RESEARCH

Economic Outlook United States

Third Quarter 2011 Economic Analysis

BBVA

- U.S. economic expansion will gradually pick up pace in the second half of the year, yet downside risks have increased
- Global growth remains strong in emerging markets, while Europe must resolve concerns about sovereign debt
- Prices of residential real estate indicate greater stability for non-distressed properties
- U.S. auto sales are rebounding as Japanese production is restored



Index

1.	Editorial
2.	Global Outlook
3.	U.S. Outlook
4.	BBVA Compass Sunbelt Outlook
5.	The Automobile Market: Struggling to Rebound, but Positioned for Profitability
6.	April 27, 2011: A Day that Changed Alabama16
7.	Forecasts

BBVA Compass is proud to collaborate with the following universities:









Closing Date: August 5, 2011



1. Editorial

The latest GDP release at the end of July came in surprisingly negative. The economy stalled in the first half of the year and the recession was much deeper than previously thought. From peak to trough (2007-2009) economic activity declined 5.1% instead of 4.1% as previously reported, and GDP in 2Q11 was lower than in 4Q07. Had it not been for unprecedented fiscal and monetary stimulus, the accumulated decline in GDP could have been closer to 8%. Moreover, in 2Q11 real per capita GDP was still 3.3% lower than at the start of the recession. If this ratio recovers at around 1.5% per year it will take more than two years to bring it back to pre-recession levels, implying a five-year "lost" cycle. This is even worse for employment which will take longer to fully recover.

It is probable that growth will accelerate in coming quarters, once deleveraging ends and construction activity strengthens. However, the economy may also be undergoing a structural transformation that could result in low growth for several years and neither a quick fiscal fix nor a long period of low borrowing costs will be enough to catalyze fast growth. In this environment, the temptation of politicians to promise a silver-bullet will intensify, thus increasing the risk of kicking the can down the road once again. It is paramount to come up with effective solutions. A first step would be to separate short-term political incentives from long-term economic challenges, so that economic policy is not sequestered by the political cycle. Next, a global rebalancing needs to take place. The U.S. needs to expand exports to fast growing emerging markets and depend less on borrowing from abroad and private consumption. The U.S. has one of the lowest export-to-GDP ratios among developed nations and one of the highest shares of private consumption-to-GDP. The inverse holds for many emerging markets that often maintain an artificially cheap foreign exchange rate and rely on exports to promote growth.

In addition, policies should focus on greater efficiency, competition and a level playing field. This implies the need for a simple, fair and transparent tax system. Some studies indicate that tax compliance costs are over \$400bn per year. In addition, fostering attractiveness to bright minds around the world is vital to maintain a leading role in business development and innovation. In fact, more than 50% of startups in the Silicon Valley were founded by immigrants. Other steps involve lowering barriers of entry and exit across markets to boost competition. This is fundamental for foreign trade and investment, the healthcare and the energy sector. Investing in R&D and fostering the links between the private sector and research centers has proven a winning formula that should not be discontinued. Leveraging the most efficient sectors of the economy is a key for success. Between 1987 and 2008, growth of multifactor productivity in computer equipment was more than 30 times the average, while that of semiconductor components was 25 times greater than the average. Other sectors with strong gains were air and rail transportation, medical equipment, media and communications. These industries can boost growth and high-skill employment that supports other sectors.

Last but not least, redefining the role of the government is a necessity. A low cost and highly efficient framework is needed to deliver high-quality public goods and services that reduce the burdens of government on daily life. This redefined role should focus on the most vulnerable groups of society and deal with market imperfections. Moreover, government must assure that the education and justice systems, two of the most important determinants of long-term economic performance, achieve the highest possible standards.

Sincerely,

Nathaniel Karp

BBVA U.S. Chief Economist

2. Global Outlook

The global economy will continue growing strongly, after a soft patch in the first half of the year

The global economy experienced a mild slowdown in the first half of the year, which was more pronounced in the U.S., but also affected some emerging countries. Nevertheless, as the factors behind the slowdown are mostly temporary in nature (high oil prices, supply chain disruptions from Japan and bad weather), global growth is set to continue at a robust pace of 4.2% in 2011 (slightly lower than previous forecasts) and 4.5% in 2012.

However, risks to the outlook are now more tilted to the downside. Although the slowdown in activity in the U.S. should be temporary, as oil prices stop climbing and international supply chains are restored, the recovery is still weak and may be prone to relapses. The recent slowdown may curb consumer and producer sentiment, and highly-leveraged consumers may restrain their spending and thus dampen the pace of GDP growth.

Both in Europe and the U.S., fiscal concerns pose big challenges for policymakers. As solvency concerns have not been fully addressed, the sovereign debt crisis in peripheral Europe intensified, with the risk of it becoming systemic as market pressure spreads beyond Greece, Portugal and Ireland to Spain, Italy and possibly Belgium. While no one doubts the solvency of the U.S. government, a short-term solution to its fiscal imbalances would increase the chance of a sudden spike in U.S. long-term yields.

Finally, in emerging economies, overheating concerns have eased slightly as tightening measures continue to gradually moderate growth in Asia and Latin America. However, fiscal policies still remain mostly accommodative, thus overburdening monetary authorities at a time when concerns over the appreciation of exchange rates in these economies remain.



Source: BBVA Research / IMF

Source: BBVA Research

It is beyond time to address solvency concerns in Europe, and that will require bold actions from EU politicians

In recent weeks, a new round of financial market stress in Europe extended to Spain and Italy, increasing the chances of a systematic crisis with potential spillover effects beyond Europe. This was caused by the delay in providing a second package to Greece and the insistence that private



bondholders should bear part of the cost of further financial aid to that country, together with the lack of a comprehensive solution to underlying solvency concerns in Greece. This lack of resolve toward Greece spilled over to countries with no solvency problems such as Spain and Italy, and consequently to the whole European financial sector, which quickly saw its liquidity dry up.

In this context, with so much at stake, the Eurogroup agreed on July 21 to deal with liquidity and solvency concerns. For the former, it decided to improve the European Financial Stability Facility (EFSF) by allowing it to lend preemptively to solvent countries in distress – much like the Flexible Credit Line from the International Monetary Fund (IMF) – and to buy sovereign bonds in secondary markets. Regarding solvency, it softened the conditions of official loans to Greece (also extended to other program countries) and reached an agreement with the private sector for a reduction of net present value of their holdings of Greek debt by 21%, through debt swaps and buy-backs.

These have surely been big – and, in some cases, unexpected – steps in the right direction towards solving the financial crisis in Europe. But Europe is not out of the woods, and that has been reflected in a slightly moderated reduction in the risk premia of peripheral countries. Apart from filling in the technical details of the July 21 agreements, there are still four main lines of action. First, the EFSF should be expanded and pre-financed. Second, Europe needs to work toward a closer fiscal union, ending with the introduction of Eurobonds, together with fiscal rules and tight control of national budgets. Third, economic reforms should continue to be implemented credibly and reform agendas should be drawn up in the rest of the EU, especially in those countries at risk of being shut out of finance markets. Fourth, EU authorities should finally decide how they will bring Greece's debt to a sustainable level and end solvency concerns.

Until these four steps are taken, Europe will be confronted with elevated sovereign spreads (not just for peripheral Europe) and a bigger debt restructuring need down the road. In the meantime, Europe will continue to be subject to reform fatigue or bailout fatigue that may lead to a disorderly debt restructuring, which could have a global impact.

Politics holds the key to the outlook in many countries in Latin America

In Latin America, many countries also face uncertainty derived from the future course of politics. In some cases this is derived from the perceived weakness of some governments as they are saddled by corruption charges or massive protests. In other cases, it is the result of recent changes in governments or the uncertainty about the outcome of upcoming elections. Although it is true that in the last decade the election cycle in the region has had less influence in the economy, it is crucial that this capital is not wasted by wide policy swings straying from continuing economic reforms.

Overheating concerns ease slightly in many emerging economies, but global risks and currency appreciation might turn up policy tightening

Emerging economies continue to show risks of overheating, although these risks have receded somewhat given ongoing tightening measures and headwinds (in Asia) from higher commodity prices and the earthquake in Japan. Moreover, risks of a hard landing in China diminished as 2Q11 growth showed a slight deceleration and the economy is still on track for a soft landing. However, inflation in emerging economies remains a concern, and policymakers risk falling behind the curve as they remain cautious about the global environment and worry about excessive currency appreciation.



3. U.S. Outlook

GDP figures confirm our baseline scenario of slow growth for the rest of the year. Real GDP increased just 1.3% in 2Q11 from a downwardly revised 0.4% in 1Q11, at an annualized rate. Growth in both quarters was lower than expected. In 2Q11, consumer spending experienced the lowest contribution in two years due to a sharp decline in durable goods consumption. Demand for big ticket items was affected by high energy prices, reduced spending on autos and uncertainty in the labor market. Non-residential investment and net exports contributed positively to growth, while government spending subtracted.

Revised data indicate that real GDP experienced a more V-shaped pattern than initially estimated. The decline during the recession from 4Q07 to 2Q09 was more severe and the recovery from 3Q09 to 3Q10 turned out stronger. The accumulated decline during the recession was -5.1% versus an initial estimate of -4.1%, while the accumulated increase during the 12-month recovery was revised upward to 3.9% from 3.6%. These revisions are more consistent with recently revised state GDP estimates that also indicate a sharper fall in many states. The downward revisions to 4Q10 and 1Q11 data reveal the extent of the recent slowdown, as the accumulated increase was revised to 0.7% from 1.3%.

In 1H11, supply chain disruptions caused by the Japanese earthquake affected auto production, while adverse weather conditions and high energy prices also had a negative impact on economic activity. As a result, we have lowered our GDP growth expectations for 2011.

Our baseline scenario could be affected by three main risks. First, higher energy prices have the potential to reduce disposable personal income and consumer spending. Second, weakness in the housing market raises the risk of a double dip that could limit economic growth even further. Third, insufficient measures to reduce the fiscal deficit heighten uncertainty have the potential to increase borrowing costs.



Source: BBVA Research & Haver Analytics

Source: BBVA Research & Haver Analytics

Going forward, personal consumption expenditures (PCE) will continue to be positively affected by employment creation, low interest rates and wealth creation; however, further deleveraging and a persistently high unemployment rate will limit this growth. Therefore, we expect consumer spending to expand in 2H11, although at a moderated pace. Non-residential investment continues to expand at a higher rate than the rest of the economy; however, it has recently eased. Investment in equipment and software will continue to be the major driver of non-residential investment in the near future, favored by strong demand overseas.

In the housing market, high levels of inventories and lower sales discourage construction. On the other hand, supported by better economic conditions, the commercial real estate market appears to be reaching bottom and the recovery could start soon.

High energy prices will continue to exert pressure on headline inflation, while core inflation is likely to increase further, reflecting the pass-through effects into non-energy goods. Despite the upward pressures, we expect core inflation to remain within Fed's comfort zone. This is because labor cost indicators -approximately two thirds of total input costs- such as hourly earnings and the employment cost index continue to show stability. Moreover, although short-term inflation expectations have increased, long-term expectations remain anchored. For instance, 10-year-ahead inflation expectations are slightly below trend at 2.4%.

Through its communication, the Fed has delineated the sequencing of a potential exit strategy: cease reinvestment, modify forward guidance, raise the target rate (incease interest on excess reserves, discount window) and later conduct sales of agency securities from the System Open Market Account (SOMA) portfolio with ample pre-announcement. But the Fed has also revealed an alternative plan. If deflationary risks reemerge, it may offer more explicit guidance on the target rate and balance sheet, conduct more securities purchases and increase the average maturity of the Fed's holdings; however, Chairman Bernanke pointed to the untested nature of these choices and their uncertain effects on output.

Although the Fed seems to be drawing contingency plans, clearer signals are needed before taking the next step. Opinions are divided inside the central bank; on one hand, there are those who believe that additional monetary policy stimulus should be considered given the weakness shown by most economic indicators. On the other hand, there are those who suggest the removal of policy accommodation as inflationary risks have intensified. We do not expect any rate hikes for an extended period. However, if economic conditions deteriorate further or the recovery proves to be slower than previously expected, the next interest rate hike could be delayed even further. Chart 5



Core Inflation and Hourly Weekly Earnings,

Chart 6 Fed Funds Models, %



Source Haver Analytics

Source: BBVA Research & Haver Analytics

4. BBVA Compass Sunbelt Outlook

The BBVA Compass Sunbelt Region continues to expand faster than the U.S. average. While the residential housing market remains weak, aggregate home price indicators mask the sources of this stress. Employment is growing in most states; however, the unemployment rate remains elevated. Further compounding high unemployment, projected budget shortfalls are forcing state governments to lay off workers. On the upside, the Sunbelt's relatively higher export intensity continues to boost economic output, because high commodity prices and fervent global demand for high value-added products are sustaining rapid export growth. Texas continues to lead the recovery as activity in the oil and gas industry remains strong and spills over to the rest of the economy. Consequently, although the BBVA Compass Sunbelt Region experienced a weaker recovery relative to the rest of the U.S. during 2010, we expect the Sunbelt to outperform the U.S. in 2011 and 2012.

Housing prices are showing a dual evolution: while prices of distressed properties are declining intensely in almost every state, non distressed property prices exhibit stability

In the first half of 2011, property price indices were down significantly compared to the prior year. Annual depreciation varied between 2% and 12% across the BBVA Compass Sunbelt, according to the Federal Housing Financial Agency (FHFA) Purchase Index. While these figures appear to indicate that property prices are declining across the board, the decomposition of these indices reveal two submarkets: distressed properties (foreclosures and distressed properties in financial entities portfolios) in which prices are adjusting sharply, and non-distressed properties in which prices have exhibited more stability since economic activity picked up.

In general, distressed properties are sold at a huge discount, which pushes aggregate home price indexes downward. Data from CoreLogic reveals that discounts reached as much as 27% of the foreclosure price nationwide in 1H11. In the BBVA Compass Sunbelt Region, the average discount on foreclosures was almost 20%. In states where distressed sales began earlier, the price discount was the smallest. In California, Arizona and Florida, for example, the price discount was around 15%, while in Alabama, New Mexico and Texas the price discount averaged between 20% and 30%.

Nationwide, sales of distressed properties accounted for one of every four homes sold, according to RealtyTrac. In states where the housing meltdown was soft, such as New Mexico and Texas, distressed properties accounted for about 20% of total existing home sales; however, in states where the housing bubble was intense, such as California and Arizona, distressed sales accounted for 50% of total sales. In the BBVA Compass Sunbelt region, distressed properties comprised 38% of total sales.

On the flip side, prices of non-distressed residential properties show a more stable pattern. In the first five months of 2011, the national home price index excluding distressed properties rose by 3% according to CoreLogic. In Alabama, California and Colorado, prices of non distressed properties are holding the line, while in Texas, our analysis points to price appreciation. The price declines of non-distressed properties are far milder than the total data suggests in Arizona and Florida.



Source: CoreLogic and BBVA Research

Source: CoreLogic

Texas steams ahead, as economic momentum remains high

Texas continues to expand at a faster rate than the national average. While economic growth is moderating throughout the rest of the country; early indicators of summer activity suggest that manufacturing and labor continue to expand. Industrial production is strengthening, largely due to the oil and gas industry and ample demand for exports. For example, the number of drilling rigs in operation continues to rise, despite the recent drop in oil prices. Oil and gas drilling is strong in the Permian Basin and the Eagle Ford Shale. In addition, drilling permits in the Gulf of Mexico have been authorized, which is likely to increase activity in the industry even further.

Employment growth remains solidly above 2% on a year-over-year (yoy) basis, although it moderated in the second quarter due to public sector layoffs, and reductions in educational services and nondurable goods manufacturing employment. Many other service sectors are exhibiting annual expansion rates between 3 and 8%. The unemployment rate remains high; however, it is well below the national average.



Texas continues to face fiscal challenges, and lawmakers are considering further budget cuts. Tax revenue continues to rise due to increased retail sales, however, sales flattened early in the second quarter likely due to higher gasoline prices. The strength of Texas' exports cannot be emphasized enough. The manufacturing of high value-added products is requiring skilled labor, and robust international demand for oil and gas-related extraction equipment accounts for much of the increase.

While the home price purchase index is declining slightly on a year-over-year basis of around 2%, this decline is likely due to distressed properties which are selling at a large discount. Furthermore, lagging effects from the housing bubble persist in Texas' metropolitan areas. However, population and employment growth along with household formation support demand for residential housing. Construction and sales activity remains low, but building permits and housing starts remain stable.

Going forward, Texas will continue to outperform the rest of the country, with a solid GDP growth rate of 3.1% in 2011 and 3.4% in 2012.



Source: BBVA Research

Source: FHFA / Haver Analytics

Alabama's employment in private services slows, while exports boost activity

Economic activity in Alabama decelerated significantly in the second quarter, as our state monthly activity index (SMAI) dropped during this period. Certainly, the late April tornadoes had a negative impact on activity, while auto production slipped due to supply chain disruptions caused by the Japanese earthquake in March. The slowdown in activity was reflected among private services sectors, as many of these areas saw a reduction in jobs. These sectors have been critical for Alabama's job creation, as they were responsible for more than 50% of Alabama's private-led job creation during 1H11. We believe that the pace of growth in private services will remain slow for the remainder of the year. In spite of the transitory effects from Japan's earthquake, the motor-vehicle and parts industry remains a key contributor to Alabama's growth. The manufacturing sector contributed more than 20% of private net job creation during 1H11, and employment in motor vehicle manufacturing held steady in 2Q11 but declined slightly in the parts sector.



Furthermore, employment in the trucking industry expanded last quarter, and employment in professional, scientific and technical services also grew substantially. To the contrary, state and local government agencies reduced employment by nearly 6,000 workers in 2Q11, and state and municipal finances remain strained due to an unappreciable rise in tax revenue over the past year. Any additional state and local government budget cuts and layoffs will continue to weigh on economic activity in 2H11.

The residential sector remains subdued, as the home price purchase index has exhibited a sharp downward adjustment. Purchase prices are down more than 7% on the year as of 1Q11. Relative to the previous year, building permits and housing starts on a year-to-date basis are down 15%. Rebuilding efforts from the tornado damage might give some boost to housing construction, but the overall trend remains weak. The commercial real estate market continues to stabilize but activity remains slow.

In spite of the lagging residential market, exports continue to grow at double-digit rates. Chemicals and transportation equipment are in high demand from emerging markets, and these industries will contribute to Alabama's projected growth of 1.9% in 2011 and 2.1% in 2012.



Source: BLS / Haver Analytics

Source: Dept. of Energy, Wall St. Journal / Haver Analytics

Arizona's employment notches a year-over-year increase, as construction and high tech pick up

The 3-month moving average (3mma) of the SMAI edged down in the second quarter, as economic activity moderated. On a positive note, the pace of private sector job creation in Arizona strengthened during the second quarter buoyed by the construction, manufacturing, transportation, healthcare and business services industries. However, losses of nearly 10,000 jobs in state and local government agencies due to budget cuts dragged down total job creation during the prior quarter. Contrary to the public sector, the computer equipment and semiconductor manufacturing industry is adding jobs at a healthy pace, while the year-over-year rate of employment growth in construction entered positive territory in June for the first time since December 2006. Year-over-year, Arizona's employment growth remains below 0.5%, but displays an upward trend that points to sustainable expansion.

The housing market remains subdued. Prices, housing starts and building permits continue to decline from the previous year's levels; however, permits seemed to be reaching bottom, suggesting that recovery could occur soon. The number of mortgage delinquencies and foreclosures is declining rapidly, but they still have a long way to go.

Total exports continue to fuel growth, led by computer and electronic products. The Japanese earthquake had a minor effect on the supply chain of semiconductor manufacturing and high-tech products. In these industries, a high-level of capacity utilization is boosting the state's average productivity. Moreover new orders of high tech products continue to rise, and suggests that this sector will continue to support economic growth.

Given the weakness of the labor and housing markets, we expect the recovery to be slow. We project GDP growth of 1.8% in 2011 and 2.6% in 2012.

California's tech sector flies high, but widespread job growth calms

In the second quarter, overall economic activity slowed as state and local government layoffs accelerated, and segmented growth continues throughout the state. In addition to the government sector, job losses in the construction sector continue as the housing market remains exceptionally weak in inland areas with high unemployment and falling prices. Private services continue to add jobs although at a slower rate due to sharp declines in financial activities and a moderation in education and health services. While California led the nation in private sector job creation in the first quarter, it fell to fourth place in the second quarter behind Texas, New York and Florida, and just above Ohio and Massachusetts. However, overall employment creation has not been strong enough to reduce the unemployment rate, which remains the second highest in the nation.

On the bright side, exports are still growing at double digit rates on a year-over-year basis; however, as expected, they moderated slightly in the second quarter due to a slowdown in exports of computers and electronics. Nevertheless, international demand for these products remains unchecked, and California's leading position as an innovator and a supplier of high-technology products will serve it well in the future.

The dual evolution of housing prices is most pronounced in California. Purchase price indexes suggest a "double-dip" in housing, because the year-over-year change was +2% in early 2010 but now it stands at -8%. However, our analysis confirms that the aggregate index is being driven by distressed properties, and non-distressed housing near the coast is actually experiencing price appreciation. The pace of housing starts and building permits is rebounding, which supports our assessment. These trends along with falling delinquency rates are laying the foundation for a self-sustaining rebound in the housing market.

In spite of a volatile labor market and high unemployment, California's resurgence is causing average productivity to rise, and thus sustained employment growth will cause GDP to expand 2.4% in 2011 and 2.8% in 2012 – both above the U.S. average.



Colorado's growth stands firm, while New Mexico wavers

A latecomer to the recovery, Colorado's activity index accelerated in the second quarter as employment expanded in the mining and logging, information and leisure and hospitality industries. Although government sector layoffs weighed on the headline number, the state's tax revenue has surprised policy makers to the upside and limits the need for additional budget cutting measures.

In the housing market, building permits and housing starts remain flat, suggesting that the downward adjustment has bottomed out. However, purchase prices accelerated their decline on a year-over-year basis. Certainly, discounts due to distressed sales are partly responsible for this acceleration.

Although Colorado's export intensity is among the lowest across the Sunbelt region, exports are growing robustly driven by computer and electronics and food products. We expect Colorado to expand 2.1% in 2011 and 2.7% in 2012 due to its lagging exit from the recession.



Employment creation in New Mexico remains very weak, and indeed, our state index indicates a decline in economic activity to below the U.S. average. In the second quarter, employment growth was driven by mining and logging, manufacturing, trade and transportation, while leisure and hospitality, and construction experienced severe losses.

The housing market remains under stress, with housing starts, permits and prices still declining at double digit rates from the levels of the previous year. It will take time to stabilize the market, as New Mexico entered the recession late along with Texas and Colorado.

Given the weakness of the labor market and its high dependency on government employment, New Mexico will grow at a very slow pace, well below the U.S. average. We expect growth of 1.3% in 2011 and 2.1% in 2012.

Florida's growth consistency improves, but activity remains slow

Our state activity index suggests that the pace of Florida's economic expansion improved in the second quarter, and the state is now growing near the national average. Last quarter, Florida took third place for total private sector job creation and, contrary to many other states in the region, state and local government employment actually increased in the second quarter. Employment across a swath of service sectors expanded in 2Q11, while construction and manufacturing contributed jobs at a slower pace. Florida maintains a AAA rating from S&P. The government has made substantial budget cuts and continues to adequately fund its pension system. Remember that Florida was one of the only states prior to the recession whose pension contributions kept the system fully funded at 100%+.



Source: : BBVA Research

Source: BLS / Haver Analytics

In the housing sector, however, foreclosures remain elevated, and housing starts and building permits are stagnant while prices continue to decline at a faster rate. As in the case of California, the sale of Florida's distressed properties are weighing on the aggregate index; however, nondistressed properties do not appear to be appreciating significantly. Furthermore, a slow tourism sector weighs on expectations of tax revenue and economic activity.

Exports and manufacturing continue to be a boon for the state's expansion; strong demand from Latin America underlies this trend. We expect growth to surpass 1.9% in 2011 and expand 2.5% in 2012.

Table 1

BBVA



In the wake of the global recession, the U.S. automotive industry confronts a new landscape: in 2009, China became the world's largest auto market in terms of unit sales, and U.S. consumers are saving more and spending less on durable goods as they reduce their debt burdens. In the past three years, the big three domestic auto manufacturers have restructured their operations for enhanced profitability as they reduced product lines and narrowed their focus. While Ford managed to restructure itself without public capital, federal government bailouts were essential for GM and Chrysler to retool their operations. For example, in late July, the U.S. Treasury announced that it had sold its remaining stake in Chrysler and will take an estimated \$1.3 bn loss on that investment, while it retains a 27% ownership stake in General Motors and a nearly 75% stake in Ally Financial (formerly GMAC, GM's financial arm).

The return on these capital injections lies with rising auto sales and a more efficient U.S. auto industry. From October 2010-April 2011, the pace of new auto sales surged above 12-13 million annualized units, and the prospects were positive for a strong resurgence in demand. However, the March earthquake in Japan hindered production and caused the sales of the largest Japanese automakers to fall precipitously in May and June. Hence, total auto sales fell below 12 million annualized units as alreadytight new car inventories declined further and dealer purchase incentives decreased.

Manufacturer Jan-May-2011 Origin Apr Jun Change Cars 3.9 2.9 -1.0 Japanese Light Trucks 2.2 1.9 -0.3 Cars 3.0 2.9 -0.1 Non-Japanese Light Trucks 4.1 4.0 -0.1 Subtotal 13.1 11.7 -1.5



Monthly, Seasonally-Adjusted Pace of U.S. Auto Sales, mn units*

*Note: Numbers may not sum due to rounding Source: AutoNews / Haver and BBVA Research

Source: Autodata / Haver Analytics & BBVA Research

Despite the temporary setback in sales, our analysis suggests a gradual recovery for the rest of the year once Japan's production is normalized. While essential replacements and a growing population will support higher sales, we do not foresee a rapid return to the pre-recession average of 15 mn annual units until after 2015.

First, the working age population in the U.S. is projected to grow around 0.5% per year during the next decade, while it grew 1.2% per year from 1990 to 2007. As older workers retire and there are fewer young workers to fill their shoes, there will be less demand for new autos. Secondly, in addition to the slower growth of the labor force, high unemployment and a slow pace of job creation curtail the growth in demand for new autos. Consequently, the ratio of auto registrations to employment reached a new height during the recession, and there remains a glut of autos relative to employment. We do not expect employment to surpass its pre-recession peak until 2014.

Third, many consumers have changed their saving and spending habits, as they can no longer count on real-estate to be their sole source of savings (or collateral for home equity loans). The savings rate has been hovering near 5%, the median age of vehicles in use is approaching 10 years, and consumers are paying down all forms of debt to restore their personal balance sheets.

Nevertheless, low interest rates and longer loan terms maintain the affordability of autos for people with good credit, and the popularity of leasing has climbed back above 20%. Leasing remains attractive for entry and mid-level luxury vehicles; with a lease, a consumer can get into a more expensive car for a much lower monthly payment relative to an outright purchase.

A consequence of both modern manufacturing practices and the recession, new vehicle inventories remain low, and the supply shock to Japan's production severely eroded any buildup that occurred during the prior year. Thus, at the beginning of 2Q11, purchase incentives declined and lowered the probability that a consumer would find his or her desired car in the new vehicle market declined. Tight inventories have also resulted in a boost to the values of used cars, whose prices are currently at an all-time high.



Source: Manheim Consulting, BEA / Haver Analytics

Source: AutoNews Corp./ Haver Analytics

Rising oil prices, tighter lending standards and greater frugality have pushed up the demand for late-model compact and mid-size cars: their prices have risen precipitously in this environment. We expect a pullback in the prices for used vehicles in 2H11, as normal new car inventories are restored, and the labor market recovers.

In spite of high oil prices, however, recent sales data indicate few signs of changing consumer behavior. U.S. automakers continue to sell more trucks and SUVs than cars. Over the past year, monthly sales of light trucks at Chrysler, Ford and GM have outpaced sales of their cars by 3:1, 1.8:1 and 1.5:1, respectively. The Japanese automakers retain their specialization in selling more cars than trucks. Although the pullback in oil prices may have delayed decisions to purchase fuel efficient cars, in the long term, we expect oil prices to continue to rise due to strong global demand.

Surging oil prices will pose a challenge for U.S. auto manufacturers, as they will need jump to the forefront of efficient vehicle design to remain competitive with cars from German and Japanese manufacturers. But, the long-term benefits of a conversion to a more fuel efficient fleet will boost productivity and generate more economic output with lower dependence on oil. Further research and development over the next decades presents huge upside potential for new technologies such as lithium batteries and hybrid engines, and the spillover effects from advancements in these areas will reverberate through the economy.

6. April 27, 2011: A Day that Changed Alabama

Samuel Addy, Director and Research Economist, and Ahmad Ijaz, Director of Economic Forecasting, Center for Business and Economic Research, The University of Alabama

April 27, 2011: A Day that Changed Alabama

A total of 62 confirmed tornadoes carved paths of destruction totaling at least 1,177 miles as they traversed the northern and central sections of Alabama on April 27, 2011. The tornadoes varied in intensity and length, with three rated as EF-5, eight as EF-4 and seven EF-3 tornadoes; these inflicted severe damage to homes and businesses in the affected areas. A total of 250 people died as a result of the storms, with the highest county death toll (50) resulting from the EF-4 tornado that struck more densely populated areas of Tuscaloosa. The EF-5 tornadoes that hit the state caused 35 deaths in DeKalb County, 26 in Franklin and 25 in Marion County as they devastated entire small communities. More than 2,200 were injured statewide. The tornadoes were indiscriminate, striking young and old, students and families, poor and middle class and urban, small town and rural areas.

As a result of these storms, 43 Alabama counties were declared federal disaster areas, with eligibility for individual assistance, 33 counties were also entitled to apply for FEMA public assistance and all 67 counties were ruled eligible for assistance with debris removal. More than 13,000 homes and businesses were destroyed or declared unsafe and about 10,000 more sustained lesser damage or were affected. Two schools in Tuscaloosa and two in Hackleburg were destroyed and 10 other schools across the state were damaged, while five critical facilities statewide were destroyed or unusable. Surveys found 177,857 acres of forest land with a value of \$228.4 million damaged across the state. Insured losses from the Alabama tornadoes are estimated as at least \$2.6 to \$4.2 billion, making it the costliest natural disaster in the state's history. Recent estimates from the Insurance Information Institute indicate that insurers expect to pay out about \$2 billion on claims from the Tuscaloosa and Birmingham areas alone. Looking across the United States, insured losses from the spring 2011 tornadoes totaled \$14 billion, ranking this the nation's fifth most costly disaster.

Great strides have been made in debris removal and cleanup; by mid-July the United States Army Corps of Engineers had cleared about 4.3 of the 4.7 million Cubic Yards it was contracted for. While some repairs of damaged structures were complete or in progress and a small amount of rebuilding had begun, it was also apparent that bringing planning, redevelopment and rebuilding efforts to fruition is going to take time. And, while money has been and will continue flowing in from federal sources, insurance companies and from individual and corporate donations, it is also clear that there are real costs to individuals, the state and to local communities that will be incurred as these efforts progress. Although it is still too early to fully comprehend the total economic effects of the damage caused by the tornadoes, enough information is available to permit some preliminary estimates of damage effects on the Alabama economy with specific focuses on employment, earnings, state finances and gross domestic product (GDP).

Tornado Impact Analysis

The Center for Business and Economic Research at The University of Alabama derived preliminary estimates of the economic and fiscal impacts of the tornadoes as well as the consequent recovery efforts on Alabama based on data available in June. Multipliers obtained from the Bureau of Economic Analysis (BEA)'s Regional Input-Output Modeling System (RIMS II) were used in a model developed specifically for this analysis. To allow for uncertainty regarding the damage impacts at this early stage, low- and high-end estimates are presented. For impacts of recovery activities (cleanup, assistance and rebuilding), multipliers used are for the waste management and remediation services, accommodation and construction industries.

Fiscal impacts are derived from the earnings impacts allowing for the fact that not all of the earnings impacts are sales or income taxable. Spending on sales taxable items constitutes around 42 percent of total earnings and state taxable income (net income) is about 66 percent of earnings. Because job losses occurred across many industries, combined income and sales tax revenues share of total state tax receipts was used to determine the total lost state tax revenue for the damage impact analysis. No such determination is made on the recovery impacts because of the focus on just three industries; only sales and income taxes are reported and as such the recovery fiscal impacts are conservative.

The following assumptions are used in this analysis:

- 1. Economic damages only occur in 2011.
- 2. Cleanup and assistance spending will total \$1.6 billion (\$1.0 billion for cleanup and \$600 million for assistance) and be completed in 2011. Assistance will be mainly for accommodation.
- 3. Rebuilding spending will range from \$2.6 to \$4.2 billion with \$1.0 billion spent in 2011 and the remainder in 2012.
- 4. All recovery (cleanup, assistance and rebuilding) activities will be completed by the end of 2012.

Negative Economic Impacts from Tornado Damage

Toward the end of May 2011, the Alabama Department of Industrial Relations (ADIR) had received 6,000 claims for tornado-related unemployment and had data showing that some claimants were returning to work. Adjusting this number of claims received for the eight months remaining in the year and assuming that a quarter of the claimants will return to work reduces the number to 3,000 net direct unemployed wage and salary workers. To this number we add an estimated 761 proprietors or self employed based on BEA data and determine that the total direct number of unemployed due to the tornadoes is 3,761 for 2011. It is expected that these people will be working again in 2012.

The 3,761 direct unemployed must be added to the indirect unemployment resulting from the tornadoes to determine a total employment impact. Since businesses in numerous industries suffered damages, specific industry multipliers cannot be applied as a breakdown by industry is not available. Most Alabama industries' direct effect employment multipliers are between 1.5 and 3.5; using these multipliers puts the total direct and indirect number of tornado-related unemployed at between 5,641 and 13,162. This is about 0.2 to 0.5 percent of total Alabama employment including proprietors.

Currently, workers average earnings are at about the 2009 earnings per worker level of \$38,621, which means that \$217.9 to \$508.3 million in total earnings will be lost in 2011 because of the tornadoes. This translates into \$19.1 to \$44.5 million in lost state taxes, about 0.2 to 0.5 percent of the total. The lost state taxes comprise \$8.3 to \$19.3 million in income tax, \$3.5 to \$8.2 million in sales tax and \$7.3 to \$17.0 million in other taxes. In addition, the state is expected to spend \$80 to \$100 million on cleanup. Thus, including lost tax revenues, the tornadoes will cost the state \$99.1 to \$144.5 million in 2011. Additionally, local sales tax collections are expected to fall by \$4.4 to \$10.2 million and local governments will incur cleanup costs.

A fixed-asset basis is used to estimate the effect on Alabama GDP. At the time of this analysis, a range of \$2.6 to \$4.2 billion in expected insurance claims were reported, based on early estimates by Risk Management Solutions and AIR Worldwide. Assuming that the claims cover fixed assets only and allowing 10 percent extra for uninsured losses results in total estimated lost assets of \$2.9 to \$4.6 billion. Under the assumption that Alabama has the same GDP to fixed assets ratio of 29.2 percent as the nation, the tornadoes will reduce Alabama GDP by \$835 million to \$1.3 billion in 2011, or 0.5 to 0.7 percent.

The economic effects are certainly only a part of the full damage impacts. There are other adverse impacts on quality of life that are not considered in this analysis because they are non-market or non-

economic effects. Lives were lost and disrupted, people and businesses displaced, and the physical and emotional health of many was affected. Because such quality of life aspects cannot be expressed with the variables used for impact analysis, the damage impacts reported here are conservative.

Positive Economic Impacts of Recovery Activities

Recovery activities will create economic impacts that exceed those of the tornado damage, injecting an estimated \$2.6 billion into the Alabama economy in 2011 and an additional \$1.6 to \$3.2 billion in 2012, based on the assumptions used in this study. The 2011 spending will create a \$5.3 billion output or gross sales impact which will add \$2.9 billion to the state's GDP, or 1.6 percent. Of the \$2.9 billion value-added or GDP impact, \$1.5 billion is earnings to 51,709 workers, or \$29,763 per worker. State income tax revenues of \$58.3 million and sales taxes totaling \$24.8 million will be generated, along with local sales tax receipts of \$31.0 million.

In 2012 the \$1.6 to \$3.2 billion that will be spent on rebuilding will yield \$3.7 to \$7.3 billion in gross economic activity, including a \$1.9 to \$3.9 billion contribution to Alabama GDP. A forecasted 36,893 to 73,787 jobs that will be created in 2012 as the recovery progresses will generate \$1.2 to \$2.3 billion in earnings at an average of \$31,741 per job. It is likely that some of the jobs created by recovery activities could go to people who became unemployed as a result of the tornadoes. Increased tax revenues resulting from the recovery should yield \$63.2 to \$126.5 million for the state (\$44.4 to \$88.8 million in income tax and \$18.9 to \$37.7 million from sales tax) as well as \$23.6 to \$47.2 million of local sales tax collections.

During the expected 2011 to 2012 period, the recovery activities will generate enough revenue to cover damage-induced losses to state finances as well as the state spending for cleanup if assumptions on losses and spending hold. While the tornadoes' damages are largely localized, the economic impacts of the ensuing recovery activities will be more widespread. Some areas were so devastated that it is nearby communities that will benefit from the recovery spending.

Certainly the positive economic impacts of recovery activities are larger than the negative impacts of the tornado damages. It is important to note that the net effect is positive because most of the recovery funds are from external sources—the federal government, insurance claims and personal and corporate donations. Those funds would have gone to some other use if the tornado devastation had not occurred. As such, from a national perspective, the combined impact is negative. Additionally, there are the adverse effects on quality of life that if considered and valued could point to a net negative impact. Reinvesting and improving on what was there before, rather than just rebuilding, will facilitate long term positive impacts.

Table 2 Federal Assistance For Tornado	Recovery	Table 3 Quantifying the April 27 Tornadoes				
FEMA Individual assistance		62	Tornadoes Confirmed			
Applications approved	15,751	1,177	Tornado miles			
Individuals & households program	¢cc 442.004	250	Deaths			
Total dollars approved Housing assistance	\$66,443,084 \$47,981,400	2,200+	Injured			
Other needs assistance	\$18,461,684	43	Counties federal disaster areas			
SBA Low-interest loans						
Applications approved	1,300					
Total dollars approved	\$73,800,000					

Source: Federal Emergency Management Agency and Small Business Administration, July 25, 2011

Source: Alabama Emergency Management Agency and FEMA

Table 4

Property Damage Estimates		Insured Losses from Costliest U.S. Disasters, \$bn							
Structures destroyed	7,300	Hurricane Ivan (O4)							
Structures damaged	15,700	Hurricane Charley (04)							
Major	5,800	Hurricane Wilma (05)							
Minor	5,200	Hurricane Ike (08)							
Affected	4,700	Spring Tornadoes (11)							
Schools destroyed	4								
Schools damaged	10	Northridge Earthquakes (94)							
Critical facilities destroyed/unusable	5	Hurricane Andrew (92)							
Forest land damaged		9/11 Attack (01)							
Acres	177,857	Hurricane Katrina (05)							
Value	\$228,360,576	0 10 20 30 40 50							

Source: Insurance Information Institute

Chart 26

Source: Alabama EMA, FEMA, American Red Cross, Alabama Forestry Commission

Table 5

Alabama Tornado Economic Damage Impacts (2011 only)

Direct unemployed	3,761
Direct + indirect unemployed	5,641-13,162
Percent of total employment	0.2-0.5
Lost earnings (mn)	\$217.9-508.3
Lost state tax revenue (mn)	\$19.1-44.5
Lost local sales taxes (mn)	\$4.4-10.2
Estimated insured losses (mn)	\$2,600-4,200
Estimated uninsured losses (mn)	\$260-420
Lost Alabama GDP (mn)	\$835-1,348
Percent of total 2011 GDP	0.5-0.7

Table 6 **Positive Recovery Impacts**

	2011	2012
Cleanup (mn)	\$1,000	
FEMA assistance (mn)	\$600	
Rebuilding (millions)	\$1,000	\$1,600-3,200
Output (millions)	\$5,251	\$3,664-7,329
Value-added or GDP (mn)	\$2,938	\$1,939-3,878
Employment (jobs)	51,709	36,893-73,787
Earnings (mn)	\$1,539	\$1,171-2,342
State income and sales tax (mn)	\$83.1	\$63.2-114.7
Local sales tax	\$31.0	\$23.6-47.2

Source: U.S. BEA, Alabama Department of Finance, Alabama Department of Revenue, ADIR, and Center for Business and Economic Research, The University of Alabama

Source: Center for Business and Economic Research, The University of Alabama

Figure 1



Source: National Weather Service, Alabama EMA

Economic Forecasts (YoY % Change)

	2010	1Q11	2Q11	3Q11	4Q11	2011	2012		2010	1Q11	2Q11	3Q11	4Q11	2011	20
U.S.								Alabama							
Real GDP	3.0	2.2	1.6	2.0	2.4	2.1	2.6	Real GDP	2.0	2.6	1.8	1.5	1.7	1.9	
Nonfarm Employment	-0.7	0.9	0.8	1.1	1.3	1.0	1.7	Nonfarm Employment	-0.9	0.3	-0.2	0.0	0.3	0.1	0
Nom. Personal Income	3.7	5.7	5.2	5.0	5.4	5.3	4.4	Real Personal Income	2.1	0.7	0.8	0.9	1.0	0.9	
Home Price Index	-3.0	-5.5	-5.8	-4.5	-3.4	-4.8	-1.7	Home Price Index	-5.6	-7.1	-5.8	-4.2	0.5	-4.2	2
Home Sales	-5.3	-1.9	-8.5	28.7	11.5	6.0	9.9	Existing Home Sales	-6.0	-7.2	-12.1	16.3	16.5	2.0	4
Arizona								California							
Real GDP	0.8	2.1	1.5	1.7	2.0	1.8	2.6	Real GDP	1.8	3.3	2.3	2.0	2.0	2.4	2
Nonfarm Employment	-2.1	0.1	-0.1	1.1	1.3	0.6	2.2	Nonfarm Employment	-1.3	0.9	0.7	1.4	1.4	1.1	1
Real Personal Income	1.0	1.0	1.7	1.8	1.9	1.6	1.4	Real Personal Income	2.1	1.7	1.8	1.6	1.7	1.7	
Home Price Index	-11.2	-12.2	-10.5	-6.2	-1.4	-7.7	2.5	Home Price Index	-0.8	-7.7	-7.1	-4.9	-2.1	-5.5	2
Existing Home Sales	-1.4	13.3	4.0	23.5	13.4	13.2	7.9	Existing Home Sales	-8.0	-1.8	4.3	12.9	13.6	6.9	
Colorado								Florida							
Real GDP	1.4	2.5	2.0	1.8	2.0	2.1	2.7	Real GDP	1.4	2.4	1.7	1.6	2.0	1.9	2
Nonfarm Employment	-1.1	0.6	0.3	0.5	0.7	0.5	1.1	Nonfarm Employment	-1.0	0.6	0.1	0.6	1.1	0.6	2
Real Personal Income	1.6	1.3	1.8	1.9	1.7	1.7	0.8	Real Personal Income	1.1	1.2	1.1	1.4	1.3	1.3	1
Home Price Index	-0.8	-6.0	-3.9	-1.0	-2.4	-3.4	2.6	Home Price Index	-6.5	-9.9	-8.3	-5.4	-3.8	-6.9	2
Existing Home Sales	-5.9	-8.1	-3.1	38.0	22.1	9.9	3.1	Existing Home Sales	11.0	17.0	15.8	32.1	28.7	23.0	10
New Mexico								Texas							
Real GDP	1.7	1.2	1.1	1.3	1.6	1.3	2.1	Real GDP	2.8	3.6	3.1	2.9	2.8	3.1	-
Nonfarm Employment	-1.3	-0.3	-0.6	0.2	0.5	0.0	0.7	Nonfarm Employment	0.3	2.6	2.1	2.4	2.4	2.4	2
Real Personal Income	3.1	1.6	1.9	1.7	1.8	1.8	1.2	Real Personal Income	2.7	2.8	3.1	3.2	2.7	3.0	1
Home Price Index	-3.5	-7.3	-4.6	-3.3	-0.7	-4.0	2.3	Home Price Index	0.1	-2.0	-1.3	-0.1	2.0	-0.4	2
Existing Home Sales	-4.4	-4.7	-12.1	33.9	22.9	7.1	7.2	Existing Home Sales	-6.2	-4.8	-10.2	16.7	5.6	0.7	(

Note: Forecasts in bold

Source: BBVA Research, BEA, BLS, NAR, Census Bureau and FHFA

Economic Structure

	U.S.	AL	AZ	CA	СО	FL	NM	тх	
GDP (2010 \$ Billions)	14,527	1,726	2,536	19,011	2,576	7,477	797	12,075	
Population (2010 Thousands)	309,051	4,730	6,677	37,267	5,095	18,678	2,034	25,213	
Labor Force (June '11 Thousands)	153,421	2,169	3,179	18,044	2,682	9,234	938	12,264	
Nonfarm Payroll (June '11 Thousands)	131,035	1,870	2,391	14,069	2,236	7,247	805	10,589	
Unemployment Rate (June '11)	9.2	9.9	9.3	11.8	8.5	10.6	6.8	8.2	
Total Building Permits, (YTD Jan-Jun 2011)	215,948	3,980	5,341	12,374	4,634	16,238	1,863	33,988	
Change in Building Permits (YTD Jan-Jun YoY (%))	-14.5	-17.1	-18.2	-12.4	-6.1	-9.6	-19.1	-11.7	
Home Ownership Rate (2Q11)	65.9	73.6	65.3	55.2	66.0	68.9	70.2	64.6	
Housing Prices (1Q11 YoY Change (%))	-5.5	-7.1	-12.2	-7.7	-6.0	-9.9	-7.3	-2.0	
Exports of Goods (1Q11 \$ Billions)	350.9	4.2	4.5	37.5	1.6	14.9	0.5	57.8	
Change in Exports (1Q11 YoY Change (%))	19.2	22.9	17.0	13.5	14.6	18.7	21.2	24.2	
Source: BEA, BLS, Census, WiserTrade and FHFA	Source: BEA, BLS, Census, WiserTrade and FHFA								

DISCLAIMER

This document and the information, opinions, estimates and recommendations expressed herein, have been prepared by Banco Bilbao Vizcaya Argentaria, S.A. (hereinafter called "BBVA") to provide its customers with general information regarding the date of issue of the report and are subject to changes without prior notice. BBVA is not liable for giving notice of such changes or for updating the contents hereof.

This document and its contents do not constitute an offer, invitation or solicitation to purchase or subscribe to any securities or other instruments, or to undertake or divest investments. Neither shall this document nor its contents form the basis of any contract, commitment or decision of any kind.

Investors who have access to this document should be aware that the securities, instruments or investments to which it refers may not be appropriate for them due to their specific investment goals, financial positions or risk profiles, as these have not been taken into account to prepare this report. Therefore, investors should make their own investment decisions considering the said circumstances and obtaining such specialized advice as may be necessary. The contents of this document is based upon information available to the public that has been obtained from sources considered to be reliable. However, such information has not been independently verified by BBVA and therefore no warranty, either express or implicit, is given regarding its accuracy, integrity or correctness. BBVA accepts no liability of any type for any direct or indirect losses arising from the use of the document or its contents. Investors should note that the past performance of securities or instruments or the historical results of investments do not guarantee future performance.

The market prices of securities or instruments or the results of investments could fluctuate against the interests of investors. Investors should be aware that they could even face a loss of their investment. Transactions in futures, options and securities or high-yield securities can involve high risks and are not appropriate for every investor. Indeed, in the case of some investments, the potential losses may exceed the amount of initial investment and, in such circumstances, investors may be required to pay more money to support those losses. Thus, before undertaking any transaction with these instruments, investors should be aware of their operation, as well as the rights, liabilities and risks implied by the same and the underlying stocks. Investors should also be aware that secondary markets for the said instruments may be limited or even not exist.

BBVA or any of its affiliates, as well as their respective executives and employees, may have a position in any of the securities or instruments referred to, directly or indirectly, in this document, or in any other related thereto; they may trade for their own account or for third-party account in those securities, provide consulting or other services to the issuer of the aforementioned securities or instruments or to companies related thereto or to their shareholders, executives or employees, or may have interests or perform transactions in those securities or instruments or related investments before or after the publication of this report, to the extent permitted by the applicable law.

BBVA or any of its affiliates' salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to its clients that reflect opinions that are contrary to the opinions expressed herein. Furthermore, BBVA or any of its affiliates' proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. No part of this document may be (i) copied, photocopied or duplicated by any other form or means (ii) redistributed or (iii) quoted, without the prior written consent of BBVA. No part of this report may be copied, conveyed, distributed or furnished to any person or entity in any country (or persons or entities in the same) in which its distribution is prohibited by law. Failure to comply with these restrictions may breach the laws of the relevant jurisdiction.

In the United Kingdom, this document is directed only at persons who (i) have professional experience in matters relating to investments falling within article 19(5) of the financial services and markets act 2000 (financial promotion) order 2005 (as amended, the "financial promotion order"), (ii) are persons falling within article 49(2) (a) to (d) ("high net worth companies, unincorporated associations, etc.") Of the financial promotion order, or (iii) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the financial services and markets act 2000) may otherwise lawfully be communicated (all such persons together being referred to as "relevant persons"). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons. The remuneration system concerning the analyst/s author/s of this report is based on multiple criteria, including the revenues obtained by BBVA and, indirectly, the results of BBVA Group in the fiscal year, which, in turn, include the results generated by the investment banking business; nevertheless, they do not receive any remuneration based on revenues from any specific transaction in investment banking.

BBVA is not a member of the FINRA and is not subject to the rules of disclosure affecting such members.

"BBVA is subject to the BBVA Group Code of Conduct for Security Market Operations which, among other regulations, includes rules to prevent and avoid conflicts of interests with the ratings given, including information barriers. The BBVA Group Code of Conduct for Security Market Operations is available for reference at the following web site: www.bbva.com / Corporate Governance".

BBVA, S.A. is a bank supervised by the Bank of Spain and by Spain's Stock Exchange Commission (CNMV), registered with the Bank of Spain with number 0182.

This report has been produced by the BBVA Research U.S. unit

Chief Economist Nathaniel Karp +1 713 881 0663 nathaniel.karp@bbvacompass.com

Hakan Danis +1 713 843 5382 hakan.danis@bbvacompass.com

Jason Frederick +1 713 843 5369 jason.frederick@bbvacompass.com

Jeff Herzog +1 713 843 5348 jeff.herzog@bbvacompass.com

BBVA Research

Group Chief Economist Jorge Sicilia

Chief Economists & Chief Strategists:

Financial Systems and Regulation Santiago Fernández de Lis sfernandezdelis@grupobbva.com

Pensions David Tuesta david.tuesta@grupobbva.com

Financial Systems Ana Rubio arubiog@grupobbva.com

Regulatory Affairs María Abascal maria.abascal@grupobbva.com

Market & Client Strategy: Antonio Pulido ant.pulido@grupobbva.com

> Equity and Credit Ana Munera ana.munera@grupobbva.com

Interest Rates, Currencies and Commodities

Luis Enrique Rodríguez luisen.rodriguez@grupobbva.com

Asset Management Henrik Lumholdt henrik.lumholdt@grupobbva.com

Contact details

BBVA RESEARCH USA

5 Riverway, Suite 320 Houston, TX 77056 U.S. Telephone: +1 713 341 8200 Email: researchusa@bbvacompass.com www.bbvaresearch.com Ignacio San Martin +1 713 881 0620 ignacio.sanmartin@bbvacompass.com

Marcial Nava +1 713 881 0604 marcial.nava@bbvacompass.com

Developed Economies: Rafael Doménech r.domenech@grupobbva.com

Spain Miguel Cardoso miguel.cardoso@grupobbva.com

Europe Miguel Jiménez mjimenezg@grupobbva.com

United States Nathaniel Karp nathaniel.karp@bbvacompass.com

Financial Scenarios Sonsoles Castillo s.castillo@grupobbva.com

Economic Scenarios Juan Ruiz juan.ruiz@grupobbva.com Emerging Economies: Alicia García-Herrero alicia.garcia-herrero@bbva.com.hk

Cross-Country Emerging Markets Analysis Álvaro Ortiz-Avarca

Mexico Adolfo Albo a.albo@bbva.bancomer.com

Macro Analysis Mexico Julián Cubero juan.cubero@bbva.bancomer.com

Asia Stephen Schwartz stephen.schwartz@bbva.com.hk *South America* **Joaquín Vial** jvial@bbvaprovida.cl

> Argentina Gloria Sorensen gsorensen@bancofrances.com.ar

Chile Alejandro Puente apuente@grupobbva.cl

Colombia Juana Téllez juana.tellez@bbva.com.co

Peru Hugo Perea hperea@grupobbva.com.pe

Venezuela Oswaldo López oswaldo_lopez@provincial.com