

Inclusionary Housing in Spain

FIRST DRAFT

Nico Calavita, Joaquim Clusa, Sara Muir & Robert Weiner

Introduction

In 1975 Franco, Spain's dictator for more than 35 years, died. He had gained power at the end of the 1936-39 Spanish Civil War. During the initial period of his long tenure, Spain was isolated from the rest of the world and out of the UN until 1955, when Cold War politics prompted the U.S. to open its arms to Spain and Spain to open its territory to American military bases. In 1959 Franco ended his autarchic economic policies and the Spanish economic miracle ensued, when millions of people migrated from the south and from the countryside to the major cities, creating a nightmarish expansion of cheaply built high-rise towers at the periphery and an upward densification at the center of urban areas. With the end of *Franquismo* a transitional period to democracy produced national elections in 1977 and the Spanish Constitution in 1978. The new constitution attempted to resolve age-old issues of centralism, nationalism and separatism that the dictatorial regime of Franco had buried for more than 35 years but certainly not resolved. The result was the creation of 17 "Autonomous Communities" with four of them, Basque, Catalonia, Galicia and Andalusia more autonomous than the others. High levels of autonomy, however, have not quelled aspirations for complete separation in the Basque and Catalonia regions.

The socialist party, PSOE (*Partido Socialista Obrero Español*), won the elections in 1982 and governed the country uninterruptedly for 14 years. In 1996 a series of scandals brought to power the rightist *Partido Popular* (PP) which in turn lost the elections to the PSOE in 2004 probably as a result of its handling of the railway bombings in Madrid.

The Spanish economy is one of the most dynamic in Europe. In 1986 it became a member of the European Union (EU). With EU support provided

by the European Regional Development Fund and the liberalization of the economy, Spain increased GDP growth, improved its infrastructure, attracted foreign investment and reduced drastically the unemployment rate.

A real estate boom spiked housing prices 150% from 1998 to 2006 (world....), and contributed to a high inflation rate and growing family indebtedness. The socialist regained power at the height of this huge housing affordability crisis and created a new housing ministry, the *Ministerio de Vivienda*, to tackle the housing situation.

This chapter begins with an analysis of the evolution of the Spanish planning system, with a particular emphasis on the mechanisms utilized to recapture increments in land value, including IH. This is followed by a description of the Spanish housing system, characterized by the highest housing ownership and lowest social housing levels in Europe. The rest is dedicated to two case studies; the first of IH policies in the Catalonia region and the Marina redevelopment project in Barcelona and the second of IH in the city of Vigo in the Galicia region. Both cases emphasize the economic feasibility of IH under particular political and economic contexts.

The Planning Framework

The planning system in Spain is highly sophisticated, formally rigid, obsessed with curtailing speculation and with assigning development value equitably to land owners blessed with development designations..... Faced with inadequate fiscal resources, ...especially for investment..., municipalities have encouraged urban growth and milked the development process legally and in many cases illegally to bolster their finances. Each new law has attempted to redress past problems only to create new ones (Garcia Bellido 1999; Pere Riera et. al. 1977).

Evolution

The legislative basis of Spanish planning was set during *Franquismo* with the 1956 Planning Act, *Ley sobre Regimen del Suelo y Ordenacion Urbana*. The 1956 law initiated as an effort on the part of Franco's regime – especially the reformist national-syndicalistic Falange movement - to reduce land speculation,¹ but the group of technocrats in charge of developing planning legislation to that effect created a “complete, integrated, systematic and hierarchical urban planning and management system (Gonzales 2007: 31). This is not surprising considering that it was from inside “ruling circles-

rather than amongst an intelligentsia whose leading lights remained in exile—that reforming ideas and pressure for change would come, prompted by frustration and local inefficiencies...”(Judt 2005: 518).

From a tradition in which property rights were sacrosanct and local administrations paid for all infrastructural costs, a drastic new approach was devised, founded on four main principles (Garcia-Bellido: 239-240): 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 General Plan (usually of single municipalities, in rare cases of an association of municipalities in a metropolitan area) which distinguishes three juridical categories of property, each with rights and duties: urbanized, urbanizing and non developable and; 4) “Juridical security” of administrative acts; through the systematic assignation of uses, values, rights and duties this principle seeks to limit public arbitrary acts and guarantee future land values. In exchange, property owners are responsible for the urban infrastructure (...local...not general...) and public facilities. By establishing a division between developable and non-developable land the 1956 law established what in the U.S. is referred to as an Urban Growth Boundary (UGB) line. Ironically, as we shall see later, non-developable areas are often used for large interventions such as regional shopping centers or airports (Riera 1997).

This *Ley* preceded by a few years the push for economic growth of the 1960s and became its victim. Growth, many times chaotic and without public infrastructure was emphasized, leading to the degradation of historic centers and coastal areas. Planning standards for the provision of public facilities did not yet exist and cities neglected the opportunity provided by the law and built without public facilities a series of high-rise developments (*poligonos de vivienda*) which created, as in the case of Barcelona and Madrid, highly segregated cities causing protests of neighborhood groups – *movimientos de vecinos* - which led to the eventual provision of public infrastructure and facilities (Calavita & Ferrer 2001).

Legislation passed in 1975 and in 1976 attempted to address the deficiencies of the 1956 law. The new laws eliminated development rights in non-developable areas (which under the 1956 law had been minimized) and

separated urbanizing land into two categories: *suelo urbanizable programado* that has to be built immediately in accordance with two successive 4-year plans and *suelo urbanizable no programado* to be built in the future. Development on the *suelo urbanizable programado* was to be organized through “partial plans” prepared for relatively large sectors. These sectors of the city also known as PAUs -*Polygonos de Actuacion Urbanistica*,PP in the programmed developable land....roughly correspond to the size of a neighborhood. PAUs usually include several property owners forced to work together for the development of the plan through a *reparcelacion*, literally the redrawing of property lines. The law requires that all landowners roughly achieve the same profit rate out of the assignation of development rights, per unit of original land (Riera 2000). To achieve this redistributive equity an *aprovechamiento medio* or average profit is calculated with a complicated formula on the basis of the land uses and the densities (calculated in terms of Floor/Area Ratios - FARs) proposed for the area. As part of this *reparcelacion* the landowners are required to build and provide the public facilities necessary for that area - including parkland - as established in the General Plan. The land that remains for private development is usually less than 50% (Riera 2000: 14).

The 1975 legislation also mandated that land be given to the municipality equivalent to 10% of the profit to be gained from the development of a sector. This requirement was increased to 15% in 1990, confirmed in 1992 and lowered again in 1996, reflecting the shift from socialist to conservative governments. This 10% can be considered a “tax” on the benefits of urban development, sort of a “betterment” tax. The 1975 law introduced a new procedure “of great importance” (Garcia-Bellido 1999:257). In the areas designated *suelo urbanizable no programado* development rights were to be assigned not necessarily to landowners but through competitions to developers (*agentes urbanizadores*) who by themselves could expropriate in accordance with PAUs or work with landowners. This provision was eliminated in 1997.

1978 Constitution

The 1978 Spanish Constitution spells very clearly that urban planning is the prerogative of autonomous communities. Article 148.1. includes “Town and Country Planning and Housing” as one of the “matters” that the self-governing communities have competence over. It is quite remarkable that a country with a long tradition of ultra-centralism, exacerbated through many

years of *Franquismo*, was able to delegate to the regions many powers held firmly by Madrid in the past, urban planning in particular.

But perhaps the central administration did not really understand the extent to which it had lost its power. A 1997 decision of the Constitutional Tribunal invalidated many sections of the 1990/1992 *Ley del Suelo*, particularly those aspects concerning the respective roles of the central government and the autonomous regions. The court made abundantly clear that the regions are the entities in charge of urban and regional planning. The central state is in charge of legislation on property rights, compulsory expropriation, general economic planning and environmental protection. While urban planning is the regions' responsibility, local administrations were granted a "guarantee of municipal autonomy" which devolved planning regulatory powers to localities (Gonzales 2007). To supplant the voided 1990/92 *Ley del Suelo* almost all the autonomous regions passed legislation very similar to the national legislation deemed unconstitutional by the Constitutional Court.

Finally, we have seen that preventing speculation – an issue at the origin of the 1956 law - continued to be a concern until the end of the Franco regime with the 1975/76 law and during the transition to democracy period, when the constitution was drafted. The result was a constitutional mandate to prevent speculation, probably the only in the world. This mandate comes at the end of Article 47, the article that clearly spells the right to housing and the need for planning "to prevent speculation": "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." But Art. 47 does not end there. It continues with: "The community shall have a share in the benefits accruing from the town-planning policies of public bodies." It appears then, that the Spanish Constitution mandates that increments in land value resulting from planning – *plusvalias* in Spanish - shall, at least in part, benefit the "community." As we shall see, IH is viewed in Spain as a mechanism to help recapture *plusvalias*.

The 1990/92 *Ley de Suelo* was passed at the apex of socialist power resulting from a booming economy that had benefited from hard (for a socialist government) but necessary liberalization policies pushed through by the government. Economic growth had significantly increased urban land and housing prices and the government coalition headed by the socialists

incorporated measures in the new law that were supposed, in line with the constitutional mandate, to fight speculation. The 10% of value to be given to the municipalities was increased to 15%. The law established rigorous deadlines for the entire urbanization process and restricted the time within which buildings had to be constructed after approvals were granted to two or three years depending on the circumstances.

1996 law...conservative government...all land is developable...except the protected one...it maintains the land use assignment...

Problems

At the end of the 1990s the urban planning system in Spain had generated tremendous benefits for the public sector. **Most importantly, it produced the public infrastructure and public facilities necessary to maintain or improve quality of life as cities grew, at no cost.** The need for expropriation on the part of localities has been eliminated as localities can obtain approximately 50% of the land of each PAUs for free. But such process comes at a high cost. **By restricting the amount of land that can be developed and by assigning and establishing exact value to each parcel of land, the value of developable land has reached one of the highest levels in Europe.** No...land is not responsible for housing prices increase..

Ironically, this has happened even though many localities have pushed for new growth for financial reasons. Creating new development rights is beneficial from a taxation point of view. **About one-fourth of the increase in property values resulting from real estate development is captured through various forms of taxation, including the 10% of land value increase as described above (Riera 1997). This motivates cities to encourage growth.**

In an attempt at a diagnosis of Spanish municipal planning, Ferrer (2005:11) observes that **one reason for the crisis of urban planning in Spain is the relationship between urbanism and municipal financing, with the search for revenues conditioning 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?"

...municipalities can pushed development insofar there is demand...not only for fiscal reasons...

At first sight, the Spanish planning system is very rigid and formal. 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 encyclopedial documents inaccessible to non-experts but always susceptible to changes” (Garcia-Bellido, 1999: 245 - emphasis added).

Plans can be changed to make areas outside the UGB developable, development rights can be added and transferred, and large facilities – such as regional shopping centers, airports, industrial plants – are paradoxically built in the *non-urbanizable* areas, which then creates pressures for adjacent properties to be built. “In practice, is not that clear that *non-urbanizable* areas cannot be developed” (Riera 1997: 86). Such uncertainty will obviously motivate land speculators to seek, and administrators to obtain benefits from, plan changes. The result is something very similar to the “growth-machine” model proposed by Harvey Molotch (1987) to describe urban governance in the U.S., whereas politicians and land-owners manipulate the planning process to foster growth and increase land use intensities. Sometimes, it is not only growth benefits that officials seek. There have been several instances of corruption, especially in coastal areas, that have been uncovered in recent years.

This was the situation in the mid-1990s, when a center-right coalition, headed by Aznar’s *Partido Popular* came to power. Felipe Gonzales socialist government was brought down by a series of scandals, including revelations that it had conducted a “dirty war” against Basque terrorism between 1983-87 and engaged in graft and influence peddling which “aroused wide-spread anxiety over the moral conditions of a Spanish democracy still in its infancy” (Judt 2005: 746).

Attempts at liberalization

The approach chosen by the new conservative government was to pass a more pro-market legislation in 1988 that amended the 1976 law to allow development practically anywhere, except for environmentally protected areas. The law had little effect (Riera 2000). In 2000 the Royal Decree Act 4 on Urgent Liberalization Measures in the Real Estate and Transport Sectors (*Real Decreto-Ley 4/2000 de Medidas Urgentes de Liberalización en el*

Sector Inmobiliar y de Transporte) eased the process for developers to obtain permission to build in the non-urbanizable areas. By increasing land offer, according to the market theory defended by the legislators, the final price of real estate would decline (Gonzalez 2007: 36).

Unfortunately, it did not work. Or it worked too well. While housing production and prices increased in all developed countries during the first quinquennium of the 21st century, they did so in Spain as well, but with a vengeance. Developers did take advantage of the new freedom. In the same period more housing was produced in Spain than in Great Britain, France and Germany combined, but housing prices increased 150%, more than in those three countries. Higher levels of housing production in Spain were the result of a huge demand from other Europeans for housing in Spain, either for second homes or for retirement. In addition to the list of causes usually given for the sharp increases in housing costs in developed countries in this century, Spain has also suffered from high levels of speculation, on the part of both individuals and real estate companies (Gonzales 2007). As a consequence, the housing crisis in Spain was more palpable and diffuse than in other European countries. While the bursting of the bubble in 2007 will certainly lower housing prices and make housing more affordable to middle-class households, the housing problem for lower income people will persist and probably worsen with the economic recession.

It seems that the policy of increasing land supply to lower housing prices failed. According to Gonzales (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." The extent to which the new law prompted a development rush on land hitherto unavailable for development has not been studied. Proponents of liberalization believe that for a variety of reasons, including resistance of municipalities and lack of awareness on the part of landowners of the possibilities offered by the law, the potential of the law was not fully unleashed (Riera 2008).

Loss of sustainability is another serious problem. The liberalization law assumed that regional and municipal plans determining environmental areas to be protected were already in place, but that was not always the case. The control of development on land to be preserved is limited to the peripheries of big cities and coastal spaces" (Gonzales 2007:37).

Javier Garcia-Bellido, probably the most prominent urban planning practitioner/theoretician in Spain, had predicted the failure of the liberalization of land markets. Throughout the 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 that he helped create came with serious dysfunctions. He felt that legalized and certain future land values that are created through planning, increase the cost of developable land way above acceptable levels and that “free” public facilities come with high social costs. The entire Spanish planning paradigm had to change. As a first step, the right of land ownership should be separated from the right to develop, as in Great Britain. The right to develop would be granted through competitions among developers or negotiations with local administrations. Only by doing so, land costs could be kept low (Garcia Bellido 1999).

Garcia Bellido prepared the 1994 *Ley Valenciana Reguladora de la Actividad Urbanística* for the Valencia region applying this competition principle to all large developments. It seems to have reduced land costs (Clusa). In 1999 he predicted that the liberalization of planning was not going to lower land prices without opening the real estate market to competition among developers. He stated that he believed that opening more land to development would contain the growth of land prices is “unfounded” (Garcia Bellido : 268). It seems that he was right. The liberalization of land markets has been accompanied by tremendous increases in land and housing prices.

With a change in 2004 from a rightist to a leftist government, the failure of the liberalization process, and a housing market gone crazy, a new *Ley del Suelo* was inevitable. The question is: would it be another refinement of the existing system, or would it embody a new paradigm, as advocated by Garcia-Bellido?

La Ley 8/2007

The *Ley del Suelo* represents an attempt on the part of the socialist government of Zapatero to solve the problems previously described, particularly the interconnected phenomena of planning corruption, unbridled development and skyrocketing housing costs. Under the leadership of the

minister of the newly constituted *Ministerio de la Vivienda*, Maria Antonia Trujillo, the new law achieved the consensus of all parliamentary groups, including all nationalist parties, as for example the conservative *Convergencia i Unio* of Catalonia or the Basque *Eusko Alkartasuna*, with the exception, however, of the conservative *Partido Popular* (PP).

The fundamental objectives are to guarantee a larger quantity of land for affordable housing (*Vivienda de Proteccion Oficial* or VPO), create more efficiency in the land markets, combat speculation, make urban and regional development more sustainable and increase transparency and participation in the urban development decision-making processes.

Much of the law is based on a more literal and meditated application of Art. 47 of the Spanish Constitution, in which a right to decent housing is to be accomplished with urban planning processes that aim to eliminate land speculation and to recapture the unearned increments generated by urban development. In this sense the law:

- 1) Allocates a minimum of 30% of the square meters designated for residential development in the urban development plans to a land reserve dedicated to a VPO housing regime.
- 2) Provides for greater flexibility in meeting the requirement that land be given to the municipality equivalent to 10% of the profit for a sector to recapture “*plusvalias*”, (unearned increments in land value), establishing a minimum percentage of 5% and a high of 15% (20% in exceptional cases) to reflect various circumstances surrounding increments in land values resulting from entitlements. Given the intention of the legislators to recapture a higher proportion of *plusvalias*, it is to be expected that the localities will choose a higher percentage. In most cases this percentage will have to be dedicated to VPOs as well.

It should be mentioned that several regions had already passed legislation to create land reserves for protected housing including the Basque Region in 1994, Madrid in 1997ⁱⁱ, Castilla-Leon in 1999 and Catalonia in 2002 (Ponce 2004). The 30% is a minimum and does not affect regions with the same or even higher requirements, such as the Basque region. To avoid a concentration of social housing, Article 10 establishes that in urbanizing

areas, the distribution of social housing must be “respectful of the principle of social cohesion.”

Other important points of the law include:

- Transparency and participation of the public in the planning decision making process. City councils may now approve agreements (*convenios*) between developers and the city and not city bureaucrats; those with executive powers in a commune cannot work in the private sector for two years after ending public sector responsibilities; the names of land owners receiving *plusvalias* through plan changes must be made public.
- The use of land must be based on sustainability principles; in this sense the projected growth of a locality must be based on real growth projections. Areas part of “Natural Spaces” or the “Natural Network 2000” (*Espacios Naturales o Red Natural 2000*) cannot be changed to other uses unless for reasons, scientifically established, related to their natural evolution.
- Localities can require land for public facilities only in direct proportion to the impact created by the proposed development. It can be now assumed that, similarly to the US, new development cannot be required to ameliorate existing deficits.
- The law changes the system of valorization of land. Prior to the 2007 law, the value of real estate was guaranteed on the basis of the type and intensity of the proposed uses. Under the new law the value is based on the existing, and not potential, use. In those cases when plots of land destined for VPO must be sold or ceded to others, their value will reflect the VPO designated use. The value of rural land will be based on its agricultural potential, although the law allows “compensation for the loss incurred as a result of the inability to participate in the implementation of new development.” As it is written, this provision is rather puzzling. It seems to negate the nationalization of development rights which the existing-use value provision and the following clauses seem to suggest.
- Article 6 confirms the figure of the “Urbanizing Agent” (*Agente Urbanizador*) which had been envisioned in the 1975 legislation, abrogated in 1997 but adopted in all regional legislations (with the exception of Catalonia). This “agent” is granted the power to expropriate land and develop other people’s property. If in the past property

owners were forced to come together to develop their properties, now land owners do not necessarily have the right to develop. The law asserts that development is a public prerogative that can be exercised directly by the city or entrusted to private initiative. When the initiative is granted to private developers, it will follow a process that will insure “publicity and competition, and with criteria of adjudication that ensure an adequate participation of the community of the increments in value generated from development...” (Article 6.a)

Criticisms

The most recurrent theme of the critics, particularly the developers - *Asociacion de Promotores Constructores de Espana* (APCE)- is that by practically eliminating private property in favor of a greater political control of the development process, the new law will encourage speculation even more, especially by limiting the amount of developable land and by increasing the discretionality of localities. By eliminating the guarantee of land values associated with General Plan designations, the ability to borrow on the part of small property owners is limited, thus favoring large, well-capitalized development corporations, incentivizing the formation of an oligopoly in the development industry. The cost of the 30% VPO requirement will be passed on to market buyers, making housing even more expensive for those who cannot benefit from VPOs and will discourage development in general and consequently the production of VPO and, APCE points out, “30% of nothing is nothing.” The figure of the urbanizing agent is another intrusion on the part of the state in the private property regime, “making political arbitrariness and discretionality the *modus operandi* of the new system” (Melian 2007: 1).

Implementation

It is generally too early to assess how the new law is working, especially in light of the slump in real estate development that has followed the boom of the past few years; but a few considerations can be made. Most importantly, it is unclear whether the right to develop has been separated from ownership rights. While the law allows for all land to be expropriated at existing-use value, “valuation” associations (appraisers) have contacted the Central Bank to ask how they should appraise land in the cases when land designated for

development is being used agriculturally or is vacant. The Bank responded that, unless there is a threat of expropriation, the appraisal value would be based on the Municipal Plan designation. The value of the land is supposed to be based on existing-land use value, yet it seems that in practice most of the land is being appraised as before, assigning the differential in value between existing and future land use to land ownership. Apparently banks are not giving loans to developers to acquire land when there is a threat on the part of the Municipality or the Autonomous Community that the land could be expropriated (Murclusa 2008). It should be noted that in Italy similar legislation that allowed expropriation at values connected to agricultural uses was found unconstitutional by the Italian Constitutional Court. It is likely that this will be that case in Spain as well.

It remains to be seen how other aspects of the law will be implemented, such as the requirement that land for public facilities be directly proportional to the impact created by the proposed development, that land use be based on sustainability principles, that development can be taken away from property owners by *agentes urbanizadores* and that the planning process be based on transparency and public participation. The part of the *Ley* requiring that 30% of residential space be dedicated to VPOs will certainly be implemented but, as we shall see, with tremendous variations across regions and cities.

Housing Conditions and Trends in Spain

Nationwide, Spain has made remarkable strides in housing policy and programs over the last several decades, achieving one of the highest homeownership rates among advanced Western countries. This period also coincides, as one might anticipate, with huge growth in economic prosperity and population and concomitant increased demand for housing and decreased affordability, especially in major cities and metropolitan areas. These changes have aroused profound questions concerning where young people will live, how new immigrants will be integrated, and how change will be managed.

The Tenure Imbalance

Perhaps the singular most unique characteristic of the Spanish housing system is its strong orientation towards owner-occupation. In 2003, Spain

boasted a home ownership rate of 85.3%, the highest rate in Europe. In contrast, France had a rate of 67.5% and the majority of households in Germany rented (Eurostat, 2003). This was not always the case. In 1950, the rate of owner-occupation was 46% (Pareja-Eastaway, 2002), and since then the rate has risen steadily to the point where the country now has one of the smallest rental housing on the continent. In urban and suburban areas, the norm is owner-occupation of flats in multi-story buildings, rather than single-family homes.

The large percentage of owner-occupied housing in Spain is due, according to Allen et al. (2004), to the central role that the extended family plays in extending access to housing to its family members (usually at the time of matrimony) and the symbolic importance of "patrimony," in the form of real property.

The State, however, beginning with the Franco regime, has played a crucial role in promoting homeownership, "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: 18). This approach has worked well until recently. But recent changes have made this tenure imbalance unsustainable and heightened the need for rental housing. They include: 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, needing rental housing away from their hometowns and; 3) The population of immigrants is growing rapidly. These changes point to a desperate need for rental housing, something that Spain is totally unprepared for, both on the part of the State and the private sector.

The most prominent group affected, and the one that garners the most public empathy, is young people and newly-formed families. High prices of home purchase coupled with inadequate supplies of affordable rental housing have resulted in high ages of economic emancipation of youth from their parents and delayed ages at 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 over 27. Today, it is not uncommon to find adult children in their early to mid-30s still unmarried and still living with parents, especially in the more expensive cities and suburbs.

Some have argued that low rates of new household formation can be explained not only by the lack of affordable starter homes, including units for rent, but of demographic and cultural factors. Spain has one of the lowest replacement fertility rates in the world. Small family sizes make it easier for adult children to remain at home for longer periods than when Spanish families were larger and overcrowding was greater. The centrality of the family in Spanish culture and unwillingness to move long distances from parents and extended family limits housing options. Whatever the reasons, the reality is that many Spanish youth delay marriage and child-bearing until they are able to purchase a first home proximate to their families of origin and 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. Recently, however, the country has experienced unparalleled economic prosperity and become a magnet for foreign immigration. There were 4,145,000 foreign residents in the country in January 2007, about 10% of the total population, mostly from North and Sub-Saharan Africa, South America, and Eastern Europe (Wikipedia, 2008). Given the low fertility rate of native-born Spanish families, it is primarily this immigration that is feeding population growth, which peaked in 2003 at 2.3%. Many are crowding into older neighborhoods in city centers and housing estates on the periphery. Lack of a coherent government strategy to ensure decent and affordable rental housing for this wave of new immigrants, which shows no signs of slowing or leaving, portends difficulties of social and economic integration and the potential for civil unrest in the future.

Recent Trends in Housing Prices and Production

The robust housing market in Spain, although experiencing recent deceleration with the general downturn in the world economy, has been notable for high rates of price appreciation. From 1997 to 2007, housing prices nearly tripled. The growth rate of 190% – about 11% per annum – was the fourth highest among 20 countries surveyed and the third highest rate in Europe after Ireland (240%) and the United Kingdom (190%) (Economist, December 2007). Prices in the U.S., in contrast, doubled

during the same period, growing at a rate of 102%. However, in the period 2005 to 2006 the growth rate was 5%, an indication that price increases were beginning to slow, presaging the current environment of housing price depreciation.

Price appreciation occurred during this period despite enormous unit production (Economist, December 2007). Production peaked in 2006 with 921,000 units licensed nationwide, an extraordinary 20 units per 1,000 in population. Production in 2007 declined by 22% to 720,800 units. However, contrast the numbers in Spain with unit production in California, a jurisdiction of comparable population (an estimated 38 million in 2007) and growth rates, which permitted 164,300 units in 2006 and 112,300 in 2007 (California Building Industry Association, January 2008). Despite efforts to increase affordability, the average Spaniard still spends more on housing than other Europeans. In 1999, household outlays for purchase and service of debt on a new home consumed 25.3% of income ((European Liaison Committee for Social Housing, 2008).

With so many units produced one can question why prices have continued to escalate in such dramatic fashion and not kept pace with demand. A peculiar phenomenon of Spanish housing markets is that so many privately-owned units are held outside of the market, even though demand is great. For example, in 1991, the percentage of vacant units not occupied as main homes was nearly one third (31%) of total units; 15.8% were unoccupied and 15.4% were second homes (Zaldivar and Castells, 1992). There are several possible reasons for this: First, the importance attached to “patrimony” as a form of investment, second, the inflexibility of the rental market that, until recently, was highly protective of tenants, third the possible speculative nature of investment in the country, both domestic and foreign. Moreover, the ability of landlords to gain higher, unreported income by renting bedrooms, even beds, on a temporary, informal basis, rather than whole units, further limits the supply of dwellings for long-term lease.

Other indicators suggest, however, that the over-heated Spanish housing economy is now cooling as we approach the end of the decade, with the possible exception of the protected housing sector. Sales of dwellings, especially new dwellings, declined by more than 7% in 2006 compared to the previous year and foreign investment in housing declined by 11% (European Liaison Committee for Social Housing, 2008). (To be updated in Spring 2009)

The Evolution of Spanish Housing Policy from Franco to the Present

In the space of some 70 years, Spain has moved from a largely agrarian and underdeveloped society with a lack of democratic institutions to a thriving economy with a strong body of housing law and one of the most sophisticated land use and housing finance regimes (Belsky and Retsinas, 2004). At the center of this achievement is the right to housing enshrined in the Spanish constitution.

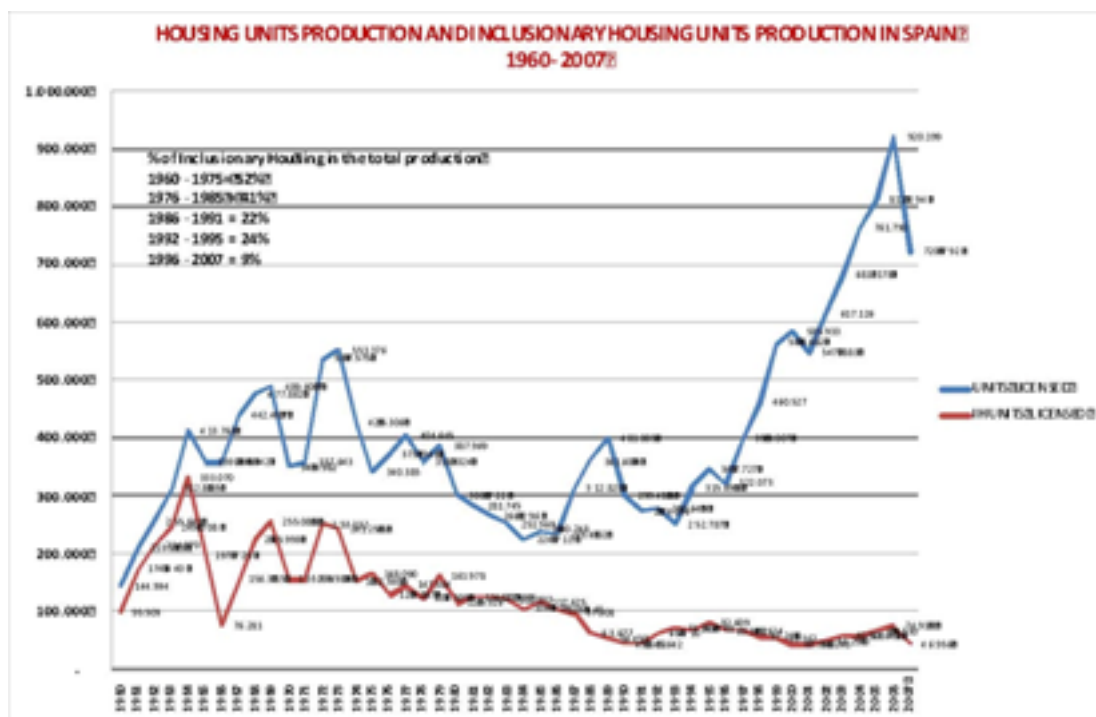
During the Franco era from the mid-1930s until his death in 1975, the national government was the central manager of day-to-day life, including financing and regulation of housing. After the devastation of the Spanish Civil War, the Franco regime sought to restore social control and satisfy the yearnings of the populace via creation of various institutions and passage of successive acts to stimulate the private sector and create an inventory of protected housing or *Vivienda de Proteccion Oficial (VPO)* (Belsky and Retsinas, 2004). VPO legislation in Spain originated in 1963 with Decreto 2131 and amended several times throughout the years. Both the builder and the buyer get financial incentives that are established by each region. Builders receive low interest loans (generally around 3% for a maximum of 80% of costs) and direct subsidies per unit that depend on location, size and level of affordability. Buyers subsidies include a price that can be as low as one third of market, help with the down payment and a subsidy on the mortgage payments for a period of years, usually between 5 and 10, both depending on household income. There are different types of VPOs, affordable to different income groups.

The increase in Spain's rate of home ownership continued after the end of Franquismo while at the same time maintaining one of the lowest rates of social-rented housing in Europe – 1% of total units in 2002 (Pareja-Eastaway, 2002). While other countries were mass-producing social housing for rent during the post-World War II period, Spain was fostering home ownership for baby boomers and internal migrants. It can be asserted then, that until very recently, housing policy in Spain can be identified with the VPO program, in all its manifestations, all aimed at providing housing for ownership that could be afforded by almost all income groups.

VPOs are either built, mostly voluntarily, by private builders or by public-

private corporations such as the Institut Catala del Sol in Catalonia or in the Basque Country. As it can be imagined, private developers will build VPOs voluntarily only during recessionary periods, when the demand for market-rate housing drastically declines. While the sale price is established by the government at rates lower than market it is still profitable for builders to build VPOs under those circumstances given the financial subsidies and the certainty that the units will be sold very quickly and without the costs, such as advertising, associated with market-rate units in a competitive situation. VPOs then, perform an anticyclical function and permit developers to wait out the the down market, without going out of business.

Graph # shows how the largest percentage of VPOs occurred as a result of the 1970s recession (42%), and the smallest during the last decade, a period of unprecedented boom in the Spanish market. It can be expected that this percentage will increase considerably at least for the next few years, not only because of the housing bust currently under way, but also because the IH requirements, as will be explained later, are likely to generate a large number of VPOs.



Currently, the Housing Plan for 2005-2008 adopted by the Socialist government is resulting in substantial new production with a major emphasis on protected housing for lower-income households (European Liaison Committee for Social Housing, 2008). The goal is an increase of 180,000 new units of VPOs through a variety of measures to stimulate new construction and rehabilitation, as well as tax exemptions for lower-income families for ownership housing. New, preferential financial incentives are also being provided to profit-motivated companies that agree to produce rental housing. Increases in national spending for protected housing are being matched with financial resources allocated by regional and municipal governments.

As it has been mentioned before, the *Ley del Suelo* of 2007 mandated that a minimum of 30% of residential square meters should be reserved for VPO, and that the 10-15% of value in a PAU should be dedicated also to VPOs. How these mandates are implemented is left to the regions and cities of Spain. Most importantly, they – regions and cities - can decide whether to exceed the minimum IH mandate. This raises the question of how that higher percentage should be arrived at. Put another way, if a locality decides to increase that minimum, what process should be followed to ensure that the increased requirement is fair and economically viable?

What follows are two case studies of the ways in which two localities, Barcelona in Catalonia, and Vigo in Galicia, approached the issue. The Barcelona case will be analyzed first, preceded by a description of the housing system in Catalonia, the VPO standards in the region, the implementation of IH and two recent regional efforts that go beyond the existing requirements for the provision of IH.

Case Studies: IH and land value recapture

Catalonia

During the second half of the 19th century Catalan entrepreneurs brought, with the Basque, the industrial revolution to Spain. With a population of 7.3 million inhabitants Catalonia is, with the Madrid and Basque regions, an extremely important component of the Spanish economy. Beginning in the

late 16th century, its history has been marked by struggles to maintain its independence in a process of continuing centralization of the Spanish state. Franco mercilessly tried to stamp out Catalan identity, especially with its suppression of the Catalan language now strongly supported by the region's government (The *Generalitat*). Barcelona, the capital of Catalonia, has lost about 400.000 inhabitants to its hinterland since its high in the 1960s, and it has now a population of approximately 1.4 million. Barcelona is famous in planning circles for successfully transforming itself in a very short time from a “gray” industrial city in the midst of a deep economic crisis in 1980 to an international success story a decade later. **But such a triumph has made Barcelona's housing market the most expensive in Spain, with an average price of 3,700 euros for a square meter.**

Housing in Catalonia

The history of housing policies in Catalonia is not, until recently, too different from the rest of Spain. But in the second half of the nineties it started to become apparent that the usual housing approaches were largely ineffectual to cope with new circumstances. Policies did not change in nature, as they tried to increase the production of VPOs and encourage the acquisition of market-rate housing through fiscal incentives. But the new conditions, namely housing for sale becoming more and more unaffordable especially for young people, and a large increase in the number of immigrants moving to the region, made necessary a change of direction. In Catalonia alone the immigrant population has increased approximately by 1 million in less than a decade, raising the population of the region from 6,208 million in 1999 to 7,210 million in 2007. Affordability problems have become deeper, and a large and increasing number of households cannot afford ownership housing, even VPOs, making it necessary to emphasize production of affordable rental housing. It must be said that affordability problems have also hit the middle class, necessitating programs for social strata that in the past did not need any help from government. Thus VPOs have become more flexible, to help families with incomes higher and lower than the typical *Vivienda de Régimen General*.

- There are three levels of protection, based on different sale prices and household incomes:
 - o Housing of *Régimen Especial*: for the lowest incomes

- o Housing of *Régimen General*: for low to moderate incomes
- o Housing of *Precio Concertado*: for moderate income households

An additional level, *Concertado Catalan*, aimed at a market just below market-rate, was added in the Fall of 2008.

The income requirements are based on the IPREM (*Indicador Público de Rentas de Efectos Múltiples*), or weighted minimum salary, that in 2007 was € 10.019 /year for a family of three in the city of Barcelonaⁱⁱⁱ (Zone A). There are four IPREM Zones with the highest being Barcelona. The lowest is Zone D at € 7.514.

To obtain a unit under the *Régimen Especial* the family income should be 0,7 to 2,5 of IPREM, for the *Régimen General* 0, 7 to 5,5 times, for *Precio Concertado* 0,7 a 6,5 times (6,5 times of IPREM is €65.128).

The maximum price per square meter in Zone A (Barcelona) are €1.705 for the *Especial*, € 1.940 for the *General* and 3.001 for the *Concertado* VPOs. An *Especial* VPO apartment of 70 sq.mt (753 square feet), the VPO maximum apartment size, would cost € 119.500. In the lowest cost zone in Catalonia the prices would be, respectively €1137, €1.212; €1.364. An *especial* apartment in the lowest price zone would be € 79,590. Generally, the price for VPOs are approximately one third of market-rate housing.

The Region of Catalonia has become extremely active in the past few years in promoting social housing (VPOs of different affordability levels and rental housing) to be built by the private sector, cooperatives, a few nonprofits and INCASOL, its agency dedicated to the development of social housing. This activism is the result of many factors, most importantly the housing crisis of the 2000-07 period and a shift in the governing coalition from center-right to center-left, coalition that has made the provision of social housing probably its most important objective. The Department of the Environment and Housing has projected the formation of 40,000 households per year for the 2007-2016 period, with a “60% necessitating some type of public support to be able to access housing,” meaning households making up to 6.5 times the minimum salary. This new need is to be added to the existing need of 200,000 units requiring public support (Generalitat de Catalunya 2007).

It is beyond the scope of this research to describe the various efforts of the *Generalitat*, but there are a few efforts that relate closely to IH that will be

briefly described. But first, a description of the implementation problems of the IH requirement in the region.

Implementation of the 30% IH requirement in Catalonia

Catalonia enacted IH legislation in 2002 that established that 20% of residential square footage be dedicated to VPOs. The law was modified in 2004 – after a center-left coalition took power in the region - to increase that percentage to 30% and to “establish the necessary mechanisms to ensure the effective materialization of the *reservas* for the construction of VPOs...by determining the dates for the beginning and the end of the construction of this housing. Not meeting these requirements can lead to expropriation of these parcels on the part of the municipal administration.” Decree/Law 1 of 2007 confirmed that 20% of *reservas* be dedicated to VPOs *General and Especial*, 10% *concertada* and it adds 10% more for *concertada Catalan*, for housing close to market-rate prices. Furthermore it reiterated that development plans must have a date for the beginning and end of construction for the IH. This legislative frenzy however has not produced IH, even at a time of tremendous development activity. What has happened is that developers, to avoid building the IH units, negotiated with the municipalities to swap the 10% of “*aprovechamiento*” land (which allowed market-rate housing) that they were supposed to give municipalities for free, with the land where the 20% of VPO *General and Especial* was supposed to be built. The result has been the accumulation of land designated for IH in the hands of municipalities, but no IH housing. This has not been the case, however, in Barcelona, where the administration, as it will be explained later, has pushed for IH percentages higher than required by law to be built by developers.

Developers that initiated these swaps are probably sorry now, because the free housing market has disappeared as a result of the bursting of the housing bubble in 2007, and the only way to build for developers now is to build VPOs. While they have to sell them at prices much lower than market rate, developers still make a profit. As explained earlier, when the demand for market-rate housing is very high, developers do not build VPOs, and viceversa.

It can be expected that for the duration of this housing slump, the majority of housing that is going to be built in Catalonia (and presumably Spain) is going to be VPOs of all types and more affordable versions of social housing. Much of it will be built on the land banked for non-market housing that developers and municipalities have unwittingly created through the land swaps mentioned above. According to the region, enough land for IH has been assembled to house 116,000 units, plus a potential of 27,000 units included in plans being processed (Generalitat de Catalunya 2008).

But there is huge problem. VPO programs are structured to provide ownership opportunities to families that could not otherwise afford them. The price is lower, but they still need to get mortgages. During the Fall of 2008, banks started to require more “solvency” on the part of the borrowers, denying mortgages to families that would spend more than 30% of their incomes for mortgage payments, something they had done in the past without foreclosure problems (Pellicer 2008). VPOs that would otherwise be snapped up, now sit vacant (Palacin 2008).

IH in the urbanized areas

The requirement of 30% of IH is applied only to areas outside the urbanized areas, in urbanizing areas that have received a plan or zoning change that has increased the value of the land. In these areas, IH is viewed as a mechanism that attempts to recapture *plusvalias* generated by government action. The situation is different in the urbanized areas, where property rights have already been assigned for quite some time through the rights associated with the General Plan designated FARs. With the 2007 Law the *Generalitat* has extended IH to the urbanized areas, by requiring that redevelopment or significant rehabilitation in excess of 5000 sq.mt. will be required to build IH housing in quantities equal to 20% of the total residential floor space. The objective is making sure that the creation of VPOs will not depend only on areas of new growth or of large urban renewal areas (as in the Marina case to be described later) but that all areas in a city provide their fair share of IH. This policy, it is believed, will help implement sustainable development by creating more of a job-housing balance within the urbanized areas, usually rich in jobs, many of them low-wage. The law provides flexibility in terms of allowing for the IH to be built on another site within the urbanized zone of the locality, and for an in-lieu-fee that is equivalent to the cost of providing the VPO units.

This law created tremendous controversy, as property owners objected to the taking away of some of the already acquired development rights (Palacin 2008). The legislation was passed anyway but with a possible lethal provision. It is up to the localities whether to implement this law, making it possible that where there is little political support for social housing it will not be implemented. To implement the law, a city needs to designate the boundaries within which the IH requirements are applied. It can designate the entire urbanized area, portions of it, or none at all.

Areas Residenciales Estrategicas (ARE)

An interesting effort to implement IH in the Catalonia region was recently initiated with the 2007 program of *Planes Directores Urbanos de Las Areas Residenciales Estrategicas de Cataluña*. Its main objective is to produce more affordable housing and more quickly than under normal circumstances. This is to be accomplished by having the region first identify properties with development potential at the fringes of Catalan communities undergoing rapid growth, and then preparing all the planning documents that precede development approvals, thus saving considerable time and money for property owners, considering that in Spain it can take more than five years to receive development approval. In exchange, 50% of the housing would be affordable, with a minimum of 40% for rent.

There are three possible scenarios for its implementation, depending on the ownership of each area. In the first case the area is owned by the public sector. No implementation problems here. In the second case the area is owned by a developer; presumably he will take advantage of this opportunity; nevertheless a tight timing schedule is attached to each zone and development rights will be lost if the zone is not developed according to the schedule. Under the third scenario the land is owned by private landowners. In this case the development will be processed and implemented by an “*Urbanistic Consortium*” established and constituted by the Region - through the *Insitut Catala del Sol* - and the city in which the area is found, making the *consortium*, in effect, the *agente urbanizadore*.

This law also increases the famous 10% to a high of 15% as allowed by the *Ley del Suelo* of 2007 (see page....). This money is to be used to help pay for the infrastructure and public facilities. The plan for each area must include: A minimum density of 50 du/s per hectar; minimum of 50% of

social housing; integration in the existing or programmed urban context; connection to public transportation and energy saving features.

It should be mentioned that this approach is rather revolutionary in terms of region-municipality relationships. While regions have the power to plan, that power has been delegated to the municipalities. But in this case, it is the region that identifies the AREs and prepares the plans for them that may change the municipality established land use designations and development timing. It also constrains property rights; property owners are basically stripped of their right to develop now assumed by the public *Urbanistic Consortium*. It should be mentioned that property owners included in the AREs have not been consulted in this process.

Spatial Integration

With its ambitious plans for the provision of large percentages of affordable housing, the government of Catalonia is especially concerned about avoiding spatial segregation. For example, Title I of the preamble to the Law 18 of December 2007 warns that “the so-called urban question, according to which spatial segregation is a function of people’s income levels, is one of the greatest dangers that threatens the sense of community (*convivencia*) in western Europe, and is a concern to which the law wants to give a response.”

An entire chapter of this law is dedicated to “Urban Solidarity,” whose main purpose is to avoid spatial segregation and favor social cohesion. The most important provisions include:

- 1) An Urban solidarity objective. To render effective the right to housing in the entire territory of Catalonia, all municipalities of more than 5,000 people have to create in 20 years a minimum of 15% of social housing (*politiques social habitatges* – which includes all possible types of non-market housing)) of the existing housing total. In each quinquennium the percentage of social housing cannot be inferior to 25% of the number of housing units necessary to fulfil the 15% mandate (Chapter II- Article 73). (This mandate is very similar to, and probably inspired by, the French...)
- 2) An “effective social mix” guarantee. Article 100 specifies that: “In the process of assigning VPO units it must be taken 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”

- 3) Establishment of an Urban Solidarity Fund. The fund will support the localities that have difficulty in meeting the established objectives. Part of the funding will be generated from the fines imposed on those localities that do not meet the article 73 requirements.
- 4) Creation of an Observatory of Housing and Urban Segregation: “With the intention of understanding the situation in quantitative and qualitative terms of housing in general and VPOs in particular, their spatial distribution and their insertion in the respective urban context, and also to measure, in accordance with the indicators that are to be established, the existing urban segregation, the regional government will create the Observatory of Housing and Urban Segregation.” (Seventh additional disposition of Law 18/2007).

Finally, since 2002, all planning and housing laws contain a mandate that – including *Decret Ley 1/2007* - the areas reserved for the construction of VPOs, “must be planned to avoid the excessive concentration of housing of this type, in order to favor social cohesion and avoid the spatial segregation of citizens because of their income levels.

Inclusionary Housing and land value recapture: The La Marina and Vigo cases

Introduction

Affordable housing generated through the planning system is, as in the rest of Europe, a rather recent phenomenon in Spain. As mentioned earlier, the requirement that developers provide housing as part of their development schemes, started in the Basque and Madrid regions, around 12 years ago, was adopted in other regions and was made a requirement by the national government in 2007. That 30% minimum requirement was spurred by the tremendous increase in land values and housing costs during the 1997 - 2007 period and was legitimized by the 1978 Spanish Constitution’s articles that

calls for adequate housing for all families and social recovery of land value increases (*plusvalias*).

Such a constitutional, economic and political context plays out differently in the various regions and cities. The harsher the housing crisis and the less enamoured of the market the political regime, the more likely that attempts will be made to increase the percentage of IH. But such percentages cannot be established in a vacuum. Economic analyses become necessary to establish what percentages are feasible under which particular development scenarios.

In the past, cities' interest in the development process was centered on the optimization of the number, size and quality of infrastructure and public facilities. Now IH has been added to the list of a locality's demands and when the inclination is to require percentages higher than the regional or national mandate, economic analyses become politically necessary. What follows are two examples of economic analyses of this type. Joaquim Clusa and Sara Muir are the principal authors of these two cases studies, adapted from work that their firm, Murclusa, has prepared for the City of Barcelona for the Marina redevelopment project and for the General Plan update of the City of Vigo, in the Galicia region.

La Marina

Barcelona context

In preparation for the 1992 Olympic Games the City of Barcelona made essential transformations to its system of public infrastructure and public facilities, including a new ring road, a new drainage system, opening the city to the sea, public plazas and parks and new sport facilities. Preparing the city for the Olympic Games guaranteed significant grants from the Central and Regional Government with many of the investment concentrated in selected locations called "new city centralities" (Marshall).

The Olympic Games housing program distributed about 4,500 units in three Olympic villages for the athletes, journalists and referees, the beginning of the renewal of the old manufacturing areas in Barcelona. Unfortunately, the Olympic units were sold on the open market after the Olympics, even though the city was losing population, especially young people, because of its high housing costs. While highly successful at many levels, the transformation of Barcelona of the 1980s and early 1990s left untouched the deficits in affordable housing and public transportation. With the 1996-2007 housing

bubble the already existing housing affordability problems in Barcelona became much worse.

After the 1992 Games the renewal policy of the Council continued with two large interventions. First was the Poblenou 22@ Plan whose main goal was to attract high tech industries to Poblenau, a centrally located district that contains a mix of housing and disused industrial plants; and La Marina de la Zona Franca in the South West of the city, an area containing some housing but mostly industrial plants, some of them still active. This became the area where housing could be concentrated, and as much IH as possible in particular. A third significant renewal area is La Verneda in the Northeast of the city, the last large manufacturing area of the city for which a plan was recently approved with a potential of 8.000 flats and 6.000 jobs. What follows is an analysis of the Marina Plan and the process through which the IH requirements were established.



The Marina Plan

The 2005 Plan for the renewal of *La Marina de la Zona Franca* (recently renamed, in Catalan, *La Marina del Prat Vermell*- The Red Field Seaside) included two objectives. The first was to create a significant amount – higher than the 30% required by Catalan law - of Inclusionary Housing in a good quality environment, and the second was to foster an appropriate job-housing balance by creating more new jobs in tertiary activities than the

existing ones in manufacturing and warehousing activities that are likely to disappear or move in the near future. From a planning point of view the existing manufacturing use at a low density in a central location is a misuse of centrality advantages, both social and economic; in U.S. planning terms not the “highest and best use” of the site.

At the time of the preparation of the plan, the challenge was to establish mechanisms to ensure a fair balance between density, environmental quality and economic feasibility. The economic feasibility would recognize the need to ensure a fair economic balance between the three partners in the development process: the social interest represented by the municipality in the plan (adequate public facilities and IH), a fair return (established by the city to be the existing use value) for the land owners, and reasonable profits for the developers.

The economic problem of: 1) providing compensation to the existing owners of land and buildings and to the industrialists still active to move their operations, 2) paying for the re-urbanisation (new infrastructure and public facilities) required and; 3) ensuring enough profits to attract developers, was tackled by increasing the densities allowed by the existing plan with uses of higher value than the existing ones, thus increasing the value of the land.

The IH price, on the average near one third of the free market housing prices, decreases comparatively the market value of the site. Therefore the new absolute value of the land with the all new uses and the new floor space^{iv} must compensate for: 1) the existing value of the land, the costs associated with the moving of the existing activities and; 2) the re-urbanisation costs, i.e., the cost of the necessary new infrastructure and public facilities.

The major reason that prompted the renewal plan for La Marina was the need for housing in general, and social housing in particular. New housing construction in the Barcelona municipality (about 4.800 new dwellings per year in the period 2000- 2007) is roughly half of the existing need (about 9.800 units every year according the municipal Housing Plan 2004-2010). This fact, combined with high housing costs, explains partially the “expulsion” of population to the periphery. The population loss in recent years has been compensated by foreign immigration inflow in areas of the

old city that are partially abandoned and in other marginal locations with a high occupation per unit.

With its central location (7 subway stops from Plaza 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 housing needs of the city. The planning process, which took two years (2004-2006), produced a plan with the following characteristics:

- 75 Ha
- 1,3 million sq. m. of floor space
- A gross Floor Area Ratio of 1,85
- 11.865 housing units
- 48%, or 5,161 units of IH and 1,000 units of rental public housing for young families and the elderly (Joaquim, who will build the 1000 units?)
- 30.000 new potential residents
- 10.000 service jobs in 315.420 sq. m. of floor space (26% of the total)
- Land use distribution: 35% residential and economic activities; 30% roads; 31% public spaces and green areas, including health center, schools, library, senior center. (96%?)



Costs and benefits are distributed in blocks of 1,8 Ha each on average (15 in total), making possible the autonomous development of each block. The plan for each block then, must include the finance of the economic compensations among the actual owners, according to the “*reparcelación*” process. In order to get a building permit,

each new development must pay the Infrastructure Plan Charge according to the dimension of the floor space, approximately 45 € per sq.m.



Economic Analysis

The economic feasibility analysis had to evaluate the minimum development density needed in order to finance the IH objective, the local facilities costs, the development costs which include city-wide transportation facilities (0,9 Km of the main road –Passeig de la Zona Franca - and 2 new metro stations) and the land for the 10% value of the potential which it has to be given free to the municipality. Additional costs include adequate compensations for the manufacturing plants, the moving costs, and for the landowners. The compensation costs for landowners were calculated in existing-land use value terms: the land price as manufacturing estates. (Why? Who decided?)

What was decisive in order to make the renewal economically feasible is the differential between the proposed density (an FAR of 1,86) and the existing (an FAR of 1). The differential gives the additional real estate value to make possible the compensations costs for the land and the manufacturing plants and the infrastructure costs. The IH proportion and the urbanised land given to the municipality (10% of the total) for free are a decrease in the potential market-rate floor space in the renewal transformation, insofar as the IH prices are approximately 1/3 of the free housing market prices. The Internal Rate of Return (IRR) for the developer investments was calculated at 12% per year, according to the regulations and criteria of the mortgage market established by the Central Government. The operation would not have been possible with the real estate prices of some years before.

The main economic feasibility criteria for the operation then, is based on the comparison between the value of the land with the existing uses with the value of the

land with the proposed uses (minus all the costs) in a dynamic approach that takes into account the selling program of the renewal, at the actual market and IH prices, along all the life of the project (12 years in La Marina operation).

The plan was approved without much controversy. The majority of the landowners and industrialists ultimately agreed to the plan after requesting more density and a smaller IH proportion. They were not accommodated, but no formal justice procedure was initiated by any of the owners. The residents of the existing housing (around 100 families) agreed with the offered compensations in the form a new IH apartment. The only opposition came from certain public interest groups that were in favour of maintaining the manufacturing character of the area.

In November of 2007, a little more than one year after the approval of the Marina plan, a development proposal for a seven hectares portion (10%) of the Marina area was approved. The plan was accompanied by a detailed analysis of costs and benefits, including costs of urbanization, of compensation for existing buildings and, much more costly, for the moving of existing industrial uses to more suburban locations. The costs and sale prices were also included for the free market and the three categories of VPOs. The sale price for the free market units were projected at Euro 3403 per sq.mt, 1992 for the VPO *Concertado*, 1491 for the *Regime General* and 1304 *Regime Especial*.^V

The urban design plan divides the area into eight “*illas*” (subsections), with six of them including all four housing affordability categories, from market to the most affordable VPO category, while the public housing units are located in the remaining, much smaller *illas*. In this first development in La Marina at least, the effort to foster social cohesion through urban social integration has been admirably implemented. There is no reason to believe that it will not continue in the remaining portions of La Marina.

Conclusions

1. The Marina Plan approach (the increase in the IH proportions and infrastructure charges) is an application of the process of increasing “publification” of land values as contemplated in the national planning laws (1976 - 1992- 1996- 2007), the regional laws and planning practice. It is an application of the 1978 Spanish Constitution which opened a new way for the social recovery of land value increases and the guarantee of adequate housing for all families.

2. The “private city” pays progressively more for the “public city” (local and city infrastructure and land for IH) insofar as the real estate prices, and consequently the land prices, have increased very much with the real estate boom 1996- 2007. (Sara & Joaquim, what about now?)
3. Any IH proportion reduces the land price in relation to the price without IH because the land market works in the sense that “land is worth for what is buildable”, that is to say the derived demand price principle for land valuation. It works in the same way as for the local and city infrastructure charges internalised in new developments and the 10% proportion of urbanised land given to the municipality for free, according to planning regulations.
4. Because the principle of the “derived demand” in land price assessment, the IH land policy is paid by the landownership and it should be economically neutral for the developer because all the charges were discounted in the land purchase.
5. The IH production increases the size of the housing demand because it gives purchase power to an excluded demand. The IH production can play today an anti-cyclical role with the real estate crisis that begun in 2007 at the end of the 1996-2007 bubble, both at the macroeconomic-level as well as for the development industry.
6. The IH internal rate of return for the developer can be even higher than for the free housing market, because it has shorter selling periods, and the land has been bought according the derived demand price principle and without speculative expectations of future housing price increases.
7. Land values (“private compensation”) and infrastructure and IH costs (“public compensation”), are interchangeable. The infrastructure costs and the IH proportion is a reduction of the “expected” land values, insofar as the content of the ownership is granted by the general plan and the land market is a “market of futures”, according to the principle of the derived demand in the land price assessment.

IH and the Vigo General Plan

Territorial setting of Vigo

The Vigo municipality has a population of about 300.000 residents, and is located in the Northern extreme of Spain, in the Autonomous Region of Galicia. This region has a population of 2,8 million inhabitants, 315 municipalities and the qualification of “convergence region” according the European Union. The EU qualification means that the Galizia region has a lower income per capita than the EU average, as indicated in the enclosed map.



Vigo is the biggest city of the Galicia Region by population, housing (135.000 units) and economic activity (143.000 jobs) centered on a strong manufacturing base and one of the biggest Spanish ports.

Its metropolitan region includes 44 municipalities and 829.000 inhabitants. Vigo is in competition with the cities of Porto in Portugal and Santiago de Compostela (the region administrative capital with 160.000 inhabitants) and A Coruña (240.000 inhabitants) in the Galicia Region. In a two hours radius in a high speed train Vigo would include a surrounding area of around 7



million people.

Vigo underwent a significant manufacturing restructuring process in the 1980's which brought new vitality to its economy now centred on clusters based on the car (with a Citroën-Peugeot plant), fishing and ship construction industries. Vigo today enjoys a higher employment rate than the average of Galicia and the entirety of Spain.

The 110 sq. km. municipality is spatially complex, with high residential density in the center and sprawling suburbs, which cover 60% of the municipal territory and contain approximately only one third of the resident population. Many of the structures in the suburbs were built illegally and have important infrastructure and social services deficits. Because of its leap-frogging and low-density characteristics, the provision of municipal services are very expensive when compared with the rest of the city, and one of the goals of the plan update was to redevelop or eliminate the illegal housing developments and the obsolete manufacturing uses.

Galician Planning Laws

The legal basis to support the effort to increase the IH percentage was based on the following:

- **2002 Galician Planning Law (LOUGA, 9/2002).** Articles 55.3 and 64.f establish a minimum (“not inferior”) reservation of 20% of the “residential floor space of each sector” in all new developments. The percentage then, can be increased by the municipal plans without any limit, provided that an “equilibrium of profits and charges” is

maintained (articles 131.1 and 112), individually and among each district of similar value in the municipality.

In June 2008 the regional government approved an amendment to the 2002 law to conform to the national 2007 *Ley del Suelo*; but it went further. All developable sectors of a municipality with more than 20.000 inhabitants must have at least 40% IH in relation to all residential floor space. The effort described here took place before the 2007 national and 2008 regional laws.

- **2007 Galician Landscape and Coastal Areas Law** (6/2007) allows direct and quick interventions of the Regional Government in the municipalities in order to create new free market and IH land and, by means of a so called “Supra-municipal Sectorial Housing Plan,” to change some specific contents of the Municipal Plans

The normative framework then, allows the municipal Councils to decide different IH percentages in each new development. The minimum would be 30% for municipalities with less than 20,000 inhabitants, 40% or above for the larger cities. In Galicia then, the range of IH will very probably be between 30% and 40%.

The municipal plan and the long approval process (2001-2008)

The proposed Municipal Plan is a build-out plan that preserves 39% of the total municipal territory as permanent open space while compacting the sprawling suburbs with infill and redevelopment. The potential new development and renewal sectors in the periphery account for 2.866 Ha of land (25% of the municipality), with 56% of those 2.866 Ha dedicated to public infrastructure. The floor space potential is 18,7 sq m millions floor space, with the following uses and dimensions:

- o Residential: 14,2 Mm² (76%)
- o Service activities and Hotels: 2,59 Mm² (13%)
- o Manufacturing: 2 Mm² (11%)

- o New housing units: 116.061 (57.475 I.H. units)
- o Jobs: 81.600
- o New residents: 99.000

The Municipal Plan proposed land uses represent an increase of 78% of housing units, 57% of jobs and 33% of residents. The build-out is projected to occur in about 20 years for commercial land uses and 26 years for

residential uses, using the average production figures for the 2001-2006 period.

The completion of the planned infrastructure will require an investment of 6.490 M€, in 2007 values. It is equivalent to 347 €/sq m for the total proposed floor space (134 €/m² in city-level infrastructure and 213 €/sq m in local physical facilities and compensation for property owners in the redevelopment areas). The new developments have to finance 68% of the total cost, in the form of compulsory internalized infrastructure. The remaining investment must be financed by the three different levels of government – national, regional and local - for an amount of 29%, with the share of the municipal Council being only 8%, the Regional Government 12% and the Spanish Government 10%, and public companies (mainly water and sewerage entities) – the remaining 3%. The whole infrastructure investments is also equivalent to 6.230 € per actual resident.

The investments and developments prioritized for the 2008- 2011 period are quite significant (around 25% of the total investment) and reflect, as shown in the Priority (“*Prioridades*”) map (Joaquim, where is the map?), the interest of the Council to fill the gap generated by the lack of a new plan in recent years, given the long time that it has taken to prepare and approve the plan (2001-2007).

The Approval Process

The so-called “initial approval” of the Municipal Plan was made by City Council in 2004. This proposed plan generated around 60.000 written objections/comments, especially from property owners affected by the redevelopment of illegal settlements. The final approval (the so called “provisional approval”) of the revised plan was made by the Council in May 2006, after a long pedagogical and participative process, and the Plan 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 issued a series of “adjustment conditions” to be fulfilled by the Council, especially related to the extension of areas designated for new development and the phasing of future development. After the elections of May 2007 the new Vigo City Council majority took advantage of the opportunity offered by a Plan needing revisions as mandated by the regional government, and decided to increase the IH percentage from the original 23% to a minimum of 40% in the Plan. A new

plan amended to include the new IH requirements as well as most of the Regional Government amendments was approved by the Council in December 2007.

The municipal plan, incorporating the new IH requirements, was finally approved by the Regional Government on May 16, 2008. This last step closes a extremely complicated planning process of nearly eight years that involved four different mayors.

Objectives

The City Council's objective was to incorporate an IH reservation of at least 40% of the floor space in the whole municipal plan new developments and also in all development sectors of the city where it was economically feasible. As described before,—development in Spain is structured through PAUs or “partial plans” prepared for relatively large areas (*sectores*) where land owners share in the urbanization costs – and profits - in proportion to the land owned. Each of these sectors presents different opportunities and constraints that result in different land values. Given these differences, it was decided that the IH requirement could not be applied equally to all *sectores*, but that the requirement had to be tailored to the development potential and development costs associated with each sector (380 in total).

In order to avoid a new “initial approval” and the consequent public comments period, which would delay the plan approval at least one more year, the density, the private land uses, the land for public infrastructure, and the territorial delimitation of each sector of the Plan approved in May 2006 were maintained. Consequently the only variable to be adjusted was the IH proportion of each sector. Given the tremendous increase in the real estate market and expected land values in the 2003-2007 period (97%), the overall decrease in land values due to the additional IH requirements was only about 25%. Land owners then, would still enjoy an increase of 75% in value for their properties.

The economic feasibility of each sector was measured by the so called “land residual value” method. This approach is often utilized by developers to establish how much they should pay for land they would like to develop. It assesses all costs involved with the development of the site, including developers' profit, and the market value of the buildings to be sold or rented.

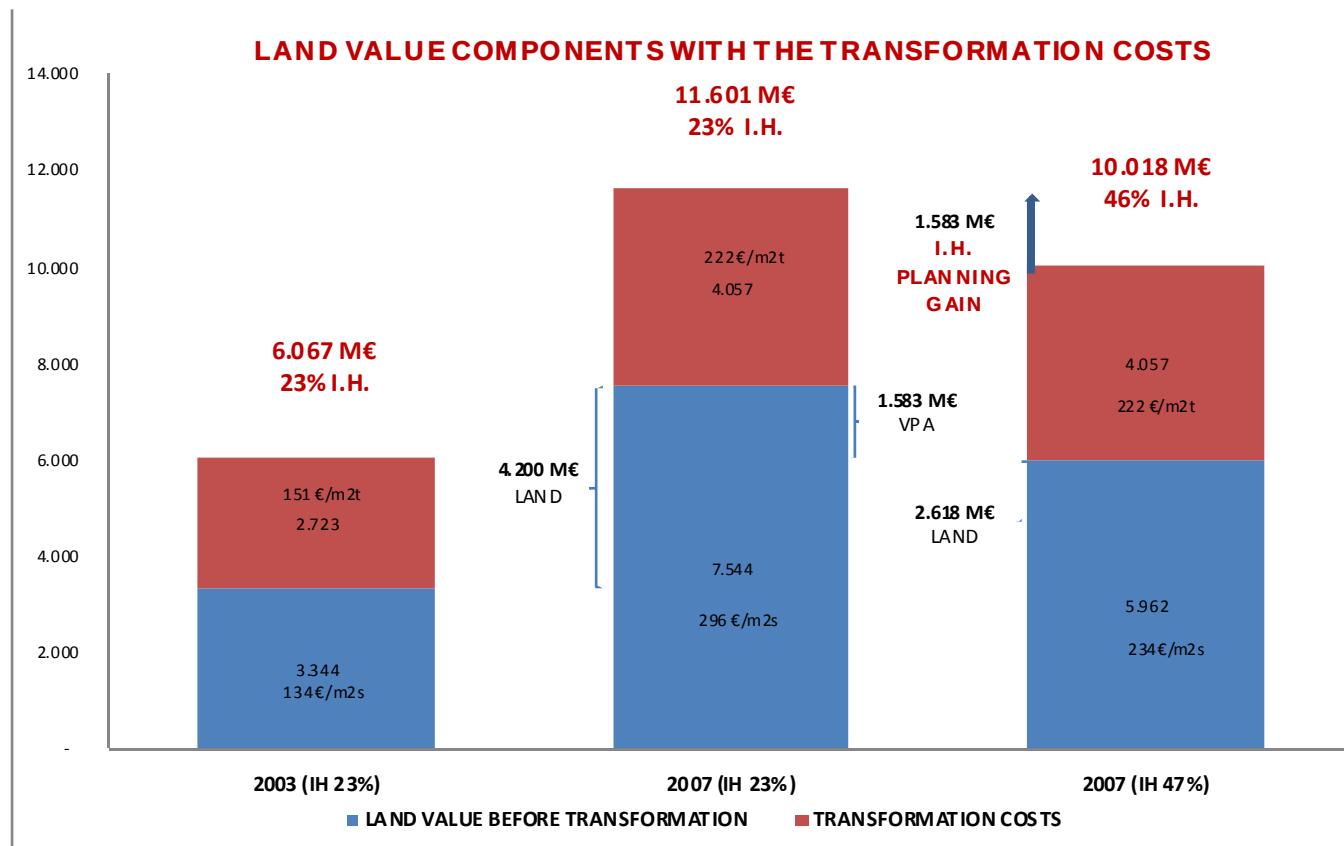
The costs are deducted from the revenues and the remaining amount indicates the maximum the developer should pay for the land. In particular cases the residual value might be negative, requiring public subsidies for development, as in the case of redevelopment in the U.S. The 75% increase guarantee generated various IH percentages in the different sectors, with the lowest percentage to be found in the central district, where land values were very high and developers are charged with higher infrastructure costs.^{vi}

As mentioned above, the objective of the numerical exercise was to guarantee a lineal increase of 75% in relation to the 2003 land residual value in each sector, resulting from the 2004 first approval of the Plan calculations (see Appendix 1 for a description of the algorithm utilized to calculate the percentage of IH in each sector.) This 75% figure was adopted after different trials in order to guarantee a minimum of 39% IH in the most central districts with the highest real estate prices and higher percentages in other areas.

The reason for the 75% guarantee was political. The number of land-owners in the areas where illegal housing has been built is very large (the average property size is about 600 sq m) and they yield significant political power. Ownership in Galicia is held sacrosanct and as a means to economic independence. While they retained 75% of their land value potential - in part based on increased development rights - they were still unhappy with the proposed changes, and the developers enlisted their support to fight the new plan. As it can be expected, a period of harsh political conflict ensued, but the continuing and worsening housing crisis – coupled with the constitutional mandates - made possible for the decision makers, who could point out that the reduction in potential land values was actually much less than what could be legally possible, to hold firm.

The economic analysis was initially attacked on technical grounds, but when it became clear that the methodology was quite sound, the conflict became purely political. The Land Value Component Table shows how redevelopment costs and land costs increased from 2003 to 2004, with an increase of 4.220 million in land values. With an increase of IH from 23% to 47% of residential floor space the windfall for landowners is reduced to 2.618 million, a decrease of 29%. The increase in the IH proportion of 24 percentage points produces a reduction of 29% in the new expected land values (1.583 M€), which is the amount of the planning gain according to the following chart. Even so, the 2007 market values allow a substantial increase both in the redevelopment costs (especially relocation costs

associated with the illegal settlements) and for land owners in relation to 2003. (Joaquim, what happens now we the drastic reduction in real estate prices?)



Land Prices and costs in the context of the Vigo real estate market (2003-2007)

The real estate market is the fundamental factor for the economic feasibility of new developments. The economic consequence of the increase in the IH reservation is the reduction of the expected land values resulting from the lower prices of IH housing (1.514 Euro/sq. m.), which is 63% of the average price of market-rate housing (2408 Euros/sq. m.) in Vigo. (Joaquim, you said half before – Also, why much cheaper in Barcelona? One third). The expected land values based on the original 23% IH percentage were speculative market values because the Plan had not been given final approval. All the transactions made on that assumption during the planning process incurred a clear economic risk. It is interesting to note that some of

the land sale contracts contained clauses that guaranteed the prices of the land sale only if the plan was not amended .

The public sector, then, enjoyed a part of the gain generated by the increase during the 2003- 2007 period in the real estate prices that would otherwise go to landowners. It should be remembered that the expected incomes of the developments take into account only 90% of the floor space density allocated by the Plan, because 10% of all potential floor space must be given free and with public facilities and infrastructure to the municipal Council, according to the Spanish and Galician planning laws, as explained in the planning section.

The main source for housing prices has been the 2003 and 2007 prices from the Ministry of Housing Statistics which covered all municipalities and regions in Spain. The free market housing prices increased 73% between 2003 (1.550 € / sq m floor space) and 2007 (2.676 €). The Vigo prices were a 57% higher than the average regional prices in 2003 whereas they were a 76% higher in 2007, a dynamic reflecting the dimension and the economic vitality of the city. Because the lower increases in the 2003-07 period of urbanization costs (22%) and construction costs (27%), the residual value of the land for free market housing increased 97%.^{vii}

An econometric model was also elaborated by a statistician in order to forecast the evolution of the demand and prices in Galicia and to take into account the change of the economic cycle. By adapting the hypothesis of a maintenance of the interest rates in the near future according to the forecasts of the European Central Bank (4,8% in 2007 and 4,4% in 2010) the forecasts gave a reduction in the housing prices of 10% and a 3% increase in the demand for the period 2008-2011.

In addition to a decrease of the actual prices of 10% in the economic exercise of equalizing the property rights of each development unit, it was also included in the calculation an increase of 75% in the 2003 compensations costs for housing. The values for the different land uses and transformation costs are presented in the following table. Despite the criticisms of the Vigo Developers Association, they were unable to provide any alternative table of values.

** Single family housing parameters were adjusted as a proportion of the free market housing of each district (Joaquim, where does this belong?)

Summary and conclusions

- The economic analysis presents the justification for an IH reservation of 47% of the potential residential floor space, equivalent to 53% of the total potential housing units (57.475 IH units out of the 116.061), in the new Vigo General Plan approved formally by the Council in 29th December 2007.
- The actual Plan is the result of the political program of the new Council majority after the May 2007 local elections which established the objective to increase up to a minimum of 40% the IH proportion of the potential residential floor space from the 23% IH proportion approved by the former Council in May 2006.
- The land residual analysis allocates different proportions of IH in each sector (near 400) of the Plan because it is a “result variable” in order to maintain the proportion of land value increase allowed for each one (75% in four years, considered the minimum acceptable) and maintaining the net density ratio and the urbanization charges as established with the initial approval of the plan. The maintenance of the 2003 economic equilibrium among the sectors was the main legal instrument to justify that the plan had not been “substantially changed” and a new public comments process was not needed.
- The real estate market is the fundamental factor of economic feasibility of the new developments. The economic consequence of the increase in the IH percentages is the reduction of the “expected values” of land ownership resulting from the lower prices of IH units; about 60% of the average free market housing levels in Vigo. As a result, through IH the city will be able to recapture a part of the gain generated by the 2003- 2007 increase in land prices that would otherwise go to landowners.

It could be argued that the 2008 regional law requiring a generalized 40% IH have made all the efforts in Vigo unnecessary. That is true, but the Vigo decision makers initiated the process before the national and regional laws were passed. Furthermore, the existing plan, which is based on a more equitable distribution of costs and benefits is already in place, while an

application of the 40% IH requirement at this point would require additional revisions to the plan. (Murclusa, am I right about this?). Finally, the IH economic analysis based on hundreds of *sectores* in Vigo has established a frame of reference for future analysis of this type.

The economic analysis provided the City Council of Vigo with the evidence necessary to increase the IH requirements equitably. Such an approach made possible to implement, to the highest political-economic standards possible the constitutional right to decent and affordable housing and the principle of social cohesion.

Spain and IH: Conclusions

Appendix 1

The Algorithm

The **algorithm** described below was applied for the calculation of the IH proportion in each unit of private new development, except the ones to be developed directly by the municipality (4 sectors).

The basic “**land residual value- before- transformation**” (vr) equation¹ is given by the following expression:

$$vr = ((vpi * 0,90) - tgt - csc) / sc \quad (1)$$

being:

- vr: land residual value (in €/sq m land)
- vpi: real estate value of the land-after-transformation of all uses (€)
- tgt: transformation costs (compensations and site urbanisation costs) (€)
- csc: other transformation costs according a former 2006 “planning gain agreement”, if any
- sc: total land area of the sector

All the variables are expressed in 2007 values and they are related to the 2003 values by the corresponding transformation parameters.

In the equalisation exercise, “vr” is a known variable, because:

$$vr(2007) = vr(2003) * 1,75 \text{ (equalisation objective)}$$

$$tgt(2007) \text{ and } csc(2007) = tgt(2003) \text{ and } csc(2003) * (1,25, 1,30 \text{ or } 1,75 \text{ depending on the kind of costs as it is justified in the next block})$$

The first equation can also be expressed as:

$$vpi = ((vr * sc) + tgt + csc) / 0,9 \quad (2)$$

The IH percentage affects only the real estate value of the residential use and therefore is the “unknown” variable. The 2007 unitary values of all uses, free market residential and the IH included, are justified in the next block in the context of the price evolution 2003- 2007. The total real estate value is the sum of the one of the corresponding values of each use.

¹ Notice that according the current practice in the Vigo real estate market, the basic equation does not deduce explicitly neither the management cost nor the profits of the investor in this first stage of the development. Management cost can be already included in the unitary transformation costs presented below. The no consideration in the profits means, in fact, an additional plus of the price received by the ownership at the beginning of the development process.

$$vpi = vrs + vtx + vth + vin + vdt \quad (3)$$

being:

- vrs: real estate value of the land- after transformation, of residential uses (€) (IH value, included)
- vtx: real estate value of the land- after transformation, of commercial uses (€)
- vth: real estate value of the land- after transformation, of hotel uses (€)
- vin: real estate value of the land- after transformation, of manufacturing uses (€)
- vdt: real estate value of the land- after transformation, of other private services uses (€)

or also

$$vrs = vpi - vtx - vth - vin - vdt \quad (4)$$

Therefore substituting (3) in (2), the second equation can also be expressed as:

$$vrs = ((vr*sc) + tgt + csc) / 0,9 - vtx - vth - vin - vdt \quad (5)$$

“vrs” is the first value to be calculated for each unit in the present algorithm.

Having calculated “vrs” as a total, the real estate value-after-transformation of the residential uses depends on the IH proportion and therefore the value of “vrs (2007)” can be expressed also as:

$$vrs = (\%L * TR * pL) + (\%P * TR * pP) \quad (7)$$

being:

- %L: floor space percentage of free market housing
- %P: **floor space percentage of I.H.** (the unknown variable at this step)
- pL: unitary land-after-trasformation value of free market housing (€/m sq m floor space)

- pP: unitary land-after-transformation value of I.H. (€/m sq m floor space)
- TR: total residential floor space (sq m)

and being

$$\%L = 1 - \%P$$

the expression (5) can also be expressed, after operations, as a function of the for the IH percentage² as follows:

$$\%P = ((vrs / TR) - pL) / (pP - pL) \quad (6)^3$$

It is important to note that in the last formula the IH percentage depends mainly on the **differential of the unitary prices of the free market housing and the IH**, this last one being established by the Central Government and adjusted by the Regional Governments. The particular values in each area gives different IH percentages that are economically feasible.

The original work included a detailed example of the application of the formula, called in Vigo, during the October-December 2007 process⁴, the **“polynomial formulas”**, for a particular development unit, which is a central location unit in Praza de España with 62.651 sq m of floor space potential, out of them 4.386 of commercial uses) and with no IH percentage in the 2006 Plan, but with an important city-wide infrastructure fee. The IH percentage reached 21% in the 2007 approved Plan in the Praza de España development unit, maintaining the former city wide infrastructure fee and it was taken as the reference example of the success of the political objective.

Notice also that the average of 47% IH reservations in the whole Plan means that the developments with low transformation costs or more proportion of non residential uses will have higher proportions in relation to the residential floor space than the average one⁵.

² The algorithm adopts a more complicated expression with the consideration of the one-family housing, of two types, both free market and IH.

³ The expression works with negative values both in the numerator and the denominator.

⁴ Probably a better expression would be the “October- December” battles in which the economic team had to give two presentations justifying the results.

⁵ The development units with only economic activity have not had any additional charge to compensate (????) the increase of IH in the residential or mixed sectors.

Appendix 2 (Joaquim, you assigned IH percentages to almost 400 sectores, but now you are presenting administrative districts? Where do you talk about administrative districts in the text?))

Results by administrative districts

The feasibility study with the algorithm presented for each one of the development units (sectors?) of the existing 2006 Plan indicates the economic feasibility of an increase in IH percentages up to 47% (Joaquim, but 49% in District 8?) in terms of residential floor space and to 53% in number of housing (57.475 units) for all new developments (18,3 million sq m in all uses and 13,7 million sq m for residential uses) of the Vigo Plan. The 2007 Vigo Plan more than doubles the IH percentages included in the 2006 version.

The distribution of the IH percentage is as follows:

- District 1: 41%
- District 2: 45%
- District 3: 39%
- District 4: 39%
- District 5: 44%
- District 6: 44%
- District 7: 43%
- District 8: 49%

The percentage of non residential uses influences the IH percentage because of the lower value of commercial land uses (see table #). In relation to all uses the IH percentage is only 35% of the total potential floor space and in the two central districts with more commercial uses (Districts 4 and 5) the proportion is in fact 35%.

The general principle of the Spanish practice valuation by which “land is worth what can you place on it” (“*el suelo vale lo que vuela*”) underlies in fact the economic analysis

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ⁱ Land speculation is correctly defined as withdrawing from the development process land in areas undergoing urbanization, in the expectation of higher prices. The word speculation, however, is used in Spain quite liberally to attack development in general, but most often development perceived by the critics as harming the environment or a neighborhood.

ⁱ The city of Madrid had mandated in 1984 different IH 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."

ⁱⁱ In Spain, income is net of taxes.

^{iv} In fact 90% of the planned floor space because 10% of the urbanised land must given free to the municipality as a tax or additional urbanization charge.

^v The figure for the free-market units is actually much lower than that for the city. The Standard figures are 5.625 for free market, 3.002 for *concertado*, 1940 for *oficial*, and 1,705 for *especial*.

^{vi} The objective of the numerical exercise was to guarantee a lineal increase of 75% in relation to the 2003 land residual value in each sector, resulting from the 2004 first approval of the Plan calculations. This 75% figure was adopted after different trials in order to guarantee a minimum of 39% IH in the most central districts with the highest real estate prices and higher percentages in other areas.

^{vii} These references came from the Spanish Ministry of Public Works Statistics and development and construction industry publications