

# **The Determinants of Housing Prices: The Case of Spain**

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## Abstract

Real estate prices have escalated rapidly over the last decade in many developed markets, raising concern among investors. This paper focuses on the residential property market in Spain and touches upon various factors affecting home prices such as population growth, demand and supply of land, investors' expectations, general economic conditions, cultural factors and economic fundamentals. It is tentatively concluded that indeed prices might already be too high and that a correction is likely in the not too distant future. However, more empirical research is needed to validate this hypothesis. A list of possible issues to explore appears in the appendix.

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## **Introduction**

With few exceptions (Germany, Japan and Hong Kong) real estate prices in the major developed markets have been increasing, sometimes dramatically, over the last decade in both nominal and real terms.

This has raised concern among many investors about the right level of prices in the real estate sector and about whether prices might not be already too high, while some see the recent price behavior as support for a continuing trend. This paper centers on residential property with special attention to Spain. It is concluded that indeed prices seem to have risen too much.

Information was gathered from a number of sources.<sup>1</sup> This information has been supplemented with some academic papers, opinions from investors acquainted with the real estate business and personal thoughts. Conclusions and a tentative list of issues to explore are presented at the end.

Both research and day-to-day experience show that the main causes behind real estate prices are: population growth, demand and supply of land, investors' expectations as to future price trends, general economic conditions (i.e. inflation, interest rates, the mortgage market, building and maintenance costs and taxes), cultural factors and economic fundamentals such as the relationship between property

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<sup>1</sup> The bulk of the background information comes from *The Economist* and the reports prepared by AFI (2004) and BBVA (2005).

prices and incomes and rents. In the following, each of these factors and their impact will be discussed.<sup>2</sup>

## **Demand and Supply**

The most obvious predictor of a rise in housing demand in the long term is population growth. Population growth has two determinants: the birth rate and immigration.

The birth rate has a long-run effect and hence a more predictable impact on demand. Immigration is shorter term and has a more uncertain influence. Growing demand from immigrants is today the most dynamic (though not the most important) factor in the Spanish housing market. Demand from this source is expected to increase even more in the medium term since the proportion of immigrants in the Spanish population is still considerably below the EU average.

Nonetheless, immigrant flows have a lagged effect on demand since it takes an average of 6-7 years for newcomers to be able to buy a home. The influx of retired foreigners (mainly from northern European countries) looking for homes mostly along the Mediterranean coast is another important issue very specific to Spain. However, Spain as such a destination is suffering strong competition from other (less expensive) eastern European countries. So, although due to the aging of the continent's population the number of retired people will keep increasing it is hard to predict its long-term effect on the country's housing market.

The greater the influence of long-term (birth rate) trends as compared to short-term immigration-like trends, the greater the predictability of

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long-run demographics. Land and zoning regulations permitting, it is expected for supply to gradually adjust to predictable trends and housing prices be less affected.

The impact of birth rate trends is becoming less important in Spain. Unsatisfied demand is almost exhausted since 80% of families already own their homes, and previous demand stemming from the coming to adulthood of the 1960-76 baby-boom generation is slowing down. Anyway, as said before, housing prices should not be greatly affected by birth-rate based population growth since it is expected for supply to gradually adjust to these predictable trends as long as zoning regulations do not become an obstacle.

It is not as easy to foresee the future influence of immigration-like forces. They will probably keep housing demand strong for quite some time but their price impact will depend on how supply manages to adjust to these (more uncertain) developments.

Obsolescence is another factor. Much as happens with birth-like forces decay is easy to predict and should be compensated with new supply. This new supply could materialize either through demolition and new construction or through renovation of the aging units.

Also the underground economy undoubtedly plays an important role in the Spanish real estate sector. It is well known that a very considerable amount of economic activity takes place beyond the reach of the fiscal authorities. This materializes into additional demand for property. Covert by definition, it is very difficult to estimate to what extent Spain's housing prices will be affected in the future by these concealed forces.

Lastly, any analysis of demand and supply forces in the real estate sector must be circumscribed to a particular city or region. Home prices are higher in big cities or places where many people want to live and there is a limited supply of land. But high prices do not mean

rising prices. Prices will rise only when demand keeps on exceeding supply in a particular neighborhood.

### *Heterogeneity*

Another consideration is that real estate is intrinsically a heterogeneous asset. New homes are priced differently from those in the secondary market. Some homes are more luxurious, better designed and/or respond better to customer needs. Also smaller properties are more expensive by the square meter. Thus, prices are not perfectly comparable between two properties in the same location.

Furthermore, demand price elasticity is generally lower for homes targeted to the upper classes. Hence, in certain large city areas where demand might be relatively less elastic property prices can be expected to escalate more rapidly in times of heavy demand.

Lack of homogeneity blurs any clear projection about residential property prices. Actually, there is no such thing as a “housing market” but many markets defined by geographical area and type of housing. Prices among these markets are correlated but do not necessarily move in tandem.

In addition, the relationship between needed space and the number of people in search of a house can vary. As a matter of fact, the mean surface area of Spanish homes has steadily declined as families become less numerous and immigrants tend to demand smaller sized units.

In 2004 a new historical record was established in Spain when about 700,000 new houses were started to be built. This trend is likely to change in 2005 when this figure is expected to fall to 600,000, which is nevertheless a very considerable number still far above the mean for the last 5 years.

This figure masks opposing trends in a heterogeneous market. Homes started in smaller towns are growing at a much faster rate whereas in cities of over 750,000 inhabitants new construction is actually decreasing at a 20% yearly rate; and single family start-ups are flat while apartment block construction is growing at 13% annually.

### ***Government Action***

Governments have a crucial role in the real estate market. First, planning and regulations on the use of land influence supply. The more strict and unresponsive the authorities are to demand the higher real estate prices will be.

Responsiveness by the authorities to demand pressures depends crucially on political considerations and on the relative influence of the various political lobbies on government decisions.

In particular, current owners are generally interested in restricting supply. A constrained supply raises the value of their properties and eliminates the extra costs of supplementary public services (sewerage, electricity and phone lines, etc.) as well as other less quantifiable costs such as additional congestion and interrupted views. This confronts the opposing interest in increasing supply of developers and new property buyers.

In the end, which lobbies are able to better organize themselves before the government and to what extent the government will respond to their demands is a key determining factor in the responsiveness of the authorities to demand pressures.

The construction of efficient transportation links with suburban areas helps to narrow the price gap between cities and smaller towns. In fact, population growth in Spain is increasingly concentrated in the smaller communities surrounding the larger cities.

Moreover, measures promoting the supply of residential property available for lease can help stop the increase in residential prices. Examples include taxing properties kept empty for speculative purposes and improving judiciary procedures to facilitate and speed up processes against delinquent tenants. The current Spanish government seems ready to act to prop up the supply of housing and hence ease price rises.

Also, in the particular case of Spain municipalities have a measure of monopolistic power over the supply of land that must be taken into account. Many local governments own considerable tracts of land that are released for development only when demand pressures reach the point where they can be sold at high (“speculative”) prices, more with a view to replenishing government coffers than for long-term planning purposes.<sup>3</sup> This speculative approach is not a negligible force behind the supply of land in the country.

The bureaucratic structure of the various levels of government also poses a special complication in Spain. The national, regional (“*comunidades autónomas*”) and city governments each have legal authority over land development. These faculties are not always clearly differentiated and might even overlap, thus hampering effective governmental action.

In sum, supply-demand forces suggest that:

- In principle, supply should tend to adjust gradually to future demand stemming from birth rate causes
- Supply adjustments to immigration-like sources will probably not be smooth
- The extent to which supply will adjust to future demand will very much depend on the equilibrium between the various

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<sup>3</sup> The benefits obtained this way are supplemented with the future tax stream from newly developed properties.

interested parties: current owners, new buyers, local governments and developers

- Judging only on the basis of supply-demand forces it is difficult to foresee what direction future residential property prices will take. Nonetheless, other considerations indicate a possible downturn, as will be discussed further on.

Having said this, and despite an overall descending trend, prices will clearly evolve quite differently in each region and depending on type of housing.

## **Expectations**

From an investment viewpoint future price expectations are a key determinant of current prices. In particular, how investors judge expected returns in the housing market as opposed to the stock and bond markets has a critical impact on current demand and prices.

For stocks and bonds the risk-return relationship claimed by investors seems to have changed in recent years (Dimson, Marsh & Staunton 2003). New higher security levels point to lower expected returns both in the stock and the bond markets and there can be little doubt that this has been a driver behind the recent rise in housing prices.

It is too early to say how permanent this situation is and whether the risk-return relationship will readjust to previous levels. But we cannot rule out the possibility of real estate prices stabilizing at a new higher equilibrium plateau.



## ***Real Estate Bubbles***

Even accepting the existence of a new (permanent) less demanding asset risk-return relationship it is quite possible that residential property prices are already beyond any reasonable equilibrium level in many developed countries and that we are witnessing a “bubble” not much different from the one leading to the 1929 stock market crash or, more recently, the one emanating from fast growing internet businesses.

According to Robert Shiller, a well-known Yale University economist, a bubble exists whenever home purchases are driven by expectations of future price increases. And indeed, recent surveys show that expectations of future price rises are the main motivation for many people to buy housing.

In addition, surveys reveal other defining (emotional) characteristics of investor sentiment in the midst of past real estate bubbles (Case & Shiller 2003). For example, when asked why they decided to buy, typical investors seemed to be motivated by:

*Word-of-mouth:* Most people around them thought that it was the time to purchase. Hence, it made no sense to deviate from what was considered “obvious” general knowledge.

*Timing:* The best decision was to buy the house quickly before it was too late and they would not be able to afford it.

*Risk Appreciation:* A belief that residential property is the best way to save, partly because land scarcity insures that house prices will never fall, and partly because real estate is less volatile and thus safer than

the stock and bond markets. Therefore, a house is seen more as an investment than as a place to live.<sup>4</sup>

In consequence, in the middle of a housing bubble investors feel that they can reduce their savings rate since the growing value of the property will do the saving for them.

*Blindness:* The conviction that their decision was not driven by emotional factors but resulted from a pure rational analysis.

Generally lacking economic training, single families tend to give much weight to non-economic (bubble type) factors when deciding to purchase a home. This accentuates the importance attached to emotional aspects by this significant group of investors. These emotional considerations will be supplemented with cultural factors to be discussed later.

Optimistic expectations are particularly strong in Spain, where a vast majority of investors remain buoyant owing to a recent history of escalating prices. In the last 15 years the average return on investment in housing has been about 9.5% annually (with a 4.2% inflation rate). In 2004 alone prices went up about 17% despite a drop in the stock on offer and a reduction in the number of homes sold. These percentages cover up regional differences. For instance, in Valencia and Seville prices have accelerated while in Madrid and Barcelona, the two largest cities, prices have grown at a more moderate rate.

On top of this the number of housing units per family is now 1.57 in Spain as opposed to a much lower ratio of 1.12 for the rest of the EU. Also, about 14% (over 3 million) homes are kept empty by their investor owners, many of them with a view to being sold for profit

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<sup>4</sup> To the extent that investment markets are rational it is not possible in the long term for a less risky asset (i.e. real estate) to yield a higher return than other riskier assets (i.e. financial instruments).

(Trias de Bes 2005)<sup>5</sup>, and it is estimated that about 47% of “second homes” are actually speculative investments. This strengthens the speculative reason for today’s high housing prices and the possibility that, if the perception of the market going down spreads, these owners might decide to sell.

It is usually thought that bubbles are less likely in real estate than in the stock market because higher transaction costs discourage speculation. When expectations about future home prices cool off, high transaction costs are bound to dampen speculative demand, thus pulling prices down.

Surprisingly, it has been shown that bubbles are probably more likely in housing than in the stock market, for several reasons (Herring & Wachter 2003):

- a) Unlike the stock market, real estate markets lack a central exchange. Hence, they are quite inefficient: assets are heterogeneous, transaction costs are high, and information is imperfect. This implies that to a significant extent expectations are likely to be set by looking backwards. That is, prices are expected to rise (or fall) in part because they have done so in the past.
- b) No short-selling is possible. Thus, prices are driven by optimists so long as the upward trend continues.
- c) Due to construction lags, new properties take years to complete. By the time they are built demand and prices may have fallen. Therefore, supply tends to adapt slowly to new information, exacerbating the volatility of the cycle.

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<sup>5</sup> This could also signal the difficulties envisioned by owners to prosecute potential delinquent tenants efficiently and rapidly. It is also likely that an unknown number of these units might actually be leased illegally in order to avoid taxes.

- d) Lenders lend as much as possible during booms when prices are increasing and restrict lending during slumps, again exacerbating volatility.
- e) Markets with strict planning and regulations on building delay supply adjustments, making for still greater volatility.

Furthermore, lack of liquidity intensifies price changes. Not all real estate markets remain forever liquid. As a result, when the decision is taken to sell it might be necessary to lower prices significantly. The contrary happens when the decision is taken to buy.

However, there is evidence that house prices are sticky downwards, meaning that prices do not tend to fall because owners have minimum reservation prices below which they are unwilling to sell (Case & Shiller 2003).

Conversely when investors have benefited from a long period of rising prices (as has happened in Spain) they might be willing to sell their properties even with some losses, since they might feel that they are still obtaining a sizeable profit<sup>6</sup>. Only investors' expectations regarding the evolution of future prices will dictate which of these two conducts will finally prevail in Spain.

Another argument is that about 70% of homeowners live in their homes. High transaction costs will possibly inhibit them from selling their properties simply because prices could fall. Instead, most of these owners are likely to stay in their homes. So, many properties will not actually be put up for sale, with the result of a shorter supply and therefore less steeply falling prices in the event of a crash.<sup>7</sup>

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<sup>6</sup> Although the decision to buy or sell should be based on current market prices vis-à-vis future price expectations, behavioral finance researchers have found empirical evidence of this type of “irrational” conduct from investors.

<sup>7</sup> Timely and effective action by the authorities could also help cushion the worst effects of a possible crash.

In consequence, although it is possible that asset prices are stabilizing at a new higher equilibrium level there are strong signals of a speculative “bubble” in the Spanish home market. This together with a huge stock of homes apparently kept for speculative purposes reinforces the possibility of an overall deflation in property prices.

## **Economic Conditions**

We will now go on to discuss a number of economic conditions that are closely connected with the housing market. In particular: disposable income, inflation and interest rates, mortgages, building and carrying costs, and taxes and regulations.

### ***Income and Interest Rates***

According to AFI (2004) disposable income and availability of financing have been the main drivers behind home prices in Spain. In fact, fast growing disposable income is surely key to explaining past price rises. Also income disparities are directly related to the different residential property price levels across the country’s regions.

Disposable income is closely tied to unemployment. As unemployment (or the threat of future unemployment) increases demand for housing must fall, and with it prices. At this point it is difficult to predict whether the unemployment rate will vary considerably in the foreseeable future in Spain.

Homes are generally purchased with mortgage financing. Thus, the level of real interest rates is closely tied to housing prices. Lower real rates make mortgages cheaper, pushing up real estate prices. Since the introduction of the euro, inflation rates in Spain have stayed above the EU average. Hence, real interest rates have been negative, providing one reasonable justification for the house price boom.

But conversely, higher real interest rates tend to spell pricier mortgages and lower residential property prices. It is worrisome that some analysts foresee a rise in real rates that could translate into a depression of housing prices.

There seems to be a widespread belief that real estate prices will not decrease as long as real interest rates do not fall. However, as I stress in this paper, prices depend on many factors and, in the middle of a speculative bubble, especially on expectations. If rents fall and prices stop rising investor-speculators may decide to sell as their expectations of capital gains evaporate.

A popular argument is that housing prices will not fall abruptly but just level off. This might be true in inflationary situations where inflation quickly erodes real prices, but for real prices to decrease in low inflation environments takes much longer periods of time. Thus, a deep slump is more likely under the current conditions.

### *Mortgages*

Mortgage loans can have fixed or variable interest rates. Unlike fixed rate mortgages where installments remain constant, variable rate mortgage payments vary with interest rates. If interest rates rise installments will rise as well. This could compromise the day-to-day budgets of many highly indebted small investor-speculators, pushing them to sell and pressing down house prices even more.

The debt of Spanish families has been mounting rapidly. Eighty percent of future savings are already tied to servicing mortgage debts, leaving only 20% for other investments. This means that saving portfolios are poorly diversified and concentrated in relatively illiquid investments.

In addition, risk levels might be misunderstood. The leverage mortgages create can fool many investors into believing that they are obtaining a higher return on their initial investment. But this does not take into consideration that the rise in “apparent” return comes with a much higher level of risk.

Also, 31% of family salaries are dedicated to mortgage payments, a number that drops to 25% when tax incentives are considered. This would not appear to be an alarming situation since Spanish banks usually consider the top payment for a mortgage to be 33% of monthly salaries (before tax incentives). However, indebtedness is heavily concentrated. Only 8.5% of owners have loans representing over 75% of asset value, whereas 78% have fully paid up their loans. Therefore, the budget of a sizeable number of homeowners is very tight, raising their probability of default in the event of economic conditions weakening.

Growing indebtedness has been possible partly due to the development of a strongly competitive mortgage market in a very low (even negative) real interest rate environment. However, competitive pressure is already very high and possibly will not push demand much into the future. Over the last 15 years the maturity of mortgage loans went from an average of 10 to 25 years. Even more, negative expectations regarding future home prices might restrict mortgage financing in the future, thus depressing demand.

There is also a relationship between the wide and growing availability of mortgages and capital rationing. Many smaller investors view real estate as a vehicle to access long-term loans which would not be available otherwise. In addition, once the house is paid (or almost paid) its possession gives a sense of security since in case of need funding can be obtained through a mortgage.

## ***Cost Inflation***

Cost inflation is another issue since real estate prices must respond to rises in costs. Here land and building costs must be differentiated. There is evidence that due to growing scarcity of specialized personnel (i.e. electricians, plumbers, etc.) construction prices have increased noticeably above those of other sectors of the Spanish economy. Another element is the indirect impact of higher raw material prices due to strong demand from the Far East (the “China effect”). Hence, there is no doubt that building costs are contributing to home price rises.

Land costs are different. They are not a cause but a consequence of real estate prices since higher property prices translate directly into a more robust demand for land and higher land prices<sup>8</sup>.

## ***Carrying Costs and Speculation***

Real estate has much higher carrying costs than other investment assets. Besides the cost of managing the property, there are taxes, insurance, maintenance and repairs to be paid out.<sup>9</sup> Carrying costs are often a very significant addition to mortgage payments and weigh heavily in the periodic outflows of property ownership.

As a general rule, when housing prices start to fall owners are reluctant to accept a capital loss. So the volume of sales declines but prices do not. This tends to delay price falls during busts (i.e. prices are sticky downwards). However, the success of this strategy depends crucially on the possibility for the property owner to keep up with mortgage payments and carrying costs until conditions improve (“cash

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<sup>8</sup> Land prices also increase when by changes in zoning developers are allowed to build at higher densities.

<sup>9</sup> Repairs could be particularly important when tenants harm the property and it is not viable to collect damages (“tenant risk”).



flow risk”), a fact that takes on even more relevance when the property is not being leased.

Cash flow risk is particularly important for small investor-speculators, many of whom tend to underestimate carrying costs. Thus, once their full impact is realized, they could be prone to liquidate their investments sooner than originally planned, increasing supply and depressing prices.

### *Taxes*

In most countries owner-occupiers get tax relief on their mortgage payments or are partially exempt from capital-gains tax. Also, first-time buyers often get a tax credit. This favorable treatment pushes up the relative demand (and prices) for housing as opposed to other forms of investment like bonds and shares.

Spanish tax law offers this sort of incentives. However, they have been gradually diminished in the past and are not likely to be amplified in the foreseeable future.

In sum:

- A (possible) rise in real interest rates in the near future would press home prices down.
- Inflation is expected to be kept under control by the European monetary authorities. Thus, any slump in the residential property market will materialize through a decrease in nominal prices.
- A significant number of investor-speculators are heavily indebted, with no possibility of ameliorating their debt burden by increasing mortgage maturity. This together with carrying

costs will probably place many close to default, forcing them to sell and depressing house prices.

- Only building costs, which will most probably keep going up, and new (unlikely) tax incentives can prevent prices from falling very far.

Rising costs are not likely to outweigh the other factors. Thus, in general, economic conditions point to an overall price decrease in the near future.

## **Culture**

There are at least four cultural elements affecting housing prices.

The first is the widespread belief that “renting is money down the drain”. The fact is that buying a home is actually both an investment and a consumption expense. The consumption side equals the implicit rental cost of the home, meaning the amount of rent that would have to be paid for a similar (not owned) home.

The financial side can be isolated by subtracting the implicit rental cost from the mortgage payments. The resulting cash flows, including the down payment and other carrying costs such as maintenance, taxes, etc., can be thought of as the financial side of the transaction.

Hence, paying a rent is not financially different from paying interest on a loan without owning the property. That is, the tenant occupies the property but is not responsible for the carrying costs, and neither profits from potential future price rises nor suffers from potential future price falls.

The second cultural issue is the special value attached to “bricks and mortar”. Unlike with financial assets, investing in housing means

buying something tangible. Spain offers a good example. According to the country's central bank (Banco de España) by 2004 residential property accounted for 75% of families' wealth.

The truth is that real estate assets have no intrinsic value by themselves. An apartment in war-ravaged Iraq is surely not worth much. Actually, the market value of a property only lies in the rent it is able to generate.

The third cultural element is that people always want to "own their homes". Nevertheless, this argument could be valid for main residences but not for second homes and much less for housing as an investment asset.

The last cultural reason favoring demand for housing (and hence higher house prices) is the lack of discipline to save. Contracting a mortgage can be a practical way to force oneself to save a significant part of one's income every month, something that many people find difficult to do voluntarily. This sometimes leads to extremes. Many mortgage borrowers are so hard pressed to serve their debt that they must resign themselves to a very austere life, becoming what is popularly known as "house poor".

Cultural factors are certainly quite important. Nonetheless, they are already accounted for in today's prices and there is no reason for them to push prices up even more. Any change in future home prices will be tied to the other factors discussed throughout this paper.

## **Economic Fundamentals**

For any investment to be attractive, its price must be in line with other economic variables. In the case of housing, the two basic relationships are those of prices to average earnings and prices to rents.

In most developed countries, including Spain, the ratio of house prices to average earnings has been at record high levels.<sup>10</sup> If demand is not increasing much faster than supply and prices rise too rapidly in relation to their salary levels, demand from first-time buyers will not materialize and might even decrease, pressing housing prices down.<sup>11</sup> This is likely to occur in the near future.

On the other hand, the ratio of rent vs. price levels has been at record low levels in most industrialized economies. For instance, today an apartment can be rented in Spain for about 2.5% (yearly) of its market value as compared to a historical mean of 5%. This is the lowest ratio on record.

At the current level of interest rates the out-of-pocket cost of paying a mortgage plus carrying costs is often higher than the cost of renting. Only if prices continue to rise does buying make sense. This is just what we would expect in the midst of a housing bubble when homes are bought more as an investment and less as a place to live.

But for how long will prices keep rising?

In sum, economic fundamentals strongly suggest that the price paid for a property must sooner or later be in line with income levels and reflect the present value of the rent it could produce.<sup>12</sup>

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<sup>10</sup> Real income levels are difficult to assess when there is a significant underground economy. Many analysts estimate that in some European countries, particularly in Italy and Spain, underground economies driven by tax evasion might be quite sizeable. Accounting for this factor, the ratio of housing prices to income could be closer to more reasonable levels. Nonetheless, only continuous growth of the underground economy could be a justification for real estate prices to keep on increasing.

<sup>11</sup> Possibly a better way to look at the relationship between prices and earnings is house price affordability. Homes are more affordable the more competitive mortgage markets are, as happens nowadays in the developed world.

<sup>12</sup> As mentioned before, current prices might be reflecting capital appreciation more than the return on rents. Within a limited time horizon, the terminal value of any real estate investment plays a key role for the speculator since it is there that any expected price increase is reflected. Nonetheless, this new price level must reflect the present value of future rents. So, in any case prices must be consistent with potential rents.

## **Conclusions**

Residential property has boomed in many industrialized economies, raising concern among investors about the right level of housing prices and whether these might not be already too high.

The long-run underlying cause for property price rises is increasing demand coming from population growth and migrations together with supply restrictions.

In principle supply is expected to adjust gradually to future demand caused by the birth rate, whereas supply response to less predictable migratory factors might not be so smooth.

However, land and zoning regulations play a decisive role in supply, and it is quite difficult to foresee how these will be affected by the speculative behavior of municipalities, political considerations and pressures from current owners, new buyers and real estate developers.

Nonetheless, having said that, the huge stock of empty homes suggests that sooner or later many investor-speculators will sell, thus increasing supply and causing prices to fall.

Economic conditions also play a role in housing prices. Low interest rates, aggressive competition in the mortgage market and favorable taxes and regulations have certainly helped push up real estate prices in recent years.

But the price spiral will probably stop. The considerable indebtedness of many Spanish families and a possible rise in real interest rates will probably press home prices down. Even worse, if inflation is kept under control any slump in home prices will materialize through a decrease in nominal prices. Rising building costs are not likely to outweigh these factors. Thus, economic conditions point to a general price decrease in the near future.

There are cultural elements affecting house prices as well: the widespread belief that “renting is money down the drain”, the special value attached to owning “bricks and mortar”, the fact that most people want to “own their homes”, and getting a mortgage as a vehicle to overcome the lack of discipline to save. However, these cultural factors are stable and already a built-in part of current prices. Thus, they do not affect demand for housing in either direction.

The main culprit behind the current housing boom is most likely the (very?) optimistic expectations about future prices. There are strong signals of a speculative “bubble” in the Spanish residential property market. Hence, from an expectations point of view, a deflation in property prices is quite possible.

Last but not least, economic fundamentals are central to any analysis of real estate prices. The price paid for a property should sooner or later reflect the present value of the rent it could fetch and should also be in line with average incomes in order for demand to be sustainable. This implies that rents and incomes should increase and/or property prices decrease.

The overwhelming majority of opinion makers in Spain thrust aside the existence of a real estate bubble. The “pessimists” within this constituency believe that prices will at worst stabilize. Only a few isolated analysts are convinced that housing prices will soon implode.

Given the utmost importance of the construction industry (and related activities) in Spain, the likelihood of a deep slump in real estate prices is a frightening possibility with dramatic financial consequences, not only for important sectors of the economy but for the Spanish population in general. Hence, the matrix of opinion on this issue is of vital importance.

For this reason it is possible that a sizeable number of “optimists” are actually biased interested parties such as developers and banks, with

substantial investments in real estate, or governmental authorities acting cautiously to avoid endorsing negative expectations that could immerse the economy into a recession.

Unfortunately, the fact is that inventories of unsold properties are quickly rising, and some developers are starting to offer indirect price discounts (for instance, giving parking places away). Furthermore, gradually more and more analysts are starting to suggest that a price fall (and not just stabilization) is indeed becoming quite probable. There is no doubt that these are strong signals that housing prices are starting to slow down in Spain.

Summing up, it seems that most forces behind housing prices point towards a decrease in Spanish residential property prices. Having said this, and despite a general descending trend, prices will clearly evolve quite differently in each region and depending on type of housing.

Nonetheless, this is actually an intuitive assertion. A robust conclusion demands a thorough understanding of how every factor really influences residential property prices (both in the shorter and longer run) as well as how these factors might be related to each other. Empirical research along these lines will certainly be welcomed by all those interested in the real estate market. As a preliminary guide, a tentative list of issues to explore appears in the appendix.

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## **Appendix: Tentative List of Issues to Explore**

### ***On Real Estate Prices***

In which sectors have prices increased dramatically and in which not? Are there some markets where prices have actually fallen? If so, why? Can this help us understand the dynamics behind housing prices?

What is the impact of immigrants (workers and pensioners) on housing prices?

What is the role played by the leasing market? Is the underdevelopment of leasing in Spain reflecting cultural factors? Is this behavior likely to change? How much is the rental market expected to grow?

How much have rental prices and implicit rental prices increased as opposed to purchase prices? Up to what point are rental prices responsible for higher purchase prices?

Has there been a fundamental change in consumption preferences so that Spaniards are willing to spend a higher proportion of their income on rent (or implicit rent)?

Is there a significant serial correlation of house price changes? (this would be evidence in favor of a market bubble).

How do developers respond to decreasing demand and an increase in inventories? How long do they wait before lowering asking prices? How are their minimum reservation prices set?

How do individual home owners come up with maximum (purchasing) and minimum (selling) reservation prices? How are these prices influenced by changes in interest rates?



What sub-markets are more likely to show high rates of default in the event of a bust?

Up to what point is the underground economy affecting real estate prices? How is the underground economy likely to evolve in the future within the economy as a whole?

How much have economic fundamentals (i.e. prices to incomes and rents to prices) deviated from their historical values in other countries and how do these deviations compare with today's ratios in Spain?

### ***On Real Estate Speculation***

How large is speculative investment in the Spanish housing market as opposed to demand from legitimate housing needs?

Is the second home market really that big? Can the large ratio of housing to families in Spain be explained by a large stock of foreigners' vacation homes?

What percentage of empty housing units are really vacation homes used occasionally by their owners?

How many supposedly empty houses are really being leased illegally to escape taxes?

In the event of a massive default what will the main lending banks do with a huge stock of real estate property? Will they liquidate it in the marketplace? Do they have the financial strength to keep this portfolio? For how long? How are the supervisory authorities likely to react?

### ***On Modeling***

Must a model be built for every sub-market within the whole housing market? For instance, different models for main housing, second homes, new homes, old homes, luxury vs. medium and low income homes, small houses for retired people, or singles, or couples without children versus full family units, for every region or city, etc.

How do these different markets interact with each other? To what degree are they correlated? How is suburban transport infrastructure likely to affect these relationships?

What will the significant variables to test be? For instance, inflation, income levels, interest rates, the stock market index, etc. How will this set of variables change for every sub-market?

Is it realistic to think of a single model explaining housing prices?

### ***On a Possible Investor Survey***

It would be interesting to carry out one or more surveys among residential property investors asking why they decided to buy. The answers could be contrasted with those of similar studies of actual real estate bubbles in other countries. Some possible questions follow:

Was your decision influenced by expert opinions? Opinions from friends? From the media?

Did you buy the property because prices were increasing so much that you felt that you will not be able to afford it later?

Do you think of your home purchase as an investment more than as a place to live?

Do you think of your home purchase as the best way to save?

Was your purchase seen as a good way to get an attractive (inexpensive) loan?

Do you think that residential property prices never fall?

Do you think that housing as an investment is less risky and more profitable than the stock and bond markets?

Was your decision completely rational or very much influenced by emotional factors?

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