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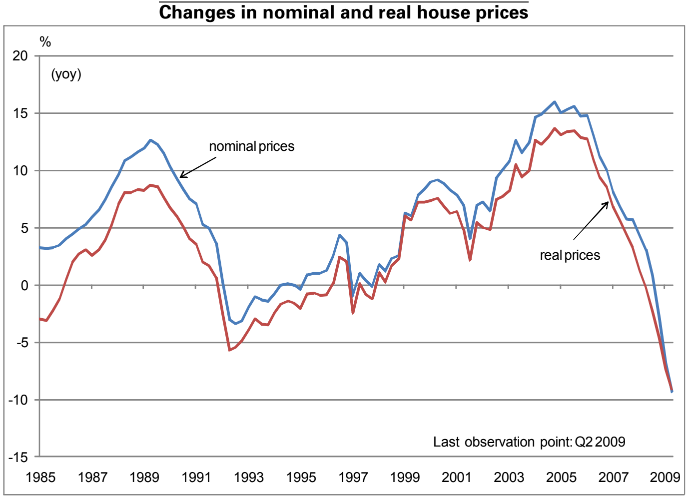
Trends in the French housing market

This study was prepared under the authority of the Treasury and Economic Policy General Directorate and does not necessarily reflect the position of the Ministry for the Economy, Industry and Employment.

- The French housing market is characterized by inadequate growth in supply relative to growth in the number of households.
- From 2003 to 2007 the acceleration in demand arising from the easing of financial conditions, new tax incentives, and probably the speculative nature of some property investments, led to increased pressure on prices.
- In a symmetric manner, the downturn in the housing market since 2007 reflects first of all a decline in demand, in a context of tighter financial conditions and prices considered too high with respect to changes in incomes and rents.
- The price decline nevertheless remains limited by the downward elasticity of the housing supply, with reductions in the inventories of new housing put on the market and strong declines in building permit applications and housing starts.
- The concomitant slowdown in housing supply and housing demand has translated into a marked reduction in activity in the residential construction sector.
- The housing market downturn should remain distinctly less pronounced than in the US or Spain due to specific features of the French market, including low household debt, the lack of a subprime mortgage market, and implementation of measures to support both the supply side and the demand side of the housing sector.
- The recovery in new-home sales since the start of 2009 and the resulting decline in inventories, if confirmed in the figures for the second half of 2009, could augur the beginning of an improvement in activity sometime in 2010. However, in the very short term, the most likely scenario appears to be a continuing decline in housing prices at a moderate rate (in year-on-year terms)-despite initial signs of an upward trend in quarter-on-quarter terms.

Changes in nominal and real house prices



Sources: INSEE-Notaires index, OECD

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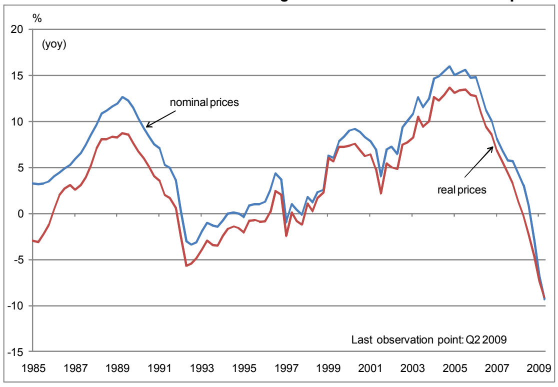
1. After very strong growth from 2003 through 2007, the housing market has experienced a distinct degradation since the end of 2007

Housing prices have exhibited strong trends in the recent period. Following strong growth between 2003 and 2007, when average annual price increases exceeded 10%, prices for existing homes fell by 9.3% in nominal terms and 9.1% in constant euro terms from the late-2007 peak to the end of the second quarter of 2009, according to the Insee-Notaires index (see Box 1).

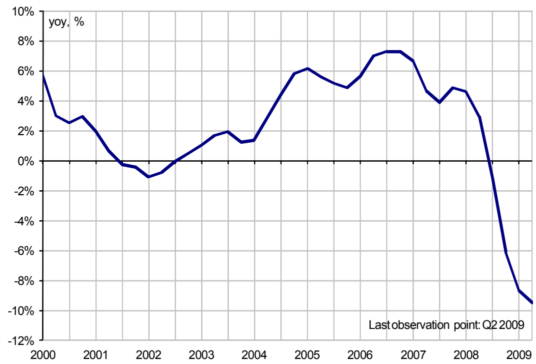
Chart 1: Changes in nominal and real house prices



Sources: INSEE-Notaires, OECD

These price changes appear to result from changes on the **household demand side**: after rising by an average 4.5% yoy between 2003 and 2007, household investment in construction[1] has fallen by an average 6.4% yoy rate since mid-2008.

Chart 2: Household investment in construction

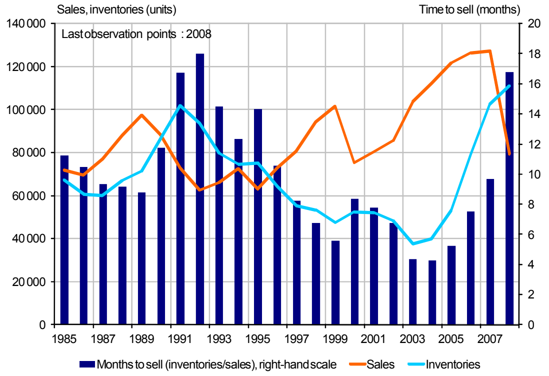


Sources: Quarterly accounts, INSEE

The downturn can also be observed in the **supply of new housing**:

- Throughout the housing market upturn, the number of new dwellings put on the market substantially exceeded sales, thus increasing **new housing** inventories: those inventories, after reaching a historic low at the start of 2004 (close to 35,000 units), increased considerably and exceeded 100,000 units in 2008. With the downturn in demand since mid-2008, developers drastically reduced the number of new housing units put on the market (–37% in 2008), though this failed to prevent a continuous rise in housing inventories.

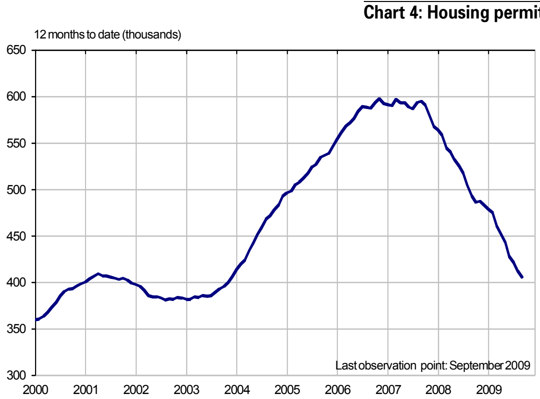
Chart 3: New home sales



Source: MEEDDM

- The rise in new housing inventories led developers to reduce their applications for **housing permits**, which therefore fell sharply in 2008 (–17% for all new housing), causing a fall in housing starts (–16% for all new housing units), and a sharp drop in activity in the building construction sector.

Chart 4: Housing permits



Source: Sit@del2 (MEEDDM)

(1) Household investment in construction includes the acquisition of new housing units and outlays for home maintenance and improvements.

Box 1: **Measuring used housing prices**

The two most widely cited sources of data on existing home prices in France are the Insee-Notaires index and the Fnaim index.

Insee, in collaboration with the Chambres de Notaires (civil-law notaries), publishes used housing price indexes each quarter. The Insee-Notaires indexes, which extend back to 1996, are the standard for examining the housing market in France. Calculated from a very broad sample of sales representative of total transactions registered by the notaires, the indexes are based on a rigorous methodology established by Insee, published on the Insee website, and implemented under the oversight of a scientific council, the Conseil Scientifique des Indices Notaires-Insee. Index quality is monitored each quarter by Insee.

The notarial databases have accumulated close to 12 million property registration records since 1990, 8.5 million of which relate to flats and houses. Approximately 850,000 property registration records are added each year; these cover two-thirds of total transactions.

The Fnaim index is calculated by the National Federation of Real-Estate Agents (Fédération NAtionale des Agents IMmobiliers), whose principal activities include disseminating information on its members' sales or undertakings to sell. The database produced by Fnaim includes about 140,000 transactions a year (undertakings to sell and deeds of sale), compared with 520,000 deeds of sale in the notarial databases.

According to the latest Insee Housing Survey, 45% of transactions are conducted with an intermediary (a real-estate professional, a real-estate agency, or a notaire). Fnaim claims that its membership covers 62% of real-estate agents in France. Its field of observation is thus narrower than that of the notaires, but it publishes price information earlier, based on undertakings to sell. The Fnaim methodology is not public.

The Fnaim figures appear to be inconsistent with changes in the tax basis for property transfer duty as tracked by the French tax authorities. In addition, the seasonality of the Fnaim indexes (low seasonality, with the same order of magnitude for houses and flats) differs from observations in the academic literature.

In February 2010, the French National Statistical Information Board (Conseil National de l'Information Statistique, CNIS) is expected to issue recommendations to improve the statistical quality and the dissemination of short-term statistics on the real estate and construction sectors.

Table 1: Comparison of INSEE and FNAIM price indexes

Changes in home prices (yoy, %)	INSEE - Notaires index	FNAIM index
2008	−3	−9.9
2007	+5.7	+2.6
2006	+10	+6.5
2005	+14.8	+10
2004	+16	+14.1
Total, 2004-2008	**+50**	**+24**

2. The determinants of the current house price cycle

2.1 The French housing market is characterized by a structural imbalance resulting from inadequate supply relative to growth in the number of households

- Supply restricted by insufficient production capacity and construction lead times

The housing supply is structurally constrained by **insufficient production capacity** in the construction sector. According to the Insee relevant business outlook survey, an average 61% of building-sector enterprises have had trouble recruiting since September 1993. Further, long construction lead times make it harder to adjust supply to demand fluctuations, thus creating an additional risk for home builders, relating to uncertainties over final demand, that further weighs on housing supply.

- "Structural demand" buoyed by sociodemographic developments

The increase in housing demand results from population growth and growth in the **number of households**. The number of households rose at an average annual rate of 1.2% between 1975 and 2005, or faster than the total population, which increased at an average annual rate of 0.5%. This is explained by the combined impact of population aging-as the elderly are more likely to live alone than young people-and by decohabitation on an equivalent age-structure basis (as divorces rose); these trends are evidenced in a decline in the number of persons per household (2.3 in 2005, compared with 2.9 in 1975).

The potential demand for housing, which corresponds to the annual number of new dwellings required to absorb the number of households by 2020, is thus reported to be roughly 350,000 to 400,000 dwellings a year until 2010, and on the order of 320,000 to 370,000 annually over the next ten years.[2]

2.2 Short-term changes in demand are explained more by financial conditions than by sociodemographic factors

Over the recent period, demand from households is explained fairly well by changes in **financial conditions,** which were highly favourable between 2003 and 2006, before tightening starting in 2007.

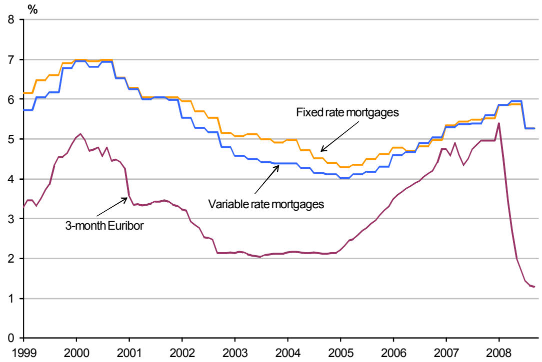
Changes in financial conditions can be assessed via various indicators.

- **Rates on new mortgages** declined substantially

(2) Jacquot A. (2007), "La demande potentielle de logements: un chiffrage à l'horizon 2020" (The potential demand for housing: quantification for 2020), *Notes de synthèse du SESP No. 165*.

between 2001 and 2005, from 7% to 4%, due to the reduction in ECB key rates over the period and narrower margins on mortgage loans, which banks used to attract personal banking customers. Rates on new mortgages then moved higher, reaching 6% in mid-2008, due to the ECB's tighter monetary policy between 2005 and 2007 and the sharp increase in bank funding costs (3-month Euribor rates) during the financial crisis.[3]

Chart 5: Changes in rates on new mortgages, and 3-month rate



Source: Datastream

- **Longer-term mortgages** allowed households to maintain their purchasing capacity[4] in an environment of rising home prices. The percentage of new loans exceeding 20 years increased from 16.4% in 2001 to 63.2% in 2007 (and 57.6% in 2009), and offerings of 30-year loans rose considerably until 2007.

Chart 6: Household purchasing capacity

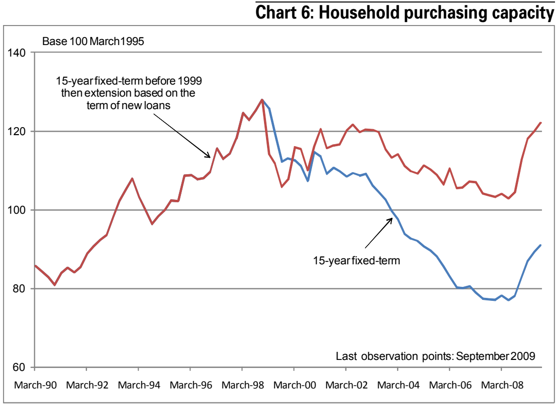
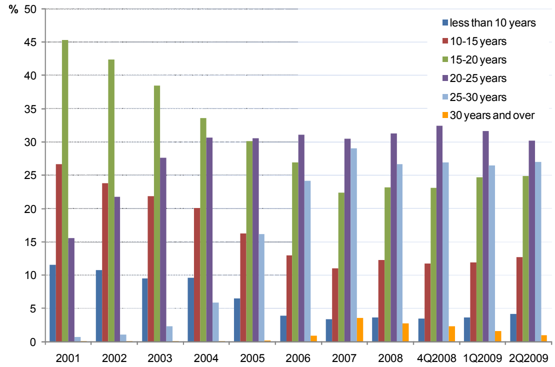


Chart 7: New mortgage loans by term at origination



Sources: Crédit Logement/CSA Observatoire du Financement des Marchés Résidentiels

2.3 While the upturn may have been encouraged by certain public policies, particularly those motivated by social objectives, public action has become clearly countercyclical since the downturn began

During the period of sharply rising home prices, public policies sought to contain rising prices by stimulating supply; these policies took the form of tax breaks (a series of tax incentives for buy-to-let investment since 1986,[5] and subsidized loans to finance low-rental housing),[6] or legislative and regulatory measures, e.g., the law on urban solidarity and renewal (the "SRU law") providing for the construction of low-rental housing, and housing-to-office floorage ratios.

During the period, however, the policies addressing the property sector also had social objectives that made them **procyclical.** The **measures** for first-time buyers and measures intended to correct a market imperfection (solvent, modest-income households excluded from the market because unable to make the appropriate down payment) thus stimulated demand and activity during a period of sharply rising prices.

Examples include the PTZ zero-interest loan,[7] the Pass-Foncier program,[8] and the tax credit under the Labour, Jobs and Purchasing Power (Tepa) Act.[9] **Environmental policies** that increased the cost of building homes may have also contributed to the price increase.

(3) Bank margins, on the other hand, have continued to narrow, as the net interest margin after general and administrative expenses was negative for the third straight year, coming to –0.3% in 2008, according to the Banque de France; see *Bulletin officiel du CECEI et de la Commission bancaire, no. 17*, July 2009.

(4) Purchasing capacity corresponds to the maximum number of square metres that can be purchased by a household with average gross disposable income (GDI). For further details see "Prix immobiliers et sphère financière" (Property prices and the financial sphere), *Diagnostics Prévisions et Analyses Economiques* no. 90, November 2005.

(5) The arrangements known as the Méhaignerie, Quilès-Méhaignerie, Périssol, Besson, Robien, Borloo Populaire and, more recently, Scellier schemes stimulate supply insofar as they relate to new housing units for buy-to-let investors and not owner-occupiers.

(6) Prêt locatif à usage social (PLUS, loan for building low-rental housing), Prêt locatif aidé d'intégration (PLAI, subsidized loan for low-rental housing for the integration of low-income households), Prêt locatif social (PLS, another loan for building low-rental housing).

(7) A means-tested supplementary zero-interest loan extended to first-time buyers for the purchase of a new or used home.

(8) Under this arrangement, a property asset is acquired in two stages, as the buyer repays the building first and then the land.

(9) Tax credit for interest on mortgages to purchase a new or used home intended as the primary residence.

Since 2008, public policies have clearly sought to limit the effects of the downturn by stimulating both supply and demand. The economic stimulus plan includes numerous measures with a total cost of €1.4bn over the two-year 2009-2010 period:

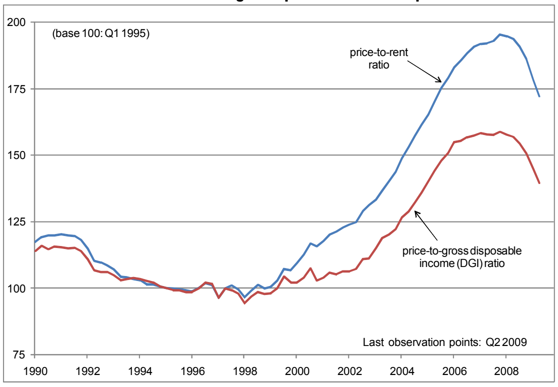
- The easing of the conditions for HLM organizations (moderate rent housing agencies) to buy off-plan property. By end-June 2009, this measure had provided funding, or funding agreements, for 17,000 of the planned 22,000 low-rental housing units.[10]
- Loans for building low-rental housing (PLUS) and subsidized loans for low-rental housing for the integration of low-income households (PLAI),[11] which should facilitate the construction in 2009 and 2010 of an additional 30,000 low-rental and very-low-rental housing units.
- Extension of the tax incentives for buy-to-let investment: developers estimate that by the end of 2009, 55,000 new housing units were bought under the new Scellier tax reduction scheme,[12] compared with 35,000 in 2008 under the Robien tax incentive scheme (after 68,700 in 2005).
- A temporary measure to double the principal amount of zero-interest loans.[13]

2.4 The price increase in the past may have been somewhat excessive, relative to the usual price determinants

In theory, the structural changes in housing supply and demand should cause home prices and rents to move in parallel.

Yet the price-to-rent ratio increased by 46% between the first quarter of 2003 and the 4th quarter of 2007. And while the trend in home prices was close to the trend in household gross disposable income between 1965 and 2000[14] (except for the late-1980s property crisis in Paris and suburbs), the price-to-disposable income ratio increased considerably, by 38%, over the 2003-2007 period. These changes seem to indicate that a portion of the price increase can be considered excessive relative to long-term trends.

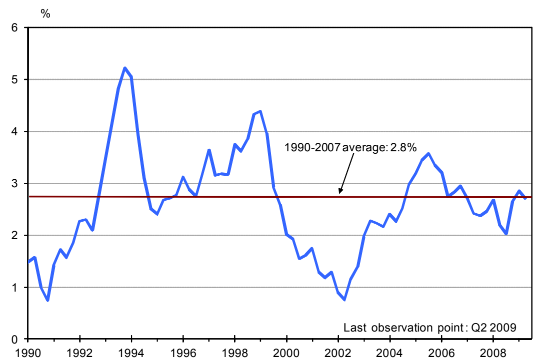
Chart 8: Changes in price-to-rent and price-to-GDI ratios



Source: DGTPE calculations

This approach, however, fails to account for valuation effects linked to changes in interest rates; and part of the change in the home price-to-rent ratio could be attributable to changes in interest rates and to rigidities.[15] If an adjustment is made for this effect, by measuring a real-estate risk premium,[16] it is observed that, while the risk premium increased considerably between 2002 and 2005, it is currently close to the average level of the 1990-2007 period;[17] this tends to minimize the relevance of the analysis presented above.

Chart 9: The real-estate risk premium in France



Source: DGTPE calculations

Note: calculated with the observed 10-year rate and the average of the yoy percentage change in rent over the past three years.

(10) The program covered 22,000 low-rental housing units and 8,000 non-regulated units. Source: DGALN.

(11) The PLUS and PLA-I are subsidized-interest loans that also make the borrowers eligible for State subsidies permitting HLM organizations to fund the production of low-rental housing.

(12) Personal income tax reduction equal to 25% of the total cost (not to exceed €300,000) of a buy-to-let investment made in 2009 and 2010 in a new or off-plan housing unit, and 20% for an investment made in 2011 and 2012.

(13) In the first three quarters of 2009, 31.6% of new zero-interest loan extensions benefited from the doubling of the principal amount (Source: SGFGAS).

(14) Specifically, prices moved within the "Friggit tunnel" (±10% around the long-term average), see J. Friggit, "Le prix des logements sur longue période" (Long-run home prices), *Informations sociales no. 155*, September 2009.

(15) In France, rents are linked to a construction cost and price index.

(16) Calculated as the difference between the rental yield and the 10-year Treasury yield. For further details see "Prix immobiliers et sphère financière" (Property prices and the financial sphere), *Diagnostics Prévisions et Analyses Economiques no. 90*, November 2005.

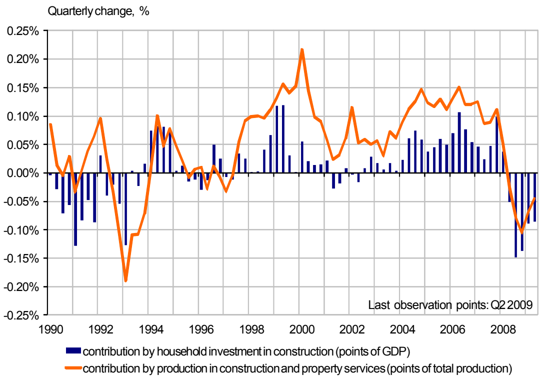
(17) Absent a satisfactory econometric equation for changes in real housing prices, the changes observed can be compared to variables with similar long-term trends (disposable income and rent). A property risk premium indicator of the kind presented here can thus be used. However, changes in the risk premium are closely dependent on changes in long-term interest rates, because rental yield and rents are relatively stable over the period; this is a limitation of the approach presented here.

3. Impact of changes in the housing market on activity and employment

Recent developments in the housing market have had a **significant impact on activity and employment**.[18] Over the 2003-2007 period, the contribution of housing to economic activity in the national income accounts (i.e., ignoring feedback effects) was significantly positive; households' investment in housing alone contributed 0.12 points of growth to total value added per year, on average; and the combined contribution of construction (including non-residential building) and property services to total production averaged 0.4 points of growth per year.

In terms of payroll employment, as defined for the national accounts, the construction and property services sectors contributed 0.2 points per year to total employment growth over the 2003-2007 period.

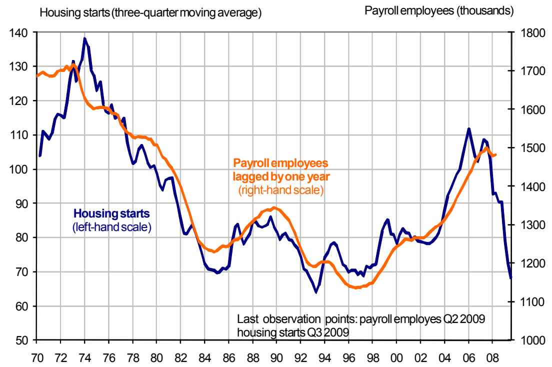
Chart 10: Contribution of the construction and property services sectors to GDP growth



Source: INSEE, DGTPE calculations

Since mid-2008, payroll employees in construction have fallen by close to 18,000, in line with the reduction in housing starts (see chart 11). The downturn in activity has been paralleled by a decline in business start-ups (excluding the freelance entrepreneurs) and an increase in business failures. In 2008, the number of business start-ups was 5% lower in the construction sector and 3% lower in the property sector than a year before. At the same time, business failures rose by 16% in the construction sector and 43% in the property sector.

Chart 11: Employment in construction



Source: INSEE, MEEDDM (Sit@del before 1986 and Sit@del2 after 1986)

Simulations with **macroeconometric models** yield results consistent with these estimates insofar as feedback effects are weak. With the NIGEM model it is estimated that a 10% fall in household investment, which translates into a 10% fall in housing prices,[19] would have a negative impact on activity, after three years, of 0.3 points of GDP, ignoring wealth effects (lower consumption following the decline in real-estate wealth), and a negative impact of 0.5 points of GDP after three years, taking account of a wealth effect arbitrarily set at 2.5%.[20] Applied to the 2003-2007 house price cycle, the results are similar in magnitude but slightly higher than those computed by measuring the contributions in the national-income accounts (a positive effect between 0.15 and 0.25 points of growth per year on average). The weakness of the feedback effects is chiefly explained by the weakness of the wealth effect in France.

4. While the special characteristics of the French housing market appear to rule out a brutal adjustment, activity can be expected to pick up sometime in 2010

4.1 A real-estate crisis similar to those affecting the US and Spain is highly unlikely, because of the characteristics of the French market

- **So far, the adjustment in the housing market has been considerably smaller in France than in the US and Spain**

Since their recent peaks, house prices have fallen substantially in the US (with the Case-Shiller index down 30% since 2006), the UK (where the Halifax index is down 19% from the 2007 peak) and to a lesser extent in Spain (down 9.4% since the first quarter of 2008).

The consequences of the slowdown in demand have been visible in the new-housing construction statistics since mid-2007, with a sharp decline in building permits and housing starts in the US and most major European countries, particularly Spain and the English-speaking

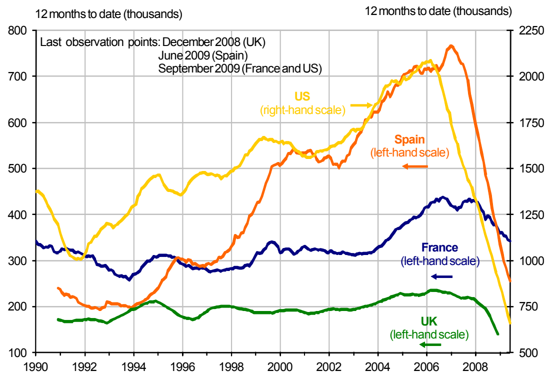
(18) In 2008, the construction and property services sectors accounted for 14% of total production and just over 8% of total employment.

(19) The price elasticity of housing investment is assumed to be unity.

(20) The numerous analyses of the relationship between asset wealth and consumption estimate the wealth elasticity of consumption to be between 2% and 8% depending on whether the concept examined is total net wealth, or financial or real-estate wealth (see, e.g., "Asset wealth and consumption: weakly correlated in France, strongly in the United States," INSEE, *Conjoncture in France*, in English [original French: "Richesse patrimoniale et consommation: un lien ténu en France, fort aux États-Unis", *Note de conjoncture de l'INSEE*], December 2007). For the purposes of this second estimation, it is arbitrarily considered that a 10-percent increase in real-estate wealth causes consumption to rise by 0.25%, i.e., that the effect is 8 times weaker than in the US.

countries. In Spain, which is the most affected European country, home building permits fell by over 59% and housing starts by nearly 42% in 2008. Severe declines were also reported in the US, where building permits fell 36% and housing starts 33%; and in the UK and Ireland, where housing starts fell 35% and 53%, respectively. The decline was smaller in France, where building permits declined 17% and housing starts 16%.

Chart 12: Housing starts



Source: National data

These strong adjustments translated into a very considerable decline in residential property investment starting in 2006 in the US (with a 23% drop in 2008), and then in Spain (–11%) and the UK (–10%), and to a far lesser degree in France (–0.5%).

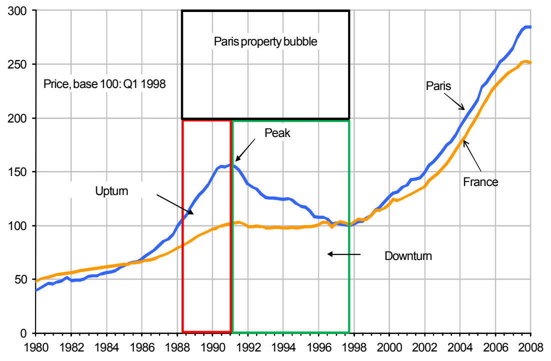
- **French household debt is sustainable**

The risk of default on mortgage loans remains low in France, where lending conditions are based on the borrower's capacity to service the loan until maturity, and therefore on the stability of the borrower's income. The sustainability of the debt is assessed by the debt-to-income ratio; in practice, French banks tend to set a maximum payment ratio equal to one-third of a household's disposable income. This method of assessing the risk of default is thus independent of changes in home prices and the resulting wealth effect, unlike the English-speaking countries, Spain, Denmark and the Netherlands, in particular, where property-value based mortgage loans are the rule. In those countries, where loans are secured by the value of the property asset, households can make mortgage equity withdrawals for purposes other than home purchase against the equity in their property. Because of these risk assessment methods, residential mortgage loss rates incurred by lending institutions are structurally low in France. 2008 mortgage loan delinquencies in France came to less than 1% of outstanding balances (0.93%), compared with 1.49% in 2001. Further, despite increases in house prices and household indebtedness in recent years, household debt remains sustainable in France (75% of gross disposable income in Q2 2009), and well below the levels in the other countries (125% in the US, 130% in Spain, and 148% in the UK).

- Analysis of the 1990s bubble indicates that price declines occur gradually in France

During Paris's property bubble of the early 1990s,[21] prices peaked in 1991, and fell by 10% the first year after the peak and 20% the second year. Prices continued falling to 1998, with a peak-to-trough decline of 35%.

Chart 13: Analysis of the 1990s bubble in France



Source: DGTPE calculations

According to OECD research,[22] house price cycles last approximately nine years in France, with an upturn of about five years followed by a 4-year downturn. This analysis, however, supposes that the profile observed in the 1990s is reproduced unchanged in the recent period, despite the changed environment (e.g., lower interest rates, public policies to stimulate demand, and rapid adjustment in the housing supply).

4.2 Short-term outlook

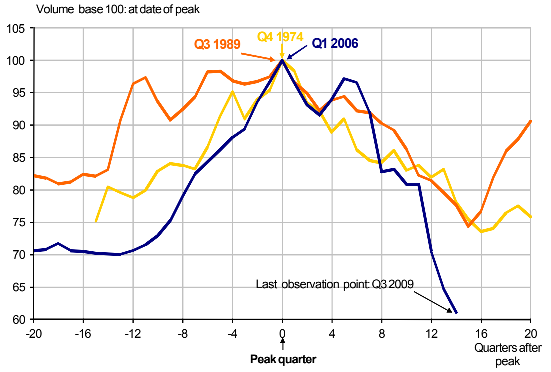
After several quarters of sharp contraction, **demand** is reported to have resumed growth in recent months, according to Insee's quarterly business survey of real-estate development released in October 2009.

The only impact of the upturn in demand so far has been to **reduce new housing inventories**; they now account for only 3.8 quarters of reservations, compared with an average of 5.9 quarters in 2008, and up to 7.4 quarters in Q4 of 2008). Time on the market returned to 9 months in Q2 of 2008, compared with an average 18 months in 2008 and 22 months in Q4 of 2008.

The positive effects of the recovery in housing demand should thus translate into higher activity in the construction sector some time in 2010. An earlier pickup is unlikely due to the sharp drop in housing starts observed in the past several quarters, which continued to weigh on activity in late 2009 and at the start of 2010 due to construction lead times. The recovery in demand, the fall in inventories, and the initial positive signs from building permits in the second half of 2009 nevertheless point to a rebound in housing starts in early 2010, with a favourable impact on activity in 2010. The current adjustment thus appears to be somewhat more pronounced than those in earlier episodes (see chart).

(21) The property bubble is assumed to begin in 1988, when housing price growth exceeded 10%.
(22) *OECD Economic Outlook No. 78*, 2005.

Chart 14: Comparison of housing-start cycles



Sources: MEEDDM, DGTPE calculations

The main risk weighing on this scenario is household behaviour, in that demand from households, which appears to have picked up for several months now, could remain weak. **A positive factor** could come from the ramping-up of the **effects of the stimulus programme**, which should provide support for activity in the building sector for the coming months.

Antoine BOUVERET, Nicolas COSTES, Cécile SIMON

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Ministère de l'Économie,
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Direction Générale du Trésor
et de la Politique économique

139, rue de Bercy
75575 Paris CEDEX 12

Publication manager:

Benoit COEURÉ

Editor in chief:

Jean-Paul DEPECKER
+33 (0)1 44 87 18 51
tresor-eco@dgtpe.fr

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