BBVA Research

United States

Real Estate Outlook

Second Quarter of 2010

- Residential investment is back.
- In 2010, house prices will slightly appreciate.
- CRE recovery will wait until 2011.
- Mortgage finance needs greater instrument diversification.

BBVA Compass

Contents

Letter from the BBVA Compass Chairman

It is my pleasure to introduce to you this inaugural issue of a publication from our BBVA Research team that provides relevant insight into the real estate market.

Recognized as one of the world's strongest financial institutions, the BBVA Group continuously invests in research, analyses and forecasts such as reported in this new publication, which will be distributed semi-annually. By sharing this valuable information with stakeholders across the BBVA Compass Sunbelt Region, it is our hope that we enable you to reap the benefits of the work of our economic experts. We trust that our research team's knowledge about the economic outlook in real estate will help you enrich your insight and guide your business strategies so that together we can work to build stronger communities.

Since 2008, when BBVA Compass launched our first U.S. Regional Watch, we have sought out every possible avenue for sharing our team's research with our stakeholders. From seminars and webinars to forums and presentations, BBVA Research not only produces periodic publications, but also travels to interact with our customers in your respective communities.

A pivotal point in the evolution of BBVA Compass' work was establishing our university partnerships with four outstanding universities, namely, The University of Alabama, The University of Arizona, The University of Colorado at Boulder, and the IC2 Institute at The University of Texas at Austin. By interacting with their faculty and students, BBVA Research reflects our bank's commitment to higher education, particularly in the business arena.

Encouraged by the overwhelming response in the communities we serve and listening to your needs and interests, we again are extending our efforts with this new publication. Our U.S. Real Estate Outlook represents another important resource for BBVA Compass' stakeholders, highlighting the best available information about residential and commercial real estate indicators and forecasts for the seven states in which we operate. Topics include the effects of housing on inflation, housing affordability ratios, price determinants and mortgage finance.

As we work together to help our communities get back on their feet after one of the worst economic recessions in decades, monitoring the housing market will be critical in developing business strategies to ensure that home ownership remains a cornerstone of healthy community development.

I hope you consider this inaugural issue of the U.S. Real Estate Outlook interesting, as well as beneficial. It exemplifies how you can count on BBVA Compass as a resource to help guide your business strategy and meet your needs for financial products and services.

Sincerely,

Jose Maria Garcia-Meyer

BBVA U.S. Country Manager and BBVA Compass Chairman

Editorial

BBVA Research is proud to release the first issue of the U.S. Real Estate Outlook. Our objective is to present deep and thorough economic analysis in the tradition of the BBVA Group to help us recognize opportunities and risks in order to better forecast economic outcomes.

In 2010 the real estate sector will be characterized by two main trends. First, residential activity will continue to improve thereby supporting the overall recovery process. Second, and in sharp contrast, the commercial real estate (CRE) segment will experience a significant decline that will subtract from overall output.

Residential activity is recovering after a profound meltdown that triggered the worst economic contraction since the Great Depression. Between 2006, when home prices started adjusting downward, and the first quarter 2009, when the economy was experiencing the worst part of the cycle, households' net worth in real estate declined 54% or about $8.3 trillion dollars. This unprecedented adjustment had major effects on the economy which ultimately resulted in the worst decline residential construction and employment has ever seen. By year-end 2008, the share of residential investment to overall GDP had dipped below 3% for the first time in the post-war era and by year-end 2009 it stood at its lowest level in history.

The wealth effect on households was so severe that the decline in personal spending prompted a sharp correction in businesses' expectations, investment plans and labor demand, which in turn contributed to a second-round of adjustments that triggered a financial crisis and unprecedented fiscal and monetary stimulus. These policies helped to ease pressures and by year-end 2009, residential net worth had recovered almost 11%, roughly $770 billion. To a great extent, the improvement reflected a rebound in home prices, which we anticipate to continue throughout the year. This will improve household wealth, consumer confidence and ultimately personal spending. A solid recovery in private consumption will be beneficial to residential construction and mortgage activity and in turn, to capital spending and labor demand, which will play a crucial role to assure a self-sustained recovery. According to our analysis, ongoing improvements in affordability ratios and strong demographics support further home price appreciation and a rebound in construction spending by year-end 2010.

Prospects for the CRE market are gloomy. This segment tends to lag overall GDP during recoveries and thus, not surprisingly, the deepest part of the adjustment is occurring in 2010, a year after output bottomed out. Lower economic activity reflected by declining sales and production levels, along with higher unemployment, has generated excess available CRE supply which has resulted in declining property prices and higher capitalization ratios. This in turn has diminished businesses' net worth and the value of collateral thereby limiting investment in structures and lending demand. We expect these trends to persist as prices continue adjusting downward. This view is supported by our econometric models which suggest that further price adjustment is needed. Thus, during 2010 non residential investment in real estate will subtract from GDP growth. Given the depth of the economic contraction and the high vacancy ratios we do not expect an improvement in CRE until mid-2011.

In this issue we also provide an alternative perspective that could help the mortgage industry at a time when Congress moves closer to passing new laws aimed at improving financial regulation. An efficient regulatory and institutional framework is crucial for a strong and sustainable real estate recovery which is the backbone of our economy and which, in so many ways, illustrates the American Dream.

We expect that our readers will find this publication useful and valuable.

Sincerely,

Nathaniel Karp

BBVA U.S. Chief Economist

U.S. Economic Outlook

National Outlook

The economic recovery has taken hold, but challenges remain

Heading into 2010, the U.S. economy is slowly pulling itself out of the severe recession that began in December 2007. Although economic activity contracted 2.4% in 2009, it started to rebound in the second half of the year and it continued in the first quarter of 2010. We expect this trend to persist throughout the year. According to our forecast, U.S. GDP will grow around 3.0% in 2010 and then slowdown to an average of 2.5% in 2011 and 2012.

Consumer demand began to pick-up, as did business investment in equipment and software, in the second half of 2009. Furthermore, residential real estate investment grew in 3Q09 for the first time since 1Q06 and economic growth in emerging markets, particularly Asia, stimulated demand for exports. The economy has shown signs of widespread improvement, but concern lies in the pace of recovery as there are many challenges that still need to be overcome.

While household and business demand has picked up and exports expanded, deleveraging and limited access to credit will determine the economic recovery

Consumption led the recovery in 2009. Consumer spending grew for three of the four quarters and surpassed 1Q09 levels by 1.8% in 1Q10. While the pace of expansion was weak, the overall performance was positive considering the poor economic environment facing consumers due to massive layoffs and declines in financial and real estate assets. Consumption, however, is forecasted to grow 2.2% year-over-year (YoY) in 2010, which is below the historical average of 3.3% YoY, due to many challenges that will limit the pace of recovery. The labor market remains weak and businesses have reported that they will hire conservatively, which will affect consumer confidence and limit wage growth. Furthermore, consumer credit outstanding declined $112B in 2009, the result of individuals paying off existing debt, unwilling to take on new debt and banks' conservative lending practices.

Looking forward, non-residencial investment (NRI) in equipment and software could play an important role in the recovery. While business spending on equipment and software declined 16.6% YoY in 2009 due to a sharp drop in demand and falling corporate profits, it resumed in the second half of 2009. Business conditions are still weak compared to the pre-crisis environment, but corporate profits are recovering and business confidence has picked up. Furthermore, industrial production of high tech goods, as well as new orders for capital goods, have exhibited steady rising trends in recent months, indicating that commercial investment in equipment and software could pick up further and increase 10.4% in 2010.

Chart 1
BBVA U.S. Monthly Activity Index & Real Gross Domestic Product (4-Q % change)

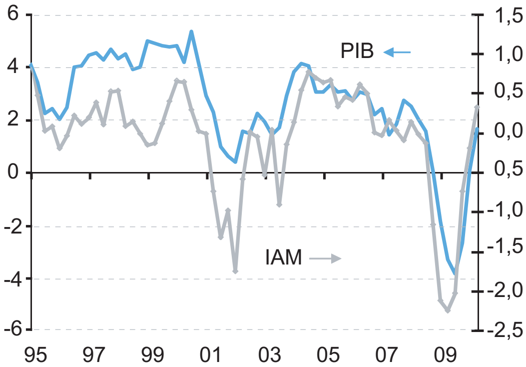
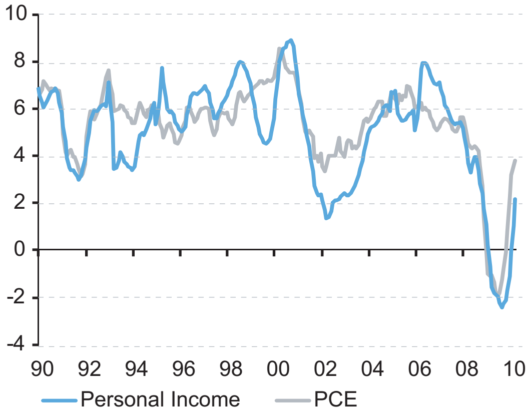


Chart 2
Personal Consumption Expenditures & Personal Income (YoY % change of 3 mma)



Source: BBVA Research & BEA

Source: BEA

However, a major concern for the future of NRI is business deleveraging. While credit standards for businesses have eased, according to the Senior Loan Officer Opinion Survey, the amount of commercial and industrial loans outstanding at commercial banks dropped 16.4% YoY in 4Q09. This result suggests that businesses are not yet willing to take on new debt, perhaps due to uncertainty in the pace of recovery and the shape of demand. Exports are also expected to provide support for the economic recovery. After dropping sharply in late 2008 and early 2009 due to the global recession, they began to grow in 2H09. Emerging markets are leading the global recovery, particularly those of Asia and Latin America. As a result, their demand is driving U.S. export growth. China's strong growth and aggressive investment has cause exports to the country to surpass 2008 levels by over 60%. Exports are forecasted to expand by 10.1% in 2010, indicating that external demand will not only contribute to GDP growth, but could also stimulate job creation.

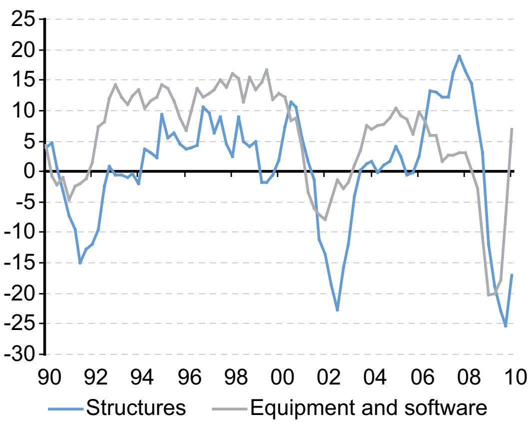
While deflationary pressures have eased, economic slack and stable inflation expectations will keep inflation contained

The economic recovery is not expected to generate inflationary pressures in 2010. Headline inflation is forecasted to average 2.0%, while core inflation will average 1.5%. In fact, the latest inflation data illustrated that downward price pressures remain prevalent. Core inflation dropped to 1.1% in March 2010 from 1.8% in December 2009. One explanation is the declining trend in rent, which has depressed the shelter component. Nevertheless, apart from shelter, price pressures remain subdued. The economy is improving, but economic activity is emerging from such low levels that economic slack remains. This is evidenced by the high unemployment rate and the low level of capacity utilization. Furthermore, data on productivity and costs illustrate that producers' labor cost per unit is declining at a faster rate than prices, while their profit per unit is rising. As a result, producers have room to drop prices further while still maintaining a profit.

In order to mitigate the financial and economic crisis, the Federal Reserve enacted securities purchase programs in 2009 that greatly increased the liquidity in the system. While the purchases were successful in improving conditions in private credit markets, they resulted in U.S. banks holding $1.1 trillion reserves with Federal Reserve Banks. Such a large quantity of reserves could drive inflation if introduced into the system at once. As a result, the Fed's primary challenge in 2010 will be to reduce the level of excess reserves using tools that will allow it to maintain control of monetary policy. Demand for the fed funds market has diminished due to the amount of excess reserves, so the Fed has proposed new monetary policy tools such as paying interest on reserves, reverse repurchase agreements and term deposits.

Chart 3

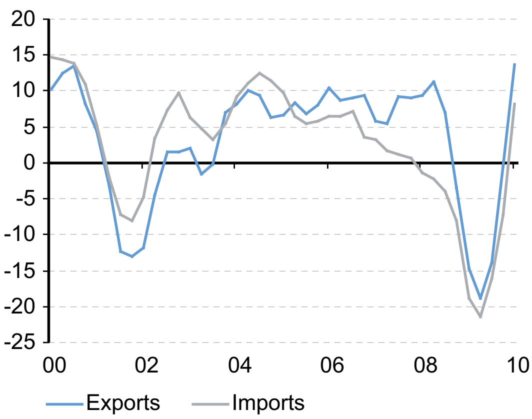
Non Residential Investment (Yoy % Change. Quarterly data)



Source: BEA

Chart 4

Export & Imports of Goods (2005 chain-weighted dollars, 12 month % change)



Source: U.S. Census Bureau

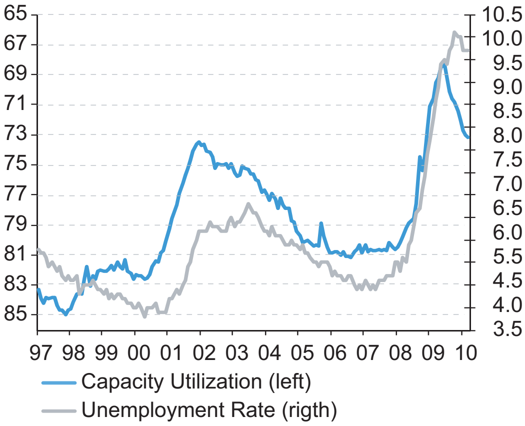
The economy began adding jobs in the first quarter of 2010, but the risk of a low job recovery remains

The economy has shed 8.3 million jobs since the recession began, which pushed the unemployment rate up to 10% in 4Q09, a level not experienced since 2Q83. In 2009, the number of job losses slowed significantly and in the first quarter of 2010 the labor market added more than 160,000 new jobs. The general trend points to stronger job creation along 2010 but the risk of a low job recovery remains. The temporary help services sector, a subcategory of professional business services, has exhibited a steady trend of job creation since 4Q09. This is the first sector to resume hiring and could be a leading indicator that permanent hiring could start again. In addition, the manufacturing sector added jobs for the first time in the 1Q10 and is expected to continue to do so as industrial activity picks up further. Also the construction sector generated some new jobs in March 2010 for the first time since the summer of 2007.

Nevertheless, unemployment is forecasted to remain high at an average rate of 9.4% in 2010 as the labor market recovers slowly. Businesses will remain constrained by weak demand, tight credit markets and uncertainty about the pace of recovery. All of these factors will cause companies to maintain conservative hiring practices.

Chart 5

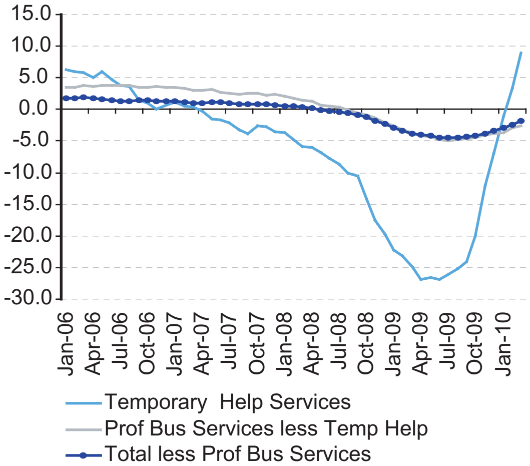
Capacity Utilization & Unemployment Rate (inverted scale & %, %)



Source: BLS & Federal Reserve

Chart 6

Non-Farm Payrolls (YoY % change)



Source: BLS

BBVA Compass Sunbelt Region Outlook

The regional picture shows deep differences among states but much potential

At the regional level, several economic indicators improved in the last months of 2009 and first quarter of 2010 confirming that the output levels are beginning to increase. Yet, the strength of the recovery is not homogeneous and performance in some states is likely to lag the overall economy. Within the BBVA Compass Sunbelt Region, the economic outlook remains solid but heterogeneous.

Alabama's economy is highly sensitive to the automobile industry and the state's recovery in the near term is dependent on the industry's performance. Recovery is underway, but it is occurring at a slow pace. In the short-term, a jobless recovery seems likely as firms adapt production capacity to reach a higher level of output per unit of labor. The housing market could give a boost to the state economy as the downward adjustment was milder than in other states. Although domestic demand for autos is projected to remain weak in 2010, the industry will benefit from faster economic growth overseas, which will boost Alabama's exports of transportation equipment. Overall, Alabama's GDP growth is expected to be lower than that of the U.S. in the short and mid-term.

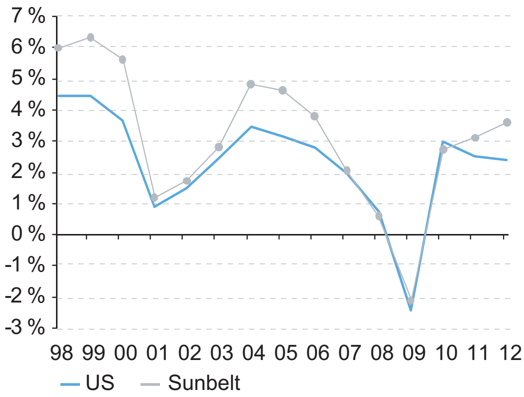
In 2010, Alabama's GDP growth will be positive; averaging a yearly increase of 1.8%, but employment growth will still be slightly negative, especially in the first half of the year. For 2011-2012, our GDP forecast indicates a 2.2% growth ratio, which will help the state labor market to recover. Once foreign demand for U.S. exports improves, Alabama's top firms will be the first to ramp up production and satisfy higher demand. Our analysis suggests that as exports of transportation equipment return to pre-recession levels, this upturn will add 1.0 percentage points (pp) to Alabama's GDP growth rate in 2010 and 0.6 pp in 2011.

Although the unemployment rate is still very high and the real estate meltdown is not over yet, **Arizona**'s economy appears to be recovering in the first months of 2010. Job gains in professional and business services, wholesale trade, education and mining sectors suggest overall net employment growth is on the horizon. For 2010, our state's GDP forecast points out to a 3.2% increase, slightly above the national average. Rapid population increase, exports growth and the recovery of the real estate industry will be the main drivers of the state economy in the mid-term. In 2011 and 2012, state's GDP growth will average 3.8%, well above the national average.

In **California**, economic growth is falling behind the national average as the state faces significant challenges: continued fallout from its sizable housing meltdown, a fiscal crisis that could stall recovery and the 5th highest unemployment rate will limit growth. With approximately 2.2 million unemployed workers and a 9% decline in its labor force during the recession, California will experience slower recovery than the U.S.in the short term. In 2010, California's economy will grow 2.4% YoY vs. 3.0% expected for the U.S.

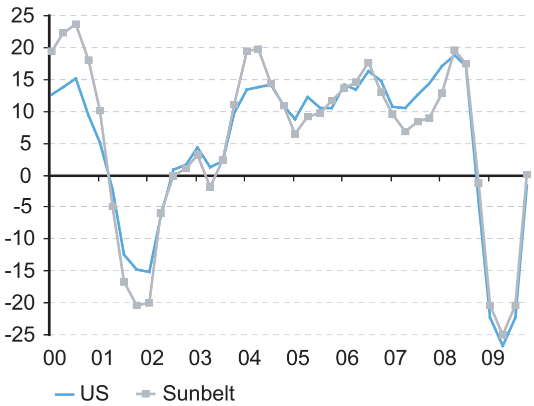
Nevertheless, the state's strengths such as industrial diversity, large volume of international trade and high value-added industries support a stronger economic recovery in the mid-term. In 2011 and 2012, our forecast indicates an average growth ratio of 3.1%, half a point above the national average.

Chart 7
GDP Growth (Constant. YoY % Change, Sunbelt: AL, AZ, CA, CO, FL, NM & TX)



Source: BEA and BBVA Research

Chart 8
U.S. & Sunbelt Exports (YoY % Change, Sunbelt: AL, AZ, CA, CO, FL, NM & TX)



Source: Wiser and BBVA Research

In **Colorado**, recent modest gains in employment in professional and business services and leisure and hospitality support the resurgence of activity. Although different economic activity indexes still show a weak environment and exports are at lower levels in 2010, Colorado will leverage its relatively stable housing market and lower-than-average unemployment rate to produce solid GDP growth that we estimate will be around 3.0%. The increase of the national NRI in equipment and software will drive the state economy to its potential in 2011 and 2012, when GDP growth could average 3.5%.

Florida was one of the states most affected by the real estate meltdown and had the hardest economic downturn of the last 25 years. Florida entered the recession before other states but recovery is already taking place and we expect a GDP growth rate of 3.0% in 2010, in line with the national average. In the first quarter of 2010, employment is already increasing and exports have been increasing since 3Q09. Florida's economy will continue to benefit from robust growth throughout Latin America, as these countries are its top-trading partners. Tourism will also rebound with the global recovery as well as the residential investment. In 2011 and 2012, our state's GDP forecast indicates 3.8% average growth.

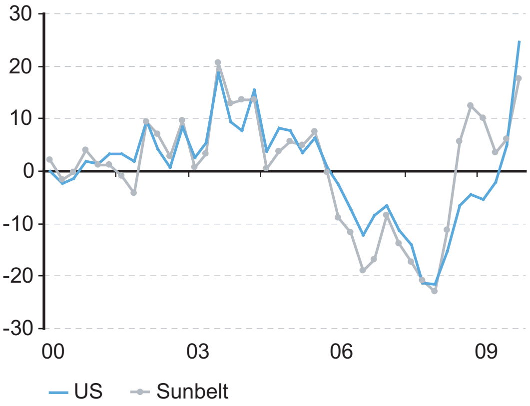
In the mid-term, although some challenges represent important limits to Florida's economic expansion we should not lose sight of the solid long-term prospects: the demographic dynamism that has been driving long-term growth is unlikely to disappear, as the population continues to age. In addition, the state benefits from an attractive geographical position and the fast growth in the state's high-tech industries will improve productivity gains and thus, potential economic growth.

New Mexico exports decreased deeply in 2009, which negatively affected the local labor market and activity. However, the large share of government in the local economy has limited the increase in the unemployment rate and the impact of the recession. Although employment in 1Q10 was still declining, the state's GDP will be positive in 2010 but below the national average with an increase of 2.5%. In 2011 and 2012, economic growth will be slightly above the 2010 estimate.

Despite the negative impact caused by the recession, we maintain that **Texas** will outperform the rest of the country. In the first months of 2010, there has been some good news in the Texas labor market: the number of mass layoff events is receding, unemployment rates appear to have stabilized and the professional and business services, financial activities and mining and logging sectors have created jobs since 4Q09. Professional and business services employment typically leads a recovery. The state GDP forecast points to 3.1% growth in 2010. Economic indicators suggest that domestic demand is picking up but at a slow pace. For 2011 and 2012, state's GDP growth forecast averages 3.6%.

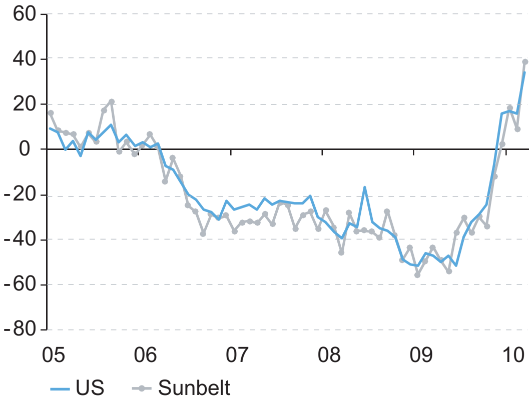
In 2010 the economy will continue to benefit from the fiscal stimulus; in fact, 56.3% out of the $16.95 billion awarded to Texas under the American Recovery and Reinvestment Act of 2009 has not yet been received. In addition, the primary engines of growth in the short-term are energy and exports, which have been driven by fervent economic growth overseas. These engines will not lose steam as emerging economies are expected to grow faster than developed economies in the next five years. Foreign demand for exports has helped to lead the economic recovery in Texas as it is the second largest state exporter in the nation. Thus, Texas is in much better economic condition than other states.

Chart 9
Existing Home Sales (Yoy % Change, Sunbelt: AL, AZ, CA, CO, FL, NM & TX)



Source: BEA and BBVA Research

Chart 10
Building Permits (Yoy % Change, Sunbelt: AL, AZ, CA, CO, FL, NM & TX)



Source: U.S. Census Bureau and BBVA Research

Effects of Housing on Inflation

After a sharp decline in 2009, headline inflation has started to increase in recent months. However, the core inflation (i.e. Consumer Price Index (CPI)) continues heading downward. The latest data shows an increase in headline inflation to 2.3% from 2.1% on a year-over-year (YoY) basis. On the other hand, core inflation continues to decrease and reached 1.1% on a YoY basis. This is a significant deceleration and recent trends indicate that core inflation could slow further.

One of the main contributors to this downward trend is the deceleration of shelter prices (i.e. rent and owner's equivalent rent), which is the result of the decline in home prices that began in 2007.

As a result, shelter prices helped contain core inflation. March's inflation report highlighted that downward risks to core inflation are still prevalent. Currently, shelter contributes 32% of the headline inflation index: owners' equivalent rent makes up 24% and rent contributes 6%. Furthermore, the shelter component comprises almost half of the core CPI which makes many economists focus on the trend of shelter component. Rent and owners' equivalent rent (the main components of shelter) have been trending downward since 2007 and have been applying downward pressure since 2009 due to decrease in home prices and high vacancy rates. The table below shows the annualized contribution of components of core inflation in one, three, six and twelve month horizons.

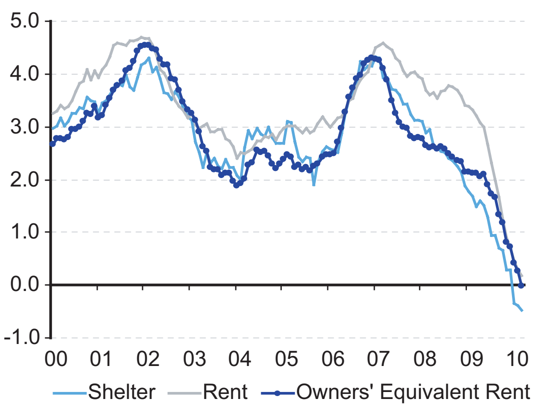
Table 1
Inflation Contribution. March 2010 (p.p.)

	1m	3m	6m	12m
CPI	0.76	0.93	2.02	2.3
Energy	-0.02	9.22	13.45	18.3
Food	2.78	2.22	1.48	0.2
Core	0.46	-0.18	0.89	1.1
Commodities	-0.79	-0.10	1.98	1.9
Services	0.94	-0.22	0.47	0.8
Shelter	-0.79	-2.23	-1.46	-0.5
Owners' eq rent	-1.33	-0.85	-0.82	0.0
Other	-0.62	-2.68	-1.67	-0.6
Other	1.70	0.66	1.32	1.3
Core ex Shelter	1.36	1.32	2.63	2.4

Source: BBVA Reseach

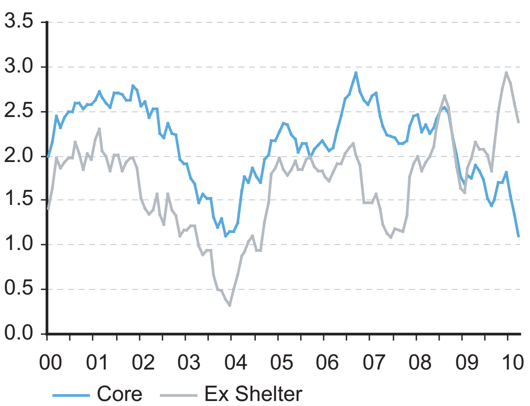
For the last 12 months, the negative contribution of the shelter component to core CPI has been significant. For example, in the last 3 months, shelter prices decreased 2.2% annualized, which puts significant downward pressure on inflation. The latest data also shows that when shelter's contribution is excluded from core CPI, core inflation increases to 2.4% from 1.1%. Therefore, core inflation excluding shelter helps us see the "real" trend in core inflation. It shows an increasing trend since mid-2007 and indicates an upward risk. Given that the housing market is stabilizing and home prices are expected to increase in the medium term, shelter prices could put upward pressure on both core and headline inflation in the medium term even with a large output gap. However, we still expect shelter to remain a drag on core services in the short term. In addition, the decline in core commodities is likely to become a trend, which would result in low but positive core inflation in the short term.

Chart 11
Shelter Price Indices (YoY % change)



Source: BLS

Chart 12
Core CPI (YoY % change)



Source: BLS

Residential Real Estate

General Trends

While there are factors that lead us to consider that the residential market has begun its recovery, other indicators suggest that it will remain slow in 2010

Since the second half of 2009, the residential real estate market has shown clear signs of recovery. Home sales have improved, the stock of homes for sale is falling and residential prices have stabilized. The outlook for 2010 indicates that demand will continue to expand and that prices will increase slightly. Affordability ratios will remain at attractive levels and there will be a significant correction to excess stock. However, the liquidity restrictions of the financial sector and the continued mortgage deleveraging process will limit growth of residential demand.

Signs of recovery in residential construction: investment in 2010 will be positive

Home construction has been affected to a greater extent in this recession than in previous ones. Its recovery will also be slower than in earlier occasions. Starting in the second half of 2009, leading indicators for the segment, such as housing permits and home starts have been showing a slight recovery that is being translated into an improvement in residential investment. In fact, in the second half of 2009, residential investment contributed positively to GDP growth for the first time since the first quarter of 2006.

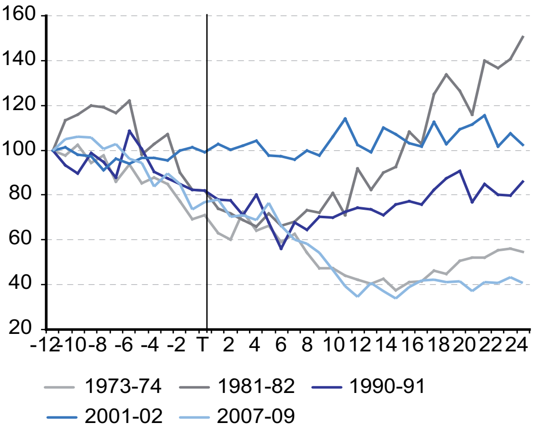
In any event, the housing recovery is not evenly spread across all segments: new home starts have increased slightly since mid-2009, while apartment starts, generally for the rental market, continue to fall. Public aid for home buyers and the good current affordability ratios of homes are providing a slight boost to home purchase, which has increased from an annual average of 5.0 million units sold in mid-2009 to nearly 6.9 million at the end of the year. In the case of rented homes, excess supply and reduced returns have meant that investment has been falling significantly since mid-2009.

In the short and medium term, there are three elements that will sustain residential demand: tax incentives, the fall in the cost of access to housing and demographic variables.

Tax incentives for housing were increased and extended to April 2010 and will also cover households who already had a home

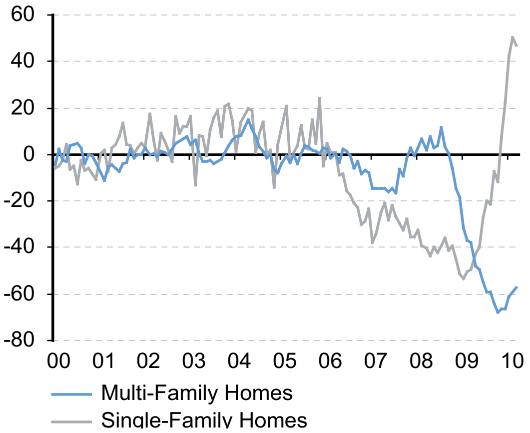
Tax assistance amounted to a total of $8.5 billion dollars for nearly 1.1 million first home buyers in 2009. In 2010, tax incentives for housing was targeted at all kind of homebuyers, whether first-time buyers or those who already owned a home. According to the government, the cost of the new plan, which ended in April 2010, will be around $10.8 billion, and it is benefiting a total of 1.5 million buyers.

Chart 13
Housing Starts (Index, T-12 months=100, T=start of recession)



Source: BBVA Research

Chart 14
Housing Starts (6mma YoY% change)



Source: U.S. Census

In the case of those considered first-time buyers (have not owned their main residence in the three years before the purchase), the incentive is applied to all those who buy their main residence before May 1, 2010 and complete the transaction before July 1, 2010. The tax incentive is 10% of the price of the home, up to a maximum of 8,000 dollars for those households with an income of less than 125,000 dollars in the case of a single income, or of less than 225,000 dollars in the case of two incomes. The price of the home may not be greater than 800,000 dollars.

In the case of existing home owners, it is considered that a household is not a first-time buyer if it has resided in its own home for five consecutive years and has owned the home for eight years before buying the new home. The tax incentive is equivalent to 10% of the price of the home, up to a maximum of 6,500 dollars. The time period for purchase and closing of the transaction is the same as for first-time buyers.

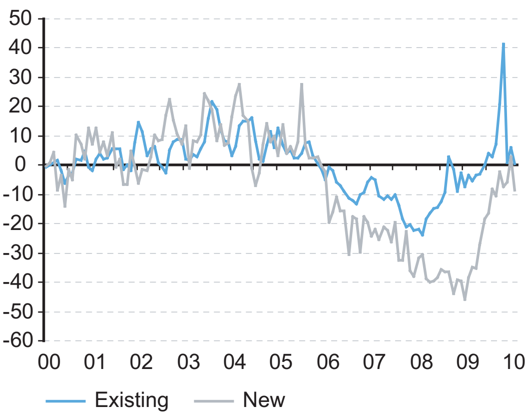
The significant improvement in housing affordability stimulates residential demand

In addition to the above, the gradual adjustment in housing prices and the fall in mortgage interest rates, which are at all-time lows, have contributed to a significant improvement in housing affordability. Throughout 2009, the monthly cost of home purchase, compared with household income, fell by nearly four percentage points to all-time low levels, both in the case of existing and new homes. Half of the fall in the monthly cost of access to home ownership was the result of price changes, 40% to the improved financial conditions and the remaining 10% to increased household income.

The fall in the relative costs of home purchase has stimulated demand, particularly in markets where price adjustments have been greatest. In the second half of 2009, housing sales improved by nearly 30% at a national level. In the same period, the home affordability ratios improved by over 33% compared with household income levels. In states such as Arizona, California and Florida, where housing prices have fallen substantially, sales have increased far above the national average.

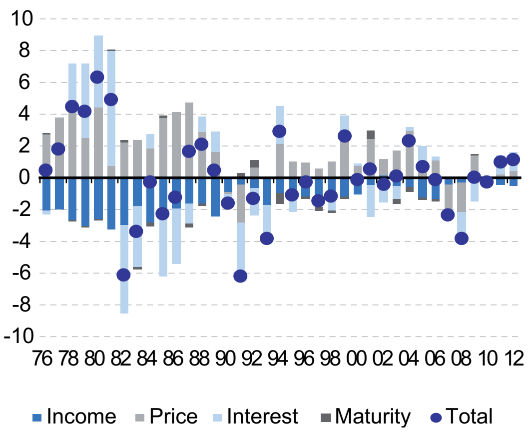
In 2010, the ratio between the monthly payments for the purchase of a home and household income will remain relatively stable, given that financial conditions will not change significantly and the potential price elevation in homes will be mitigated by increased income levels. However, in the medium term, the expected increase in interest rates and the rise in residential prices will have a negative effect on housing affordability ratios.

Chart 15
Housing Sales (YoY % Change)



Source: NAR and U.S. Census

Chart 16
Housing Affordability Index (Contributions to Change)



Source: BBVA Research

In the medium term, demographic factors will lead demand for new homes to exceed a million units per year

The third element supporting residential demand in the medium term is related to demographic variables and the growth in the number of households. Although in the short term real estate construction depends on economic variables such as employment or interest rates, in the long term, housing demand is still basically determined by household needs. Structurally, the housing supply tends to adjust to a demand that basically depends on structural factors, such as the formation of new households and the renewal of obsolete housing stock.

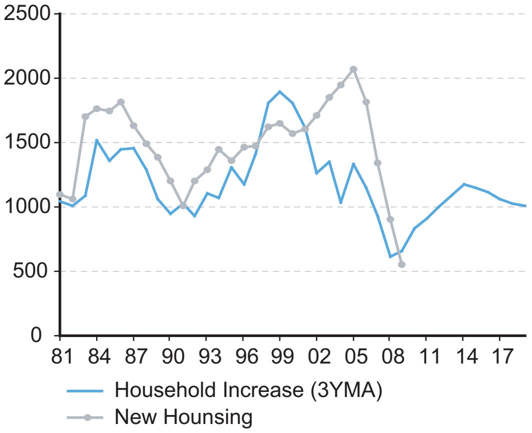
With regard to the net creation of households, between 1970 and 2009, the number of households in the U.S. increased at an average rate of slightly more than 1.42 million per year, while the construction of new homes was 1.54 million per year. In the last forty years, both the number of households and the number of homes have almost doubled to an estimated total of 121 million households at the end of 2009 and 130 million homes.

Nearly 112 million of these homes are permanently occupied, some 7.5 million are for sale or rent and the remaining 10.5 million units are second homes or not on the market, according to the latest data from the Current Population Survey/Housing Vacancy Survey (CPS/HVS).

Over the next decade, there will be a net increase of around a million households per year on average, so the construction of new homes should at least double the half million constructed in 2009 to satisfy the needs of these new households. Taking into account the current population pyramid and using a conservative assumption of the increase in the immigrant population, BBVA estimates indicate that while the population could grow at a rate of 0.6% on average over the next decade, the number of households will do so at a greater average rate of around 0.8%.

Chart 17

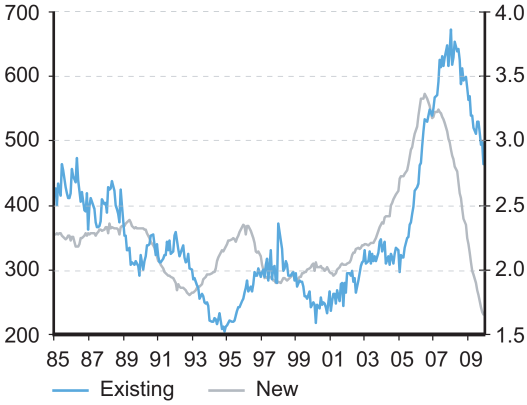
Net Households Increase & Housing Production (Thousands)



Source: U.S. Census Bureau and BBVA Research

Chart 18

Single Family Home Inventory (New (thousands) and Existing (millons, saar))



Source: Census & NAR

Although the proportion of rented homes has increased over the last three years, the trend indicates that ownership as a form of residence will remain stable in the medium term

In accordance with estimates in the Census, the number of occupied homes in 2000-2009 increased by over 6.5 million to 111.8 million in the last quarter of 2009. Of this total, 67.6% were occupied by their owners and 32.4% by tenants.

The percentage of home ownership in 2009 fell by over 1.5 percentage points from the high in 2004, which was 69%. Over the last four decades, the trend has been for ownership to increase its relative weight out of the total of occupied homes. This is why we consider that over the coming years this ratio will tend to stabilize at around 67%.

Part of the excess supply of homes is being corrected, which will lead to a slight upturn in prices in 2010

The slight boost in demand and the low rate of new supply are leading to a significant decrease in the inventory of homes for sale. At the end of 1Q10 they numbered 3.5 million, of which 3.3 million were existing homes and just over 0.2 million were new construction homes. Compared with the historical average, the current stock level shows an excess supply of nearly a million homes. This excess is basically accumulated in the existing home segment, given that the stock of new homes is at historically low levels.

From the picks in 2006 to the end of 2009, prices adjusted by more than 25% in the existing housing segment and 15% in new housing, according to data from the Case-Shiller index and the census. In real terms, price drops were around 35% in the case of existing homes and 20% for new homes. In 2010, the steady stimulus of demand will lead to residential prices increasing slightly. According to our forecasts, home prices will grow by around 1.5% on average for both new and existing homes. In 2011 and 2012, the increases will be in line with inflation, so we expect that in real terms housing prices will barely rise in the medium term.

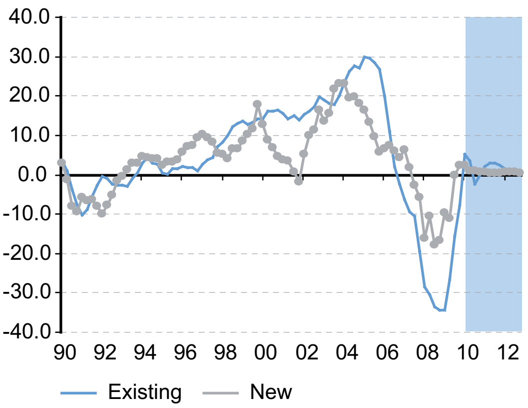
The current housing crisis has made it clear that, in the long term, investment in housing does not present greater returns than other assets

Since the mid-1970s, home prices have gone through three full cycles: In the first cycle, the upward phase extended through 12 quarters and housing prices increased by 16.6%, while the downward phase lasted 20 quarters and prices fell by 13.5%. In the second cycle, the price rise was 20%, while the fall was 15%. In the last cycle, which has been the longest, the expansion phase lasted 36 quarters and homes increased in price by 80%, while the contraction phase will last 18 quarters according to our estimates, and the price adjustment will be 40%.

Overall, from 1975 to 2009, real housing prices have increased at an annual average of around 0.8%, using data from the Federal Housing Financial Agency (FHFA), or 0.4% according to data from S&P. In any event, the returns are well below the real returns on other assets.

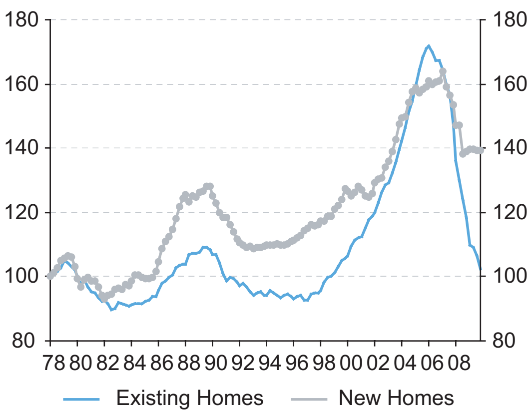
This historical price evolution raises the question whether investment in housing is an attractive investment from the total returns point of view. Before the current housing meltdown, historical prices showed a positive yearly appreciation that averaged 3% in real terms, which was a strong incentive for investors. Latest home price data showed that housing investment returns could be not only below other products but also that they could be negative.

Chart 19
New and Existing House Price (YoY % Change in real terms)



Source: U.S. Bureau of Census, S&P and BBVA Research

Chart 20
Real House Prices. New & Existing (Index 1978 = 100)



Source: NAR, U.S. Bureau of Census and BBVA Research

The BBVA Compass Sunbelt Region Trends

Home sales grew more in states where price corrections were more prominent. The improved affordability ratios are a major support for increased demand

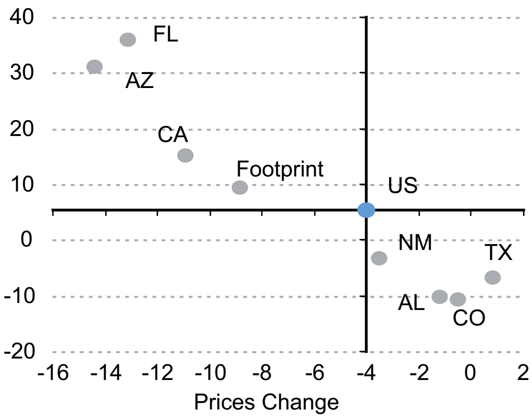
The performance of the residential market in the seven states where BBVA Compass is present was relatively heterogeneous throughout 2009. While the market in some states such as CO or TX continued its adjustment, with lower sales and prices, in others, such as FL, AZ and CA, sales saw significant improvement and prices began to stabilize in the second half of the year. Sales generally grew more in those states where price corrections were higher and decreased in those with lower price corrections. In this way, while prices decreased by 8.8% and sales increased by 9.4% in the existing housing sector in 2009 across the BBVA Compass Sunbelt Region, national aggregate prices decreased by 4.0% and sales increased by 5.4%.

Improved affordability ratios were a key factor in increased demand and are one of the pillars for the present residential market recovery. Two elements led to this improvement: home price corrections and mortgage interest rate cuts. In this way, residential price cuts led to the ratio between prices and household income in 2009 returning to more historic levels. Further, the interest rate cuts led to monthly mortgage payments being lower, meaning a better affordability level for housing.

Nationwide, at the end of 2009 the home price to household income ratio was 7% lower than the average over the last 30 years. In those states where the home price to household income ratio most deteriorated, such as AZ, CA or FL, the correction was greater, returning to levels close to the historic average. In AL, CO and TX where the aforementioned ratio deterioration was much less, the correction was more tempered. However, in 2010 the improvement of the affordability ratios will be more limited as mortgage interest rates will not go down again and home prices will start to stabilize in most markets.

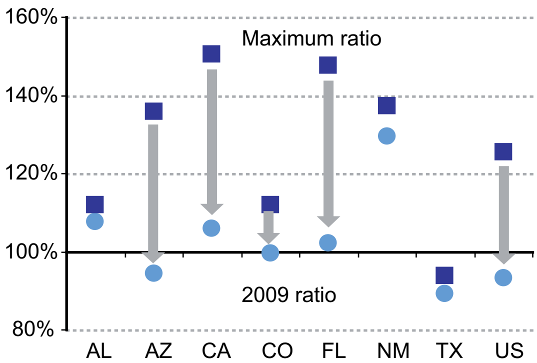
In 2010, our forecasts suggest that residential prices will continue to fall in AZ, FL and NM, albeit at lower rates than in 2009, and that they will show slightly positive advances for AL, CA, CO and TX. In 2011 and 2012 residential prices will increases slightly in the seven footprint states, with average increases of 2%.

Chart 21
Existing Housing Prices and Sales (2009-2008 % Change)



Source: FHFA, NAR and BBVA Research

Chart 22
Housing Prices to Households Income (Maximum & 2009 ratios in relation to historical average ratio (%))



Source: BBVA Research

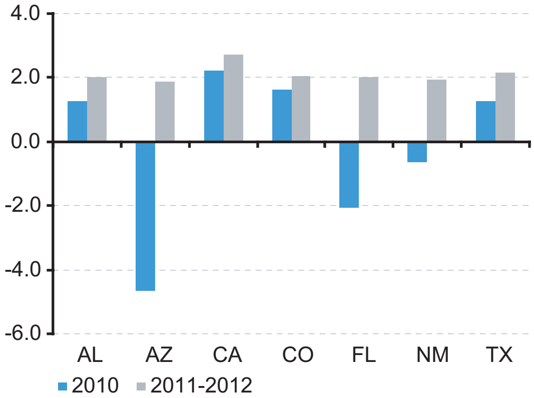
Improved job prospects and higher population growth explain the higher residential demand in the Sunbelt Region

In the medium and long term, employment and population growth rate are key factors in residential demand. In this sense, improved job prospects and higher population growth in the BBVA Compass Sunbelt Region over will lead to housing demand also being higher than in the rest of the country in the coming years.

Regarding the above, the BBVA Compass Sunbelt Region is characterized by higher potential economic growth than the national average, providing greater capacity for creating new jobs. In this way, according to our forecasts, potential growth in the U.S. will be around 2.2% over the next ten years while potential economic growth in the Sunbelt region will come in at 2.5%. This difference in economic capacities will mean higher job growth in most states in the region. In fact, our 2010 forecasts point to employment slightly increasing in FL, CO and TX and stabilizing in AZ, CA and NM, in tandem with the national average. Employment will decline slightly in AL. Employment will improve in all Sunbelt Region states in 2011 and 2012.

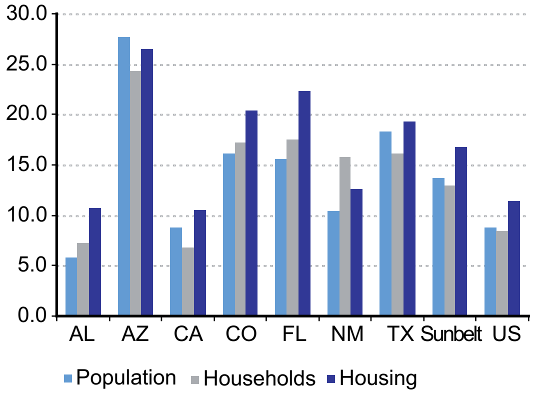
Further, population growth in most Sunbelt Region states comes in above the national average, meaning greater growth in residential demand. According to historical data, between 2000 and 2009, the U.S. population increased by just over 24 million, with households increasing by 10.1 million and housing stock by 13.2 million units. In relative terms, population grew 8.8%, households 9.3% and housing stock 11.4%. Over the same period for the BBVA Compass Sunbelt Region, population increased by 11.9 million, with households increasing by 4 million and housing stock by 5.8 million units. In relative terms, population grew 13.7%, households 12.8% and housing stock 16.7%. Growth in these variables was concentrated in AZ, FL, TX and CO within the Sunbelt Region.

Chart 23
Housing Price Forecast (2010-2012. YoY % Change)



Source: BBVA Research

Chart 24
Population, Households and Housing (Change 2009/2000 (%))



Source: U.S. Bureau of Census and BBVA Research

Medium and long term prospects point to the favorable population growth differential in the Sunbelt Region remaining over the coming twenty years. Population in the region will reach almost 132 million in accordance with the latest census estimates. In relative terms, this population will comprise 36% of total national population, four percentage points higher than in 2009.

The relative improvement in residential demand transferred to development activity, showing the first positive rates since 2Q06 in the early months of 2010

During 2009, improved residential demand led to improved development activity at both a national level and in the BBVA Compass Sunbelt Region. In fact, towards the end of 2009 and in early 2010, approved projects and home building started showed positive growth rates in the seven footprint states, especially AZ, CA and CO, where the number of building permits grew to year-over-year rates above 30%. In FL and AL growth was more moderate with rates around 10%, while TX saw a very slight upturn. The low levels of new home stock and improved demand are behind this improvement. In any case, construction of new homes is still at historically low levels.

Housing Affordability Ratios

It is possible to define a set of indicators that would delineate how affordable a house is in relation to the average household income. These indicators are called housing affordability ratios. BBVA Research has produced a set of indicators that measures a household's economic ability to buy a house. The aim of these indicators is to link household income with home prices and mortgage conditions. In doing so, we have developed a tool to estimate the effects that changes in each variable have on housing affordability.

We structured three main indicators. The first indicator measures the relationship between home prices and household income. The second estimates the average cost of mortgage payments in relation to household income. The third indicator calculates the borrowing power of the average household in the current mortgage conditions and relates it to housing prices. All these indicators are consistent among themselves and they offer different views of the housing affordability issue.

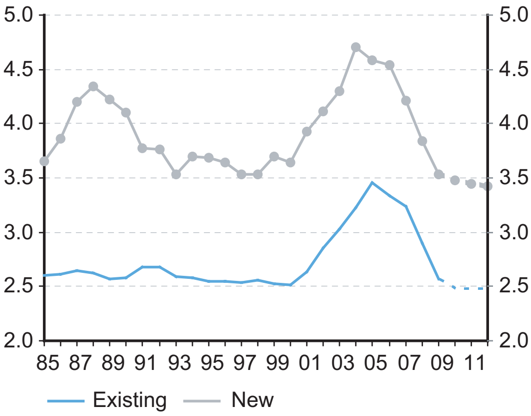
The first indicator defines the relationship between home prices and family income; allowing us to make historical or inter-state comparisons. In 2009, the median price of a new house was equivalent to 4.0 times the average income of a U.S. household, while the median price of an existing house was 2.6 times that the average income. Those ratios were 25% below the highest ratios observed for both new (4.7 in 2004) and existing housing (3.5 in 2005). As shown in this page first graph, 2010 ratios will be at the lowest level since the mid eighties and, according to our forecast; they will remain low for the next two years, which will drive up housing demand.

Our second affordability indicator, the ratio of mortgage payments to household income, takes three factors into consideration: prices, income and mortgage conditions. As home prices exceed family income, households usually request mortgage financing in order to buy a house. For this indicator, the mortgage conditions (loan to value, interest rate and loan maturity) are the key factor to take into account. In 2009, the cost of the mortgage payments needed to buy a median house was equivalent to 18.2% of the average household income for a new house and 13.3% for an existing home. These ratios were 35% below the ratios observed in 2005 for both new and the existing homes. From the historical point of view, this affordability ratio is now at its lowest level, as it can be seen in the second graph.

Finally, the third affordability indicator, household borrowing power and housing prices, is broadly used. In fact, the National Association of Realtors (NAR) has developed a housing affordability index that measures whether or not a family could qualify for a mortgage loan on a home. The NAR indicator is estimated using median existing home prices and median household income; in consequence, it measures how affordable a median existing house is. With a similar methodology but using average incomes and average prices, the BBVA Research Department has built an affordability index for new housing. In 2009, both indicators, affordability of new and existing homes, were at their peak levels. According to our forecast, in the coming years these indicators will return to lower levels.

Chart 25

Housing Affordability (Housing Price to Family Income)



Source: BBVA Research

Chart 26

Housing Affordability (Mortgage Payments to Family Income)

Source: BBVA Research

Commercial Real Estate

National Trends

In 2009, commercial real estate investment slumped due to the major fall in demand and returns. The recovery in the segment will be on hold until 2011

Although commercial real estate (CRE) investment maintained positive growth rates in the initial quarters of the recession, in 2009 it gradually declined to a year-over-year fall of nearly 25% in the fourth quarter of the year. In 1Q10 it dropped 17%. This decline was mainly the result of the collapse of investment in offices, commercial properties and, to a lesser extent, healthcare-related establishments. These three groups together represented nearly 60% of total commercial investment in 2009. Investment in hotels also showed a steep negative trend.

There are several reasons behind this significant fall in CRE investment: 1) the destruction of employment since the end of 2007 (leading to a total loss of over 8 million jobs up to the end of 2009); 2) the slowdown in household consumption, which has led to the closure of some retail outlets; 3) credit restrictions, which have limited the expansion of supply since 2008; and 4) the steep fall in returns on commercial real estate, which has made investment less attractive.

The recovery of commercial real estate investment depends on job creation, a decrease in the level of vacancies, improved returns and an easing of credit restrictions

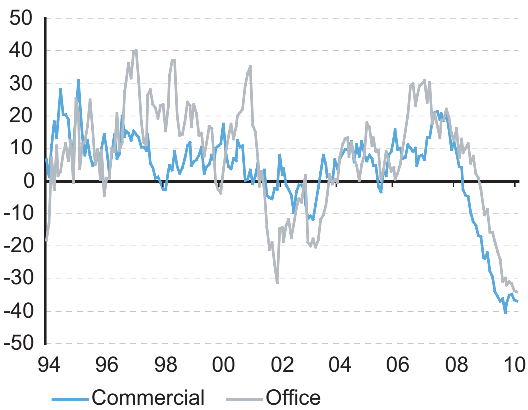
One of the defining elements of commercial real estate is its cyclical nature and close links with the economic cycle. When the economy expands and generates employment, demand for productive spaces increases; at the same time, consumption also increases, and with it the demand for retail premises. The reverse is also true. In fact, employment levels generally anticipate the changes in demand and investment in commercial real estate.

For the market to recover in the current situation and reactivate commercial real estate investment, two further conditions have to be met apart from increased employment: returns have to enter positive territory again and mortgage finance must start to flow once more.

With regard to job creation, our forecasts for 2010 indicate that economic growth of around 3.0% will generate an increase of nearly 1.2 million non-agricultural jobs. This new employment could demand about 200 million square feet of productive space, area that will come mainly from stock that is already available. The high inventory levels of commercial real estate for rent in 2010 will limit the recovery of investment. As a result, it will not be until the first half of 2011 that commercial real estate investment fully benefits from the recovery in employment.

Chart 27

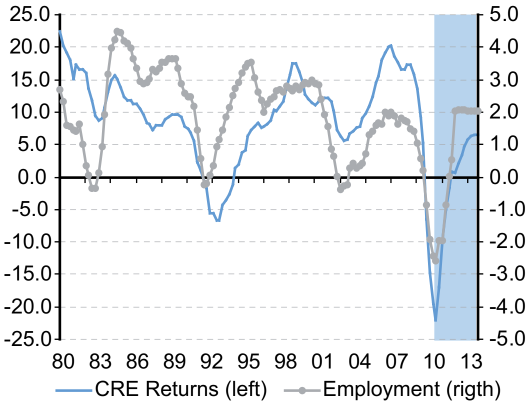
Construction Spending (YoY % change. Nominal)



Source: U.S. Bureau of Census

Chart 28

CRE Returns & Services Employment (YoY % Change)



Source: BLS, NCREIF and BBVA Research

Thus, according to REIS, Inc. in the first quarter of 2010 the vacancy rate was 8.0% for rented apartments, 17.3% for offices and 10.8% for malls or retail outlets. In all three cases, the current rates are three percentage points above the average for this decade. As these rates fall, the stimulus of new demand will be reflected in investment.

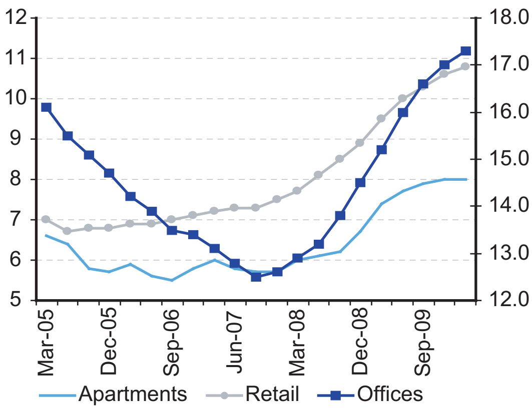
The second condition for recovery in real commercial real estate investment is that the returns should again become positive and attractive for investors. In those products in which returns have been negative or below Treasury bond yields, commercial real estate investment has been badly hit. Between 1995 and 2008, returns were positive at around 8%-9% as an annual average in real terms. However, in 2009 returns on commercial real estate investment were negative: -20% in the case of offices and apartments for rent and -12% for commercial premises. The falling returns had a significant effect on the slump in investment.

However, the quarterly profile of returns shows that in the fourth quarter of 2009 there was a turnaround in the trend. If this is continues, it will mean a return to positive ground in 2011. Our forecasts indicate that total annual returns will not exceed inflation until the end of 2011.

Finally, the third condition for reactivation of commercial real estate investment is that financing flows to the sector have to recover. The still rising level of defaults in the segment and increased banking losses represent an added difficult for the recovery of financing. In addition, the current difficulties in obtaining funding through issuance of their own securities, such as commercial mortgage-backed securities (CMBS) significantly limit the liquidity of commercial banks and represent an added disadvantage for financing the segment.

Chart 29

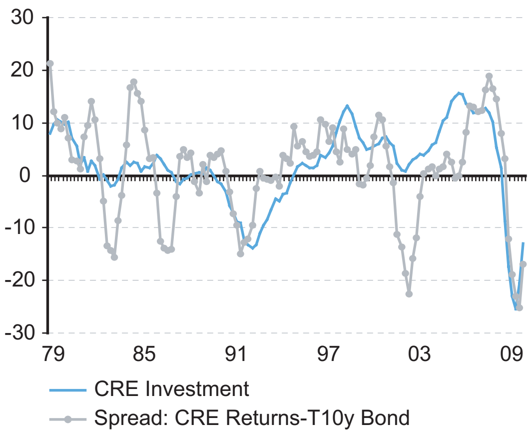
Rental Vacancy Ratios (As % of Total Rental Supply)



Source: REIS

Chart 30

CRE Returns and Investment (Difference CRE returns and T10y Note and YoY % Change)



Source: NCREIF, Treasury, BEA and BBVA Research

In the medium term, in an environment of stable rentals, the foreseeable increase in capitalization ratios will limit the revaluation of commercial real estate

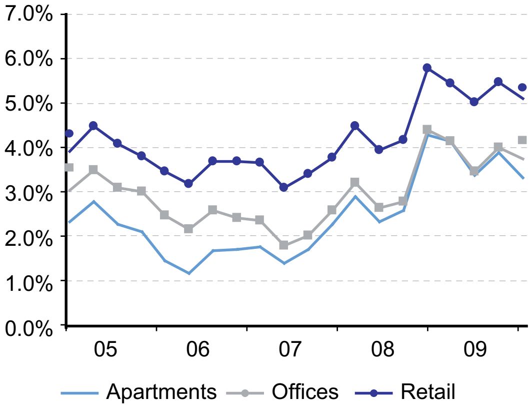
There are two factors that determine the changes in prices of CRE: the capitalization ratio demanded and the level of rentals. When the capitalization ratio falls, prices increase and vice versa. In the case of the rentals, when they rise, prices increase as well.

The capitalization ratio demanded depends on two elements: first, the returns on other alternative non-risk investments, such as the 10 years treasury bond; and second, the risk premium of the real estate segment in question. Since mid-way through 2007, despite long-term returns remaining relatively stable, the increase in risk premiums in the real estate sector has led to an increase in the capitalization ratio demanded for commercial investment of more than two percentage points in three sub-markets.

In 2008 and 2009, the negative impact of the increase in capitalization ratios on commercial real estate prices can be estimated at between -10% and -15%, depending on the segment. We do not expect extra increases in the risk premiums in 2010 and we think that the capitalization ratios will remain stable at current levels, so that this variable will not have a significant impact on prices over this year. However, in the medium and long term, our forecasts indicate a moderate increase in interest rates that will translate into capitalization ratios that will be slightly higher than at present. This will limit the revaluation of commercial real estate.

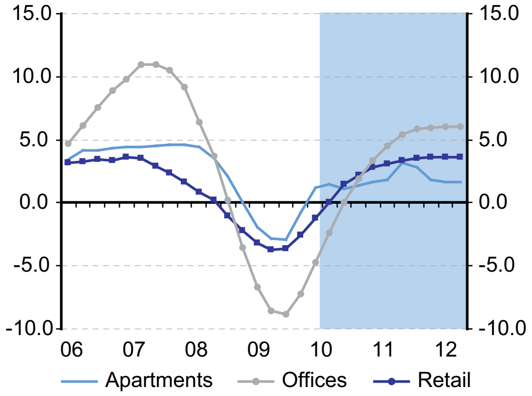
With regard to the second factor affecting prices, the level of rents, we consider that they will continue to fall gradually throughout 2010 and that they will stabilize by the end of the year. Starting in 2011, with economic recovery underway, rent increases will move into positive figures that will consolidate as demand improves. In general, there are four factors affecting the formation of rents: vacancy ratios, the volume of available supply, job creation and household income. When vacancies or supplies increase, rents tend to fall, while if employment or household income increases, rents tend to rise.

Chart 31
Capitalization Ratios (Spread with 10y Treasury Bond)



Source: REIS and BBVA Research

Chart 32
CRE Rents (YoY % Change)



Source: REIS and BBVA Research

Apartments and commercial premises will emerge from the crisis faster, but the strongest segment will be offices. Hotels and manufacturing space will need a longer period to recover

Since 2005, the proportion of households renting their homes has increased by nearly two percentage points to 32.8% of all occupied housing in the fourth quarter of 2009, according to the latest figures published in the census. The low level of housing transactions at present and the instability of the labor market suggest that the weight of rented homes out of the total will continue to increase in 2010 as well.

However, despite the slight growth in demand, the vacancy ratio in rented apartments is increasing as a result of the strong growth in supply, which has exceeded demand from the start of 2008. According to census figures, at the end of 2009 there were nearly 4.5 million rented homes and apartments vacant, 16% above the figure for the end of 2007. This high excess supply has led to a fall in both rents and prices of these types of estates throughout 2009. In 2010, the major slowdown in new supply and some improvement in demand due to the better employment situation and increased household income will lead to rents ending their decline and bottoming out, with a slight increase starting in 2011.

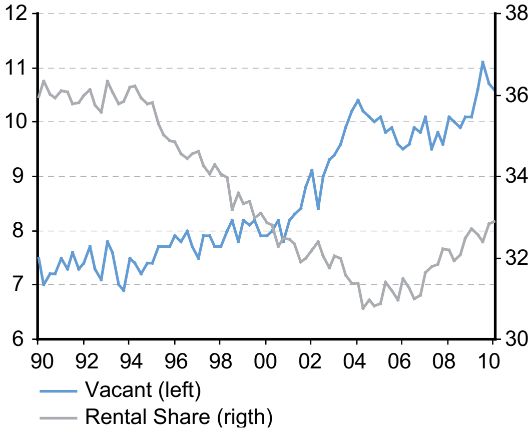
The fall in household consumption in 2008 and 2009 had a clear impact on the retail sector, where a total of 1.2 million jobs were destroyed over the last two years and the vacant rental area increased by 45% to over 10% of the total available area, according data from REIS. In the final months of 2009, household consumption recovered slightly and we expect that this trend will continue throughout 2010. This will have a positive effect both on employment and CRE demand. In any event, the recovery in consumption has to be stronger and longer lasting if the current excess supply is to be eliminated in this segment and rentals are to be stabilized. The lower vacancy ratios currently affecting both segments and the incipient recovery in household consumption will enable recovery in rented apartments and commercial retail to be swifter than in other segments.

The office segment has been badly affected by the strong fall in employment and the process of space rationalization begun in many companies at the start of 2009. This has led to a significant increase in the stock of available offices for rental. The destruction of more than 2.2 million jobs associated with the office segment since the end of 2007 has led to over 290 million square feet of area returning to the rental market. As a result, throughout 2009 the vacancy ratio in the office segment increased by two basis points to 17%. This increase in the vacancy ratio is basically due to the significant fall in demand, as the increase in supply over recent years has been very limited.

In 2010, our forecasts suggest that as a result of the lower returns from rentals, prices of real estate will fall by around 10% in the office segment, 5% in the retail premises and over 3% in rented apartments. In 2011 and the first half of 2012, prices will stabilize and it will not be before the second half of 2012 when CRE price increases will begin to be above inflation. In the medium term, with rents rising at similar rates to inflation, the increase in capitalization ratios will limit the revaluation of commercial real estate.

Chart 33

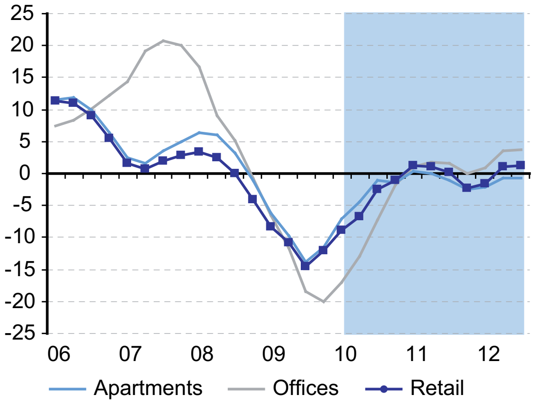
Rental Housing (Vacant Inventory (%) and Rental Share (%))



Source: U.S. Bureau of Census

Chart 34

CRE Prices (YoY % Variation)



Source: BBVA Research

BBVA Compass Sunbelt Region Trends

During 2010, the commercial real estate market will continue to be weak across practically the entire region. However, the first signs of improvement in some sectors will appear

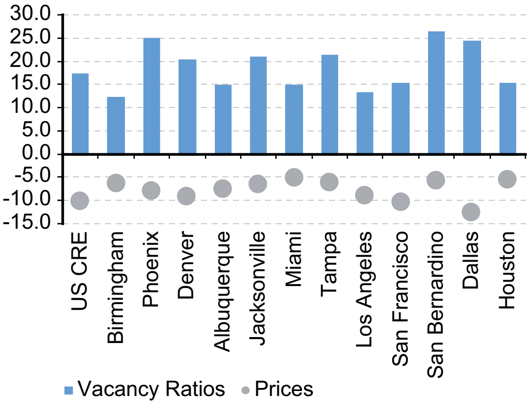
Commercial real estate demand will remain weak across nearly all metropolitan areas in the BBVA Compass Sunbelt Region in 2010. This will lead to a slight increase in vacancy rates despite the new supply of space being highly restricted. Real leases will continue to decrease, although at a lower rate than in 2009, and yields will again be negative across nearly all markets in the region.

Vacancy rates for office space will increase across all major metropolitan areas in the region and prices will remain on the downward trend that began in 2009. In 2010, cities such as Denver (CO), Jacksonville (FL) or Tampa (FL) will continue to see one in five offices vacant while cities such as Phoenix (AZ), San Bernadino (CA) or Dallas (TX) will see supply excess at one in four offices. Cities such as Birmingham (AL), Albuquerque (NM), Los Angeles (CA) or Houston (TX) will still have vacancy rates below the national average.

In 2010, the increase of available office space supply will lead to a decrease in effective leases in the different metropolitan areas and, by extension, office prices. In the region as a whole, our estimates show prices decreases being below the national average, albeit some cities such as Dallas, San Francisco (CA) or Denver will see higher than average decreases.

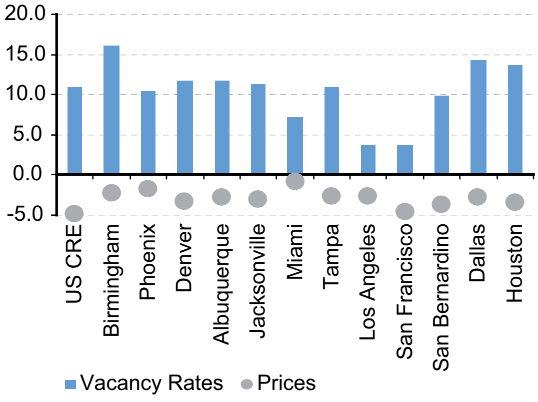
Vacancy rates in the retail sector are still below those in the office sector and across the footprint these rates are below the national average except for large cities in Texas, where investment in this type of real estate was significantly higher in recent years, as well as in the Alabama metropolitan areas. The low vacancy levels in the main metropolitan areas of California come as a contrast.

Chart 35
Offices Vacancy Ratios and Prices (2010 levels and % change 2010/2009)



Source: BBVA Research

Chart 36
Retail Vacancy Ratios and Prices (2010 levels and % change 2010/2009)



Source: BBVA Research

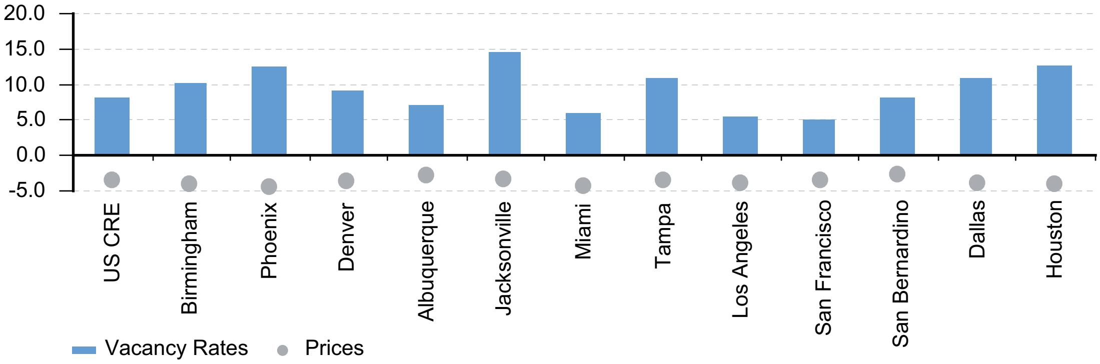
Expected price corrections for 2010 in this sector will be below those for the office sector in nearly all markets in the BBVA Compass Sunbelt Region. With regards to the national average, our forecasts point to retail space prices in the main footprint cities falling less than in other areas of the country.

Vacancy rates in the rental apartment sector in 2010 will be much higher than the national average across the main metropolitan areas in Arizona, Florida and Texas, where supply increased significantly in recent years. In contrast, they will remain more contained in metropolitan areas in California where new supply coming into the market was limited.

This available supply increase will continue to drive prices down. Our forecasts point to price fall in this sector for footprint cities being in line with the national average.

Perspectives for 2011 and 2012 are more positive for the three sectors looked at, both with regard to occupancy rates (which will improve) and to prices (which will see below-inflation growth).

Chart 37
Apartments Vacancy Ratios and Prices (2010 levels and % change 2010/2009)



Source: BBVA Research

Commercial real estate price determinants: three panel models

In general, there are four methods commonly used to determine the price of commercial real estate for rent: the capitalization ratio, cash flow discount, comparable sales and replacement cost. The first two methods make direct use of the income generated by the real estate to determine its price, and the third method does so indirectly. The replacement cost does not depend on the income, and is used to validate the other three methods.

Given that the price of CRE depends basically on the income or rental that these buildings are capable of generating, this is the variable we have decided to estimate.

To determine the rental flows or income from commercial real estate, we started with the data on vacancies and real rents provided by REIS for the three sub-markets analyzed (offices, apartments and retail), to which we added information on employment, household income, housing prices and housing affordability rates. Three panel models were constructed, one for each sub-market. We used the quarterly data from the 26 most relevant metropolitan areas of the BBVA Compass Sunbelt Region. The analysis period stretches from the first quarter of 2005 to the third quarter of 2009.

The resulting equations are as follows:

1 $\Delta(Ro) = c_0+\alpha_0\Delta ET+\beta_0\Delta Ro_{t-1}+\lambda_0\Delta VRo+\delta_0\Delta INVo$

Where $\alpha_0, \beta_0 > 0; \lambda_0, \delta_0 < 0$

This equation represents the changes in rental income in the office segment (Ro) as a function of total employment (ET), past performance of income in the segment (Rot-1), the vacancy rate in this segment (VRo) and the available stock (INVo).

2 $\Delta(Ra) = c_a+\alpha_a\Delta IF+\beta_a\Delta HP+\lambda_a\Delta VRa+\delta_a\Delta CAa$

Where $\alpha_a, \beta_a > 0; \lambda_a, \delta_a < 0$

This equation represents the changes in income in the rented apartment segment (Ra) as a function of household income (IF), housing prices (HP), the vacancy rate in this segment (VRa) and the cost of accessing a home (CAa).

3 $\Delta(Rr) = c_r+\alpha_r\Delta ET+\beta_r\Delta IF+\lambda_r\Delta VRr$

Where $\alpha_r, \beta_r > 0; \lambda_r < 0$

This equation represents changes in rentals in the retail segment (Rr) as a function of total employment (ET), household income (IF) and the vacancy rate in this segment (VRr).

These equations, together with the local coefficients obtained from the panel data model, allow us to analyze the price movements of the different segments of commercial real estate. They also allow us to draw up a series of estimates of the future movements of rentals and prices for different commercial real estate assets in each of the metropolitan areas analyzed.

The results of the estimates are presented as forecasts of nominal rentals and prices of commercial real estate in some of the graphs in the chapter on commercial real estate.

From the results of the models, we can conclude that:

- In 2009, rents adjusted in the office segment. In the retail segment they overshot while they remained under-adjusted in the apartments segment
- In 2010, CRE real rents will continue to decrease. In 2011 and 2012 rents will be higher than inflation only in the office segment
- In the Sunbelt Region MSAs, CRE investment opportunities will appear after 2011

Mortgage Finance

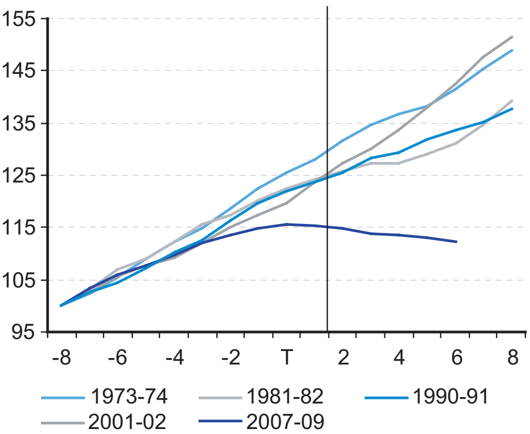
The real estate crisis has led to a 2.9% fall over 18 months in the volume of mortgage lending. Forecasts indicate a return to positive rates at the end of 2010

The link of mortgages to the current recession is clear if we look at the rate of mortgage lending over the last forty years. While in previous recessions there was a relatively stable rate of growth in mortgages, in the current recession mortgage lending has fallen, both in real and nominal terms. Beginning mid-way through 2008, the outstanding balance of mortgages dropped steadily to just over 14.3 trillion dollars at the end of 2009. This represents a decrease of 400 billion dollars when compared to the level in the second quarter of 2008, and it is the first time there has been a drop in total outstanding mortgages since the Federal Reserve began to collect data in 1952. At the end of 2009, nearly $10.8 trillion correspond to residential mortgages, $3.4 trillion to commercial mortgages and $0.14 trillion to mortgages of agricultural land. This mortgage lending structure (75% housing, 25% CRE) has remained relatively stable since the mid-1990s.

In 2000-2007, mortgage lending, particularly for homes, expanded greatly due to several factors: negative real interest rates, very lax credit standards, introduction of new products onto the market and the significant development of mortgage-backed securities. As a result of these factors, at the end of 2007 total outstanding mortgages were equivalent to 102% of GDP. Over the last two years, this percentage has fallen slightly to 98% in the last quarter of 2009. By segment, at the end of 2009 the weight of the mortgage balance on homes was equivalent to 74.6% of GDP, while outstanding CRE mortgages represented 23.4%.

Chart 38

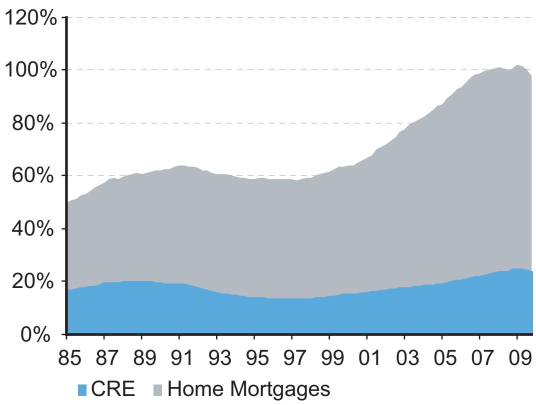
Total Outstanding Mortgages (Index, T-8 quarters=100, T=start of recession)



Source: BBVA Research and Federal Reserve

Chart 39

Mortgage Outstanding and GDP (Residential and CRE Weight in GDP)



Source: Federal Reserve, BEA and BBVA Research

The trend affecting mortgages points to an end to the household deleveraging process in 2010, while CRE deleveraging will extend into 2011

The financial deleveraging of the real estate sector is affecting both the residential and commercial segment, though deleveraging began and is stronger on the residential side. According to data from the fourth quarter of 2009, while the total of outstanding mortgages of family homes fell more than 3.5% in seven quarters, CRE mortgages fell 2.8% in the last four quarters.

From the start of the residential crisis in 2007, household mortgage leverage, measured as the ratio between household mortgage lending and household disposable income, has dropped 8%. At the end of 2009, outstanding home mortgages were equivalent to 96.9% of household available income, while in the last quarter of 2007 this percentage was 105.3%. Our forecasts indicate that this ratio will fall a further 2% in the first half of 2010, before beginning to stabilize in the second half of the year.

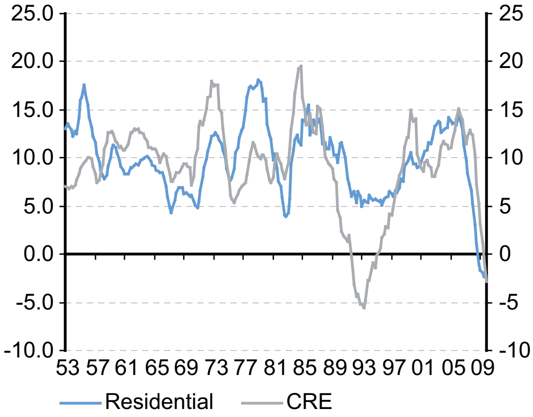
If this trend continues, once the deleveraging process ends, mortgage lending will have corrected by more than 10% in terms of household disposable income. This adjustment will leave mortgage lending in line with the trend begun at the start of the 1970s. The upper limit to the growth of residential mortgage lending in the medium and long term will be determined by changes to the home ownership regime, the level of mortgage interest rates and the new banking regulations.

In the case of the business sector, mortgage deleveraging, measured as the ratio between commercial mortgage lending and company earnings, is lagging behind households, but is dropping faster. In the last quarter of 2009, the outstanding CRE mortgages were equivalent to 2.5 times business earnings, nearly half a point less than the ratio at the start of the year.

This deleveraging process in commercial real estate is largely conditioned by the characteristics of the business itself. The financing conditions for CRE are different, and participating agents are more professionalized than in the residential segment. In addition, the different tax treatment of commercial and residential properties generates incentives to maintain different property regimes and financial structures. Each has different challenges: while the CRE debtors generally pay the mortgages with income from the property rental, households do so with their personal income.

Chart 40

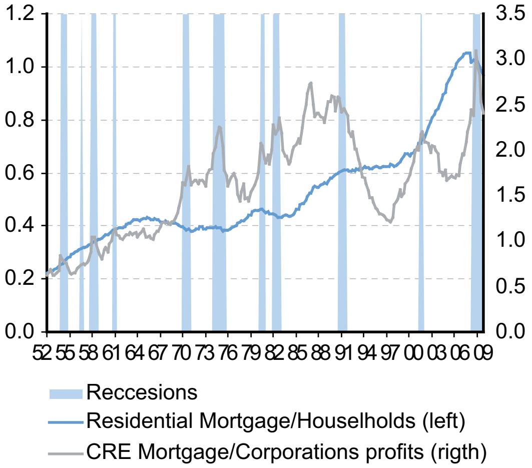
Mortgage Credit (YoY % Change)



Source: Federal Reserve

Chart 41

Mortgage Credit, Households Income and Corporate Profits. (Ratios)



Source: Federal Reserve and BEA

Government support is ensuring that the historical structure of capturing funds for mortgage lending is maintained

Finance for mortgage lending is channeled mainly through the bond market (MBS and CMBS), financial institutions and, to a lesser extent, households and the government. At the end of 2009, in the case of residential mortgages, the bond market channel provided 62.0% of the resources, financial institutions 25.4%, households 8.2% and the government 3.6%. In the case of commercial mortgages, the structure of resources is slightly different and comes mainly from financial institutions, which provide 59.1% of the total resources, while the bond markets only provide 25.3%, government 8.2% and households 7.3%.

Over the last ten years, there has been a major development of mortgage financial instruments that have enabled the weight of resources obtained in the bond market to increase over six percentage points to 53%, in detriment to participation by financial institutions and households, whose contribution overall has fallen by seven percentage points. Throughout 2009 the government support for Fannie Mae and Freddie Mac maintained the flow of resources from the bond market, so that their relative weight increased slightly. However, given the current difficulties in issuing mortgage bonds, the proportion of resources provided by financial institutions can be expected to increase significantly in 2010 and 2011.

The deterioration of the mortgage portfolio is reaching an apex and will not begin to moderate until the second half of 2010

Since the start of 2007, the quality of the mortgage portfolio has been deteriorating steadily to the lowest levels of defaults and losses since information began to be collected. The deterioration of the mortgage portfolio has still not bottomed out and everything indicates that it will continue to worsen in the first half of 2010. In the second half of 2010, price stability in housing, the expected improvement of the labor market and low mortgage interest rates will limit the deterioration of the portfolio. Both the delinquency and the charge-off ratios will begin to fall starting in the first half of 2011. Throughout 2009, the mortgage delinquency rate increased by 3.4 percentage points to 9.4% of the total mortgage portfolio, while losses grew by one percentage point to 2.8% of all mortgage lending. In the fourth quarter of 2009, default rates were slightly higher in the residential segment, at 10.1%, compared to 8.8% in the commercial segment.

Table 2

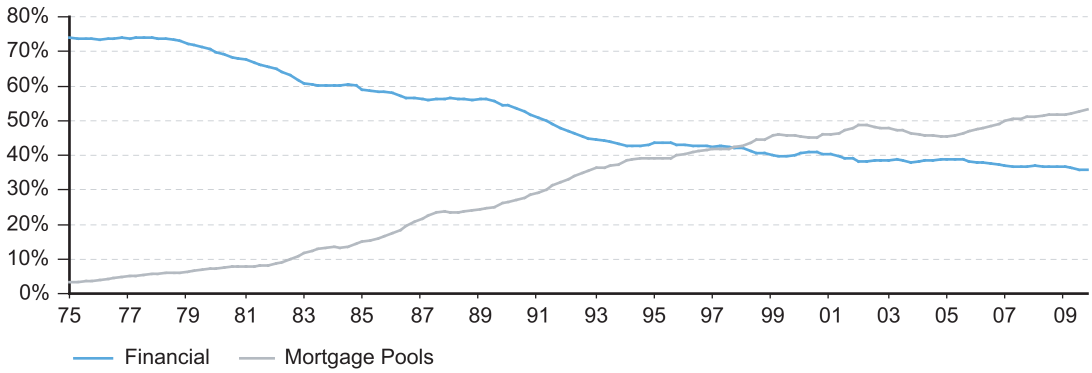
Government Effort To Rescue the Mortgage Market

Program	Committed	Invested
GSE debt purchases	\$200 billion	\$175 billion
GSE mortgage-backed securities purchases	\$1.25 trillion	\$1.25 billion
Term Auction Facility	\$500 billion	\$109.5 billion
Term Securities Lending Facility	\$250 billion	\$0 billion
Asset purchases	\$52.5 billion	\$38.6 billion
Fannie Mae and Freddie Mac bailout	\$400 billion	\$144 billion
Total	**\$2.65 trillion**	**\$1.65 trillion**

Source: BBVA Research

Chart 42

Mortgage Financing (% of Total Outstanding)



Source: Federal Reserve

How to Improve the Mortgage Finance System

Introduction

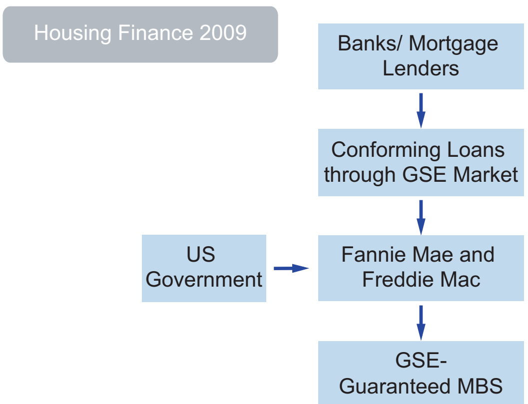
Never before in public venues have arcane details of mortgage finance been discussed so extensively, mostly thanks to the precipitous crisis experienced in the United States in 2008. With the government conservatorship of large swaths of mortgage finance, many commentators are discussing avenues for reforms of the system. In this article we discuss the classic mortgage finance system and possible reforms or partial privatization of mortgage pooling. The government's guarantee of payment delivery catalyzed the formation of the first mortgage pools. The scale benefits of the government-sponsored entities and their relative low-cost of pooling continued to roll mortgage securitization forward and increased homeownership within the U.S. One element lacking from this entire scheme, however, is the provision of diversity within the mortgage finance system. We emphasize the need for diversity of financial products and review the role of covered bonds in Europe. A focus on greater variety of products through the use of covered bonds will greatly benefit mortgage finance in the U.S.

The Classic System

The dominant method of securitized mortgage finance in the U.S. did not arise spontaneously from the action of entrepreneurs. The government started this form of mortgage finance by guaranteeing delivery on the promises of all borrowers eligible for the program. The guarantee of delivery countered the natural tendency of market actors to be unduly pessimistic about the probability of delivery, which keeps some real world markets from opening . In many ways, certain markets are "made" rather than "born" . This issue of choice of structure will be revisited in a later section. In this section, we will outline the perimeter of the existing system and its determinants. The structure of housing finance has mostly focused on establishing a large and liquid channel.

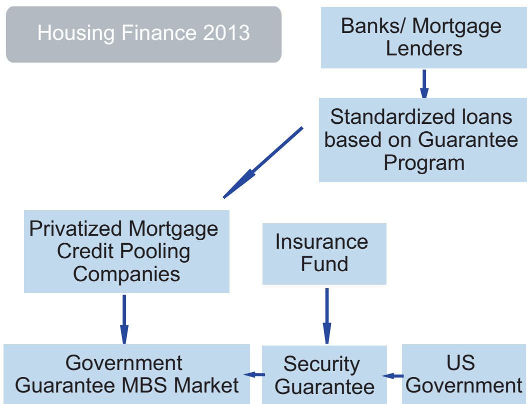
Previous to the 2008 financial crisis, the mortgage finance system in the U.S. functioned primarily through large mortgage pools. Banks, mortgage lenders and other firms originated mortgage loans and then sold them to Federal National Mortgage Association (Fannie Mae) or Federal Home Loan Mortgage Corporation (Freddie Mac). These organizations represent a large influence on the mortgage market as the obligations of all the housing Government-Sponsored Entities (GSEs), which include Fannie Mae, Freddie Mac and the 12 Federal Home Loan Banks) are $6.6bn and they own or guarantee about 56% of single family mortgages in the U.S. It is important to note that the most recent turmoil resulted in the first negative year-over-year (YoY) percentage change in the mortgage outstanding series, which provides some scope of the impact of the crisis. The influence of the GSEs on mortgage finance is greater than that of commercial banks, as witnessed in the lower peaks of total YoY mortgage growth relative to YoY growth at commercial banks. Mortgage lending at commercial banks has also persevered in the current crisis relative to the securitized markets.

Chart 43
Housing Finance 2009



Source: BBVA Research

Chart 44
Housing finance 2013



Source: BBVA Research

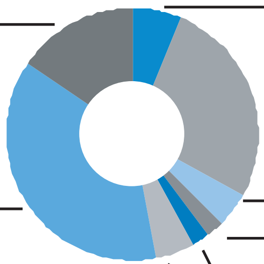
Fannie Mae and Freddie Mac held the implicit backing of the United States government. Their mission prior to government conservatorship in 2008 involved providing liquidity and packaging conforming or conventional loans into securities on behalf of the mortgage system. Some private-label securitization activity occurred as well, but the vast majority of securitization transpired through the GSEs. The GSEs hold capital for the retained loans and then issue mortgage-backed securities (MBS) for the remainder. A securitized mortgage bond allows investors to swap cash for a bond comprising the cash flow from the mortgages. The GSEs guarantee the timely payment of principal and interest of the security. As a result, the MBS trades freely in the market.

At this point in the process, ratings agencies are used to evaluate the credit quality of the securities. When loans are originated and then distributed, some institution needs to take the place of an intermediary that holds onto loans. Ratings agencies, however, received fees from issuances, meaning the possibility existed of a conflict of interest and diminished objectivity. An additional contributing issue is the fact that the Securities and Exchange Commission has limited competition in the market for credit ratings since 1975. Some of the first government-led inquiries into some of the cracks in the mortgage finance system started with investigations of practices at the national ratings agencies.

The system therefore benefited from the relatively low-cost pooling function of the GSEs via their economy of scale and implicit government backing. Some of the drawbacks of this system involved the separation of the originator from the risk of the loan. This potentially gave rise to moral hazard issues and degraded the integrity of mortgage standards. The sheer size of the GSEs, the extent of troubled mortgage assets and the collapse of some firms has focused attention on the need to reform mortgage finance.

Chart 45

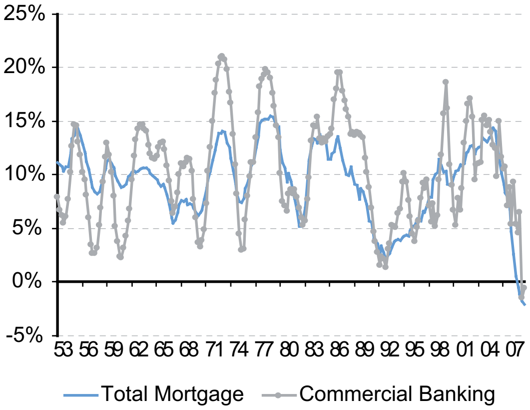
Mortgage Exposure By Institution, 2009Q4



Note: Other includes, pension and retirement funds, state and federal government, REITs, nonprofit, households and corporations.
Source: Federal Reserve

Chart 46

Commercial Banking and Mortgage Outstanding (YoY % Change)



Source: Federal Reserve

Reforms to Fannie Mae and Freddie Mac

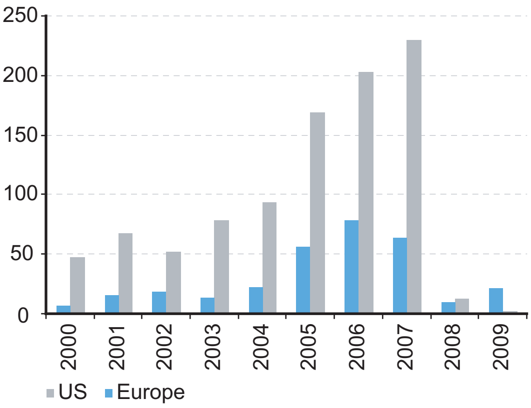
A variety of possible avenues exist for reforming the GSEs, which may include: (1) nationalization, (2) solidification of the status quo, (3) partial or complete privatization. The most likely outcome for the GSEs (and the most logical strategy for the government) is partial privatization. The partiality arises from the fact that some government programs to foster social housing or other antipoverty initiatives cannot become removed from government involvement. For example, the Government National Mortgage Association (Ginnie Mae) will continue to play a role in financing affordable housing.

A multitrillion-dollar mortgage market is not something easily wound down, so any theories involving a complete dismantling of securitized mortgages within the U.S. are far-fetched for practical reasons. At the same time, given the government's credit exposure to Fannie Mae and Freddie Mac, the only exit option for the government's exposure relies on a well-functioning securitized mortgage finance system. In other words, the only way for government to get rid of the GSE albatross around its neck is to ensure that securitized mortgage finance exists, allowing the government to sell mortgage pooling entities to the private sector.

The prospect of purchasing the ability to pool mortgages from the government would be enticing for the private sector for two major reasons. First, much like other countries' experience with privatization, a large amount of value is instantaneously created from the privatization process, mostly due to the fact that suddenly value and price are summoned to reality from what was once a government remit. Secondly, this privatization will allow the private sector to participate at each point of the value chain of mortgage finance, which may reveal gains from vertical integration. The major benefit to the government – aside from the removal of a troubled enterprise from the government's books – would be to raise funds from the private sector to pay down a growing fiscal deficit. One issue arising from the privatization process is that the government may need to create a "bad bank" – a special-purpose vehicle – to warehouse some of the impaired loans leftover from the crisis. The need for such an entity will depend on the ongoing evolution of loans in the market today.

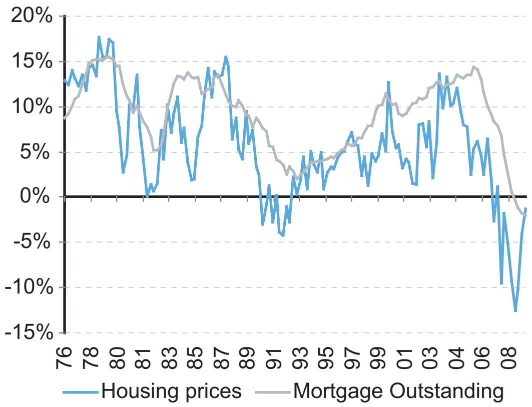
The privatization process, however, will not completely remove government's unique role in the sustainability of mortgage finance, as mentioned above. A system based on privatized mortgage pools might work as follows. First, mortgages are originated and then sold to different credit pools for standardization and pooling into securities. This would likely encompass a smaller variety of eligible loans and instruments than the original system as the government would define certain conditions for each pool. Each private mortgage pool would price and hold capital for the credit risk of the loans. Essentially, the mortgage pools would primarily hold capital for the credit risk of the loans. Turning to the securitization process, the mortgage pools would pay a fee for an insurance fund run by a government-sponsored regulator akin to the Federal Deposit Insurance Corporation (FDIC) for MBS. This regulator would also oversee the operations of credit pools just as the FDIC oversees banks involved with its deposit insurance scheme. However, this insurance would simply provide a security-level guarantee of timely payment of interest and principal. The backing of the U.S. government combined with this guarantee helps ensure market liquidity. However, to what extent would these possible reforms actually address the problems of U.S. mortgage finance?

Chart 47
U.S. and Europe CMBS Issuance (In $bn)



Source: CMSA

Chart 48
Mortgages Outstanding and Housing Prices (YoY % Change)



Source: U.S. bureau of Census and Federal Reserve

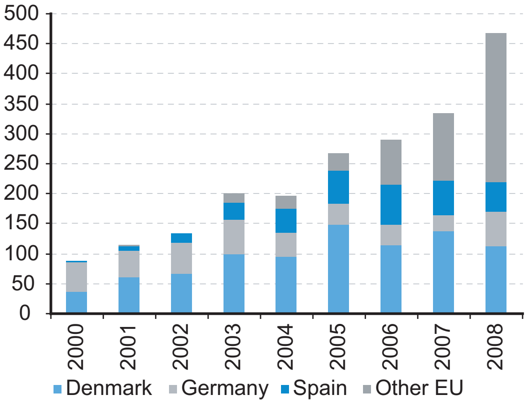
Financing: Channel or Product?

Robustness is always welcome, but the system needed more diversity to remove fragility

The trouble with the existing system and possible reforms reflect an overly-strong focus on the financing channel rather than financial products. The origins of the GSEs lay in the desire to build a new conduit for financing mortgages rather than sustaining innovative and diverse financial products. In April of 2009, the Bank of England's Executive Director of Financial Stability, Andrew Haldane, gave a speech on the role of regulation and financial products in the 2008 crisis within the context of complex adaptive networks. The financial system in 2008, Haldane expressed, existed as a robust but fragile system. The robustness arose from the high level of activity in particular products. MBS reached new levels of growth and interest. At the same time, the system exhibited fragility because activity occurred in the same areas or products. If the financial system represented an ecosystem, one could envision this as an ecosystem with too much of the same animal.

Chart 49

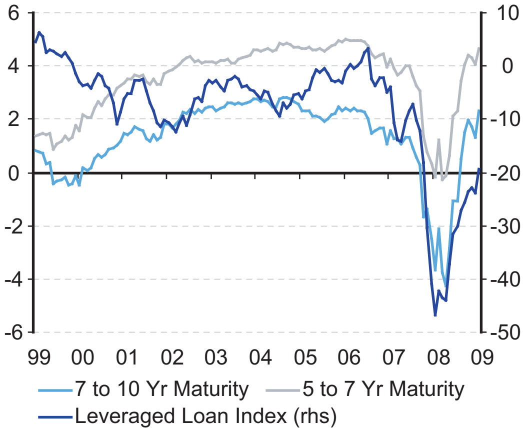
Europe Covered Bonds Issuance (In €bn)



Source: ECBC

Chart 50

Price Spread of German Covered Bonds (Relative to German Soveriegn Debt)



Source: Markit and Bloomberg

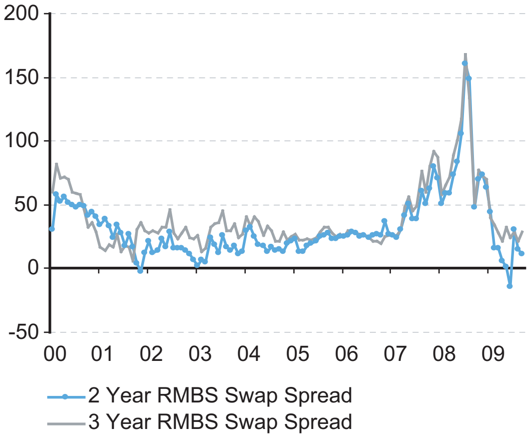
A clear way to increase the diversity of the U.S. financial network is to create more products. Financial innovation involved variations on the same MBS theme for too long. In particular, the U.S. might consider fostering the growth of covered bonds in the mortgage finance system. Covered bonds have been used over centuries in Europe and represent a roughly $3 trillion market. Covered bonds are debt instruments secured against a pool of mortgages to which the investor has a preferred claim in the event of the issuer's default. Some unique institutional frameworks are required for the existence of a covered bond market: in the European Union a number of laws exist regarding the criteria and eligibility of assets for covered bonds. Covered bonds are commonly regarded as "dual recourse" since they maintain two layers of defense: they are obligations of the issuing lender and collateralized by the underlying cover portfolio .

In other words, unlike MBS, covered bonds remain on the balance sheet of the issuer. Both MBS and covered bonds allow banking institutions to issue a large amount of instruments at once, tap deep financial markets, and diversify their funding base. Previous to the crisis, U.S.-based banking institutions enjoyed the ability of MBS to lower their capital needs as these instruments are not kept on balance sheets. The loan originator gives up the credit risk to the securitized instrument under MBS, but under a covered bond regime is retained and capital is set aside to cover the instrument.

During the recent financial crisis, asset swap spreads of residential MBS (RMBS) grew dramatically. Asset swap spreads measure the credit quality of an issuer by considering the scenario where an investor trades the fixed payment of a bond for payments reflecting the credit risk of the issuer of an asset. Covered bonds, however, did experience some pressure during the financial crisis, as viewed from the standpoint of simple price spreads over sovereign debt.

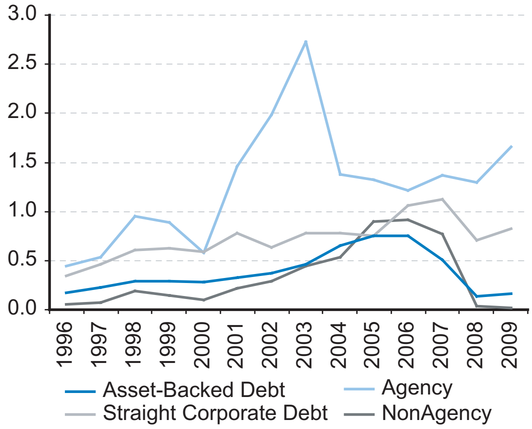
Government backing of the GSEs allowed for relatively low-cost pooling of mortgages in the United States. This combined with the capital-lightening merits of MBS generally pushed the U.S. system away from covered bonds. In contrast, the primarily bank-based financial system of the European Union focused on covered bonds. With the probable demise of government mortgage pooling of conventional loans in the United States, the cost of MBS creation will increase. Additionally, new capital rules and regulations will marginally diminish the capital benefits of MBS. We can therefore reasonably suggest that the difference in issuance cost between MBS and covered bonds will be more similar in the future. Added to this supposition is the necessity of the financial network to diversify across products rather than channels.

Chart 51
U.S. RMBS Asset Swap Spreads (Agency RMBS to Government, in Basis Points)



Source: Bloomberg

Chart 52
Annual U.S. Securitization Issuance (In $tr)



Source: SIFMA

Bottom Line

Given the exposure to the government's balance sheet posed by the GSEs and a growing federal deficit, there will occur most likely some privatization of mortgage pooling in the U.S. This will represent an immense opportunity for private companies with specialization or expertise in the mortgage market. However, the scope of reforms is inadequately focused on the diversity of financial products within the U.S. mortgage finance system. One way American mortgage finance can achieve greater variety is through the use of covered bonds, which are extensively and successfully used in Europe. We conjecture that covered bonds will become increasingly competitive with MBS in the future given regulatory changes and government reforms to mortgage finance.

Forecast

Residential Real Estate

Table 3

Residential Real Estate Indicators and Forecast

Population (million)	U.S.	AL	AZ	CA	CO	FL	NM	TX	BBVA Compass Footprint
2008	**304.1**	**4.7**	**6.5**	**36.6**	**4.9**	**18.4**	**2.0**	**24.3**	**97.4**
2009	**307.0**	**4.7**	**6.6**	**37.0**	**5.0**	**18.5**	**2.0**	**24.8**	**98.6**
2010	310.3	4.8	6.8	37.3	5.1	18.7	2.0	25.3	100.0
2011	313.2	4.8	6.9	37.6	5.2	18.9	2.1	25.8	101.2
2012	316.0	4.8	6.9	37.9	5.3	19.1	2.1	26.3	102.5

Households (million)	U.S.	AL	AZ	CA	CO	FL	NM	TX	BBVA Compass Footprint
2008	**117.2**	**1.9**	**2.3**	**12.4**	**1.8**	**7.2**	**0.8**	**8.5**	**34.8**
2009	**117.3**	**1.9**	**2.3**	**12.5**	**1.9**	**7.3**	**0.8**	**8.8**	**35.6**
2010	118.4	1.9	2.4	12.6	2.0	7.4	0.8	9.0	36.0
2011	119.5	1.9	2.4	12.7	2.0	7.4	0.8	9.2	36.5
2012	120.6	1.9	2.5	12.9	2.0	7.5	0.8	9.3	36.9

Source: U.S. Census and BBVA Research

Table 4

Housing Prices (Existing) Yoy & Change	U.S.	AL	AZ	CA	CO	FL	NM	TX
2008	**-5.9**	**-1.3**	**-16.9**	**-24.5**	**-2.7**	**-20.6**	**-1.1**	**1.3**
2009	**-4.6**	**-0.8**	**-17.9**	**-12.1**	**0.3**	**-15.8**	**-4.7**	**0.1**
2010	1.2	1.3	-4.6	2.2	1.6	-2.1	-0.6	1.3
2011	2.7	2.1	1.6	2.8	1.6	1.7	1.4	1.9
2012	2.9	1.9	2.1	2.6	2.4	2.3	2.4	2.3

Housing Affordability House Price/Family Incme	U.S.	AL	AZ	CA	CO	FL	NM	TX
2008	**3.8**	**3.3**	**3.7**	**5.6**	**3.5**	**3.3**	**4.2**	**1.3**
2009	**4.0**	**3.2**	**3.2**	**5.2**	**3.4**	**2.9**	**4.0**	**2.6**
2010	4.0	3.2	2.9	5.2	3.4	2.8	3.9	2.6
2011	3.9	3.1	2.9	5.1	3.3	2.8	3.8	2.6
2012	3.9	3.1	2.9	5.1	3.3	2.8	3.8	2.6

Source: FHFA and BBVA Research

Commercial Real Estate

Table 5
Commercial Real Estate Indicators and Forecast

Commercial Real Estate Yoy & Change		Data 2009	Forecast 2010	2011	2012
Alburquerque (NM)					
Offices	Effective Rent	**-2.1**	-1.0	2.3	3.6
	Price	**-9.8**	-7.6	-0.4	1.0
Retail	Effective Rent	**-2.9**	1.6	2.0	2.3
	Price	**-11.2**	-2.8	-0.7	-0.4
Apartments	Effective Rent	**-0.2**	1.5	1.6	1.7
	Price	**-8.7**	-2.8	-1.2	-1.0
Birmingham (AL)					
Offices	Effective Rent	**0.1**	0.4	4.0	5.2
	Price	**-7.7**	-6.3	1.2	2.6
Retail	Effective Rent	**-2.6**	2.1	2.6	2.6
	Price	**-10.9**	-2.3	-0.2	0.0
Apartments	Effective Rent	**-0.6**	0.3	2.4	2.4
	Price	**-9.0**	-4.0	-0.4	-0.2
Dallas (TX)					
Offices	Effective Rent	**-5.3**	-6.4	-1.3	-0.4
	Price	**-12.6**	-12.7	-3.8	-2.8
Retail	Effective Rent	**-1.2**	1.6	3.1	3.2
	Price	**-9.6**	-2.8	0.3	0.5
Apartments	Effective Rent	**0.7**	0.4	1.6	1.6
	Price	**-7.9**	-3.9	-1.2	-1.0
Denver (CO)					
Offices	Effective Rent	**-4.9**	-2.5	7.3	8.1
	Price	**-12.3**	-9.1	4.4	5.4
Retail	Effective Rent	**-2.9**	1.0	3.3	3.4
	Price	**-11.2**	-3.3	0.5	0.7
Apartments	Effective Rent	**-0.8**	0.7	0.6	0.6
	Price	**-9.2**	-3.6	-2.1	-2.0
Houston (TX)					
Offices	Effective Rent	**0.8**	1.2	7.4	8.7
	Price	**-7.0**	-5.6	4.6	6.0
Retail	Effective Rent	**-1.5**	0.9	1.6	1.7
	Price	**-9.9**	-3.4	-1.2	-1.0
Apartments	Effective Rent	**0.7**	0.3	1.0	1.0
	Price	**-7.9**	-4.0	-1.7	-1.6
Jacksonville (FL)					
Offices	Effective Rent	**-4.3**	0.1	5.9	7.1
	Price	**-11.8**	-6.6	3.1	4.5
Retail	Effective Rent	**-5.7**	1.4	3.8	4.0
	Price	**-13.7**	-3.0	1.0	1.4
Apartments	Effective Rent	**-0.4**	0.9	1.1	1.2
	Price	**-8.9**	-3.4	-1.6	-1.4

Continued on next page

Table 5 (cont.)

Commercial Real Estate Indicators and Forecast

		Data	Forecast		
Commercial Real Estate Yoy & Change		**2009**	2010	2011	2012
Los Angeles (CA)					
Offices	Effective Rent	**-6.1**	-2.3	7.2	8.9
	Price	**-13.4**	-8.9	4.4	6.2
Retail	Effective Rent	**-1.1**	1.8	3.8	4.4
	Price	**-9.5**	-2.6	0.9	1.7
Apartments	Effective Rent	**-3.3**	0.4	2.4	2.6
	Price	**-11.6**	-3.9	-0.4	-0.1
Miami (FL)					
Offices	Effective Rent	**-3.0**	1.8	12.1	13.5
	Price	**-10.6**	-5.0	9.1	10.7
Retail	Effective Rent	**-5.0**	3.6	4.9	5.1
	Price	**-13.2**	-0.9	2.0	2.4
Apartments	Effective Rent	**-3.8**	0.0	1.4	1.5
	Price	**-12.0**	-4.3	-1.4	-1.1
Phoenix (AZ)					
Offices	Effective Rent	**-9.0**	-1.2	6.8	9.1
	Price	**-16.0**	-7.9	3.9	6.4
Retail	Effective Rent	**-4.1**	2.6	5.2	5.6
	Price	**-12.3**	-1.8	2.4	2.9
Apartments	Effective Rent	**-3.3**	-0.2	2.7	2.8
	Price	**-11.6**	-4.5	-0.1	0.2
San Francisco (CA)					
Offices	Effective Rent	**-12.8**	-3.8	2.8	4.3
	Price	**-19.6**	-10.3	0.1	1.7
Retail	Effective Rent	**-1.1**	-0.3	1.6	2.4
	Price	**-9.5**	-4.5	-1.2	-0.2
Apartments	Effective Rent	**-4.2**	0.9	3.0	3.2
	Price	**-12.4**	-3.5	0.2	0.5
San Bernardino (CA)					
Offices	Effective Rent	**-6.0**	1.0	10.1	11.8
	Price	**-13.4**	-5.8	7.2	9.0
Retail	Effective Rent	**-5.4**	0.7	3.4	4.2
	Price	**-13.5**	-3.6	0.6	1.5
Apartments	Effective Rent	**-3.2**	1.7	2.6	2.7
	Price	**-11.5**	-2.6	-0.2	0.1
Tampa (FL)					
Offices	Effective Rent	**-6.0**	0.6	7.4	8.0
	Price	**-13.3**	-6.1	4.6	5.4
Retail	Effective Rent	**-4.6**	1.6	4.0	4.8
	Price	**-12.8**	-2.7	1.1	2.1
Apartments	Effective Rent	**-1.0**	0.9	2.5	2.6
	Price	**-9.4**	-3.5	-0.3	-0.1

Source: REIS & BBVA Research

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