BBVA Compass

# US Regional Watch

Economic Research Department

First Quarter 2009

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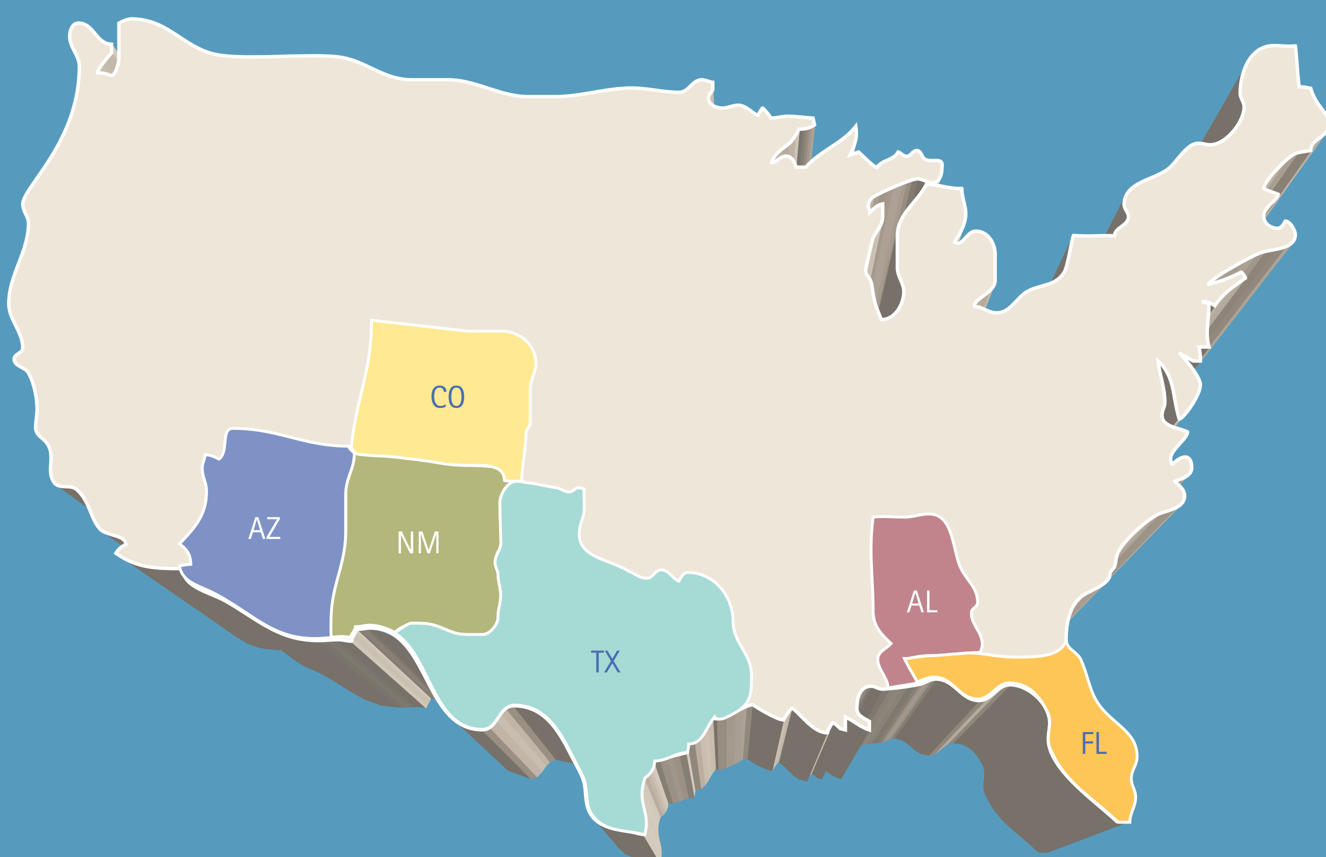


- Downside risks continue to challenge the U.S. economy
- Sunbelt economies will fare better given their fundamentals
- State finances need economic boost and fiscal prudence
- Residential construction could rebound beginning in 3Q09

# Contents

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First Quarter **2009**




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Editorial assistance provided by BBVA Compass Communications.

# Editorial

The U.S. is experiencing its worst economic performance since the Great Depression and the near-term outlook remains weak. Yet, we are confident that solid economic fundamentals will provide support for a sustainable recovery. In this edition we provide thorough analysis aimed at identifying the issues and mechanisms behind a potential recovery. As a starting point, we present an overview of the global recession which clarifies the framework in which the U.S. will interact economically with other countries. This is followed by our assessment of domestic macroeconomic conditions which we expect to deteriorate further, resulting in a GDP contraction for 2009. We expect that the monetary and fiscal policy stimuli are likely to support the recovery process, albeit at a moderate pace.

In the BBVA Compass Sunbelt Region, economic activity is also expected to decline in 2009 as Arizona and Florida continue to undergo significant pressures. However, the recession in the Sunbelt is likely to be less severe than in the rest of the country, while the recovery will be slightly faster. Colorado and Texas are still expected to outperform other states. These results are confirmed by our state monthly activity indexes which have significant predictive power based on a set of equations presented in this issue. We predict that downside risks will remain elevated due to the impact of the global economic downturn on exports and the sharp slowdown in the high-tech sector.

At the microeconomic level we present four major pieces of analysis. The first covers state finances which are under considerable strain and are likely to experience further pressures. States that have shown fiscal prudence, like Texas, will better withstand the turmoil. In addition, we provide an estimated impact of the fiscal stimulus package at the state level. The second analysis offers an assessment of economic trends in the real estate sector. We believe home sales will bottom out by mid-2009. Although, non-residential real estate will continue to be under pressure, we still identify opportunities in the multi-family segment. In addition, we present an overview of mortgage financing alternatives as applied in other countries.

The third piece focuses on new auto sales within our footprint. We expect new auto sales to remain frail for 2009, with a 24% decline in the region, mainly as a result of weakness in labor markets and ongoing financial strains. We anticipate auto sales to increase 10% in 2010, and a slow recovery in following years. Finally, as a follow up to the 4Q08 issue, we include the second part of our health care system analysis. The BBVA Compass Sunbelt Region faces a bigger challenge than the rest of the nation due to coverage and quality issues. This creates opportunities if best practices are applied to enhance efficiency and quality within a sustainable fiscal framework.

We hope you enjoy reading this issue and that it proves useful to you and your business.

Sincerely,
Nathaniel Karp
BBVA US Chief Economist

# Widespread Responses to the Global Crisis

## Uncertainties still weigh on the global financial system as their transmission to the real economy accelerates

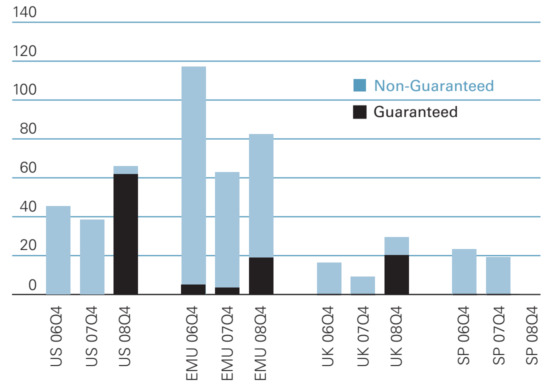
The evolution of the financial markets over the last few months has been characterized by the bankruptcy of Lehman Brothers in September 2008 and its impact on global risk aversion, the shut-down of funding markets, and ultimately, the solvency problems of many financial institutions. Under such a framework, risk and liquidity premiums spiked leaving the governments of the world's developed economies no other choice but to intervene in the markets. Such intervention contains common elements, for example, increased deposit guarantees or asset acquisition programs implemented to avoid asset fire sales which could lead to massive banking losses. Yet such measures have had little success and governments have decided to inject capital into ailing financial institutions and to guarantee their bond issuances. These programs have been implemented in an attempt to restore trust in the market and to promote the re-opening of the medium-term funding markets.

At the same time, central banks either had to introduce new measures targeted to ease financial market tensions or expand those already in place. For instance, the Federal Reserve expanded the amount it lends through its liquidity facilities and created a new facility aimed at re-activating the commercial paper funding sector. The European Central Bank decided to carry out long-term refinancing operations through a fixed rate tender procedure with full allotment, as well as expand the list of assets eligible as collateral. Finally, the monetary authorities of the leading developed economies and some emerging markets (such as Brazil, Mexico, Korea and Singapore) extended their foreign exchange swap arrangement programs in order to improve access to funding in U.S. dollars.

The success of these attempts has been mixed. Important advances have been achieved on the liquidity front. The increase in lending by central banks to financial institutions has allowed for a sharp reduction of liquidity spreads in interbank markets. For example, the spread between 3 month Libor rates and the expectation of overnight rates for the corresponding maturity has decreased from above 360 basis points after the bankruptcy of Lehman Brothers to less than 100 in February 2009. However, this level is still much higher than those observed during the first half of 2008 (around 50-60 bp). In regard to medium-term funding, guarantee programs for bank debt have allowed some recovery in issuance by financial institutions, but still at a very high cost and at volumes which do not compensate for the drought in securitization markets. These programs have been met with less success in regard to the stabilization of financial institutions, requiring government injection of significant amounts of capital in financial institutions using a variety of instruments.

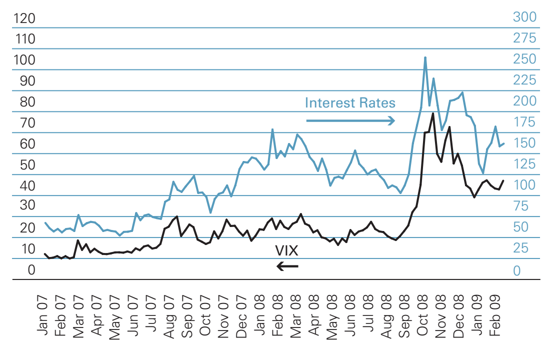
In any event, the current financial turbulence has already lasted for 18 months. Moreover, this negative outlook has translated to the real economy as the level of global credit has been clearly affected by the financial crisis.

### Banks Debt Issuance
(€ bn)



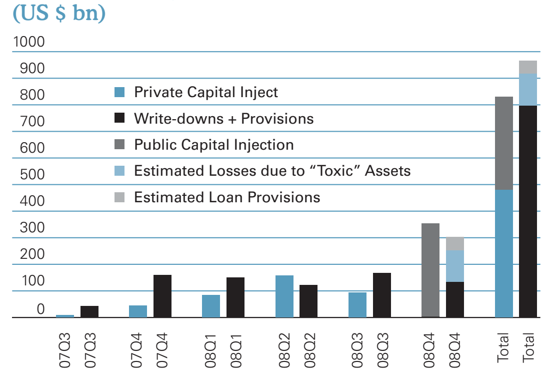

Source: Bloomberg & BBVA ERD

### Risk Aversion as Measured in Implicit Volatilities



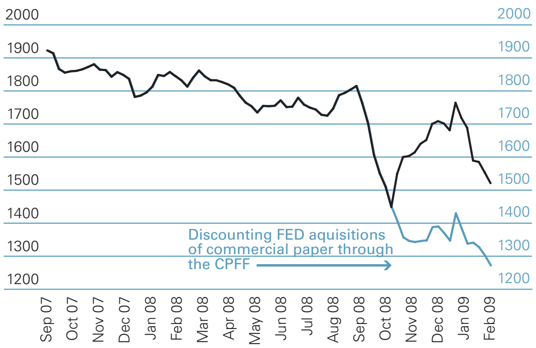

Source: Bloomberg

### Worldwide Banks: Write-downs & Capital Injection Per Quarter
(US $ bn)




Source: Bloomberg

## U.S.: Outstanding Amount of Commercial Paper
US $ bn




Source: Federal Reserve

## U.S. 10 yr Treasury Bond Yield
Monthly average


Source: Robert J. Shiller & Bloomberg

In this regard, the economic recession has hit hard and fast. The economies in the U.S., Europe and Japan have witnessed a strong cyclical deterioration that has translated into growth rates in the fourth quarter of 2008 of -1.6%, -1.5%, and -3.3% respectively (not annualized), confirming the severity of the crisis and the extreme synchronization of the downturn. As for emerging markets, economic growth has also slowed over the last quarter of 2008, affecting all geographical areas from Asia to Latin America. Overall, as global demand plummets, the effect of the financial crisis on the real economy has been stronger in those countries whose growth had previously been supported by their export sector.

Weak global demand has pushed commodity prices down helping to ease the inflationary pressures that have been restraining some central banks from cutting interest rates. In fact, headline inflation in Europe will fall below the 1% level while in the U.S. it will enter the negative range. This risk of deflation required prompt action by central banks in developed countries, leading them to quickly initiate an easing of monetary policy. As for emerging markets, an easing monetary policy cycle has also been initiated, and will continue as long as developments in the foreign exchange market allow it. In any case, given the severity of the crisis we face and allowing for some deflationary risks, central banks will have no other choice but to keep interest rates low for a protracted period of time. But as this happens, monetary policy will lose part of its effectiveness making room for fiscal policies to play a central role.

How to implement such a fiscal program will then be a key issue in providing proper stimulus to the economy and breaking the vicious circle between financial and real variables. In the U.S., a centerpiece of President Obama's domestic agenda to fight the recession is a $787 billion economic stimulus plan. As for Europe, national governments have launched their own initiatives on the fiscal arena, but generally they are smaller than the U.S. effort. In addition, the European Union policymaking process, which has been characterized by its lack of coordination, may also be a dead weight in the recovery process. Some emerging countries are also implementing their own fiscal stimulus plans aimed at escaping recession. Case in point, the Chinese stimulus plan is projected to reach more than 12% of GDP for the next two years.

Overall, the current recession and the low inflation environment will be key determinants for the yield curve. Long-term interest rates will remain low throughout 2009 in spite of the increase in debt issuance that will be needed to finance the fiscal plans. For 2010, interest rates should start to increase but they will still remain at levels considered to be historically low.

Looking to the exchange rate market, weaker European growth, when compared to the U.S., will lead to further dollar appreciation. In particular, capital flows and interest rate differentials support the view that international investors still prefer America as a financial haven for safe and liquid assets.

# Government Actions and Economic Outlook in the U.S.

## Risks continue tilting to the downside

Economic indicators suggest that the ongoing recession has deepened. In 4Q08, gross domestic product (GDP) decreased by 6.2%, the steepest fall in sixteen years. In the same period, nonfarm payroll declined by 1.5 million while employment figures suggest a similar trend in 1Q09.

Increasing job losses, declining wealth and tighter financial conditions continued to reduce consumer spending, which declined to the lowest rate since 2Q80. To date, the sharpest impact has been in durable goods spending with auto sales plunging to their lowest per-capita levels in fifty years. Spending on non-durable goods has also declined significantly. These trends are likely to continue as families increase savings to rebalance their financial position.

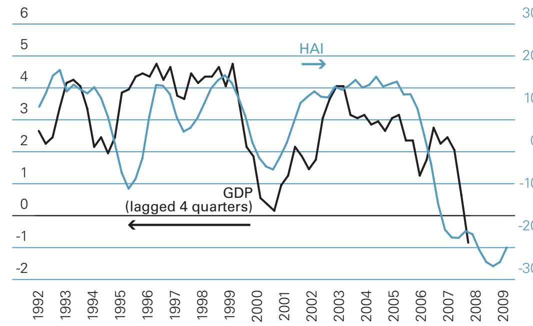
The global nature of the recession reduced real exports by 24% in 4Q08, the sharpest adjustment in 37 years. As both domestic and foreign sales declined, firms continue scaling back capital spending and increasing mass layoffs. In 4Q08, non-residential investment fell abruptly due to a sharp drop in demand for equipment and software. This highlights the fact that the recession has spread across industries. In January, non-defense capital goods orders decreased 21% from their peak in July 2008. Prospects for a fast recovery remain gloomy due to declining profits and weak business expectations.

In addition, the housing market continues to adjust sharply. In January, both housing starts and new home sales declined to their lowest levels on record, pushing home prices down even further. This has the potential to drag down household wealth while increasing pressure on banks' balance sheets.

Downside risks remain as job losses become widespread and financial instability continues. The government has taken significant action by passing the American Recovery and Reinvestment Act of 2009, a $789 billion fiscal package, combining tax relief with spending. This plan aims to stimulate the economy by creating or saving three to four million jobs and providing $150 billion to low-income families. In addition, the U.S. Treasury announced the Financial Stability Plan to restore credit by reducing uncertainty, injecting capital, cleaning banks' balance sheets from troubled assets, restoring securitization markets and mitigating foreclosures. Other entities such as the Federal Reserve, FDIC and OTS and OCC continue taking action to support the financial markets.

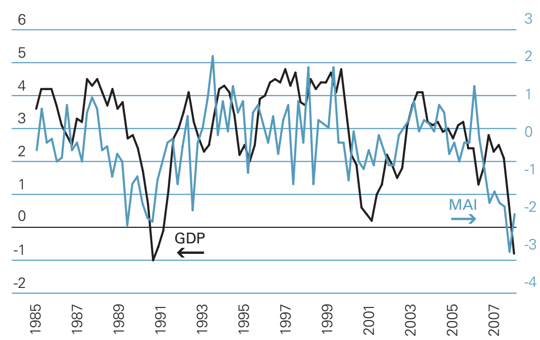
The impact of these measures on the economy is highly uncertain given the magnitude of the downturn. We expect GDP growth to decline 1.2% in 2009 and slowly recover to 1.5% in 2010. Excess capacity and lower energy prices are likely to keep inflation at very low levels; nonetheless, the risk of deflation is limited by expansionary monetary policy. The Fed will maintain its reference interest rate throughout 2009. The major risks to our scenario are that the fiscal stimulus proves less effective and/or that financial strains remain for a prolonged period of time. These would delay the recovery process and deepen the contraction.

### BBVA U.S. Housing Activity Index & Real Gross Domestic Product
4-Q % change



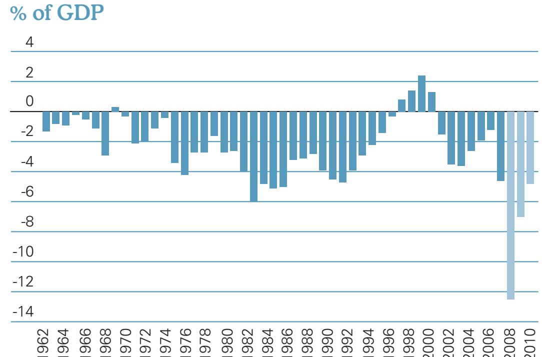

Source: BBVA ERD & BEA

### BBVA U.S. Monthly Activity Index & Real Gross Domestic Product
4-Q % change




Source: BBVA ERD & BEA

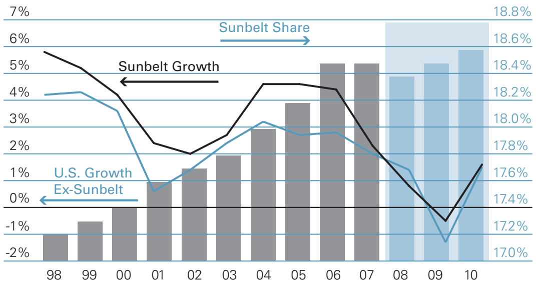
### Federal Fiscal Balance
% of GDP



Forecast in blue
Source: BBVA ERD & CBO

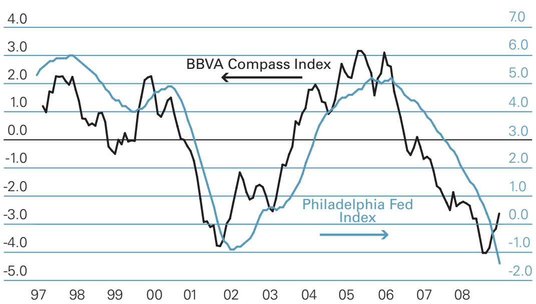
# BBVA Compass Sunbelt: Solid Conditions for Recovery

### Economic Growth & National Share
Real % change & % share
(Sunbelt=AL, AZ, CO, FL, NM, & TX)



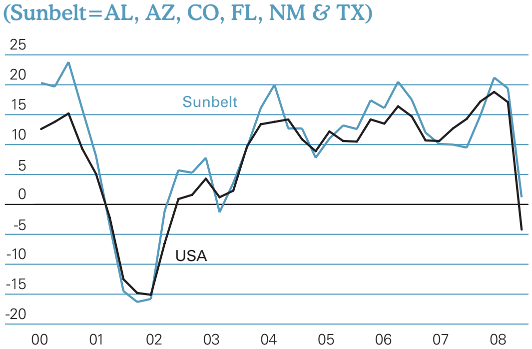

Source: BEA & BBVA ERD

### Monthly Activity Index BBVA Compass and Philly Fed
3mma & YoY % change




Source: Federal Reserve & BBVA ERD

### USA & Sunbelt Exports
YoY % change
(Sunbelt=AL, AZ, CO, FL, NM & TX)




Source: WISER & BBVA ERD

## Despite a lower growth rate in 2009, structural factors will boost the regional economy above the national average in the mid-term.

In the second half of 2008 and first months of 2009, economic data worsened in the BBVA Compass Sunbelt Region, comparable with the rest of the nation. Production activity decreased further than expected and employment diminished for the first time since 2002. In the last quarter of the year, external demand failed to contribute to economic growth and exports slowed drastically. Personal income also moderated. Over the last 12 months, the unemployment rate increased 2 percentage points reaching 6.8% in December 2008.

In 2009, our forecast for the BBVA Compass Sunbelt Region points to a deeper economic slowdown, with GDP decreasing 0.5% year-over-year, after it expanded an estimated 0.8% in 2008. Economic trends are far from homogeneous within the footprint. The economic downturn is more intense in Florida and Arizona due to a higher-level of exposure to the real estate meltdown, while the greater dynamism of the Texas and Colorado economies will contribute to a faster recovery for the BBVA Compass Sunbelt Region compared to the rest of the country.

In 2008, the evolution of the BBVA Monthly Activity Index (MAI) for the BBVA Compass Sunbelt Region indicated that, as a whole, the region was growing below its long-term trend. The index has been in negative territory since 2006, when economic deceleration started, and it is currently tracking at 2001-02 levels (when the last economic slowdown occurred). The negative evolution of the index was the result of significant deterioration of the labor market and ongoing real estate adjustment. The trend depicted by this indicator implies that the economy will contract in 2009.

In line with the MAI, the Philadelphia Federal Reserve Bank's State Coincident Index for the BBVA Sunbelt Region (a compounded indicator estimated from the states' confidence indexes) also showed a sharp economic slowdown beginning in 2006. However, in mid-2008, the yoy variation of this index became negative, setting up the beginning of the economic recession in the region.

## In 4Q08, BBVA Compass Sunbelt Region exports dropped significantly, mirroring the nation.

The profound contraction of worldwide demand in the last months of 2008 has negatively affected not only U.S. exports but also BBVA Compass Sunbelt Region exports in 4Q08, which increased 1.2% yoy, (far from the 18.5% average of the first three quarters of 2008). Demand from China and Canada, two main U.S. importers, has fallen significantly while demand from the European markets did not expand. Despite monetary turmoil, demand from Mexico and Brazil has remained stable throughout 2008. However, a stronger dollar and lower worldwide economic activity will seriously limit the expansion of regional exports in 2008.

In 4Q08, exports of transportation equipment and computer and electronic products, the two main exporting industries nationwide, have fallen due to the reduction of worldwide capital expenditures.

Exports of agricultural products also decreased in 4Q08.

Regarding the high-tech and semiconductor industries, production has plunged since mid-2008, resulting from a lack of external demand compounded by falling internal demand. The expected negative evolution of high-tech industry production in 2009 is an additional economic risk for Texas and Colorado, due to the high concentration of these industries in both states.

## Employment decreased in late 2008 as personal income growth moderated. 2009 unemployment rates continue to rise.

At the end of 2008, there were 26.1 million jobs in the BBVA Compass Sunbelt Region, 1.1% below 4Q07 levels. Employment in the region has been falling since July 2008, when it reached a high of 26.4 million jobs. From 2006 to mid-2008, the decrease in employment was significant in the construction and manufacturing industries, with more than 218,000 and 133,000 jobs lost respectively. During this period, employment growth in the service industry helped to mitigate some of the losses. However, beginning in 3Q08, employment growth was negative in the service industry as well, which resulted in a total loss of more than 300,000 jobs in the second half of the year.

The deep downturn in the construction industry in Florida and Arizona, and the decline of the manufacturing industry throughout the region since early 2007, have been the major detriments to the labor market in the BBVA Compass Sunbelt Region. In 2008, unemployment rates increased quickly. In fact, with the exception of Texas and New Mexico, the unemployment rate has risen more than 2 percentage points in the region, reaching a rate of 6.8% in December 2008. At the end of 2008, unemployment was especially high in Florida, 8.1%, and Arizona, 6.9%.

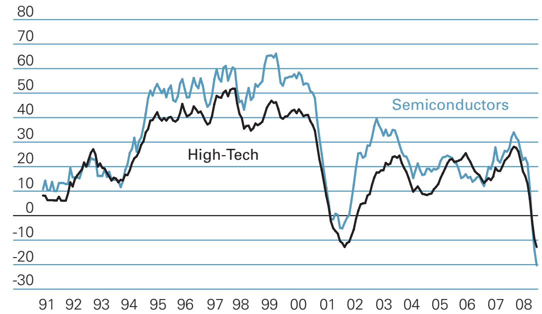
Also, as a result of lower economic growth and the slowdown in the labor market, the rise in personal income has leveled off in the region. Since 2005, the trend of this indicator points to a soft moderation that will be prolonged throughout 2009. In fact, in the third quarter of 2008 weighted personal income of the region increased at a rate of 4.1%, almost one point below the 2008 first quarter rate.

## Commercial banks post better performance in the BBVA Compass Sunbelt Region compared to the national average.

In 2008, the financial industry has been characterized by declining income, higher delinquency ratios, a growing number of non-current loans and higher losses and provisions. As a result, earnings decreased and, within the BBVA Compass Sunbelt Region, the percentage of non-profitable institutions increased from 13.3% to 22.6% in just two quarters. In 3Q08, this percentage was especially high in Arizona, 62%, and Florida, 47%, but conversely low in Texas, 11.1%, and New Mexico, 3%.

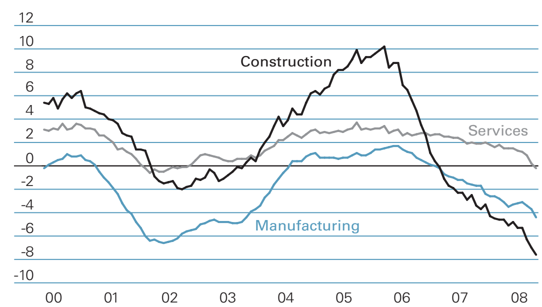
According to results for the fourth quarter of 2008, the commercial banks in the BBVA Compass Sunbelt Region had a net interest margin 0.5 percentage points above the national average and both net charge off and non-current loan rates that were lower than the national average.

### U.S.: High-Tech & Semiconductors Production
YoY % change



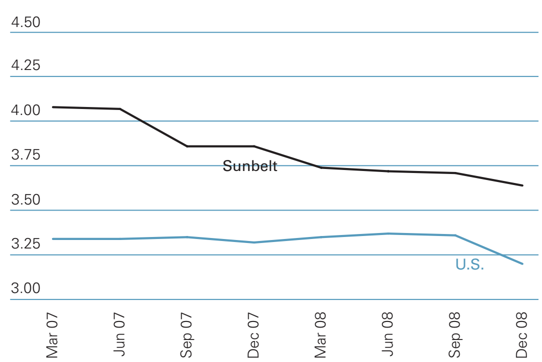

Source: Bloomberg

### Non-Farm Employment Growth
YoY % change
(Sunbelt = AL, AZ, CO, FL, NM & TX)




Source: BLS & BBVA ERD

### Net Interest Margin
Banks with Assets > $100 million (%)




Source: FDIC

# Forecasting GDP with BBVA Compass State Monthly Activity Indexes

## SMAI and GDP Equations

The BBVA Compass State Monthly Activity Index (SMAI)[1] has a high correlation with state GDP, and as a leading indicator, acts as a powerful tool to forecast the path of economic activity. Considering that state GDP is published annually, using the SMAI to forecast GDP provides additional insight into our current highly volatile environment.

We developed a set of six equations aimed at forecasting state GDP dependent on each state's SMAI, with data ranging from 1977 to 2007 (the last available official state GDP release). In addition, we considered an extra set of explanatory variables, not included in SMAI calculations, depending on each state's features. While the goodness of fit was very high using SMAI alone, we included these additional variables to improve forecasting power and enhance our ability to build scenarios.

## Main Results

The selected variables explain between 63% and 87% of GDP variability. The New Mexico model has the lowest explanatory power which, not surprisingly, has the largest GDP volatility of the states. Nonetheless, the equation captures the key turning points of the last three decades. The model with the highest explanatory power is Colorado, which captures 15 out of 17 turning points with good adjustment throughout the sample period.

The differences in explanatory power reflect that driving forces behind each state GDP vary considerably. Although variables included in SMAI - common to all states - are highly correlated with GDP, some economies are also driven by distinctive factors, which by construction, have been excluded from SMAI, such as certain commodity prices.

## Scenarios

Based on these results and our assumptions on the economic outlook for the U.S., we predict real GDP growth for 2009 and 2010. In 2009, GDP is expected to decline in five states. The only exception is Texas with a fairly low gain. Not surprisingly, the biggest GDP declines are in Florida and Arizona which are likely to continue experiencing a sharp adjustment from the bursting of the housing bubble. GDP in Alabama, New Mexico and Colorado is also likely to decline albeit at a lower rate, as the impact of the U.S. recession intensifies and spreads out. In contrast, the economy in Texas could avoid a negative outcome due to its strong fundamentals. The smallest downside risks are in Colorado and Texas while the biggest is in New Mexico.

For Arizona and Florida, GDP will decline for the second straight year; and in Florida, it will be the first recessionary period in at least three decades. For the remaining states, the GDP adjustment will be the sharpest since the 1980s. For 2010, GDP is expected to increase in all states particularly in Texas and Florida, followed by Colorado and Arizona. Nonetheless, economic growth in all states will remain significantly below potential with the most uncertainty in New Mexico, Alabama and Arizona.

### Real GDP Growth
YoY % change

| | 2009 | | | 2010 | | |
|---|---|---|---|---|---|---|
| | Upper | Baseline | Lower | Upper | Baseline | Lower |
| AL | 0.2 | -1.1 | -3.5 | 3.5 | 0.6 | -0.3 |
| AZ | -0.9 | -2.1 | -4.5 | 3.6 | 1.2 | 0.0 |
| CO | 0.1 | -0.3 | -1.7 | 3.1 | 1.4 | 1.3 |
| FL | -1.2 | -1.7 | -2.8 | 3.1 | 1.6 | 1.5 |
| NM | 1.1 | -0.9 | -2.9 | 3.1 | 1.1 | -0.9 |
| TX | 2.0 | 0.7 | 0.3 | 3.3 | 2.0 | 1.6 |

Source: BBVA ERD

It is worth noting that these scenarios already take into consideration the impact of the American Recovery and Reinvestment Act of 2009 recently approved by Congress. Therefore, the lower range would imply a scenario where the impact of the fiscal stimulus is negligible or even negative, while the upper range represents a situation where the package proves very effective. Nonetheless, we assign a lower probability to the upper range which explains why the baseline is closer to the lower limit.

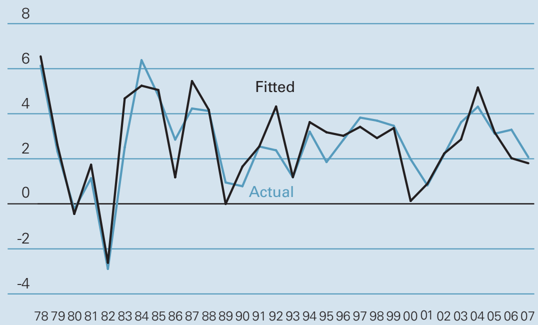
## Conclusions

The SMAI proves to be useful in tracking turning points in the business cycle. In all states the goodness of fit is very satisfactory and thus it is a powerful tool to forecast state GDP. Our six state equations suggest that 2009 is likely to be difficult for all states, but that assuming a successful fiscal stimulus, the chance of a 2010 recovery is good.

1 For more details on BBVA Compass SMAI please see 3Q08 US Regional Watch available at www.bbva.es

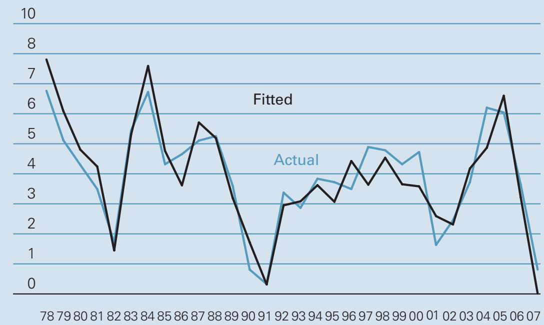
# Forecasting GDP with BBVA Compass State Monthly Activity Indexes

## Alabama GDP
YoY % change



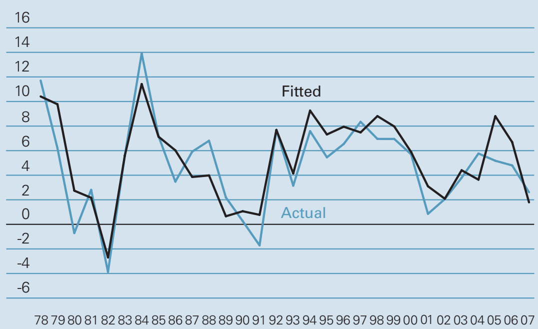

Source: BBVA ERD & BEA

## Florida GDP
YoY % change



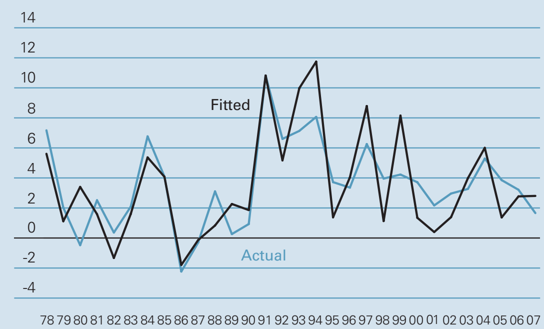

Source: BBVA ERD & BEA

## Arizona GDP
YoY % change



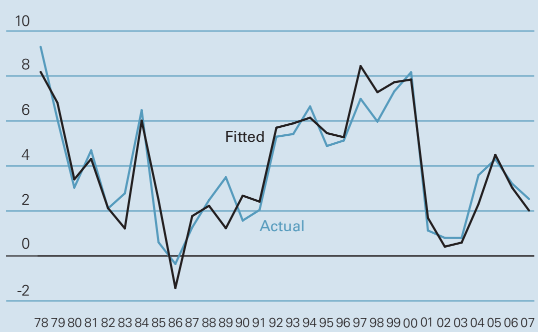

Source: BBVA ERD & BEA

## New Mexico GDP
YoY % change



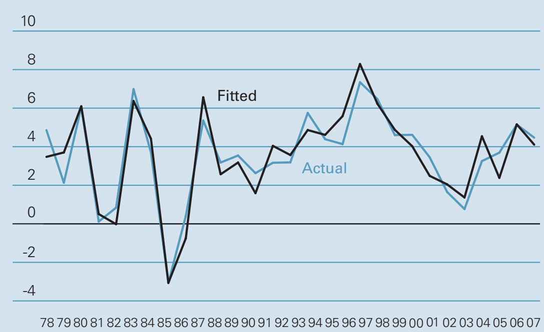

Source: BBVA ERD & BEA

## Colorado GDP
YoY % change



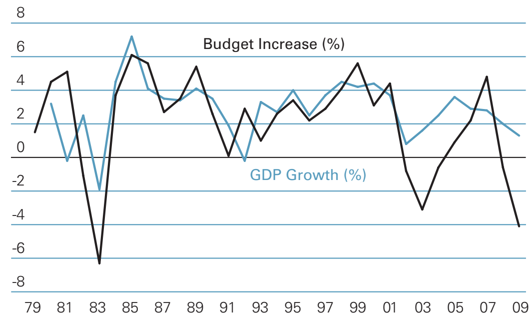

Source: BBVA ERD & BEA

## Texas GDP
YoY % change



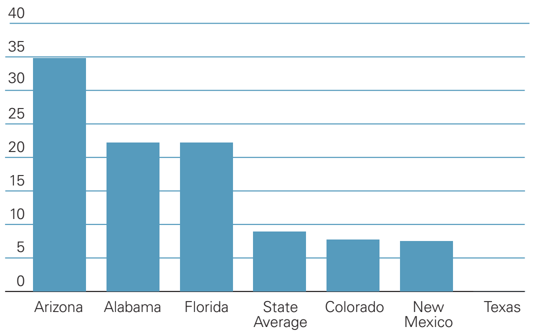

Source: BBVA ERD & BEA

## Aggregate State Budget & Real GDP
YoY % change



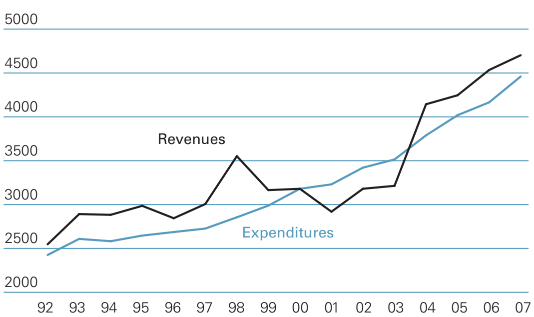

Source: BBVA & Federal Reserve Bank of Dallas

## Sunbelt State FY2009 Budget Gaps
% of the General Fund



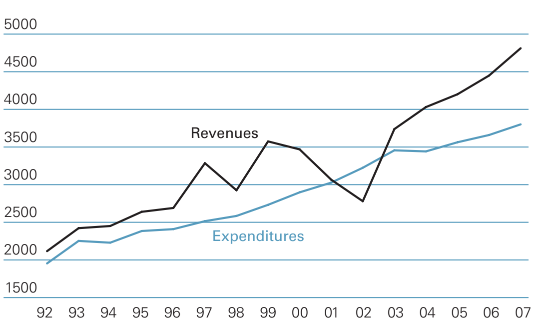

Source: Center on Budget & Policy Priorities

## Arizona State Revenues vs. Expenditures
Per capita




Source: U.S. Census Bureau

## Texas State Revenues vs. Expenditures
Per capita




Source: U.S. Census Bureau

## Economic trouble for state budgets

As a result of the economic crisis, state governments are facing budget constraints of historical proportions. However, it is difficult to make generalizations about the effect of the budget contraction on the states due to the unique financial situation, revenue structure and spending priorities in each state. In this article we examine the current situation and past trends, so we can assess which states are in a better situation to weather the current economic storm.

We are already witnessing the effect of rising unemployment and decreasing consumption on state budgets. On average, state budgets contracted at a rate of -4.1% for fiscal year (FY) 2009, which began in July 2008 and will end in July 2009 for most states. This is the highest rate of contraction since FY1983, which saw a budget contraction of -6.3% as a result of the 1982 recession. Since we expect this economic downturn to be deeper and longer than any recessionary period since WWII, we anticipate that we have not yet seen its full effect on state budgets. In fact, we are seeing only the beginning of a period of contraction and the rate of contraction for FY2010 is expected to exceed that of FY1983.

## The BBVA Sunbelt States

In total, forty-four states and Washington DC have budget deficits totaling $93.9 billion for FY2009. On average, that is about 8.9% of the states' general funds. Looking forward to FY2010, states have already reported budget gaps totaling $87.7 billion, averaging 16.4% of their general funds. Within the BBVA Compass Sunbelt Region, five of the six states face budget deficits for FY2009; the highest is Arizona's at 38.4% of its general fund.

Arizona increased its expenditures by 18% from 2004-07, while its revenues increased only by 13%. The state took advantage of this period of economic growth to increase funding to public programs. Although this policy may have benefited the community at the time, it was not sustainable and the state is now in a difficult position during this economic downturn. In addition to its budget deficit for FY2009, Arizona is forecasting a deficit of $3 billion, 29.8% of its general fund for FY2010, and it has already drained its rainy day fund. These large budget deficits and lack of a rainy day fund will require the state to make difficult decisions to reduce expenditures on many programs on which the community depends.

Alabama and Florida will also need to make budget cuts as they both face deficits amounting to 22% of their general funds for FY2009. Colorado and New Mexico are in slightly better situations with deficits of 8% of their general funds.

Texas, on the other hand, is the only state within the BBVA Sunbelt region that has a budget surplus of $2 billion. By comparing the growth rate of the state's revenues per capita against the expenditures per capita, it is clear that Texas instituted a conservative fiscal policy over the past four years. In fact, Texas' expenditures only increased by 10% while its revenues increased by 19% from 2004-07. Nevertheless, Texas is anticipating a budget deficit for FY2010, largely due to a fall in oil related tax collections. In fact, lower energy prices present a risk to the state's budget. If revenues continue to fall in 2009 and 2010, the expected budget gap will widen even further. In spite of that, due to its history of fiscal prudence, a $2 billion surplus and an additional $9 billion rainy day fund, Texas may be in a better position to handle a budget contraction than some other states.

## Tax revenues and the economic downturn

States depend heavily on taxes as a primary source of revenue. The major tax components are the general sales tax, selective sales tax, individual income tax, corporate income tax and other taxes. However, it is interesting to note that the dependency on each individual tax differs by state. In the BBVA Sunbelt Region, for example, 49% of Colorado's tax revenue comes from the individual income tax. In contrast, Florida and Texas do not tax individual income but rely on the general sales tax for 57% and 50% of their tax revenues respectively.

Alabama, on the other hand, has a well-diversified tax base, in which 83% of its tax revenue is derived fairly evenly from the individual income tax, the general sales tax and the selective sales tax. At first glance, it would appear that a well-diversified state such as Alabama would be in an ideal situation to weather an economic downturn, but that might not be the case due to the highly correlated nature of the different tax revenue sources.

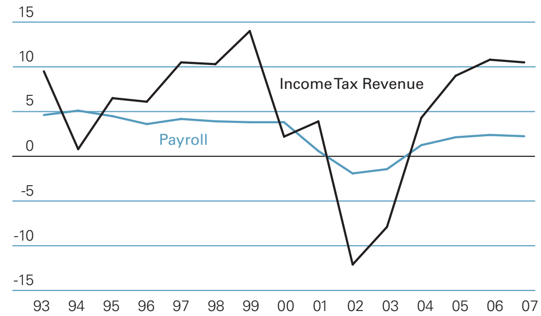
State sales tax revenues follow an interesting pattern during a period of economic slack. These revenues move up and down with income but they decline at a much faster rate during downturns. Texas and Colorado are prime examples. During the recession in 2002, Texas' income per capita decreased by 0.7% while its sales tax revenue fell by –2.6%, and in 2003 its income per capita increased by 1.7% while its sales tax revenue continued to decline by 3.2%.

Colorado also followed this pattern during that time period. This is due to the fact that declining consumer confidence motivates consumers to save more during a downturn. This trend will continue until an increase in other economic factors makes consumers secure in the economy again. As a result, states that depend on sales tax could expect to see a lag in the recovery of sales tax revenues once the economy begins to recover.

In the current situation, high income states may see income tax revenues fall at a much faster rate than payroll. Income in these states often depends on investments in addition to wages, but the value of these investments is at risk during periods of economic slack because they are tied to the stock market. As a result, the capital gains tax base contracts along with the income tax base. In fact, more people will declare capital losses, which will further erode the income tax base.

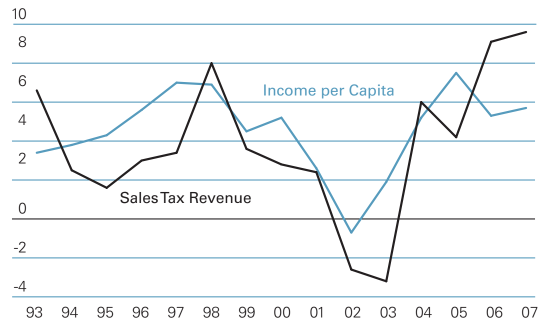
To illustrate this point, Colorado, a state that has an income per capita that is 9% to 37% higher than the other states in the BBVA Compass Sunbelt Region, saw its income tax revenue drop by 12.1% while its income per capita only fell by 1.9% in 2002. On the upside, in

### Colorado Income Tax Revenue vs. Payroll
YoY % change



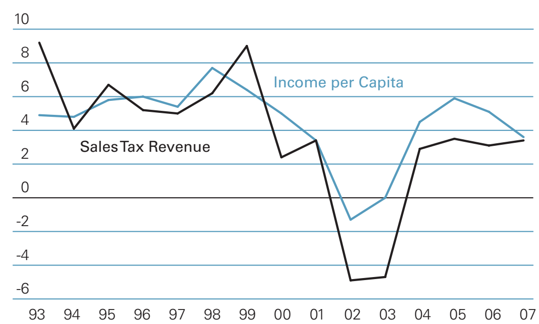

Source: U.S. Census Bureau & BLS

### Texas Sales Tax Revenue vs. Income
Per capita (YoY % change)



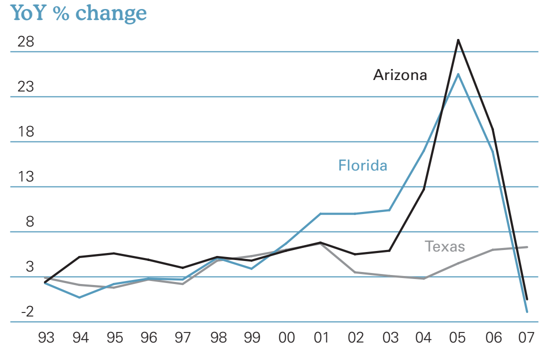

Source: U.S. Census Bureau & BLS

### Colorado Sales Tax Revenue vs. Income
Per capita (YoY % change)



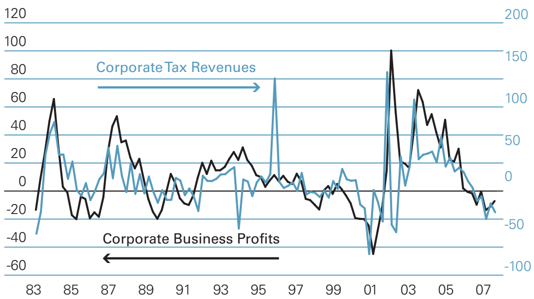

Source: U.S. Census Bureau & BLS

### OFEHO Home Price Index
YoY % change

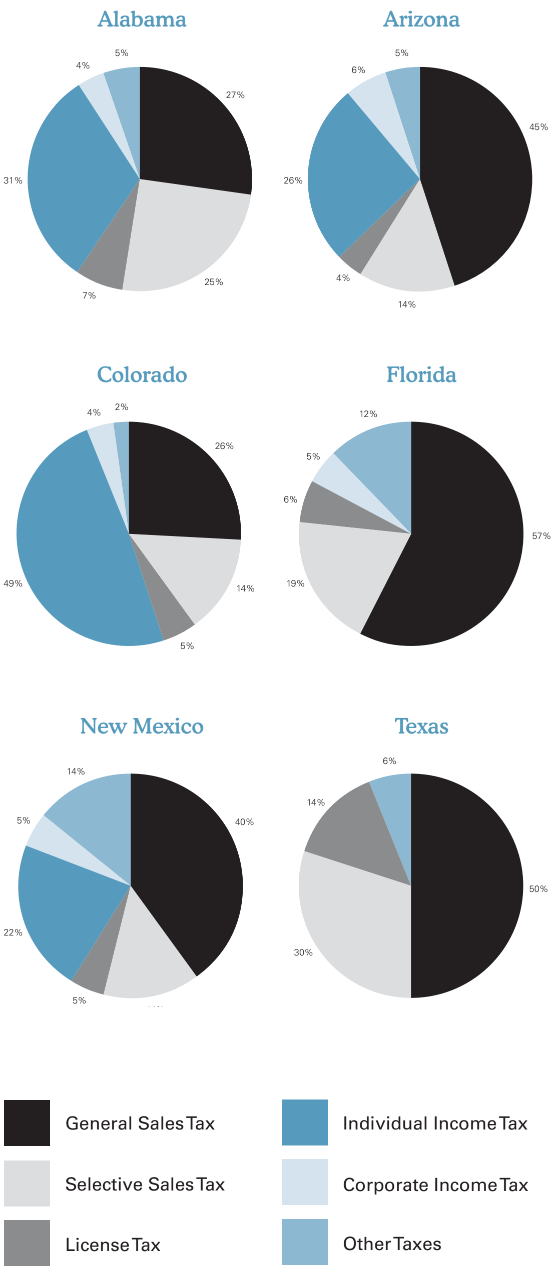



Source: OFEHO

**National Corporate Tax Revenue vs. Corporate Business Profits before Tax**
Quarterly YoY % change




Source: BLS




2007, payroll rose only by 2.2% and income tax revenue increased by 10.5%. Colorado and other states that depend on investment income could expect to see a drop in income tax revenue given the recent decline in the value of stock market investments.

The decline in real estate values will also have a negative effect on state tax revenues. Property taxes are collected on a local level, but real estate sales result in either ordinary income or capital gains that are taxed at the state level. Falling home prices will result in fewer total sales at a lower profit, or even no profit. Florida and Arizona will feel the greatest impact from a decline in real estate values. After experiencing a rapid spike in real estate prices from 2003-05, the rate of increase dropped sharply in 2006 and 2007. Texas, on the other hand, may not feel a heavy effect from the real estate crisis because its prices increased at a more moderate rate during that time period.

Lastly, the economic downturn is also putting pressure on corporate income tax revenue. The rising unemployment rate and falling consumer confidence level have resulted in less demand for goods and services and smaller profits for companies. On the national level, both corporate profits and corporate tax revenues have decreased on a yoy basis since 3Q07. Corporate income tax revenues account only for up to 6% of the BBVA Sunbelt states' profits, but we expect that regional corporate tax revenues will react correspondingly with the nation and will contribute to the overall decrease in tax revenue.

## The states have limited options

The states have a few tools for closing budget gaps, but in this economic downturn the governments need to be careful to choose the ones that will have the smallest negative impact on the local economies. The first option is to increase taxes, but it is not desirable at this time because it puts pressure on disposable income.

A second tool is to issue debt; however that would only be a short-term solution to meet current demands and it would not alleviate the budget in the long run. Most states are trying to close the gap by reducing public spending. In fact, many states have already reduced funding to various programs, such as healthcare and education.

Finally, states could benefit from federal assistance. The likelihood of federal assistance being large enough to eliminate the deficit is slim, but it will have a great impact in limiting the downside pressure on the economy.

## States need to adopt prudent fiscal policies

States need an economic boost. Thus, the government needs to consider the options that would have the most positive impact on the local economy. In addition, states should define their long-term fiscal policies. Although it is easy to increase public spending in the good years, it is difficult and hurtful to have to cut it in the bad ones. Hopefully, states will take advantage of this downturn and implement sound fiscal policies that carry over surpluses from good years to be used as buffers in bad ones. Given the cyclical nature of the economy, states need to be prepared to ride out the downturns.

# The Impact of the Fiscal Stimulus in our Footprint

## American Recovery and Reinvestment Act of 2009

To avoid a deeper recession, Congress approved The American Recovery and Reinvestment Act of 2009. States will benefit from resources allocated for state fiscal relief, allowing them to avoid budget cuts and tax increases. In addition, states will gain from tax cuts to individuals and companies and federal spending programs. Nonetheless, there are costs associated with these measures, derived from higher public debt and crowding-out effects on private investment. The net impact depends on how efficiently these resources are allocated and to what extent the package affects potential GDP growth.

## Key Provisions

State fiscal relief is mostly targeted to low- and middle-income families through Medicaid, education, food stamps, unemployment insurance and the Child Tax Credit. Eleven key provisions are to be allocated on a state-by-state basis, totalling approximately $210 billion. The six BBVA Compass states will receive around $40 billion or 18.6% of the total, which on average represents 1.5% of Sunbelt GDP. The impact on economic activity could be larger or smaller than this share, depending on the multiplier effect.

The combination of spending and targeted tax cuts could render the highest multiplier effect, while universal tax cuts could prove less effective. This criterion seems to be embedded in the eleven provisions which are expected to have a large impact. Assuming a multiplier effect between 1 and 3, the impact on GDP growth in the Sunbelt region could be between 1.5% and 4.5%, with most of the impact occurring in the next 2 to 3 years.

**Estimated Impact of Key Provisions Included in the American Recovery and Reinvestment Act of 2009**

| | AL | AZ | CO | FL | NM | TX | Sunbelt |
|---|---|---|---|---|---|---|---|
| Key Provisions, $M | | | | | | | |
| Temporary Increase in State FMAP | 850 | 1,980 | 880 | 4,390 | 630 | 5,450 | 14,180 |
| State Fiscal Stabilization Fund | 729 | 1,017 | 760 | 2,700 | 318 | 3,974 | 9,499 |
| Education | 388 | 437 | 283 | 1,311 | 197 | 2,235 | 4,851 |
| Unemployment Insurance | 106 | 149 | 131 | 468 | 39 | 569 | 1,461 |
| Child Care | 38 | 51 | 24 | 105 | 18 | 215 | 452 |
| Child Support | 17 | 22 | 19 | 100 | 5 | 161 | 323 |
| Training and Employment Services | 27 | 44 | 27 | 141 | 13 | 175 | 428 |
| Food Stamp (or Supp. Nutrition Assist.) Program | 394 | 388 | 184 | 900 | 174 | 1,838 | 3,877 |
| Emergency Shelter Grant Program | 20 | 22 | 16 | 66 | 9 | 104 | 236 |
| Child Tax Credit | 262 | 390 | 231 | 877 | 153 | 1,783 | 3,696 |
| Making Work Pay Tax Credit** | 1.5 | 0.2 | 1.0 | 12.6 | 1.8 | 1.2 | 18 |
| | | | | | | | |
| Total, $bn | 2.8 | 4.5 | 2.6 | 11.1 | 1.6 | 16.5 | 39.0 |
| % share of US total | 1.4 | 2.1 | 1.2 | 5.3 | 0.7 | 7.9 | 18.6 |
| % of State GDP | 1.7 | 1.8 | 1.1 | 1.5 | 2.0 | 1.4 | 1.5 |

Source: BBVA ERD with data from CLASP, CBPP, GAO, NELP & Tax Policy Center
** Million of people

## Impact on our Footprint

States will also benefit from other elements such as federal spending programs and tax cuts, the speed of recovery of foreign demand, financial stability, etc. However, the pace of recovery will be different in each state due to idiosyncratic components. For example, some states are better positioned to benefit from large spending plans on healthcare and energy, while others could gain more from monetary stimulus or global recovery.

By incorporating our financial and economic U.S. assumptions, we can estimate two outcomes with and without fiscal stimulus. In both scenarios GDP in the Sunbelt declines in 2009. However, this drop occurs at a much faster pace in the absence of fiscal measures.

The biggest gain from U.S. recovery appears in Arizona and the smallest in New Mexico. This could reflect that the former has greater interaction with other states while the latter has less exposure to U.S. economic fluctuations.

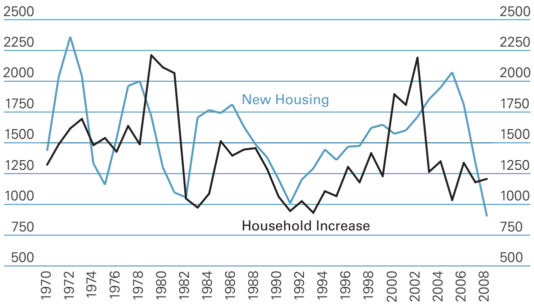
**Real GDP Growth**
% change

| | With Stimulus | | Without Stimulus | |
|---|---|---|---|---|
| | 2009 | 2010 | 2009 | 2010 |
| US | -1.2 | 1.5 | -2.6 | -0.5 |
| Alabama | -1.1 | 0.6 | -2.2 | -1.0 |
| Arizona | -2.1 | 1.2 | -3.7 | -1.2 |
| Colorado | -0.3 | 1.4 | -1.3 | 0.0 |
| Florida | -1.7 | 1.6 | -3.3 | -0.7 |
| New Mexico | -0.9 | 1.1 | -2.1 | -0.6 |
| Texas | 0.7 | 2.0 | -0.3 | 0.6 |
| Sunbelt | -0.5 | 1.6 | -1.8 | -0.1 |

Source: BBVA ERD

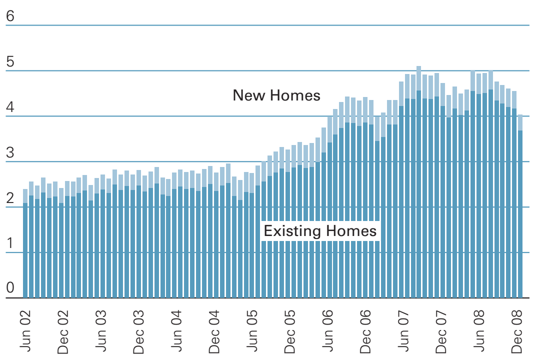
The monetary stimulus will have a significant impact across all states, however, Florida and Colorado exhibit a smaller impact. The former could reflect a higher relative share of labor intensive industries while the latter depends more on high-tech industries which incorporate high cash flows and higher-skilled labor. All things considered, the recovery is likely to be a slow process and GDP growth could remain below potential for some years.

## Household Increase & New Housing
in '000s, 3YMA



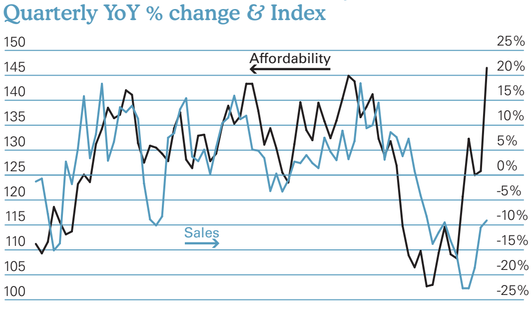

Source: Census & BBVA ERD

## Homes for Sale
Inventory, Millions




Source: NAR & Census

## Home Sales & Affordability
Quarterly YoY % change & Index




Source: NAR, Census & BBVA ERD

## Home building activity reflects household needs in the long-term view, but is strongly affected by major economic factors in the short-term.

Although residential building activity generally responds directly to economic factors, in the long-term, housing production is closely related to emerging households' needs and the renewal of obsolete housing stock. In terms of household formation, from 1950 to 2008, household development averaged over 1.4 million a year while new home construction averaged nearly 1.6 million. In the last forty years, both the total number of households and housing units have doubled: at the end of 2008, the number of households was estimated at close to 118 million, with total housing stock approaching 130 million, according to the census.

However, in the short- and mid-term, supply and demand imbalances are common and both home building activity and housing prices are affected by those imbalances. In fact, from 2000-05, housing production increased well above household needs due to rising prices. As a consequence, from 2005 to the first quarter of 2008, inventory of homes for sale doubled to reach a record of 5 million units, equivalent to almost one year's supply at the 2008 sales rate. Nonetheless, through 2008, new housing production (which was slightly over 900,000 units) was lower than the number of new households formed (which has averaged 1.2 million since 2002). That production gap helped to significantly reduce the stock of homes for sale to 4 million units at the end of 2008.

In addition to lower housing production, other supply factors, such as the incorporation to the rental market of existing homes that were for sale or large foreclosure auctions, explain why the homes for sale inventory dropped meaningfully in the second half of 2008 despite lower housing sales. In 2008, total home sales averaged nearly 5.4 million, which was 16.5% below 2007 figures. Monthly data analysis indicates that home sales have been following a decreasing trend since mid-2005, which should continue in 2009. The deteriorating labor market and corresponding mortgage constraints will weaken housing demand further and lead to lower sales. According to our forecast, total home sales will reach a yearly minimum of 4 million units in mid 2009, and will recover slightly in the second half of the year providing that the economy and the financial system stabilize.

Inventory reduction and decreased new housing starts (compared to net household increase) will not be the only factors working to adjust the housing market further in the first half of 2009. In addition, higher affordability ratios will help pump demand back into the housing market. In fact, at the end of 2008 the housing affordability index reached a new record high of 146, suggesting that the average household has a financial capability that is equivalent to almost 1.5 times the price of the average home. Due to falling home prices and mortgage rates, housing affordability has improved significantly since the beginning of 2006, when it was nearly 100 points. In 2009, this leading indicator will show values over 150 as a result of lower housing prices, a more favorable financial environment and growing family income.

## When will the housing market recover?

Despite the positive evolution of the housing affordability indexes, lower home sales will lead to lower home building activity due to the strong correlation between both indicators. In 2009, according to our forecast, housing starts will average nearly 720,000 new units, which would be 20% below the number of homes started in 2008 and would establish a new record low since data was first collected in the early seventies. The residential construction recovery will be slower than in past recessions due to the large inventory of houses on the market.

In general, housing investment requires a long-term view and it is closely related to agents' expectations which shape housing demand. Historically, housing recoveries have been anticipated by improvements in households' prospects as measured by the Consumer Confidence Index. This index is currently at its lowest value since data collection began in 1967 and is comparable to the lows that followed the first oil crisis in the early seventies. Consumer expectations are directly related to the job market and will improve once employment begins to expand.

In late 2008, home prices decreased more than 17% yoy, according to the S&P index. From the peak value recorded in the second quarter of 2006, home prices have depreciated approximately 35%. However, in order to provide further incentive for demand, an additional housing price depreciation of 15% could be needed. According to our forecast, home prices will start to appreciate in 2011 after housing demand clears the current excess of supply.

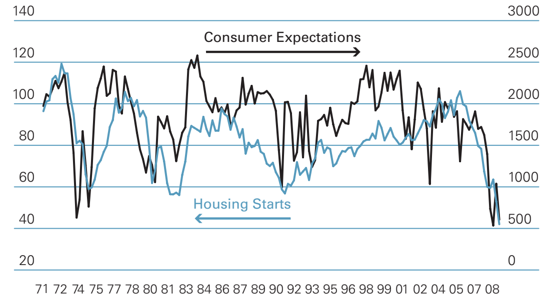
## The BBVA Compass Sunbelt Region residential real estate picture

In 2008, in the BBVA Compass Sunbelt region, main indicators in the residential market followed a similar trend to the national average: the number of building permits dropped 34.8%, while home sales fell 10.8% and prices depreciated 7.8%. In line with the national trend, the 2009 forecast for the region's residential market points to decreased building and sales activity, with home prices depreciating further, but at lower rates.

However, within the BBVA Compass Sunbelt Region, the residential market is, by far, largely heterogeneous, with very different performance between the states. On one hand, in Florida and Arizona the housing market downturn in 2008 was deep and painful and strongly affected the regional economy. On the other hand, housing prices and construction employment in Alabama and Texas have remained stable despite lower home sales. In Colorado and New Mexico, signals have been mixed and in line with the national average.

The main concern for the residential market within the BBVA Compass Sunbelt Region in 2009 is price instability in some Arizona and Florida major metro areas, and the question of when will they reach the bottom of the cycle.

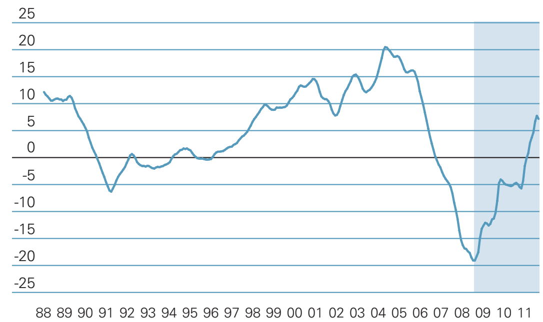
### Housing Starts & Consumer Confidence Expectations (In 000's & Index)




Source: Census

### S&P Housing Price Index

YoY variation (%)




Source: S&P & BBVA ERD

### 2008 Real Estate Indicators

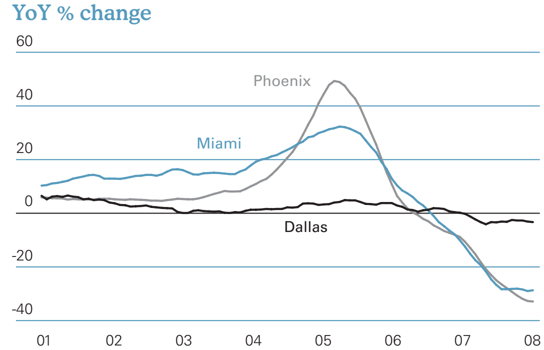
YoY % change

| | Sunbelt Footprint | National Average |
|---|---|---|
| **Building Permits (*)** | -34.8% | 35.0% |
| **Home Sales (**)** | -10.8% | -11.7% |
| **Home Prices (**)** | -7.8% | -5.2% |

(*) 2008 Average
(**) 2008 Jan-Sep Average
Source: Census, NAR, OFHEO & BBVA ERD

### S&P Housing Price Index

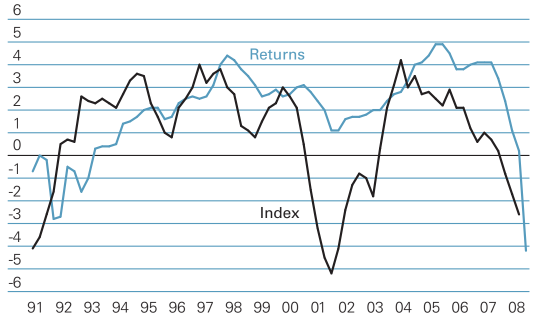
YoY % change




Source: S&P

### Commercial Real Estate Index & Quarterly Returns

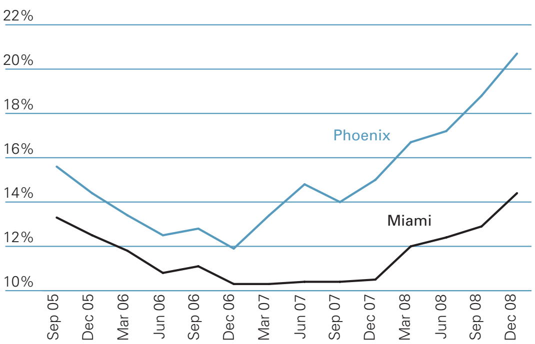
YoY variation (%) & (%)




Source: NAR & NCREIF

### Phoenix & Miami Commercial Real Estate

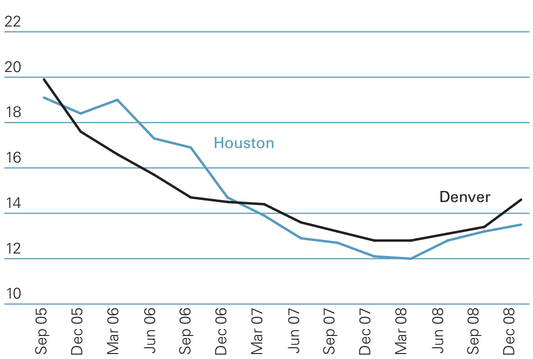
Vacancy Rates (%)




Source: Cushman-Wakefield

### Denver & Houston Commercial Real Estate

Vacancy Rates (%)




Source: Cushman-Wakefield

## The commercial real estate segment continued to deteriorate in the second half of 2008. Prospects for 2009 point to higher vacancy rates and negative returns.

In the second half of 2008, as in previous economic recessions, the main commercial real estate (CRE) indicators at the national level have deteriorated along with the economic variables: vacancy rates continued to increase while total returns fell to negative levels in the fourth quarter of 2008 for the first time since 1993.

As a result of lower CRE construction and more complex market conditions, the leading CRE index (developed by the National Association of Realtors) has been decreasing since the end of 2007. As the labor market continues to deteriorate, CRE vacancy rates will increase and revenues will drop further. Based on the current environment, our forecast indicates that investment in non-residential structures could drop 6.5% in 2009. In past economic recessions, CRE investment has recovered with or lagged the economy.

While negative employment growth has led to lower office and industrial space demand, lower household consumption has negatively affected retail and warehouse real estate. This trend caused commercial prices to depreciate in the second half of 2008 for the first time since the early-nineties recession. Price adjustments have been especially intense in the office as well as the warehouse segments.

According to our forecast, in 2009 weaker economic activity will lead to weaker CRE demand and higher vacancy rates in most metropolitan statistical areas (MSAs). Positive gains in employment and household consumption will mark the beginning of the CRE recovery.

Within the BBVA Compass Sunbelt Region, the CRE markets are broadly heterogeneous and are characterized by the economic environment of their MSAs. Based on this, in the last year vacancy rates have increased in the office segment in major MSAs with weak job markets, such as Phoenix, Tampa and Miami. However in the MSAs where employment growth is still positive, office vacancy rates have remained stable, as in Dallas, Houston and Denver.

In 2008, Phoenix employment decreased 4.5% by year end and the vacancy rate increased over 4% to 20.7%. In Tampa and Miami, total employment dropped 2.7% and vacancy rates increased over 3.5% to an average of 15.0%. In the second half of 2008, rental rates remained stable in these three MSAs, and revenues decreased.

Nonetheless, in Houston and Dallas, where employment grew 2.1% and 1.4% respectively at the end of 2008, vacancies have remained stable (Dallas) or have increased slightly (Houston) due to an increase in available office space. In both Texas metro areas, rental rates increased along with inflation. In Denver, where employment remained stable in 2008, CRE vacancy rates increased 2% to 14.6% due to a 4.0% increase in CRE space available. Rental rates remained stable.

## Real estate mortgage financing options have deteriorated for both the residential and commercial segments.

In 2008, despite lower interest rates, the mortgage market showed weak performance with the number of new loans decreasing dramatically while loan quality deteriorated further. As a result, total outstanding mortgages grew at their lowest level since the beginning of data collection on this index. With this in mind, credit standards continued tightening. In 2008, mortgage interest rates fell slightly; not only on conventional fixed rate loans (which reached a five year low in January 2009) but also on variable rate loans. As official rates began to fall in the summer of 2008, mortgage interest rates began a declining trend that will continue in 2009. In the second half of 2008, fixed mortgage loan rates decreased 1.3% to average 5.1% in January 2009, while adjustable mortgage loan rates fell 1.25% to a 6.0% average.

Throughout 2008, despite lower rates, mortgage loan demand dropped dramatically as credit conditions tightened and the economy worsened: total mortgage loans originated in the first three quarters of 2008 totaled $1.24 trillion, which represents half the mortgage flow originated in 2007. Mortgage demand has shifted to fixed rates, and while adjustable rate mortgages (ARMs) were almost 40% of the total mortgages originated in 2004, they represented only 11% of loans in 2008. Demand has also shifted slightly to government backed mortgages, which currently represent almost 16% of total originations, while they averaged below 5% from 2000 to 2007.

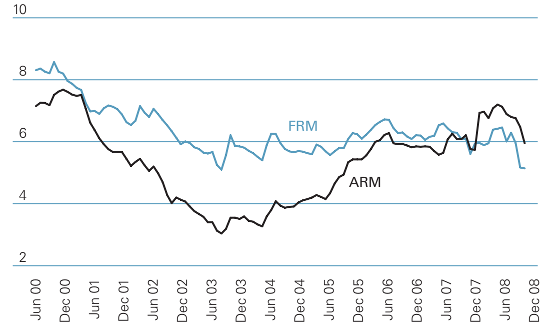
As a result, at the end of the third quarter 2008, total mortgage loans outstanding totaled $14.7 trillion made up of $12.0 trillion in residential loans and $2.7 trillion in commercial loans. Since the fourth quarter of 2006, the expansion rate has slowed in both real estate mortgage segments, reaching a historical low yoy variation rate for residential (1.8%) and a 10-year low for commercial (5.2%). Total mortgages outstanding increased 2.4% yoy, the lowest increase since first quarter 1993.

The recent trend to lower home ownership ratios is creating an opportunity for multifamily real estate, which is generally more focused on the rental market. In fact, in the third quarter of 2008, multifamily mortgage financing grew 10.5% yoy – a rate close to the 2000-07 average. By comparison, single family mortgages, more oriented to homeownership, expanded 1.2%, the lowest rate since data collection started in 1953.

In 2008, as a consequence of the prolonged real estate meltdown, the quality of the mortgage portfolio has deteriorated further. In the third quarter of 2008 the total delinquency rate increased almost 2% to reach 4.8% of total real estate loans while the charge-off rate increased three fold to 1.25%, the highest rate recorded since the early nineties.

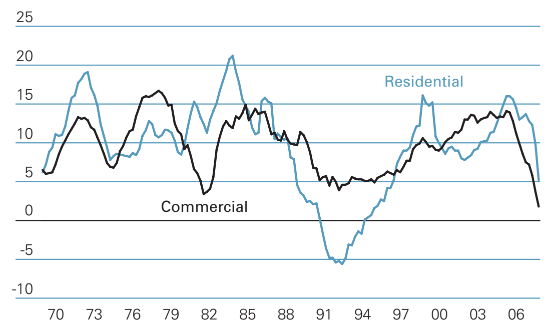
Both the residential and the commercial portfolios worsened in 2008. In the residential segment, delinquency rates increased from 3.0% to 5.0% while charge-offs escalated from 0.5% to 1.5%. According to the Mortgage Bankers Association (MBA), at the end of third quarter 2008, the residential foreclosure rate approached 3%, nearly one percentage point above fourth quarter 2007. Regarding the commercial real estate segment, from fourth quarter 2007 to third quarter 2008, delinquency rates increased 2% to 4.7% while charge-offs increased from 0.4% to 1.1%.

### Mortgage Interest Rates
(%)



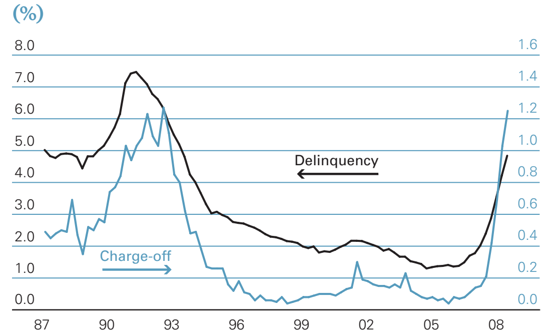

Source: MBA

### Mortgage Outstanding
YoY variation (%)




Source: Federal Reserve

### Charge Off & Delinquency Rates
(%)




Source: Federal Reserve

# Mortgage Finance: Experiences Abroad

## What's next for the U.S. housing finance system?

Extremely negative financial market conditions, accompanied by the profound housing market adjustment in the U.S., are highlighting the need to explore new funding alternatives to revitalize mortgage markets.

Traditionally, there are three funding methods available to finance mortgages. Under the first method, banks can fund loans utilizing retail deposits. This method imposes clear limitations given the short-term nature of deposits with respect to long-term mortgage financing needs.[1] Under the second method, mortgages are funded through covered bonds or mortgage bonds guaranteed with the mortgage portfolio. Under the third method, loans can be packaged and sold as securities in the secondary markets in the form of mortgage-backed securities (MBS). Note that the main difference between mortgage bonds and MBS is that the former are on-balance-sheet positions, whereas the latter represent off-balance-sheet items. In both cases, loans are pooled by the credit institution into a fund and a new security is created. In the case of a mortgage bond, the new security issued is guaranteed not only by the collateral associated with the underlying loans (the so called *"cover pool"*), used in setting up the new bond, but also by the issuer's creditworthiness.

Covered bonds have been used in Europe for more than 200 years and still represent an important segment of the capital market and a relevant mortgage funding source. Germany and Denmark were the first countries to use these instruments, and during the late nineties covered bonds were introduced more widely throughout Europe with various degrees of success (Graph 1 and 2). Spain provides a particularly representative case. *Cédulas Hipotecarias*[2] can be issued by every credit institution supervised by the Bank of Spain, and in only two years, these instruments have grown from funding about 20% of housing loans in 2005 to more than 40% at the end of 2007. Even during the current turmoil, covered bonds have continued to provide liquidity to housing markets in Europe and still represent a higher-yielding alternative to government bonds. France, with the *"Obligations foncières"*, is another representative case.

In the U.S., the majority of mortgages are funded through MBS. These securities allow ordinarily non-liquid assets (such as mortgage loans) to be packaged into liquid securities. They also permit, through the transfer of a pool of loans, a special purpose entity to be established that functions to erase these assets from the institution's balance sheet, thus removing the capital charge associated with them[3]. This technique was extensively used by Government Sponsored Enterprises (GSE), such as Fannie Mae and Freddie Mac. The main goal of these agencies was to develop a secondary market for MBS in order to increase mortgage funding sources and extend home ownership in the U.S.

This model seemed to function well but was not tested by times of financial stress. As the housing market cooled, pressures built and higher than expected losses were realized pushing the MBS market to its limit. GSE were also put under heavy strain, prompting active intervention from the U.S. government and landing Fannie and Freddie in conservatorship. After this event, fully private securitized models became nearly non-existent, posing the question of which model should be embraced for future funding of residential mortgages in the U.S.

A proposal to develop a market for covered bonds in the U.S. has already emerged[4]. There are several advantages associated with this instrument, not the least being the simplicity of its structure and the identification of the ultimate risk bearer. On one hand, covered bonds do not seem to be highly sensitive to changes in the underlying asset price, in this case, home prices. This is also reflected in the resilience of these instruments during periods of financial turmoil. For example, when compared to MBS, there has not been significant change in the spreads on the Spanish *cédulas,* despite the deep domestic housing sector downturn (Graph 3).

On the other hand, the securitization model collapse coincided with the change in the housing market cycle. Although this market is still active, it functions only due to government intervention, whereas non-agency securitization is almost non-existent (Graph 4). The debate then

1 Moreover, deposit taking activity is normally limited geographically implying higher risks for funding loan activity.

2 For more on Cédulas Hipotecarias see Ribakova E., Avesani R., García Pascual A.: "The use of covered mortgage bonds", February 2007, IMF WP 07/20.

3 Spain represents an exception to this rule. National regulation by the central bank did not allow dropping securitized items off the balance sheet.

4 In July 2008, a group of banks (Bank of America, Citigroup, JPMorgan Chase and Wells Fargo) declared a plan to start off a covered bond market for residential mortgages.

# Mortgage Finance: Experiences Abroad

turns to the future of the GSE and how they should be reformed. Privatization is theoretically an option, although it does not appear a feasible one in the near future[5]. If Fannie Mae and Freddie Mac remain public then there would be questions as to whether private shareholders should be allowed.

All in all, the U.S. mortgage finance system is undergoing a moment of profound reorganization. Whichever model is chosen, confidence will need to be restored first and regulation dramatically improved to assure viable and sound mechanisms of mortgage funding.

## Homeowner Affordability and Stability Plan (February 2009)

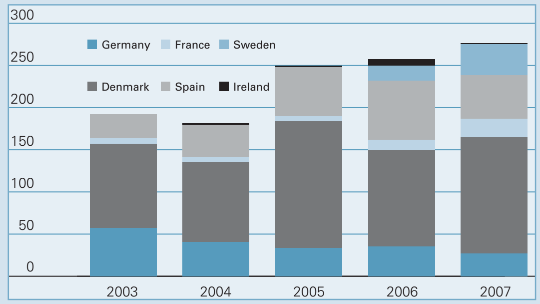
- It is part of the President's broad, comprehensive strategy to get the economy back on track.
- Goal: the plan is oriented to help up to 7 to 9 million families restructure or refinance their mortgages to avoid foreclosure.
- Key components:
  1) Affordability: the goal is to refinance up to 4 to 5 million responsible homeowners, who have seen the value of their homes drop, with more affordable mortgages (at lower rates) through Fannie Mae and Freddie Mac.
  2) Stability: the Government created a $75 billion initiative for those families who are now struggling to stay current on their mortgage payments. The goal is to provide loan modifications up to 3 to 4 million at-risk homeowners to bring monthly payments to sustainable levels. It can be achieved either by lowering the interest rates or by reducing the principal owed on the mortgage. In both cases, lenders will receive financial assistance from the plan.
  3) Low Mortgage Rates: Government is willing to maintain low mortgage rates by reinforcing the GSE capital and increasing their portfolios. The Treasury will continue to purchase Fannie Mae and Freddie Mac's MBS to promote stability and liquidity in the marketplace.

The Affordability and Stability Plan is oriented to improve the current mortgage system, by reinforcing the role of GSE. It will also curb current financial stress and limit housing foreclosures.

5 For an approach as to how to reform the U.S. mortgage market, see Hancock D. and Passmore W.: "Three mortgage innovations for enhancing the American mortgage market and promoting financial stability", preliminary draft presented at UC Berkeley-UCLA symposium The mortgage meltdown, the Economy and Public Policy, October, 2008.

### Mortgage Bond Issuance

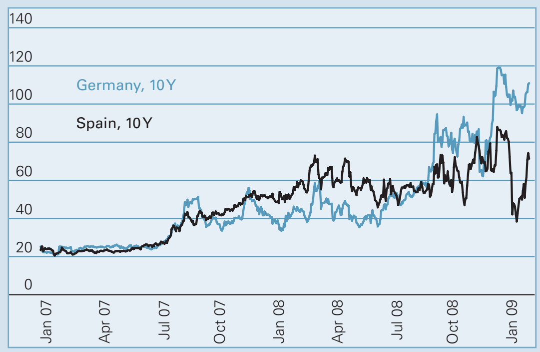
€ bn




Source: European Mortgage Bond Council

### Covered Bonds Spreads

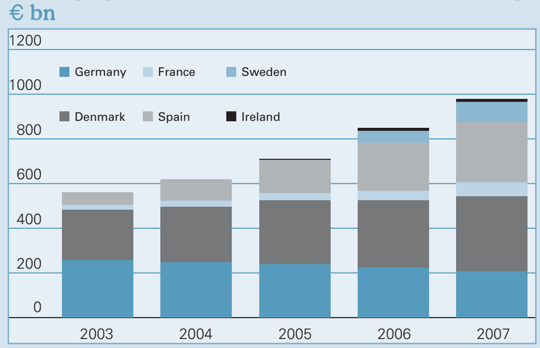
bps




Source: Federal Reserve

### Mortgage Bonds, Amounts Outstanding

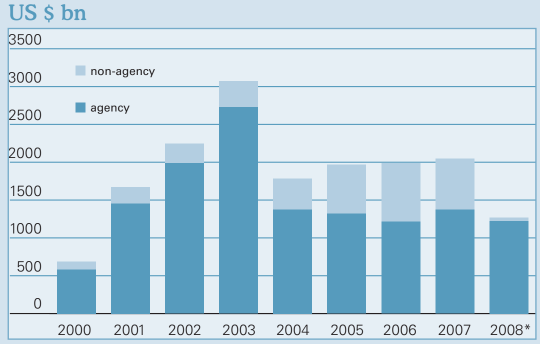
€ bn




Source: European Mortgage Bond Council

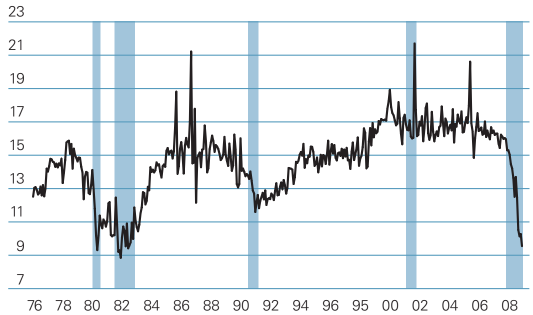
### MBS Issuance

US $ bn



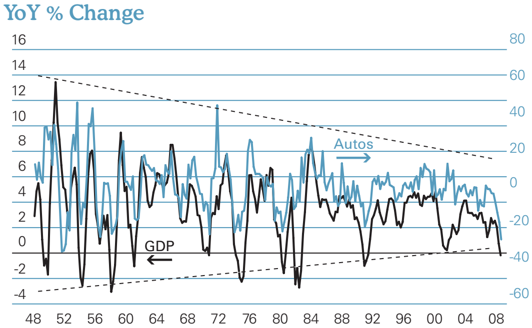

* Total until November
Source: Sifma

### Total Auto & Light Truck Sales
Million units



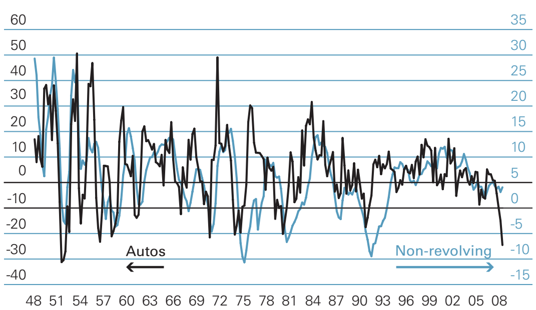

Shaded areas=recessions
Source: BEA & NBER

### Real GDP & PCE of Motor Vehicles & Parts
YoY % Change




Source: BEA

### Real Auto PCE & Non-revolving Credit
YoY % change




Source: BEA & Fed

### Response of Auto Sales to a Shock in Credit*


* One S.D. innovation, Cholesky dof adjusted
Source: BBVA ERD

## The outlook for auto sales in a recessionary environment

U.S. auto sales have experienced a sharp contraction during the current economic recession. In January 2009, total auto and light truck sales dropped to 9.6 million annualized units, the lowest level since June 1982 and 37% below sales a year ago. This downward trend could intensify if tighter credit standards and job losses continue.

Auto sales constitute a significant component of personal consumption expenditures (PCE). In 2008, they accounted for 37.1% of durable goods consumption, 3.8% of total PCE and 2.7% of gross domestic product (GDP). Not surprisingly, motor vehicle sales are a key determinant of the business cycle. For more than two decades, greater inflation stability and low interest rates resulted in a less volatile cycle, benefiting durable goods consumption, particularly auto sales.

However, the current financial crisis has put an end to this long period of stability in auto sales and GDP. Tighter credit standards have reduced the amount of auto loans and increased borrowing costs. Meanwhile significant job losses have impaired personal income and thus durable goods spending. In fact, real spending on durable goods declined by an average of 6% yoy in the last three quarters of 2008. In 4Q08 it plunged to its lowest level since June 1980 falling by 11.4% yoy.

For financial institutions, auto sales represent a significant portion of consumer credit. According to FDIC data, in 3Q08 the share of individual loans to total loans was 14.4% for commercial banks. More than half of those loans were non-revolving and included auto loans. For finance companies, the share of consumer loans to total loans was 43% in the same period. In a more traditional recession, a decline in auto sales results in a sharp adjustment in non-revolving credit. In the current cycle, this correction could be sharper than usual due to ongoing financial strains.

## The determinants of auto demand: a VECM approach

Auto sales move inversely to the price of fuel and interest rates. When car or gas prices go up, demand goes down and vice versa. Likewise, when the cost of borrowing increases, demand declines and vice versa. On the other hand, auto sales move in tandem with personal income and employment so that increases in personal income or employment result in higher auto demand.

To assess the impact of these determinants on total auto sales, we used a Vector Error Correction Model (VECM)[1], which allows us to specify the interaction of these variables in the short-run, in a framework that anchors the dynamic to long-run equilibrium relationships. The VECM is not only useful to determine the parameters of the long-term relationship between variables but also to assess the impact of variable changes on each other. Our model uses data running from 1976 to 2008 and includes new auto and light truck sales, payroll employment, non-revolving credit, interest rates for auto loans, energy prices and the consumer price index for new vehicles.

1 For more details see for example Engel, R. F., and C. W. J. Ganger. 1987. Cointegration and error correction representation, estimation and testing. Econometrica 55 (1): 26

## Main results

Regarding the long-term relationship between auto sales and their determinants, the resulting coefficients have the expected sign and are statistically significant. Since variables are expressed in logarithms, coefficients can be interpreted as elasticities. According to our results, employment growth has the largest elasticity so that a 1% increase in the rate of payroll growth leads to an 8.8% gain in new auto sales. In addition, a 1% increase in car prices leads to a -0.2% decline in auto sales while a 1% jump in energy prices reduces the demand for autos by 0.1%. As expected, an increase of 1% in the flow of credit boosts sales by 0.3%.

Our model also indicates that auto sales should not move far away from their long-term trend, unless a major shock occurs. This is consistent with the fact that sales have been fairly stable. Between 1976 and 2008 sales averaged 14.6 million units and 68% of the time they have been within a range of 12.5 and 16.7 million units. Our model results have a co-integration coefficient of -0.05, which implies a slow speed of adjustment. Therefore, once sales have been disturbed significantly, it takes a prolonged period of time for them to return to their long-term equilibrium, as was the case after the economic recessions of the early 1980s and 1990s.

Our results are consistent with recent trends and thus, not surprisingly, the sharp adjustment in auto sales can be explained by the significant decline in payroll and the intensification of financial strains which have reduced credit availability and increased borrowing costs. In fact, according to our results, one standard deviation in credit reduces auto sales in the next three months. Therefore, recurrent shocks to credit over the past two years have had devastating effects on auto consumption. So far, these negative effects have had greater impact than that of lower energy prices and huge price discounts. In the absence of further shock to these variables, auto sales should start to stabilize and eventually rebound from current levels.

## Forecasts

Based on our estimates and results from the VECM, forecast scenarios were performed for auto sales from 2009 to 2014. In the baseline scenario, auto sales are expected to decrease 20.6% further in 2009 taking the annual average to 10.7 million units, the lowest level in more than three decades. In 2010 and 2011 sales should recover briskly and continue growing until they are consistent with the long-term trend.

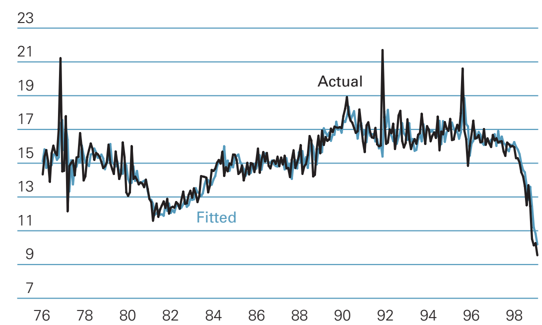
Based on these results, we calculated forecasts for auto sales in the BBVA Compass Sunbelt Region plus California, which together account for one third of total U.S. sales. In 2009, sales are forecasted to decline sharply in all states with the major drops occurring in Arizona and Florida. However, sales in the Sunbelt will decline by a slower rate than in the U.S. (17.4% vs. 20.6%). In 2010, sales are expected to recover in all states with the biggest growth occurring in Texas and New Mexico. In summary, according to our model, even in the baseline scenario, auto sales are likely to fall in 2009 and will recover slowly in following years.

### Vector Error Correction Estimates of Auto Sales

| | Coefficient |
|---|---|
| Prices | -0.2 |
| Credit | 0.3 |
| Employment Growth | 8.8 |
| Energy Prices | -0.01 |
| Error Correction Term | -0.05 |

Source: BBVA ERD

### Total Auto & Light Truck Sales
Actual vs. Fitted, million units




Source: BBVA ERD & BEA

### Total Auto & Light Trucks Sales
Million units

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|---|---|
| Baseline | 13.5 | | | | | | |
| GM | | **10.5** | **12.5** | **14.3** | **16.0** | **16.4** | **16.8** |
| Chrysler | | **10.1** | **10.6** | **11.1** | **11.6** | **12.1** | **12.6** |
| BBVA | | **9.9** | **11.3** | **13.9** | **14.3** | **14.7** | **15.2** |
| | | | | | | | |
| Downside | 13.5 | | | | | | |
| GM | | **9.5** | **11.5** | **12.8** | **14.5** | **14.9** | **15.3** |
| Chrysler | | **9.1** | **9.1** | **9.1** | **9.1** | **11.1** | **12.1** |
| BBVA | | **8.1** | **9.5** | **12.0** | **12.4** | **12.9** | **13.3** |
| | | | | | | | |
| Upside | 13.5 | | | | | | |
| GM | | **12.0** | **14.3** | **15.8** | **17.5** | **17.9** | **18.3** |
| Chrysler | | **10.1** | **11.1** | **12.7** | **12.7** | **12.7** | **12.7** |
| BBVA | | **11.8** | **13.2** | **15.7** | **16.2** | **16.6** | **17.0** |

Forecasts in bold

GM: 2009 – 2014 Restructuring Plan; Chrysler: Restructuring Plan for Long-Term Viability; both presented on February 17, 2009 to U.S. Department of Treasury. Upside for Chrysler refers to Scenario B in the same report
Source: BBVA ERD

### State Estimates for Auto & Light Truck Sales
Thousand units

| | 2009 | | 2010 | |
|---|---|---|---|---|
| | Baseline | Downside | Baseline | Downside |
| AL | 148 | 121 | 167 | 139 |
| AZ | 183 | 149 | 189 | 158 |
| CO | 172 | 140 | 192 | 160 |
| FL | 561 | 457 | 581 | 486 |
| NM | 63 | 51 | 72 | 60 |
| TX | 798 | 649 | 910 | 760 |
| Sunbelt | 1,925 | 1,566 | 2,111 | 1,764 |
| CA | 1,099 | 894 | 1,222 | 1,021 |
| **Total** | **3,025** | **2,461** | **3,333** | **2,785** |

Source: BBVA ERD

## U.S. health system challenges

In the previous edition of BBVA Compass' *US Regional Watch*, we highlighted the main challenges of the U.S. health system, both from a nationwide and a regional perspective. Despite spending more on healthcare than any other nation, the U.S. does not provide universal care. Fiscal projections show that the challenge to public finances stemming from funding public healthcare would be enormous. This prognosis cannot be applied to every state (see Table 1), but, in general terms, a comprehensive reform seems inevitable.

## A snapshot of President Obama's proposals

President Obama proposed to establish a new public health plan. The plan would be financed by those firms who do not offer coverage to their employees ("pay or play", with public subsidies to small and medium enterprises), by citizens (with "fair" premiums and subsidies for those with low-incomes) and by the government.

He also proposed the expansion of Medicaid and SCHIP—the State Children's Health Insurance Program—(by raising income eligibility levels), mandating insurance for children and federal reinsurance for catastrophic claims (to curb premiums). Finally, he suggested the creation of a new insurance market (National Health Insurance Exchange) to facilitate the purchase of private insurance or to join the new plan.

## From the Massachusetts' model…

Many of President Obama's proposals are being tested in Massachusetts due to its healthcare reform of 2006. Notable inclusions of the reform are the expansion of Medicaid, the "pay or play" system for large and medium-size employers, subsidies for small firms and individuals and the Connector (a market maker which links individuals, employers and health plans)[1].

Resulting from the reform, the state of Massachusetts provides almost universal healthcare coverage (95% in 2007 vs. 85% which was the U.S. average), albeit at a higher cost (nearly $6,700 per

### Health System Indicators in the U.S.

| | Expenditure (pc, US$, 2004) | Coverage (percent, 2007) | Quality (score, 2005) |
|---|---|---|---|
| Massachusetts | 6,683 | 94.6 | 60.7 |
| Iowa | 5,380 | 90.7 | 62.4 |
| Minnesota | 5,796 | 91.7 | 67.0 |
| Wisconsin | 5,670 | 91.8 | 66.0 |
| **US** | **5,283** | **84.7** | **45.2** |
| Alabama | 5,136 | 88.0 | 40.1 |
| Arizona | 4,103 | 81.7 | 46.1 |
| Colorado | 4,716 | 83.6 | 55.8 |
| Florida | 5,483 | 79.8 | 38.9 |
| New Mexico | 4,470 | 77.5 | 40.8 |
| Texas | 4,601 | 74.8 | 35.1 |
| **Sunbelt** | **4,868** | **78.9** | **39.7** |

Source: BBVA ERD, based on data from CMS, US Census & AHRQ

### President Obama Health Care Proposals vs. Massachussets

| President Obama's plan | Massachusetts reform |
|---|---|
| Increase eligibility for Medicaid and SCHIP to 300% of poverty level | Eligibility for MassHealth (state Medicaid) increased up to 300% for certain populations |
| "Pay or play" system for large employers | Same. Large employers must have 25% of their workers enrolled or pay 33% of the premium |
| Subsidies for people with low-income to purchase health insurance | Subsidized premiums for individuals <300% of poverty |
| Mandatory enrollment of children in public or private health insurance | Mandatory enrollment of children if adults can afford it. Higher taxes in the case of non-enrollment |
| Create a National Health Insurance Exchange to facilitate purchase prices | Massachusetts Connector |
| Not specified yet | Minimum creditable coverage determines the baseline benefits |
| Create a national insurance plan | Nothing similar |
| Reinsurance subsidy for employer's catastrophic healthcare costs | Nothing similar |

Source: PwC Health Research Institute

capita, $1,400 higher than the national average in 2004). The main difference between the Massachusetts plan and President Obama's is that it does not contain a mandate to purchase insurance, an issue considered crucial to extend coverage.

Using a simple static approach (Graph 1), it can be shown that healthcare coverage is positively correlated with per capita health expenditures (both private and public). The Massachusetts (MA) healthcare system is ranked among the leaders in 2004 (the latest year with data for disaggregated expenditure) with a coverage ratio close to 90%. This result was due to a significantly higher expenditure (only lower than the District of Columbia), since its position does not differ significantly from the U.S. national pattern.

When simultaneously evaluating the coverage rate and overall healthcare system quality (Graph 2), the Massachusetts' outcome is again favorable. Obviously these results should be interpreted with caution since they ignore critical issues such as demographic characteristics and per capita income level. It can be concluded that while the Massachusetts' model is broad-based and provides quality service, it is costly which raises doubts concerning its easy exportability[2].

## …to a Minnesota approach

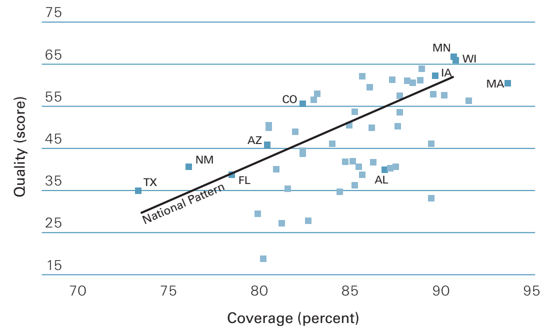
A group of Northern states (Minnesota (MN), Iowa (IA) and Wisconsin (WI)) also display good results. These states exhibit a positive coverage gap, since they place well above the national pattern. In addition, and more importantly, they appear to be excelling in the technological frontier (in terms of coverage and quality), with a per capita expenditure level only slightly above the national average. In other words, these states may be avoiding the "flat part of the spending-benefits curve."

## Sunbelt (and other laggards) may improve

No state does well or poorly in all areas. However the BBVA Compass Sunbelt Region as a whole faces a bigger challenge: lower insurance coverage (79%), and a lower overall quality score. Challenges are more acute for New Mexico and Texas in the coverage front. Taking the described static U.S. pattern as a valid reference, their spending level is associated with five to ten percentage points higher coverage than those observed (see Graph 1).

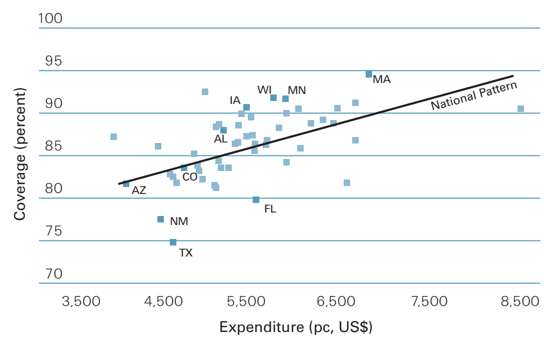
The differences in regional healthcare indicators and policies generate an extraordinarily rich menu of reforms. The new U.S. administration seems to favor the Massachusetts' model, characterized by high spending, high coverage and relatively high quality. Nevertheless, we argue that there exists, at least one other plausible benchmark in the North: Minnesota, Iowa and Wisconsin display better quality scores and higher levels of coverage with contained private and public expenditure. In addition, a combination of cost-saving new technologies, more preventative care, higher liberalization of the drug market and a reduction in medical lawsuits should also be implemented. The Sunbelt states (except Colorado) start from a laggard position. Should they apply some of these best practices, it may help them to catch-up to the healthcare frontier on access, efficiency and quality within a sustainable fiscal framework.

### Quality & Coverage in the U.S. by States




Source: BBVA ERD, based on data from CMS, US Census & AHRQ

### Expenditure & Coverage in the U.S. by States




Source: BBVA ERD, based on data from CMS & US Census

1 See www.barackobama.com/pdf/issues/HealthPlanFull.pdf and the summary in www.whitehouse.gov/agenda/health_care.

2 For an analysis of the reform, including some of the political economy aspects, see Gruber, J. (2008): "Massachusetts health care reform: the view from one year out", Risk Management & Insurance Review, 11:1, 51-63.

# Fact Sheet

Finance and Banking Industry, Dec 2008

| Commercial Banks* | US | Alabama | Arizona | Colorado | Florida | New Mexico | Texas |
|---|---|---|---|---|---|---|---|
| Number of institutions reporting | 4,301 | 95 | 30 | 89 | 205 | 35 | 337 |
| Total employees (full-time equivalent) | 1,898,268 | 51,606 | 3,221 | 10,279 | 22,086 | 4,231 | 63,423 |
| **Performance Ratios (YTD, %)** | | | | | | | |
| Yield on earning assets | 5.4 | 5.9 | 6.8 | 6.4 | 5.8 | 6.2 | 5.9 |
| Cost of funding earning assets | 2.1 | 2.3 | 2.5 | 2.3 | 2.5 | 2.0 | 2.0 |
| Net interest margin | 3.2 | 3.5 | 4.3 | 4.1 | 3.3 | 4.2 | 3.8 |
| Net charge-offs to loans & leases | 1.3 | 1.5 | 2.4 | 0.6 | 1.3 | 0.5 | 0.5 |
| Net operating income to average assets | 0.2 | -2.6 | -2.9 | 0.2 | -0.7 | -0.7 | 0.9 |
| Return on assets | 0.2 | -2.6 | -3.0 | 0.1 | -0.8 | -0.7 | 0.8 |
| Return on equity | 2.1 | -17.2 | -25.9 | 1.0 | -7.2 | -7.4 | 8.0 |
| Percent of unprofitable institutions | 21.2 | 19.0 | 70.0 | 11.2 | 54.2 | 5.7 | 12.2 |
| **Condition Ratios (%)** | | | | | | | |
| Net loans and leases to assets | 54.2 | 66.0 | 75.8 | 65.6 | 71.2 | 65.7 | 65.8 |
| Loss Allowances to Loan & Leases | 2.3 | 1.8 | 2.4 | 1.6 | 2.0 | 1.8 | 1.3 |
| Non-performing assets to assets | 1.8 | 2.0 | 5.1 | 2.1 | 4.0 | 1.7 | 1.2 |
| Core deposits to total liabilities | 48.6 | 60.1 | 73.4 | 74.7 | 64.1 | 70.1 | 64.5 |
| Equity capital to total assets | 9.4 | 12.1 | 12.2 | 8.9 | 10.2 | 8.5 | 10.3 |
| Core capital (leverage) ratio | 7.4 | 7.0 | 11.5 | 8.3 | 8.8 | 8.1 | 8.8 |
| **Aggregate Condition and Income Data ($ milllion)** | | | | | | | |
| Net income | 23,805 | -6,575 | -432 | 40 | -813 | -113 | 2,028 |
| Total assets | 12,166,149 | 262,889 | 14,297 | 46,662 | 112,463 | 16,387 | 259,240 |
| Earning assets | 10,242,844 | 223,308 | 12,659 | 42,942 | 101,882 | 15,056 | 232,049 |
| Total loans & leases | 6,743,592 | 176,760 | 11,097 | 31,131 | 81,658 | 10,961 | 172,715 |
| Other real estate owned | 21,636 | 749 | 196 | 201 | 567 | 35 | 501 |
| Total deposits | 7,956,882 | 180,065 | 11,207 | 38,236 | 85,880 | 13,038 | 192,952 |
| Equity capital | 1,144,404 | 31,757 | 1,747 | 4,154 | 11,447 | 1,394 | 26,706 |

Source: FDIC

| Non Prime Mortgage Loans | US | Alabama | Arizona | Colorado | Florida | New Mexico | Texas |
|---|---|---|---|---|---|---|---|
| Federal Reserve (Jan 09) | | | | | | | |
| Total Loans (Subprime and Alt+A) (Number) | 5,459,866 | 53,359 | 142,610 | 105,600 | 555,965 | 22,243 | 305,829 |
| Loans / 1,000 Housing Units (%) | 42.7 | 25.0 | 53.5 | 49.6 | 63.8 | 25.8 | 32.4 |
| Average Balance ($) | 232,795 | 109,053 | 200,805 | 198,603 | 206,363 | 159,258 | 107,889 |
| Average FICO | 649 | 621 | 649 | 660 | 643 | 640 | 621 |
| Average Interest Rate (%) | 7.7 | 8.6 | 7.6 | 7.3 | 7.7 | 8.0 | 8.4 |
| Loans with Adjustable Rate (%) | 58.70 | 43.7 | 73.8 | 61.5 | 75.4 | 46.5 | 39.7 |
| Loans in Foreclosure (%) | 6.4 | 2.7 | 7.1 | 3.9 | 16.6 | 4.7 | 2.8 |
| RealtyTrack (Jan 09) | | | | | | | |
| Loans in Foreclosure (Number) | 274,399 | 920 | 14,674 | 4,323 | 40,770 | 164 | 9,754 |
| Year-over-year % change | 17.8 | 58.4 | 62.0 | -36.7 | 35.1 | -57.2 | -33.6 |
| Real Estate Owned by the Bank | 66,777 | 543 | 4,545 | 1,242 | 5,594 | 73 | 4,028 |
| 1/every X Households (rate) | 466 | 2,323 | 182 | 492 | 214 | 5,257 | 967 |

Source: Federal Reserve & Realty-Track
* With more than $ 100 million assets

# Forecasts

Year-over-year % change

| | 1Q09 | 2Q09 | 3Q09 | 4Q09 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|
| **US** | | | | | | | |
| Real GDP | | | | | 2.2 | 1.3 | -1.2 |
| Employment | -2.1 | -2.7 | -2.8 | -2.0 | 1.1 | -0.2 | -2.6 |
| Personal Income | 4.0 | 2.9 | 3.9 | 3.8 | 6.2 | 4.7 | 3.7 |
| Home Sales | -16.9 | -18.9 | -15.4 | -3.8 | -14.8 | -16.5 | -14.0 |
| Home Prices | -7.0 | -6.0 | -3.0 | -1.0 | 1.6 | -5.5 | -4.3 |
| **Alabama** | | | | | | | |
| Real GDP | | | | | 1.8 | 0.9 | -1.1 |
| Employment | -0.7 | -0.7 | -0.8 | -0.7 | 1.3 | 0.3 | -0.7 |
| Personal Income | 5.4 | 3.7 | 6.0 | 5.5 | 5.7 | 5.1 | 5.2 |
| Home Sales | -11.9 | -3.3 | 3.4 | 24.7 | -6.9 | -26.8 | 1.8 |
| Home Prices | -1.1 | -1.1 | -1.2 | -1.4 | 5.6 | 3.0 | -1.2 |
| **Colorado** | | | | | | | |
| Real GDP | | | | | 2.0 | 1.6 | -0.3 |
| Employment | -0.8 | -1.2 | -1.4 | -0.7 | 2.2 | 1.1 | -1.0 |
| Personal Income | 3.6 | 3.2 | 3.4 | 3.3 | 5.9 | 4.9 | 3.4 |
| Home Sales | -7.6 | -0.6 | 2.1 | 8.1 | -3.1 | -9.1 | 0.2 |
| Home Prices | -0.8 | -1.6 | -2.1 | -1.4 | 2.3 | 0.8 | -1.5 |
| **New Mexico** | | | | | | | |
| Real GDP | | | | | 2.8 | 1.5 | -0.9 |
| Employment | -0.6 | -0.9 | -0.7 | 0.0 | 1.3 | 0.5 | -0.5 |
| Personal Income | 5.7 | 4.5 | 6.5 | 5.9 | 4.3 | 6.0 | 5.6 |
| Home Sales | -25.5 | -24.7 | -23.7 | -26.8 | -23.0 | -26.0 | -25.1 |
| Home Prices | -1.1 | -1.6 | -2.5 | -2.9 | 7.6 | 0.6 | -2.0 |

| | 1Q09 | 2Q09 | 3Q09 | 4Q09 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|
| **Sunbelt** | | | | | | | |
| Real GDP | | | | | 2.3 | 0.8 | -0.5 |
| Employment | -1.4 | -1.8 | -2.1 | -1.8 | 1.8 | 0.5 | -1.8 |
| Personal Income | 4.0 | 2.9 | 3.9 | 3.8 | 6.2 | 4.7 | 3.7 |
| Home Sales | -1.0 | -1.3 | -0.9 | 5.2 | -13.4 | -12.5 | 0.4 |
| Home Prices | -10.4 | -9.9 | -8.9 | -8.4 | 1.6 | -6.7 | -10.8 |
| **Arizona** | | | | | | | |
| Real GDP | | | | | 1.8 | -0.3 | -2.1 |
| Employment | -5.6 | -5.7 | -5.5 | -4.4 | 1.2 | -1.6 | -5.3 |
| Personal Income | 2.1 | 1.2 | 2.0 | 1.5 | 5.5 | 3.1 | 1.7 |
| Home Sales | 20.1 | 8.7 | -8.2 | 3.1 | -26.4 | 8.8 | 4.3 |
| Home Prices | -11.4 | -9.2 | -6.9 | -4.1 | 0.4 | -10.9 | -6.7 |
| **Florida** | | | | | | | |
| Real GDP | | | | | 0.0 | -0.9 | -1.7 |
| Employment | -3.7 | -4.0 | -4.1 | -3.5 | 0.5 | -1.4 | -3.8 |
| Personal Income | 2.7 | 2.0 | 3.0 | 3.0 | 5.2 | 2.9 | 2.7 |
| Home Sales | 4.0 | -7.0 | -13.6 | -17.3 | -27.9 | -9.1 | -8.7 |
| Home Prices | -21.0 | -18.1 | -16.1 | -13.4 | -0.9 | -14.3 | -17.0 |
| **Texas** | | | | | | | |
| Real GDP | | | | | 4.1 | 1.9 | 0.7 |
| Employment | 1.1 | 0.3 | -0.3 | -0.6 | 2.9 | 2.3 | 0.2 |
| Personal Income | 5.1 | 3.8 | 4.7 | 4.7 | 7.5 | 6.4 | 4.6 |
| Home Sales | -8.8 | -4.4 | 3.0 | 12.6 | -2.6 | -15.0 | 0.0 |
| Home Prices | 1.7 | 1.4 | 0.8 | 0.4 | 7.8 | 3.5 | 1.1 |

Source: BBVA ERD, BEA, BLS, NAR, Census & OFHEO

Economic Structure

| | US | Sunbelt | AL | AZ | CO | FL | NM | TX |
|---|---|---|---|---|---|---|---|---|
| GDP (2007, $ Billions) | 13,808 | 2,602 | 166 | 247 | 236 | 735 | 76 | 1,142 |
| Population (2008, Thousands) | 304,060 | 60,741 | 4,662 | 6,500 | 4,939 | 18,328 | 1,984 | 24,327 |
| Labor Force (4Q08, Thousands) | 154,447 | 30,202 | 2,154 | 3,166 | 2,750 | 9,313 | 966 | 11,854 |
| NonFarm Payroll (4Q08, Thousands) | 135,178 | 26,105 | 1,976 | 2,544 | 2,332 | 7,784 | 840 | 10,629 |
| Income Per Capital (2007, $) | 38,564 | 36,794 | 32,404 | 32,900 | 41,019 | 38,444 | 30,604 | 37,006 |
| Households (2007, Thousands) | 115,564 | 22,122 | 1,854 | 2,226 | 1,886 | 7,182 | 746 | 8,307 |
| Houses/ 1000 Hab, (2007) | 424.0 | 413.4 | 461.8 | 420.8 | 437.6 | 477.7 | 437.6 | 394.6 |
| Home Price (4Q08, YoY Change (%)) | -6.5 | -9.7 | 1.7 | -15.2 | -0.1 | -19.5 | -2.4 | 2.1 |
| Home Ownership Rate (2008, %) | 67.8 | 68.8 | 73.0 | 69.1 | 69.0 | 71.1 | 70.4 | 65.5 |
| Exports of Goods (2008, $ Billions) | 1,300.1 | 292.5 | 15.8 | 19.7 | 7.7 | 54.3 | 2.8 | 192.1 |

Source: BEA, BLS, Census & OFHEO

# Notes

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