options other than to build VPOs. It is likely that for the next few years most of the housing built in Catalonia will be VPOs and social rental housing, largely situated on the land banked for nonmarket housing as a result of land swaps. According to the Generalitat, enough land has been assembled to accommodate 116,000 affordable units as well as the 27,000 units included in plans currently being processed (Generalitat de Catalunya 2008). But the impact of the construction of new VPO units might be limited because prospective buyers of VPO units are having difficulty in getting mortgages. As credit tightened and banks raised lending standards, VPOs that previously would have been purchased now sit vacant (Joaquim Gasco Palacin personal communication 8 October 2008).

*Inclusionary housing in urbanized areas.* The previously mentioned 30 percent inclusionary national and regional requirement applies to a single situation: land where a planning or zoning change has increased its value, which as a practical matter occurs only in new urbanizing areas. In these cases, inclusionary housing is viewed as a mechanism to recapture *plusvalías* generated by government action.

The situation is different in urbanized areas, where property rights have already been established under floor area ratios (FARs) assigned in the general plans. The differences in policy between urbanizing and urbanized areas, however, led to the concern that VPOs would be concentrated in new growth areas or large urban renewal areas, such as La Marina, described later. To ensure that all parts of the city provide their fair shares and help foster sustainable development by creating a better jobs-housing balance within the job-rich urbanized areas, in 2007 the Generalitat extended inclusionary requirements to urbanized areas and set an inclusionary requirement equal to 20 percent of total residential floor space in redevelopment or significant rehabilitation that exceeds 5,000 square meters. The law allows for the affordable housing to be built on another site within the urbanized zone of the locality or to pay an in lieu fee equivalent to the cost of providing the VPO units.

The crafting of this policy led to tremendous controversy, as property owners objected to the reduction of already-acquired development rights (Joaquim Gasco Palacin personal communication 2008). While the legislation passed, it was made optional for localities, allowing them to specify whether the inclusionary requirements apply to the entire urbanized area, portions of it, or none at all. This turns inclusionary housing in urbanized areas into a local political battle and means that implementation is unlikely where political support for VPOs is weak.

*Residential strategic areas.* A recent effort to implement inclusionary housing in Catalonia is the 2007 program, *Planes Directores Urbanos de Las Areas Residenciales Estratégicas en Cataluña* (Urban Guide Plan for Strategic Residential Areas in Catalonia), which was designed to produce more affordable housing more quickly than under normal circumstances. Under this program (known as ARE), the Generalitat will first identify areas with development potential at the fringes of rapidly growing communities, and then prepare the planning documents that precede development approvals. This process can save considerable time and money for property owners since it can often take more than five years to have such documents approved in Spain. In exchange, 50 percent of the housing has to be affordable, of which 40 percent must be rental housing.

Although tight time requirements mean that development rights are lost if the ARE is not developed on schedule, if the land is owned by the public sector or by a single developer, the outcome is likely to be straightforward. Where the land is owned by multiple private landowners, the matter is more complicated: development will be implemented by an urban consortium established by the region (through the government's Institut Català del Sòl) and the city in which the area is located, in effect making the consortium the developer or *agente urbanizador*.

The law creating the ARE program also increased the 10 percent donation of land value to 15 percent as allowed by the 2007 *Ley del Suelo* to help pay for the infrastructure and public facilities. The plan for each area must have a minimum density of 50 dwelling units/hectare<sup>6</sup> (approximately 20 units/acre); a minimum of 50 percent social housing; integration of the development into the existing or planned urban framework; connection to public transportation; and energy-efficient features.

This approach is a major departure from the typical role of a region in Spain. While regions have the power to plan, that power traditionally has been delegated to the municipalities. In Catalonia, however, the region identifies the AREs and prepares plans that may change land use designations and development timing provisions established by the municipality. This program also constrains the rights of property owners in designated AREs, not only because their development rights are assumed by the public urban consortium, but often because they are not even consulted.

**Spatial integration.** Avoiding spatial segregation is another major regional concern. In 2007 the Catalan regional government passed a Housing Rights Law (Law 18/2007). In its preamble the law warns, "the so-called urban question, according to which spatial segregation is a function of people's income levels, is one of the greatest dangers threatening the sense of community (*convivencia*) in Western Europe, and is a concern which the law must address." An entire chapter of the law is dedicated to urban solidarity to foster social cohesion and prevent spatial segregation. It includes:

1. An urban solidarity objective that, similar to the French *loi SRU* (see chapter 6), mandates that all municipalities of more than 5,000 people dedicate within 20 years a minimum of 15 percent of all housing in the municipality to be social housing, including all possible types of nonmarket housing. Article 73 specifies that in each five-year period, the percentage of social

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6. One hectare = 10,000 square meters.

housing created may not be less than 25 percent of the number of units needed to achieve the 15 percent mandate.

2. An “effective social mix” guarantee—that is, “the process of locating VPO units must take into account the social structure of the locality, district or area in relation to incomes and areas of origin, to avoid the excessive concentration of groups that could put the development at risk of social isolation” (Article 100).
3. An urban solidarity fund to support localities that have difficulty meeting their solidarity objectives. Part of the funding will come from fines imposed on those localities that fail to meet the Article 73 requirements.
4. An Observatory of Housing and Urban Segregation to monitor the location and integration of housing generally and VPO housing in particular and to collaborate with the regional housing agencies to foster social integration. Its board comprises social organizations and industry representatives with an interest in integration.

Finally, since 2002, all planning and housing laws in Catalonia have contained a mandate that the areas reserved for the construction of VPOs must be planned to avoid the excessive concentration of this type of housing; in order to favor social cohesion and avoid the spatial segregation of citizens because of their income levels.

As this review of recent legislation demonstrates, Catalonia has been very active in pursuing inclusionary housing. Indeed, the pace of legislative intervention has become almost frenetic during the past several years. Unfortunately, there is very little housing to show for that activity. In an interview, Carme Trilla, director of the housing department for the Catalonia regional government, lamented, “Catalonia has lost ten years.” She added, however, “because a large quantity of *reservas* are now available and it is now convenient for developers to build VPOs, the number of VPOs in Catalonia in the next few years is likely to grow substantially” (Perez 2007, 1).

### **Basque Country**

The Basque Country was the first region in Spain to establish inclusionary housing, and it set rather high percentages: 65 percent in urbanizing areas and 20 percent in urbanized areas. This legislation resulted in “little production” of VPOs, however, “for the lack of the necessary public energy to implement the formal and material aspects of the law” (Burón Cuadrado 2007, 4-b). In 2002

the Basque government began to intervene more aggressively in the private land and housing markets with the goal of providing decent housing at prices affordable to all income levels in the region, as mandated by the constitution (Burón Cuadrado 2008, 15). The region sought to increase the percentage of VPOs and social housing to 55 percent of the total housing market, lower the free market share to 25 percent, and increase to 20 percent the *vivienda de precio tasado* (appraised housing price), which has prices between the VPOs and free market units. The thinking was that such a large presence of nonmarket housing would have a calming effect on market-rate housing as well (Burón Cuadrado 2008). Interventions in this direction include the following features.

- A capacity to build the units directly. The Basque Department of Housing and Social Affairs has a number of dependent public entities—such as Bizigune, Alokabide, and Orubide—whose general purpose is to produce social housing. The largest is Vivienda y Suelo de Euskadi (VISESA), which lists as its major objectives the construction and rehabilitation of VPOs and social housing and the ability to obtain and entitle land for the development of affordable housing. VISESA controls Orubide, which is dedicated to land banking (Euskadi Government 2005).
- Length of affordability. From 2002, all affordable units must remain so in perpetuity.<sup>7</sup> In the case of VPOs, the region maintains ownership of the land (*derecho de superficie*); after 75 years the units become property of the region. The region maintains and utilizes fully the right of first refusal when VPOs are sold in the open market. No social housing has been sold since 2001.
- Expansion and protection of *reservas*. With Law 2 of 2006, the inclusionary housing percentages were increased from 65 percent to 75 percent in urbanizing areas, and from 20 percent to 40 percent in urbanized areas. The law justifies the increases in this way: “The high prices of housing and the chronic scarcity of land make even more necessary a large increase in the offer of VPOs which are, for a large number of people, and especially young people, the only housing appropriate for them in terms of price and needs . . . even though we are the region with the highest percentages of affordable housing in the Spanish nation, they are clearly insufficient to satisfy the demand”<sup>8</sup> (Law 2/2006, II.1). The *reservas* cannot be sold, exchanged, or shifted to other uses, as has happened in other regions.

7. Other regions also passed similar controls in 2004: Catalonia (90 years), Extremadura (in perpetuity), and Asturias (for the life of the structure).

8. Ley Suelo y Urbanismo de Euskadi, June 20 (Law 2/2006).

- Strong controls. It is widely acknowledged in Spain that the management of VPOs suffers from several problems, the most important being weak resale controls. VPO units are usually sold at or close to market value, thus losing the original affordability of the unit. Also, VPOs are supposed to be assigned on the basis of waiting lists and other criteria, while in reality people connected to politicians or the private developers of VPOs are often the primary beneficiaries (Perez 2007). Related issues are the qualifications necessary to be awarded affordable housing and whether those qualifications are maintained over time. Through its Basque Housing Council (Etxebide), the region has apparently developed a fair, transparent, and rigorous system to manage affordable housing effectively and fairly, even for VPO units developed by the private sector (Burón Cuadrado 2006). Since 2004 more than 40,000 inspections have been carried out with sanctions (including expropriations) imposed for illegal arrangements.
- High market share of VPOs. In 2008 VPOs constituted 48 percent of the new housing units in the Basque Country. This market share is five times larger than the average in the rest of Spain. The jump from 20 percent market share in the 1980s to 48 percent in 2008 was made possible by the construction of more than 45,000 VPO units in the period from 2001 to 2008.
- Growing social rental stock. In 2001 there were only 740 social rental units in the Basque Country. Since then the Basque government has promoted this form of tenure and now has more than 17,000 VPOs that are social rental units.

This strong regional intervention in the private housing market, as well as collaboration with the localities and market developers, has increased the pace of affordable housing production. There is no doubt, however, that the efficient utilization of the *reservas* since 2003 has been the most important factor in increasing the pace of VPO production. According to Javier Burón Cuadrado (2008, 38), the former deputy minister of housing for the region, “continuing in this direction, especially in collaboration with the municipalities, the present housing problem will be resolved in the near future.” But that was opined in 2008. With the change of government at the regional level in 2009 and a horrendous building and financial crisis, no more land is being obtained for VPOs and the larger VPO projects have been stopped (Javier Burón Cuadrado personal communication 16 March 2010).

#### **LOCAL CASES: INCLUSIONARY HOUSING AND LAND VALUE RECAPTURE**

Affordable housing generated through the planning system is a recent phenomenon in Spain, as it is in the rest of Europe. After being pioneered in the Basque Country and the Madrid region in the late 1990s, it was gradually adopted in

some housing, but was comprised mainly of industrial plants, some of which are still active. It was seen as an area where housing, including as much inclusionary housing as possible, could be concentrated.

*The plan.* The 2005 renewal plan for La Marina was recently renamed, in Catalan, La Marina del Prat Vermell, which translates to “the red field by the sea.” From a planning standpoint, especially considering the city’s housing situation, the existing low-density manufacturing uses were seen as a misuse of this centrally located area with social and economic locational advantages. With its location seven subway stops from Plaça de Catalunya, considered the geographical and social center of the city, La Marina was an ideal site for a mixed-income housing project with related services and employment to help meet the city’s housing needs (figure 7.2).<sup>9</sup>

The plan had two objectives. The first was to create a significant amount of inclusionary housing in an attractive environment, and the second was to foster an appropriate jobs-housing balance by creating more new jobs in the service sector to replace the existing manufacturing and warehousing jobs that were likely to disappear or move in the near future.

The challenge in preparing the plan was to ensure a fair balance of density, environmental quality, and economic feasibility. From an economic feasibility standpoint, it was important to ensure balance for the three partners in the development process: (1) the social interest represented by the municipality, in the form of adequate public facilities and inclusionary housing; (2) a fair return for the landowners, which the city established as the existing use value; and (3) reasonable profits for the developers. The difficulties associated with each partner are those of paying for the new infrastructure and public facilities; compensating the existing owners, including the cost of relocating active industrial operations; and ensuring sufficient developer profit. These issues were addressed by increasing the densities allowed by the existing plan and replacing existing uses with uses of higher value, thus increasing the value of the land. The changes in density and use also had to compensate for the inclusionary housing prices, which would reduce the site’s market value.

The plan, developed between 2004 and 2006, called for an overall FAR of 1.85 over the 75-hectare (188-acre) area and had the following features:

- 1.3 million square meters of floor space;
- 11,865 total housing units;

9. The team that prepared the Modificació del Plá de La Marina de la Zona Franca included Ramón Massaguer, Oriol Clos, Isabel Meléndez, José A. Tajadura, Neus Aleu, Joan Abad, Enric Lambies, Marta Perelló, and Ricard Fayos.

other regions, and then by the national government in 2007. The constitutional, economic, and political contexts of inclusionary housing play out differently in the various regions and cities, however. The harsher the effects of the housing crisis and the less market-oriented the political regime, the more likely it is that the region or city will attempt to increase the inclusionary set-aside.

Such decisions cannot be made in a vacuum, however; they require an economic analysis to establish what percentages are feasible under particular development scenarios to ensure that they are both fair and economically achievable. This section presents two economic analyses, prepared by Joaquim Clusa and Sara Mur of the firm, Murclusa, for La Marina, a redevelopment project in the City of Barcelona in Catalonia, and for a general plan update for the City of Vigo in Galicia.

### **Barcelona: La Marina Plan**

In preparation for the 1992 Olympic Games, the City of Barcelona transformed its public infrastructure and facilities by building a new ring road and drainage system; reclaiming the waterfront; and building new public plazas, parks, and sport venues. These facilities benefited from significant central and regional government grants, with much of the investment concentrated in selected locations termed *new city centralities* (Marshall 2004).

The Olympic housing program redeveloped a number of Barcelona's old manufacturing areas to create three Olympic villages containing about 4,500 units to house athletes, journalists, and referees. These units were sold on the open market after the Games, even though the city's population—especially the number of its young people—was decreasing due to its high housing costs. While highly successful at many levels, the transformation of Barcelona in the 1980s and early 1990s left untouched its affordable housing deficit. The housing bubble between 1997 and 2007 only exacerbated the city's housing affordability problems.

After the 1992 Games, the city's renewal policy focused on major projects. The most emblematic of these is a 252-hectare area where Barcelona meets the Mediterranean and the Rio Besós. The planning culminated in 2004 with the Forum Universal de las Culturas, which succeeded in upgrading and integrating existing infrastructure (e.g., plants for sewage treatment and alternative energy) with a convention center, hotels, and other facilities as well as with the redevelopment of La Mina, a public housing project in need of renewal. The main goal of another project, the Poblenou 22@ Plan, was to attract high-tech industries to a centrally located district that has a mix of housing and disused industrial plants. A recently approved plan in the northeast for La Verneda, a large manufacturing area, has the potential to create 8,000 housing units and 6,000 jobs. La Marina de la Zona Franca, an area in the southwestern part of Barcelona, has

- 3,802 units of social housing, including 1,086 units of rental housing for young families and the elderly, 2,716 units of *régimen general* and *especial* VPOs, and 2,445 of *concertado* VPOs; and
- 10,000 service jobs in 315,420 square meters of floor space (26 percent of the total).

It called for a land use distribution of 35 percent for residential and commercial development; 30 percent for roads; and 31 percent for public spaces and green areas, including a health center, schools, library, and senior center (figure 7.3).

Each of the 15 blocks, averaging 1.8 hectares in size, was treated as a separate entity so each one could be developed independently. This created several challenges because the plan for each block had to provide compensation to its former owner(s) through a reparcelization process. Then each new development

Figure 7.2 La Marina Planning Context



The plan for La Marina area is labeled "A"; "B" indicates various revitalization interventions in the Zona Franca area. To the right of the Marina plan area is the hill of Montjuïc, home to many of the sport facilities for the 1992 Olympics. Right of Montjuïc is the medieval center and the expansion designed by Ildefons Cerdà during the second half of the nineteenth century.

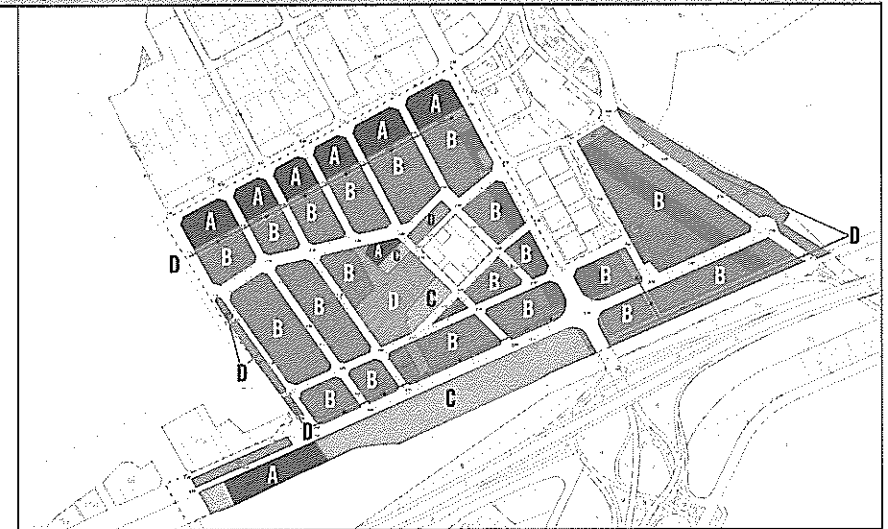
Source: Ajuntament de Barcelona, Sector d'Urbanisme, Direcció de Plans i Projectes, Departament de Planejament en Transformació.

had to pay an infrastructure charge of approximately €45 per square meter to get a building permit.

**Economic analysis.** To comply with various laws and regulations, the economic feasibility analysis of the entire site had to determine the minimum development density needed to finance the inclusionary housing, the public facility costs, the development costs (including a major road and two new metro stations), and the dedication of 10 percent of the potential land value to the municipality. The analysis also had to calculate compensation for landowners, manufacturing facilities, and moving costs. The compensation for property owners was based on the existing value of the land as an industrial site.

The critical factor in making the redevelopment economically feasible is the differential between the proposed net density (2.30 FAR) per block and the existing density (1.0 FAR). This differential creates enough additional real estate value to make possible the compensation costs and the infrastructure costs, factoring in the inclusionary housing and 10 percent land dona-

Figure 7.3 La Marina Plan



This plan shows the road network and generalized land uses, including where private development including VPOs will take place (labeled A and B). Buildings as high as 15 stories are labeled A. Public facilities are labeled C, and D indicates open space. When detailed plans for each block are prepared, three additional hectares of open space and 4.8 hectares of public facilities will be identified. All told, 13.3 and 11.15 hectares, respectively, will comprise the entire plan area.

Source: Ajuntament de Barcelona, Sector d'Urbanisme, Direcció de Plans i Projectes, Departament de Planejament en Transformació.

## Vigo: The General Plan

In contrast to the plan for La Marina, which highlights how an aggressive jurisdiction recaptured all the land value increment to pay for infrastructure, public facilities, relocation costs, and the highest possible percentage of inclusionary housing in a neighborhood, the Vigo case outlines the process and economic analysis that led to higher percentages of inclusionary housing than the minimum required for an entire city. The political context, however, permitted only a partial recapture of land value increases.

*Territorial setting.* The municipality of Vigo is located in the northern part of Spain, in Galicia. This region has 2.8 million inhabitants, 315 municipalities, and the qualification of being a “convergence region” according to the European Union; that is, this region has a lower income per capita than the EU average. As one of Spain’s busiest ports, with a strong manufacturing base, Vigo is the largest city in the region, in terms of residents (300,000), housing (135,000 units), and economic activity (143,000 jobs). Its metropolitan region includes 44 municipalities and 829,000 inhabitants.

Vigo is in competition with two other cities in Galicia—Santiago de Compostela, the region’s administrative capital, with 160,000 inhabitants; and A Coruña, which has 240,000 inhabitants—as well as with the city of Porto in Portugal. Vigo underwent a significant restructuring of its manufacturing base in the 1980s, which brought new vitality to its economy, now centered on the automobile industry (a Citroën-Peugot plant), fishing, and ship construction. Vigo’s employment rate is higher than the average both in Galicia and in Spain as a whole.

The municipality has high residential densities in its center and low-density suburban development covering 60 percent of the entire municipal territory (110 square kilometers). Vigo also suffers from important infrastructure and social services deficits. Approximately one-third of the population is housed in illegally built structures. Because of its leap-frogging and low-density pattern of development, the provision of municipal services in outlying areas is more expensive than in the rest of the city. One of the goals of the plan update was to redevelop or eliminate the illegal housing developments and obsolete manufacturing uses, while at the same time creating a more compact city.

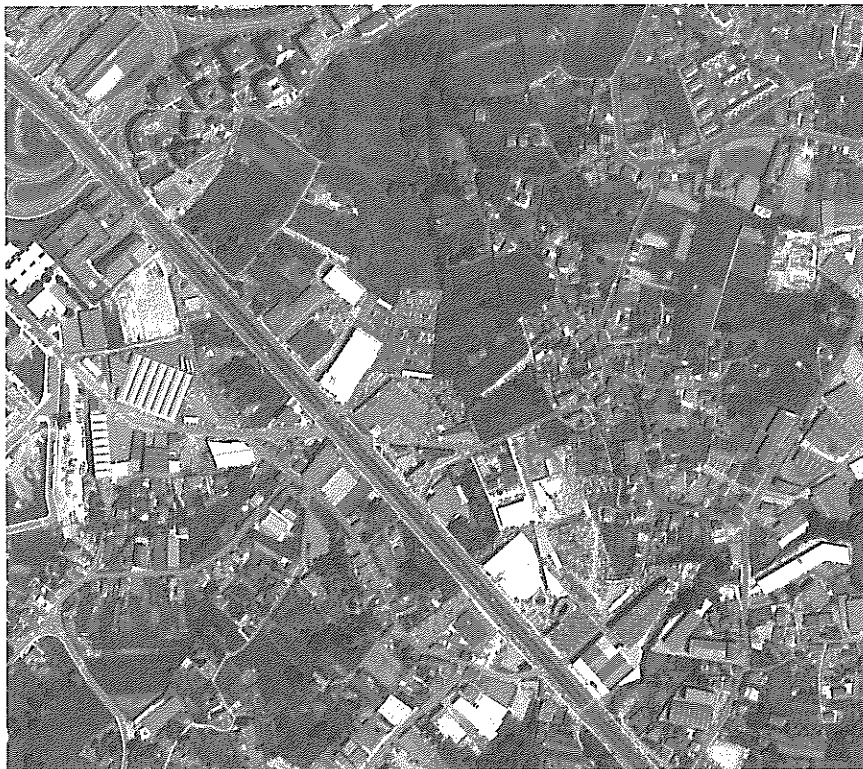
*Galician planning laws.* The legal basis to support the effort to increase the inclusionary housing percentage in Vigo was *Ley 6* of 2002 of the Galician region, which established a minimum reservation of 20 percent of the residen-

tion, which represent a decrease in potential market-rate floor space since VPO prices are approximately one-third of the market prices. The calculation also has to be sufficient to give the developer's investment an internal rate of return of 12 percent per year, based on mortgage market regulations established by the central government. On the basis of the economic analyses, it was calculated that of a total of about 12,000 units, approximately 5,700 would be market, 2,500 VPO *concertado*, 2,700 VPO *régimen general* and *especial*, and 1,100 social rental housing. All told, it amounted to more than 50 percent inclusionary housing.

The plan for La Marina was approved without much controversy. The majority of the landowners and manufacturers ultimately agreed to the plan, and none appealed to the courts even though their requests for greater density and a smaller inclusionary percentage were not accepted. The roughly 100 families living in the area accepted compensation in the form of new affordable apartments. The only opposition came from certain public interest groups that sought to maintain the manufacturing character of the area.

**Discussion.** The increase in the inclusionary requirements and infrastructure charges in the plan for La Marina reflects the escalating “public-ification” of land values as contemplated at all levels of government, from the national planning laws of the entire post-Franco era, to Catalan regional laws of the last several decades, to the planning practices of the City of Barcelona itself. This constitutionally derived institutional context opened a new approach for the social recovery of land value increases and the guarantee of adequate housing for all families. The extent to which the “private city” was made to pay more for the benefit of the “public city” (public infrastructure and land for VPOs) reflects the extent to which real estate prices, and consequently land prices, had increased as a result of the real estate boom from 1997 through 2007. Whether those arrangements remain sustainable under existing conditions remains uncertain.

It should be noted that the inclusionary requirement increases the potential demand for housing because it makes housing accessible to a larger population, thus potentially playing a countercyclical role now that the 1996–2007 bubble has ended. In that context, the internal rate of return for a developer of inclusionary housing can be even higher than that in the free housing market, because the VPO units have shorter selling periods and are being built on land bought according to the derived demand price principle, without speculative expectations of future housing price increases.



An aerial photograph of Vigo reveals contemporary urban sprawl and illegal settlement.

Credit: Xerencia de Urbanismo, Concello de Vigo.

tial floor space in all new developments. Municipal plans could increase the percentage with no limit, provided “equilibrium of profits and charges” is maintained individually and among each district of similar value in the municipality (articles 131.1 and 112). In June 2008, the Galician government approved an amendment to the 2002 law to conform to the national 2007 *Ley del Suelo*, but it went even further: all developable sectors of a Galician municipality with more than 20,000 inhabitants must have at least 40 percent inclusionary housing. The effort described here took place before the 2007 national and 2008 regional laws were enacted.

*The municipal plan and approval process.* The municipal plan is a build-out plan that preserves 39 percent of the total municipal territory as permanent open space while densifying the sprawling suburbs with infill and redevelopment. The floor space potential is 18.7 million square meters, with 76 percent (14.2 million square meters) dedicated to residential uses—a total of 116,061

new units, including 57,475 units of inclusionary housing. The build-out was projected to occur in about 20 years for commercial land uses and 26 years for residential uses, using the average production figures for the period from 2001 to 2006. The so-called initial approval of the municipal plan was made by the Vigo City Council in 2004. This proposed plan generated around 60,000 written objections and comments, especially from property owners who would be affected by the redevelopment of illegal settlements. After many public hearings, however, the plan was approved in May 2006 and was sent to the regional government for final approval.

The regional government has the right to demand changes to municipal plans, and in January 2007 it issued a series of “adjustment conditions” to be made by the city council, especially related to the expansion of areas designated for new development and the phasing of future development. After the May 2007 elections, the new majority on the Vigo City Council took advantage of the opportunity offered by the need to revise the plan as mandated by the regional government, and decided to increase the inclusionary housing percentage from the original 23 percent to a minimum of 40 percent. At this point it became necessary to undertake an economic analysis of the implications of this percentage increase. On the basis of that analysis, the revised percentage in the municipal plan was approved by the regional government on 16 May 2008. This last step closed an extremely complicated planning process of nearly eight years’ duration that involved four different mayors.

*Inclusionary housing objectives.* The city council’s objective was to incorporate an inclusionary housing reserve of at least 40 percent of the floor space in all new development sectors. As described before, urban development in Spain is structured through PAUs—partial plans prepared for relatively large sectors where landowners share in the urbanization costs and profits in proportion to the land owned. Each of the sectors in Vigo presents its own opportunities and constraints, which results in their having different land values. Given these differences, it was decided that the inclusionary housing requirement could not be applied equally to all sectors, but rather had to be tailored to the development potential and costs associated with each of the 380 sectors.

An initial economic analysis in Vigo found that an average inclusionary housing requirement of 40 percent would be possible based on the recapture of 25 percent of the increases in land values of the period from 2003 to 2007. The landowners would still enjoy an increase of about 75 percent in value for their properties. The reason for the 75 percent guarantee was political. Many different landowners hold property in the areas where illegal housing has been

built (the average property size is about 600 square meters), and they wield significant political power because ownership in Galicia is held sacrosanct and is viewed as a means to economic independence.

While the owners retained 75 percent of their land value potential—based in part on increased development rights—they were still unhappy with the proposed changes, and the developers enlisted their support to fight the new plan. The harsh political conflict that ensued was expected, but the deepening housing affordability crisis coupled with Spain's constitutional mandates made it possible for the decision makers to hold firm. They could point out that the reduction in potential land values was actually much less than it could have been under the law.

Each sector's economic feasibility was measured using the land residual value method that is often used by developers to decide how much they should pay for land they wish to develop. It assesses all costs involved with site development, including the developer's profit and the market value of the buildings to be sold or rented. The costs are deducted from the revenues, and the remaining amount indicates the maximum the developer should pay for the land. In some cases the residual value might be negative, requiring public subsidies for development.

The 75 percent increase guarantee to landowners generated various inclusionary housing percentages in the different sectors, with the lowest percentage in the central district. As mentioned above, the objective of the numerical exercise was to guarantee a linear increase of 75 percent in relation to the 2003 land residual value in each sector, resulting from the 2004 first approval of the plan calculations.<sup>10</sup> This 75 percent figure was determined to guarantee a minimum of 39 percent inclusionary housing in the central districts with the highest real estate prices, and higher percentages in other areas of the city.

Figure 7.4 shows how redevelopment costs and land costs increased between 2003 and 2007, with an increase of €4,220 million in land values. The increase of inclusionary housing from 23 percent to 47 percent of residential floor space reduced the windfall for landowners by 29 percent, to €2,618 million. The increase of 24 percentage points also produced a 29 percent reduction in new expected land values of €1,583 million, which is the amount of the planning gain.

The economic feasibility of new development is a function of the real estate market. In the case of Vigo, the economic consequence of the increase in the inclusionary housing reserve is the reduction of the expected land

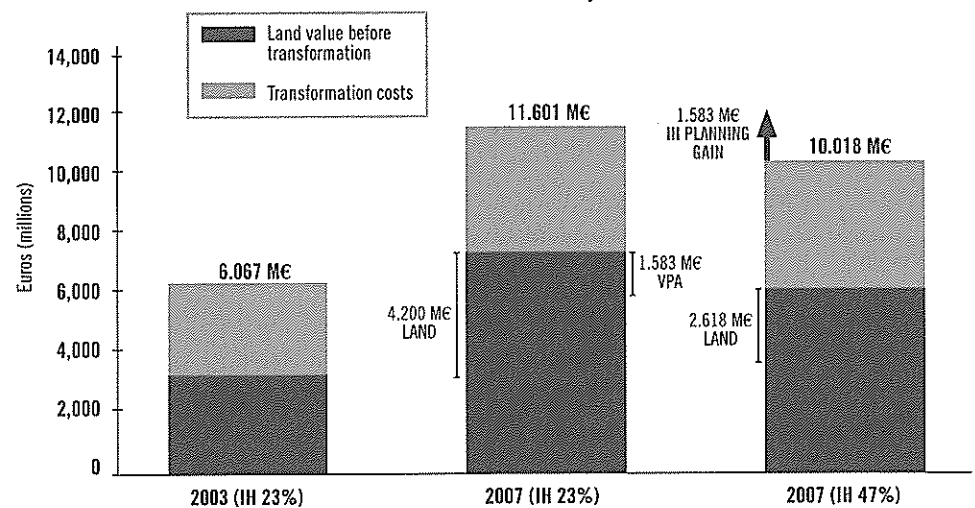
10. See [www.murclusa.cat](http://www.murclusa.cat) for a description of the algorithm utilized to calculate the percentage of inclusionary housing in each sector.

values that result from the lower price of €1.517 per square meter, which is 63 percent of the average price of market-rate housing (€2.408 per square meter). The public sector, then, enjoyed a part of the gain generated during the 2003–2007 period by the increase in real estate prices that otherwise would have gone to landowners.<sup>11</sup>

**Discussion.** The Vigo City Council’s decision in 2007 to increase the inclusionary housing percentage to 40 percent exactly one year after the previous council pegged it at 23 percent might appear to have been rendered moot by the regional government’s subsequent requirement of 40 percent everywhere. But it is important to appreciate Vigo’s approach. Not only did the council want to increase that percentage by recapturing some unearned increments in land value, it also strove to achieve an equitable distribution of costs and benefits by doing fine-grained analysis of hundreds of sectors. This approach allowed the city to implement, to the highest politically and economically feasible degree, the right to decent and affordable housing and the principle of social cohesion.

11. Large Vigo developers took the city to court in October 2009 seeking to lower the inclusionary housing percentage requirement to 20 percent, arguing that the existing conditions in the housing market make unfeasible the percentages approved in the 2008 municipal plan. In June 2010 the city of Vigo provided the court with an economic study elaborated by the same original economic consultant who had challenged the developers’ consultants’ study. The new study concluded that developments are feasible even with the present prices.

Figure 7.4 Vigo General Plan: Land Value Components with Transformation Costs, 2003–2007



For this potential to be fully realized, however, loans need to be provided by banks to builders and buyers of VPO units. Unfortunately, with the financial crisis gripping the country, banks are increasingly reluctant to make loans. Regions and larger localities have created a variety of quasi-independent entities that build social housing, an approach peculiar to Spain. Very few nonprofit organizations in Spain either build social housing, as in the United States, or buy it from developers, as in England or France, and then also manage the housing. These roles are performed in Spain by quasi-public entities, but efforts to increase the presence of nonprofits exist as well. Another example of Spain's more interventionist state is the ARE program in Catalonia, by which the regional government accelerates the development of privately owned land for the production of inclusionary housing.

In Spain, as in France, the fostering of spatial integration, or avoidance of social segregation, is of great concern. For example, Catalonia has legislated extensively to foster urban solidarity and avoid concentrations of VPOs. Most striking is a mandate probably inspired by the French *Loi SRU*. It requires that in the 2008–2028 period all Catalan municipalities greater than a certain size achieve a minimum 15 percent of nonmarket housing.

While there is a strong belief in Spain that the cost of inclusionary housing will be absorbed by the landowner, to ensure the political and economic viability of projects it is still important to provide economic analyses of the costs and benefits of various levels of inclusionary housing for the three parties involved in urban construction: the landowner, the public, and the builder/developer. Probably because its planning system is so entangled with financial issues, Spain is a country where the economic implications of planning decisions are carefully analyzed, including those concerning inclusionary housing.

The two case studies presented in this chapter show how different circumstances and contexts led to different levels of land value recapture, while ensuring that developments were still economically viable. La Marina in Barcelona was based on a complete recapture of potential development value, and Vigo's plan was to recapture 25 percent of land value increases from 2003 to 2007. Given the collapse of the real estate market after 2008, it remains to be seen what kinds of revisions, if any, will be required in those two plans. Nevertheless, these case studies point the way to a practice that should be adopted by jurisdictions in other countries to assist in the decision-making process that leads to inclusionary housing interventions.

## CONCLUSION

Spain has gone further than any other European country in its pursuit of inclusionary housing. The process was initiated by autonomous governments in the Basque Country and Madrid in the mid-1990s and continued in other regions in subsequent years. It culminated with the national *Ley del Suelo* of 2007, which required that a minimum of 30 percent of buildable residential land be dedicated to social housing.

Spain's achievements can be explained by several factors. First, the country has a long tradition, initiated under the Franco dictatorship, of strong public intervention in the real estate market. A principle exists that the right to land ownership and development is to be accompanied by obligations and duties, and land speculation has been singled out as a process to be discouraged. Second, with the advent of democracy, this tradition was enshrined in the 1978 Constitution, in which Article 47 calls for "regulating the use of land in accordance with the general interest to prevent speculation," and for the sharing by the community of "the increased values generated by the urban activities of public bodies." Article 47 also declares: "All Spaniards have the right to enjoy decent and adequate housing" and that public authorities shall endeavor to make that right effective.

Third, since the mid-1990s it has become increasingly clear that past policies were sorely insufficient to accommodate increasing demands for affordable housing, which led to calls for greater action by the government. Finally, the rapid and substantial increase in immigration raised concerns about social and geographic segregation. All these factors, with additional impetus provided by skyrocketing housing prices, contributed to a kind of perfect storm that legitimized high levels of intervention in the real estate market aimed at recapturing unearned increments in land value to benefit the larger society. The result was inclusionary housing.

The actual creation of social housing, however, has been a slow process. Inclusionary housing has been implemented through the dedication of *reservas*, but considerable time can pass before these land set-asides translate into homes for residents. Even in the Basque Country it took almost 10 years to establish the *reservas* system, and it took even longer in Catalonia. Ironically, the delay was caused by the very problem inclusionary housing was intended to correct. With homes appreciating rapidly, developers could make fortunes in market rate housing, and they fought any action that would curtail their development activity. But, the result could have been merely a postponement of inclusionary housing construction, as localities have obtained ample land *reservas* and developers are now eager to build VPOs.

- European Liaison Committee for Social Housing (CECODHAS). 2007. Social housing in Spain. Brussels: European Social Housing Observatory. [www.cecodhas.org/index.php?option=com\\_content&task=view&id=80&Itemid=122](http://www.cecodhas.org/index.php?option=com_content&task=view&id=80&Itemid=122)
- Euskadi Government. 2005. General budgets of the Autonomous Community of Euskadi. Vitoria Gasteiz: Gobierno Vasco.
- Ferrer, A., ed. 2005. Introducción: La última deriva del urbanismo municipal. *Papers: Regió Metropolitana de Barcelona* 43 (June).
- García-Bellido, J. 1999. Il trasferimento dei diritti edificatori nella politica fondiaria in Spagna. In *Urbanistica e fiscalità locale*, ed. F. Curti. Milan: Maggio Editore.
- González Pérez, J. 2007. Urban planning system in contemporary Spain. *European Planning Studies* 15(1): 29–50.
- Leal Maldonado, J. 2007. Regulación, redistribución y desarrollo del suelo urbano como objetivos de la Ley. *Ciudad y Territorio: Estudios Territoriales* 29(152–153): 277–289.
- Marshall, T., ed. 2004. *Transforming Barcelona*. London: Routledge.
- Melián Marrero, G. 2007. *La Ley del Suelo: Un nuevo instrumento de corrupción urbanística*. Madrid: Instituto Juan de Mariana.
- Ministerio de Economía y Hacienda. 2008. Orden EHA/564. Madrid.
- Molotch, H. 1987. The city as a growth machine. *American Journal of Sociology* 75: 309–330.
- Pareja-Eastaway, M. 2002. The tenure imbalance in Spain: The need for social housing policy. *Urban Studies* 39(2): 284.
- Perez, C. 2007. *Madrid, Navarra y el país vasco encabezan la construcción de vivienda social*. COM Financieros y Administrativos (5 February).
- Ponce Solé, J. 2004. Land use law, liberalization, and social cohesion through affordable housing in Europe: The Spanish case. *The Urban Lawyer* 36(2).
- Puig-Ventosa, I. 2009. The unsustainable dependence of Spanish local treasuries on taxes and charges related to construction activities. In *Critical issues in environmental taxation*, vol. 6, ed. J. Cottrell, J. E. Milne, H. Ashiabor, L. A. Kreiser, and K. Deketelaere. New York: Oxford University Press.
- Riera, P. 2000. Economic implications of the Spanish planning system, with emphasis on value capture mechanisms. Working Paper. Cambridge, MA: Lincoln Institute of Land Policy.
- Riera, P., D. García, I. San Martín, and G. Keogh. 1997. *Informe para el Banco de España sobre economía del Urbanismo en España, en comparación a otros países*. Barcelona: Instituto Universitario de Estudios Europeos, Universitat Autònoma de Barcelona.
- Zaldivar, C. A., and M. Castells. 1992. *Spain beyond myths*. Madrid: Alianza Editorial. [www.sispain.org/english/infrastr/housing.html](http://www.sispain.org/english/infrastr/housing.html)

## REFERENCES

- Allen, J., J. Barlow, J. Leal, T. Maloutas, and L. Padovani. 2004. *Housing and welfare in Southern Europe*. Oxford: Blackwell.
- Baltasar i Albesa, F. 2007. Introduction. In *Pacte nacional per a l'habitatge 2007–2016*. Generalitat de Catalunya, Departament de Medi Ambient i Habitatge.
- Belsky, E., and N. Retsinas. 2004. History of housing finance and policy in Spain. Cambridge, MA: Harvard University. [www.housingfinance.org/uploads/Publicationsmanager/Europe\\_Spain%202004.pdf](http://www.housingfinance.org/uploads/Publicationsmanager/Europe_Spain%202004.pdf)
- Berges, Á., and E. Ontiveros. 2007. La nueva Ley del Suelo desde la perspectiva económica: Sostenibilidad y eficiencia en los mercados del suelo. *Ciudad y Territorio: Estudios Territoriales* 29(152–153): 259–275.
- Burón Cuadrado, J. 2006. Land reserves for subsidized housing: Lessons learned from Victoria-Gasteiz. *ACE: Arquitectura, Ciudad y Entorno*. Universidad Politécnica de Cataluña 1(2; October): 85–123.
- . 2007. Examen de la política de vivienda en Euskadi: Situación actual y perspectivas. *Revista Vasca de Administración Pública* 79(II; September/December).
- . 2008. Una política de vivienda alternativa. *Ciudad y Territorio: Estudios Territoriales* 40(155): 9–40.
- Calavita, N., and A. Ferrer. 2001. Behind Barcelona's success story: Citizen movements and planners' power. *Journal of Urban History* 26(6): 793–807.
- California Building Industry Association. 2009. California new housing units, 2000–2008. Sacramento: California Building Industry Association. [www.cbia.org/go/cbia/?LinkServID=FE5ED931-F09E-44C7-96836630388F21F7&showMeta=0](http://www.cbia.org/go/cbia/?LinkServID=FE5ED931-F09E-44C7-96836630388F21F7&showMeta=0)
- Chaney, T., and P. Emrath. 2006. US vs. European housing markets: In-depth analysis. Washington, DC: National Association of Homebuilders. [www.nahb.org/generic.aspx?genericContentID=57411](http://www.nahb.org/generic.aspx?genericContentID=57411)
- Clusa, J., and S. Mur. 2007. La experiencia británica 1973–2006 de JGB y el pago de una deuda pendiente. *ACE: Arquitectura, Ciudad y Entorno*. Universidad Politécnica de Cataluña 3: 125–152.
- Consultora Galega. 2007. Estudio da posibilidade de introducción da reserva do 40% de vivenda protexida en tódolos ámbitos de solo urbano non consolidado e solo urbanizable garantindo a súa rendabilidade e equilibrio. Appendix to Plan Xeral de Vigo. [www.murclusa.cat/presentacion\\_vigo\\_20071211.pdf](http://www.murclusa.cat/presentacion_vigo_20071211.pdf)
- CSCAE (Consejo Superior de los Colegios de Arquitectos de España). 2009. [www.cscae.com](http://www.cscae.com)
- Departament de Medi Ambient i Habitatge. 2010. Diari oficial de la Generalitat de Catalunya .DOGC núm. 5565–1/02/2010 (Pàg. 9379).
- Duncan, R. 2008. Immigration in Spain: A profile. *Canada Free Press* (9 January). [www.canadafreepress.com/index.php/article/1276](http://www.canadafreepress.com/index.php/article/1276)
- Economist*. 2007. Checking the engine. *The Economist* (7 June).