

# United States Regional Outlook

Second Quarter 2010

## Economic Analysis

- We expect slower U.S. growth in the second half of 2010
- MSA-level Industrial Production highlights the rebound of stimulus supported industries
- For-profit hospitals are expanding rapidly as the industry faces increasing competition and pressures to contain costs
- The auto financing market is undergoing significant reorganization



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Closing Date: June 2010

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## Editorial

Economic indicators continue to show mixed results, highlighting the uncertainty surrounding the sustainability of the recovery. To date, the unprecedented fiscal and monetary stimuli continue to support the economy. Through government transfers and lower tax rates, fiscal policy has boosted income growth thereby offsetting the negative effects of declining employment. Low interest rates have supported credit markets thereby mitigating some of the negative effects of tighter credit conditions and decreased borrowing demand. These effects have been significant and stronger than usual given the coordinated implementation of fiscal and monetary policy actions. Additionally, the effects are stronger due to the sharp decline in economic activity, the targeted nature of the fiscal package and the sharp adjustment in credit markets.

Therefore, the anticipated decline in debt levels and increase in savings rate have not been as large as initially expected. This implies a solid increase in personal spending which has allowed a faster adjustment of inventories and a faster recovery of industrial output. The softer economic downturn, along with the sharp decline in labor costs through lower employment, allowed businesses to absorb a milder adjustment in profit margins and cash flows. Production has also benefited from strong growth abroad, particularly in Asia and Latin America.

In this environment, the recovery process will continue if businesses increase capital spending and labor demand, which in turn supports private consumption. However, this process is not occurring at a fast pace and in some sectors it is still a long way from being reality. Firms are hesitant to invest and thus, a sustainable private-led economic recovery is not assured. The lack of stronger private investment and labor demand reflects increased uncertainty and high risk aversion related to global economic conditions, potential regulatory changes, future tax policy, a weak recovery of real estate asset prices and fragile financial conditions.

Excess capacity in the goods market and feeble conditions in the private labor market are mitigating potential inflationary pressures. In fact, the lagged effect of the housing meltdown in shelter prices resulted in the lowest core inflation in modern times. In this environment of weak economic recovery and negligible inflationary pressures, the Federal Reserve will be reluctant to increase interest rates too soon thus putting the recovery process even more at risk. Furthermore, if risk perception continues to increase, the Fed's exist strategy will be more difficult to implement, as this process requires greater willingness from banks to absorb higher risk assets currently held by the Fed. Thus, we expect that the period of low interest rates will continue for several more quarters.

In this issue, we provide a closer look at economic activity at the metropolitan level, based on BBVA Compass Metropolitan Industrial Production Indexes, which confirm an improvement in economic trends and suggest that most MSAs in the BBVA Compass Sunbelt Region, particularly in Texas, continue to outperform the rest of the nation. Still, there are some short-term risks linked to the oil spill in the Gulf of Mexico, which is why we present an updated analysis on this environmental disaster.

Although the recovery process will remain sluggish, some industries will continue to expand at a solid pace. This is the case in the healthcare industry and thus, we present a second round of in-depth analysis of this critical industry focused on hospitals. Also included is an analysis on auto financing which experienced a sharp meltdown during the crisis.

We hope you find this issue helpful to your business.

Sincerely,

Nathaniel Karp  
BBVA Chief U.S. Economist

## Global Outlook

The global economy is driven by two conflicting forces: the positive cyclical impulses from emerging countries and the U.S., and heightened risk premia spreading from Europe. While the EMU rescue package reduces uncertainties in the short run, the balance of risks over the medium term is skewed downward.

The cyclical situation has improved significantly over the last few quarters, driven by the recovery in emerging market economies and the United States. Global trade is growing at 7% and we forecast a 4.2% global growth rate for 2010. At the same time, doubts about the ability of the European Monetary Union to deal with the high level of indebtedness of some of its countries have been somewhat reduced given (i) the announcement of the rescue package agreed upon by the European Council on May 9; (ii) the exceptional measures adopted by the ECB, (iii) ongoing adoption of national fiscal consolidation plans and (iv) growing momentum for institutional reform in the EU. Notwithstanding these positive developments in Europe, lingering doubts have sustained wide spreads and renewed financial stress, with negative effects on European activity and possible impacts on the rest of the world.

### **The sustainability of the recovery is not fully guaranteed beyond 2010.**

While economic recovery at the beginning of 2010 is widespread, its intensity varies a great deal across countries. This is the result of the different degrees to which their fiscal and monetary policies have been eased. These policies have been particularly instrumental in providing impulses to the cyclical upturns in China and the U.S. At the same time, emerging economies are benefiting from the strength of their own domestic demand. As a result, in these economies the recovery looks more sustained. Conversely, in developed countries, as expansionary policies fade away, doubts about the sustainability of the recovery beyond 2010 are growing. This is particularly true in Europe, whose upturn would lag behind the U.S. going forward.

### **Growing divergence in global monetary exit strategies lies ahead.**

In the U.S., a very gradual path of interest rate hikes by the Fed is likely with rate hikes expected by the beginning of 2011 and rates slightly above 1% at the end of 2011. Although economic growth may prove sluggish in 2010 and beyond, the risk of a major reversion of the current dynamics is rather limited in the U.S., with incipient inflationary pressures looming. Conversely, in Europe, in addition to a far more fragile financial situation, growth will remain subdued going forward and inflationary pressures are absent. In the case of emerging economies' monetary policies, there is no doubt regarding the need for a tightening stance. Given their cyclical divergences, exit strategies will vary across countries.

### **Economies with high public debt and limited private deleveraging are highly vulnerable to an upward movement in interest rates and higher risk premiums.**

In regimes averse to heightened risk, financial markets exacerbate its forward-looking behavior. Financial markets are particularly good at tracking inconsistent macroeconomic policies, which are overlooked during normal times. Despite the huge rescue package in Europe, substantial risk premiums remain amid uncertainty about fiscal consolidation paths. Increasing contagion has been a clear result of the fragility of the current scenario. Economic history is fraught with examples of undue contagion from some countries spreading to others in the aftermath of a crisis. In these cases, geographical linkages or cyclical similarities matter more than the

differences in fundamentals. In fact, the current episode of contagion is not fully justified either by the direct financial channel triggered by the Greek crisis or by any similarity in fundamentals. Though its justification may be open to discussion, to cope with pressures from international investors, there is a compelling need for some countries to enhance credibility.

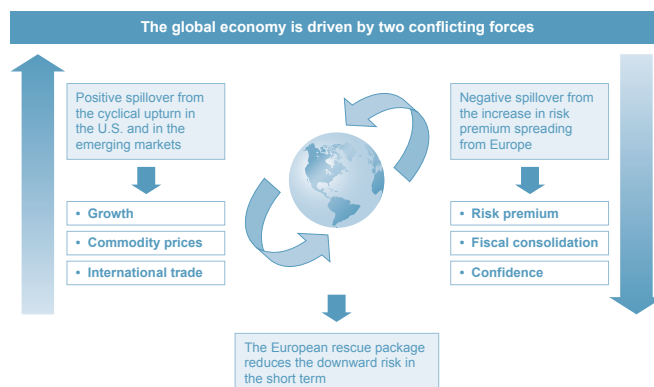
### Long-run fiscal consolidation is the major challenge for developed countries.

There are growing concerns about the long-run consequences of rising public debt levels. This will inevitably give rise to upward pressures on real interest rates and increase risk premiums for a protracted period. Even if recent contagion gradually fades away, increasing discrimination across countries depending on the credibility of their fiscal stance will prevail.

### The lack of a decisive restructuring in the banking sector and the coming regulatory process might jeopardize the recovery.

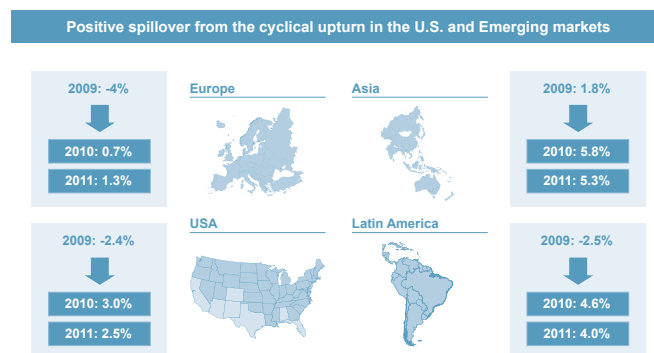
Uncertainty stemming from the financial sector is principally twofold. The sluggish restructuring of the financial industry, particularly in Europe, will lead to a creditless recovery. This is a growing concern since both historical episodes and empirical evidence show the importance of credit channels in the early stages of economic upswings. There is also uncertainty regarding the ongoing regulatory reform. The most likely outcome is one requiring significant increases in capital and liquidity requirements, which could hinder the ability of the banking sector to provide credit in coming years.

Figure 1



Source: BBVA Research

Figure 2



However, regional heterogeneity remains as a key feature of the outlook, with EMU lagging behind other areas.

Source: BBVA Research

## U.S. Economic Outlook

The pieces of the economic recovery in the U.S. are beginning to come together. The U.S. economy grew at a rate of 2.7% in 1Q10 and recent economic data points to ongoing growth, which supports our expectation of 3.0% growth in 2010. Much of the return in activity can be attributed to the fiscal stimulus, which has impacted almost every aspect of the economy, either directly or indirectly. However, there are signs that private demand is firming outside of the stimulus, albeit at a slow pace, which is essential for the sustainability of the recovery. Nevertheless, one new external risk has emerged: the financial crisis in Europe, which has weighed on financial markets.

A positive development in the first half of 2010 is the improvement in the labor market. Compared to previous recessions, the labor market in 2008 and 2009 experienced one of the deepest adjustments in history with more than 8 million jobs eliminated. In the first half of the year, 882,000 new jobs have been created and 593,000 of them can be attributed to the private sector. We expect the employment situation to continue to improve, but challenges remain as demand is not yet robust, uncertainty remains around the future business outlook and financing options are still limited for small businesses, which have historically been a source of job growth during recoveries. As a result, recovery will be slow and the unemployment rate will remain above 9.0% in 2010.

Consumption expanded in 2Q10, but at a slower pace than in the previous quarter. The improvement in the labor market has helped support personal income, but consumer confidence data indicates that people remain uncertain about the economic outlook and employment situation, which is weighing on consumer spending. Furthermore, consumers continue to be plagued by tight credit markets, low household wealth compared to pre-crisis levels and widespread unemployment. As a result, consumer spending will rise throughout the year, but the pace may moderate in 2H10.

Business conditions are also improving, as are financing opportunities for large businesses. Corporate profits rose in 1Q10 for the fifth consecutive quarter. Furthermore, the 2Q10 NABE Industry Survey rose to 51, the highest level in the history of the data, which illustrates that business confidence is improving. While these are favorable conditions for non-residential investment, ongoing declines in the commercial real estate market and limited financing opportunities for small businesses could limit the pace of recovery.

Residential investment is expected to improve slightly in 2Q10 due to greater activity in the beginning of the quarter. However, the post-tax credit decline in housing demand has depressed builders' confidence, according to the NAHB Housing Market Index. As a result, residential investment may retreat again in 3Q10. Looking at the external sector, growth abroad is expected to support exports, but imports are forecasted to rise at a faster pace, which will result in a negative net export contribution.

Inflationary pressures remain minimal. In fact, surprises to core inflation in recent data have been on the downside, driven in part by the shelter component. Nevertheless, pipeline pressures remain soft as economic slack remains and inflation expectations continue to be well anchored. Furthermore, producers' rising profits and low wage obligations allow them to absorb the rising cost of inputs without passing it on to consumers. As a result, core inflation is expected to remain low, but positive throughout 2010. Given this outlook, coupled with the newfound risks to the economic scenario from the EU, the Federal Reserve is expected to hold interest rates low for a prolonged period of time.

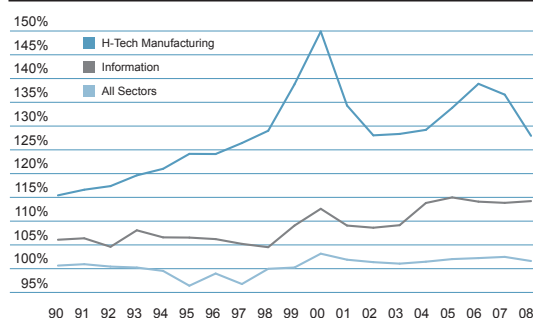


# Sunbelt Outlook

The BBVA Compass Sunbelt Region is pulling out of the recession on pace with the rest of the country. Over the past three months, our State Monthly Activity indexes reveal that most states in our region are expanding. Slowing rates of decline in state home price indexes and sector-level job losses combined with emerging job growth and surging exports to produce this expansion. Nevertheless, despite these generally positive readings, overall economic conditions remain weak in most of the states. The new homebuyer tax credit spiked home sales in the second half of 2009; however, existing home sales activity cooled in early 2010 as the tax credit expired.

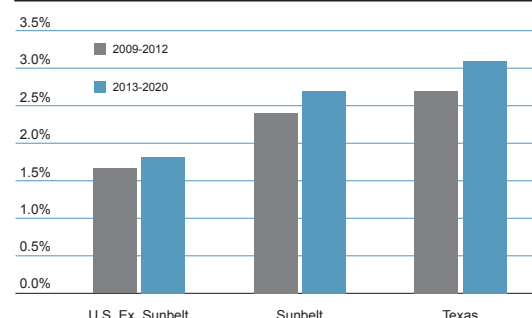
Despite downside risks, long-term prospects for the Sunbelt Region are positive. While we expect the Sunbelt to grow similar to the U.S. average in 2010 (3.0%), our forecasts point to higher than average growth in 2011 (2.8% vs. 2.5%).

Graph 1  
**Productivity in Sunbelt vs. Non-Sunbelt, Relative to Average Industry Wage**



Source: BBVA Research with Census Data

Graph 2  
**Potential GDP Growth by Region, Average Annual Growth Rate**

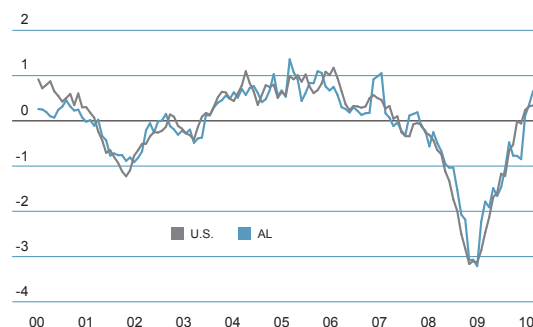


Source: BBVA Research with Census Data

## Alabama

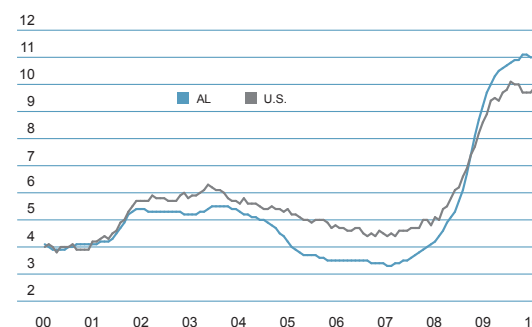
The 3-month moving average of the BBVA Compass State Monthly Activity Index (SMAI) shows that Alabama is expanding at a faster pace than the U.S. In June, Alabama was one of the only two states in the region that registered a positive monthly SMAI reading; this result stems from modest sector-level employment growth, stable housing prices and a solid rate of exports.

Graph 3  
**BBVA Compass State Monthly Activity Index, 3-Month Moving Average**



Source: BBVA Research

Graph 4  
**Unemployment Rate, Seasonally Adjusted**



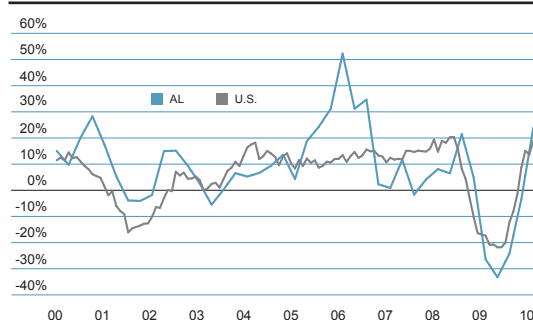
Source: BLS

The pace of layoffs has levelled off and the economy added jobs in 2Q10 following several quarters of declines. Construction, manufacturing, professional and business services, leisure and hospitality and government sectors all created jobs. Employment gains have not been rapid, however, and the year-over-year (y-o-y) rates remain negative. The unemployment rate declined to 10.8% from its most recent peak of 11.1%. Although this is a positive sign, the unemployment rate remains above the U.S. average and is showing a significant amount of excess capacity in the economy.

The auto industry is recovering at a gradual pace, supported by both domestic and foreign demand. In the U.S., auto sales have increased steadily, although they are still well below their historical average. Although exports of transportation equipment tapered off in 1Q10, they previously saw three consecutive quarters of strong increases in 2009 and they exhibit positive growth on a y-o-y basis. Nationwide, orders of motor vehicles and parts are growing, anticipating more production in the coming months.

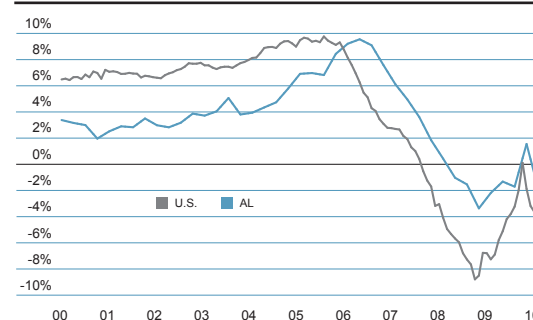
Total state exports of goods surged in late 2009, and now show positive growth on the year. This robust growth across different products reflects the rapid growth overseas. Indeed, most of Alabama's exports go to either fast-growing economies such as China and Brazil or to some of the largest economies in the world such as Germany, the United Kingdom, Japan and Canada.

Graph 5  
**Total Exports, Y-o-Y Change**



Source: Wisner Trade and Census

Graph 6  
**Housing Price Index, Purchase Only, Y-o-Y Change**



Source: FHFA

Overall, consumer spending improved but continues to be below the levels of the previous year. Recently, sales tax collections increased on a monthly basis, though they remain down y-o-y. Retail sales picked up early in the year, driven by sales of building materials and garden equipment. This reflects the spill over effects of both the home buyer tax credit and the energy-efficiency appliance rebate also included in the fiscal stimulus.

Boosted by the tax credit to home buyers, existing home sales spiked in late in 2009; however, their pace returned to pre-tax levels in 2010 as the program expired. Likewise, single-family building permits lost momentum early in 2Q10 causing a slight moderation in the growth of construction employment. Relative to the previous year, home prices continue to decline although at a slower rate. Conditions remain weak in the commercial real estate market as vacancy rates continue to increase.

Recovery is underway in Alabama, although is occurring at a gradual pace. The most important risk to our baseline is slower-than-expected growth in the U.S. and abroad. Additionally, the oil spill in the Gulf of Mexico has added uncertainty to the energy and tourism industries. The Gulf Shores of Alabama are the state's most visited natural resource; certainly the loss of tourism revenue will negatively impact the coastal counties. Hopefully, cleanup efforts and compensation from BP will limit the impact of lost tourism and commercial fishing revenue. Given that risks are still contained, the main challenge going forward is to speed up the pace of job creation in order



to bring down the unemployment rate, which is still one of the highest in the nation. Fortunately, two elements are taking the economy in this direction: the first one has to do with better-than-expected outcomes in the U.S., particularly in consumer spending. The second has to do with solid growth overseas, which will continue to support exports, particularly of motor vehicles and parts. In our baseline, Alabama's GDP will grow 2.5% in 2010 and 2.3% in 2011.

## Texas

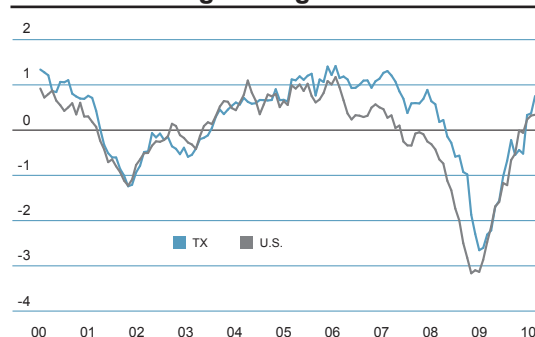
The BBVA Compass State Monthly Activity Index (SMAI) reveals that Texas continues to expand with a growth rate exceeding the U.S. average. In May, Texas was one of the only states whose growth accelerated. This confirms that the Lone Star state is leading the recovery in the BBVA Compass Sunbelt Region.

The SMAI's positive readings are primarily supported by widespread employment gains in the private sector. From January to May 2010, Texas, the country's third largest economy, has led national job creation with over 167,500 jobs including only 44,900 in the government sector. In comparison, California, the country's largest state economy, has generated only 95,000 jobs, but 43,300 of those are in the government sector.

In terms of number of jobs created in 2010, professional and business services have led the way which reflects an increase in office staffing and temporary help. The mining and energy sectors continue to create jobs at a fervent pace, as the net gains have increased each month since February. Recently, employment in retail trade and transportation has picked up strongly due to a slight upturn in both intermodal cargo volumes and activity in the shipping industry. Demand for Texas' exports has helped boost the manufacturing industries, which continue to add workers. In June, total non-agricultural employment was higher than a year ago for the first time since Texas entered the recession late in 2008. Despite employment gains, the unemployment rate remains elevated at 8.3%, although it is below the U.S. average.

Graph 7

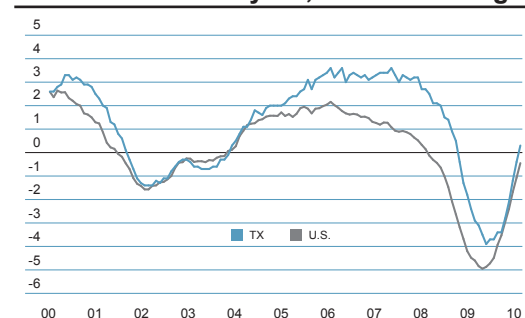
### State Monthly Activity Index, 3-Month Moving Average



Source: BBVA Research

Graph 8

### Total Non-Farm Payroll, Y-o-Y % Change

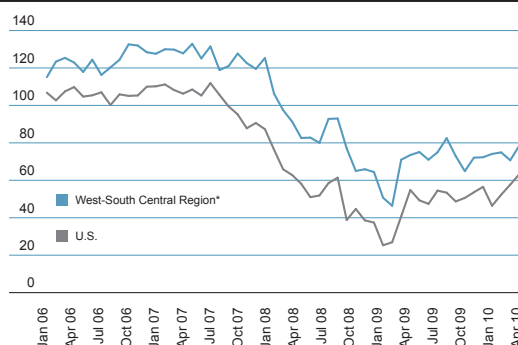


Source: BLS

Employment tends to lag other indicators in recovery cycles, and thus Texas' relatively active job creation underscores that growth has taken hold in the state. Texas' industrial production indexes have shown a sustained improvement since August 2009 as the mining and manufacturing sectors increased output. At a national level, durable goods orders excluding transportation have rebounded strongly since the beginning of 2010, and thus Texas' manufacturing production will continue to benefit from this improvement. Faster economic growth overseas has in part driven the increase in durable goods orders.

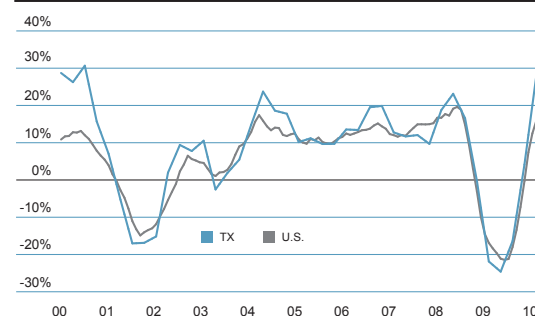
Texas' retail sales have shown resiliency, as they have posted positive y-o-y rates in 2010. The recent rise in the Consumer Confidence Index supports this rebound. According to the Office of the State Comptroller, tax collections have increased modestly, which suggests an upturn in domestic demand. Going forward, sustained employment gains along with the effect of the fiscal and monetary stimulus will continue to support GDP and private consumption growth in Texas.

Graph 9

**Consumer Confidence, 1985=100**Source: <http://www.texasahead.org/economy/>

\* Includes Texas, Arkansas, Louisiana and Oklahoma

Graph 10

**Total Exports, Y-o-Y Change**

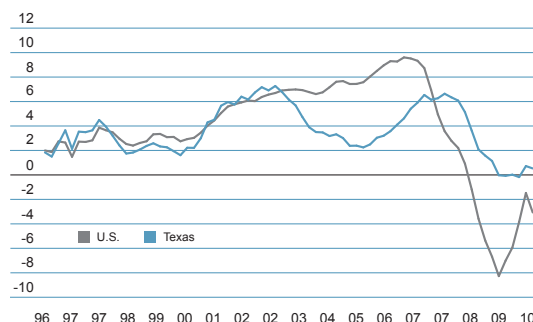
Source: Wisner Trade and Census

International trade remains on solid ground. Exports of a variety of products increased robustly during 2010. Top exports such as chemicals, computer and electronics products, and transportation equipment are growing at double digit rates over the previous year. International trade will continue to benefit from high projected growth in Asia and Latin America.

The European crisis, however, has raised concerns among some exporters. According to the Federal Reserve's Beige Book, high-tech manufacturers reported a "slight easing" in export demand associated with the European crisis. Although Europe's turmoil adds uncertainty to the outlook for national export growth, it is unlikely to severely affect Texas' international trade. Texas' trade remains well diversified with exports to the 15 most important European economies accounting for only 12% of the state's total exports, and a larger share traveling to the countries with faster growth rates such as China, Mexico and Brazil.

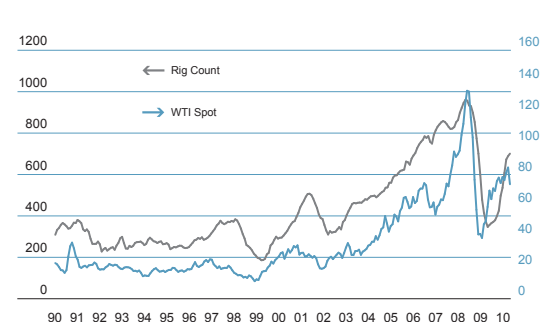
Conditions in the residential market continue to improve. Texas' existing home sales index received a boost in 4Q09 and returned to more stable levels in 1Q10; however, it remains up nearly 6% on a y-o-y basis. The purchase-only housing price index from the Federal Housing Finance Agency declined insignificantly in Texas in 1Q10, which suggests that home prices may be stabilizing. The all-transaction index continued to slide, but as both of these indicators reach a trough and begin to turn upward, single-family building permits and home sales will continue to gain momentum, and construction activity should begin to pick up. Single family building permits surged in March and April along with construction employment, but BLS data reveals a significant slowdown in construction employment as the home buyer tax credits expired. Additionally, the foreclosure rate is still high, in part due to Texas' later downturn in the housing market. These factors limit the outlook for a near-term resurgence in the housing market. Meanwhile, the commercial real estate market will remain subdued for the rest of the year, despite increasingly favorable lease terms and property sales.

Graph 11  
**Housing Price Index, Purchase Only,  
Y-o-Y % Change**



Source: FHFA

Graph 12  
**Texas Rig Count and West Texas Crude Oil Prices**

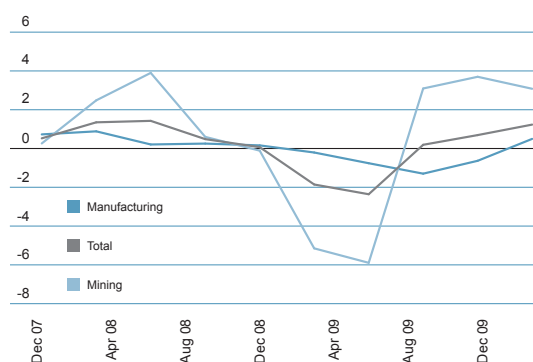


Source: Federal Reserve Bank of Dallas with data provided by Baker Hughes

The rise in oil prices over the past year supports the vigorous activity in the energy industry. The total rig count has increased continuously over the past twelve months. Certainly, the federal government's proposed moratorium on certain deep-water drilling projects would have a negative impact on employment in this sector and risks sidelining productive capacity.

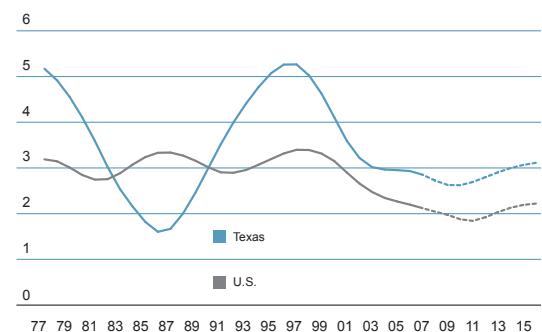
In summary, conditions for a sustained recovery in Texas are in place. The housing market is stabilizing, exports are growing rapidly and supporting industrial production, the private sector has started to add jobs while activity in the energy sector remains fervent. Positive readings in economic activity resulted in an upward revision to our baseline scenario. We expect Texas' GDP to grow by 3.3% in 2010 and 3.1% in 2011. Slower-than-expected growth in the U.S. and overseas, as well as a tougher regulatory environment in the energy industry, tilts the balance of risks negatively. The downside of these risks is limited, however, and thus Texas' prospects are some of the strongest in the BBVA Compass Sunbelt Region.

Graph 13  
**Texas Industrial Production,  
Q-o-Q % Change**



Source: Federal Reserve Bank of Dallas

Graph 14  
**Potential GDP Growth,  
Y-o-Y % Change**



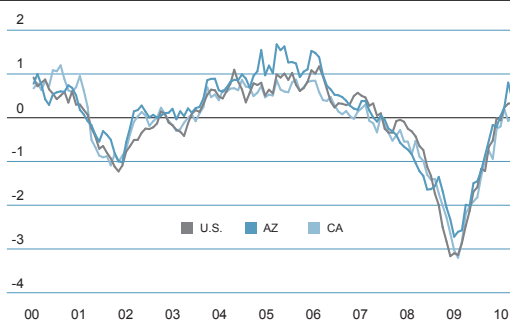
Source: BBVA Research

### Arizona, California, Colorado, Florida and New Mexico

Three of these five states in the BBVA Compass Sunbelt Region are experiencing tepid growth, and two continue to contract. Arizona, California and Florida currently exhibit the beginning signs of expansion, as they experienced a boost in late 2009. Their activity, however, cooled in 1Q10 and they are struggling to create jobs in the private sector. These three states were some of the first to enter the recession, and they are still recovering from a severe shock to real estate values as home price indexes are down more than 32% since 4Q07 in Arizona and Florida (and continue to slide downward), and more than 26% in California. The slide in home prices in California, however, appears to have stopped in mid-2009, and the purchase only index turned positive on a y-o-y basis in 1Q10.

Graph 15

#### State Monthly Activity Indexes, 3-Month Moving Average (Arizona and California)



Source: BBVA Research

Graph 16

#### State Monthly Activity Indexes, 3-Month Moving Average (Florida)



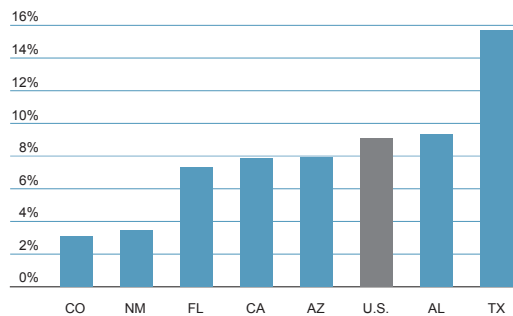
Source: BBVA Research

While overall net job creation in Arizona, California and Florida has been positive in 2010, the total change has been weak with growth of 1.3%, 0.7% and 1.0%, respectively. Additionally, both California and Florida have unemployment rates well in excess of the U.S. average; California's appears to be stable and Florida's is starting to decline. Recent positive monthly changes in overall non-farm employment were due entirely to the increase in government employment. These unusually large expansions were due to the temporary hiring of Census workers. Without these outsized gains, however, the widespread job losses across sectors would have produced a net overall loss. In short, the private sector remains weak.

The pace of exports in 1Q10 is up 9% in Arizona, nearly 20% in California and over 10% in Florida on a y-o-y basis. This surge has helped to revive employment in the mining and logging, manufacturing, wholesale trade and transportation sectors. We expect these sectors to continue adding workers as exports should continue to ramp up.

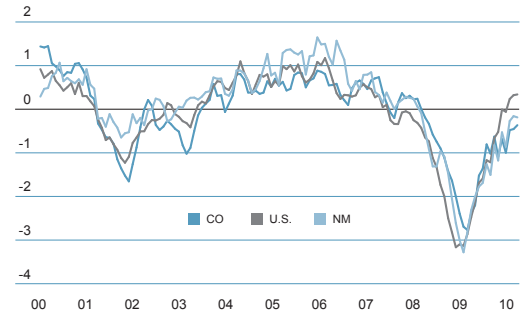
The export-led growth is benefiting the states that are most open to trade. Arizona, California and Florida have export shares that are slightly below the U.S. average, while Alabama and Texas' economies have a greater reliance on exports. Colorado and New Mexico's shares of exports, however, are minimal at 3.1% and 3.5%, respectively. Thus, these states have not benefited from rising external demand.

Graph 17  
**Share of State Exports in State GDP, 2008**



Source: WiserTrade and BEA

Graph 18  
**State Monthly Activity Indexes, 3-Month Moving Average (Colorado and New Mexico)**



Source: BBVA Research

Indeed, Colorado and New Mexico continue to contract as their state indexes illustrate. Their indexes remain in negative territory as their rebound appeared to stall in late 2009. Private employment continues to decline across many sectors in Colorado. Meanwhile, the situation in New Mexico is even worse, as the state continues to shed workers.

Although Colorado and New Mexico's economies continue to contract, some positive signals may reflect a turning point. First, although they continue to shed jobs, New Mexico registered strong positive growth in the manufacturing and leisure and hospitality sectors. In Colorado, employment gains in mining and logging and construction combined to produce weak but positive job creation. These gains come after months of steep declines in these sectors. Worldwide demand for energy and agricultural products has strengthened, and supports Colorado's important natural resources sectors.

Additionally, stable and even slightly increasing housing prices limit the downside risk in the local housing markets. In Colorado, the purchase-only housing price index increased slightly and is positive on a y-o-y basis. In New Mexico, the purchase-only index continues to decline slightly, and remains down less than 1% on the year in 1Q10.

The strong surge in existing home sales helped to reduce inventory and aid construction activity in Arizona, Colorado, Florida and New Mexico. Declining home prices in some markets fuel uncertainty in the residential market. Conditions in the commercial real estate remain weak as vacancy rates in office and industrial space continue to increase across the region.

Stabilizing home prices and their resumption of growth will help stimulate the housing market. The new home buyer tax credit accelerated some purchases, thus we expected a drop to more sustainable levels with the expiration of this program. As home purchases continue and inventory declines, the idle construction sector will be able to harness some of the excess capacity in the labor market. In our baseline scenario, we expect Arizona, California and Florida to grow at a similar pace as the U.S. (3.0%) in 2010. For Colorado and New Mexico, we anticipate growth below the U.S. average. By 2011 all these states are expected to grow at a rate equal to or above the U.S. average.

Risks in these five states are tilted to the downside. We had expected to see more vibrant private sector job creation by this time, as it has been more than 30 months since the start of the recession. Milder-than-expected growth in domestic demand could negatively impact activity in states with less reliance on international trade. Likewise, a slowdown in Asia or Latin America will limit growth in California and Florida. Meanwhile, the oil spill represents an additional risk to Florida's economic outlook as tourism and fishing industries have a significant weight in the state's economy.

# Economic Impact of the Oil Spill in the Gulf of Mexico

The Deepwater Horizon oil spill in the Gulf of Mexico will severely affect the Gulf Coast region in Louisiana, Mississippi, Alabama, Florida and Texas. While the total quantity of oil is small in relation to the daily consumption of oil in the U.S., the oil in the gulf will negatively impact the ecosystem and affect local economies along the coast. Certainly, any estimation of the total economic cost is subject to a high degree of uncertainty; however, the environmental impact could be significant and long-lasting.

We have identified four key industries that will be directly affected by the spill: oil and gas extraction, commercial fishing, recreational fishing and tourism. Each of these industries plays an important role across the gulf coast region, and shocks to demand or supply will reverberate throughout the local economies. An estimate of the total cost of the spill involves first-order direct impacts and second-order indirect and induced impacts. The direct impacts are comprised of the reductions in employment, wages and revenue of local businesses as a result of the spill. The second-order impacts stem from the spending that the employees and patrons of these businesses conduct in other local businesses.

The direct effects will be the largest in the coastal counties while the second round effects will additionally impact surrounding counties. There are 63 counties along the Gulf coast from Cameron County, TX to Monroe County, FL. Adding the other inland counties dependent on the Gulf Coast Region<sup>1</sup> comprises 140 counties in Texas (40), Louisiana (38), Mississippi (12), Alabama (8), and Florida (42). These 140 counties combined produce over \$600 billion in GDP annually and employ 6.2 million people.

In addition to the industry-related costs, there are costs associated with a reduction in housing demand for the region. In many of these communities, home prices surged during the housing boom and plummeted with the meltdown. Thus, the oil spill will further restrain the recovery in local real estate markets. In the near term, however, BP's \$20 billion fund should help to mitigate the impact of lost wages and revenue for businesses and employees, and clean-up efforts will temporarily add to GDP as the workers patronize local companies.

## Commercial and Recreational Fishing

Both commercial and recreational fishing are vital lifelines for residents of the gulf coast. The National Oceanic and Atmospheric Administration (NOAA) reports, "In 2008, commercial fishermen in the Gulf of Mexico harvested 1.27 billion pounds of finfish and shellfish that earned \$659 million in total landings revenue." Currently, the federal government has closed more than 30%, or 80,000 square miles, of the gulf to fishing activity. Closure of state waters accounts for even more. Presently, as the oil moves toward shore and remains on the surface, the most immediate threats are to the shrimp, blue crab, oyster and surface fish catches. Gulf coast shrimp and oysters account for 73% and 60%, respectively of the U.S. total catches of these species. By total landing value, shrimp account for 56% of the Gulf's commercial fishing industry, and oysters another 9%. In addition, reduced catches will impact the seafood processing and wholesale industries that add final value and in some counties employ a significant amount of workers. In summary, over 70% of the industry's value, \$900 million, is at

1: Counties meeting the following criteria: (1) at a minimum, 15% of the county's total land area is located within a coastal watershed or (2) a portion of or an entire county accounts for at least 15% of a U.S. Geological Survey coastal cataloging unit. We exclude Harris County, Texas from our analysis.

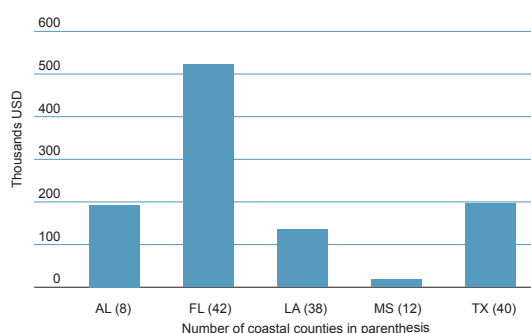


immediate risk. Louisiana's fishing economy will lose the most: landings in Louisiana account for over 70% of the gulf's total, and they translate to over 40% of the industry's total value. If the oil sinks, it will destroy larvae and affect the catch well into next year and potentially over several years. In this case, we should consider the discounted value of future losses which could add up to \$6 billion over the next 15 years.

Furthermore, NOAA research claims that there are over 25 million recreational Gulf of Mexico fishing trips in each year. Nearly 70% of these trips originated in Florida and 19% in Louisiana. These trips produced nearly 200 million pounds of seafood. Across the Gulf States, the recreational fishing and related industries employ approximately 14,000 people, and pay nearly \$37 million in wages per month. Florida counties will suffer the most from any reduction in recreational fishing demand. According to our estimates the direct short-term losses could fall between \$750 million and \$1.8 billion. Depending on the degree of the environmental damage, recreational fishing could suffer more than \$4.7 billion over 15 years.

Graph 19

### Wages Per Month Per County of Recreational Fishing and Related Industries, by State, 2008



Source: BLS QCEW

Table 1

### Estimated Economic Impact of Oil Spill, Total Potential Loss of Local GDP

	Cost Per Month (millions)			Total
	Tourism (per 10% reduction)	Recreational Fishing	Commercial Fishing	
AL	176.7	14.6	14.3	205.6
FL	2361.1	139.6	16.6	2,517.3
LA	1247.7	37.5	30.2	1,315.4
MS	293.1	8.3	19.7	321.1
TX	768.0	8.3	27.0	803.4
Total	4846.6	208.3	107.9	5,162.8
12-mo loss (as of 7/1/10)	26,775.7	750.0	905.9	28,431.6

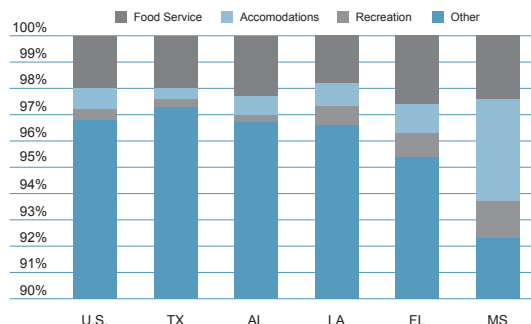
Source: BBVA Research

## Tourism

Many of these coastal counties depend on tourists to patronize local businesses. Certainly, a portion of the recreational fishing trips are taken by tourists from outside the state. Typically, spending by non-residents is regarded to have the largest effect in an economy because these dollars are then re-spent by local residents to purchase goods and services. Without visitors, these dollars would simply not be available, and there would be fewer jobs to grow the economy. Among tourism-related employment, accommodation and food services comprise the bulk of these jobs, followed by amusement and recreation. Across the states, we estimate the total contribution of employment and GDP of these industries. In these coastal counties, these industries comprise 10-15% of total employment. As these industries tend to be labor intensive and pay a lower than average wage, their contributions to GDP are smaller than their employment shares, but nevertheless, their shares are larger than the U.S. average.

Graph 20

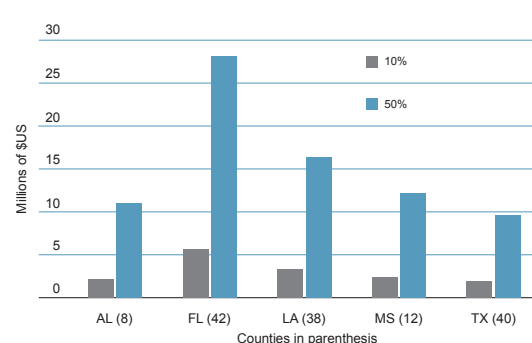
### Contribution of Accommodation, Food, Amusement and Recreational Services to GDP in Gulf Coast Counties, 2008



Source: BLS QCEW, BEA, BBVA Research

Graph 21

### Per-Month Cost of a 10% / 50% Reduction in the Value of Tourism-Related GDP Per County, by State



Source: BLS, BEA, BBVA Research

Using a panel estimation for the gulf coast counties, we find that, on average, a \$1 billion reduction in GDP in accommodation and food services GDP can translate to more than \$3 billion reduction in total GDP through both direct and second-order effects. This multiplier of 3 can certainly vary across counties. Considering that accommodation and food-services industries in the gulf coast counties account for \$19.4 billion in GDP annually, for every 10% reduction in output of these sectors, the total annual economic costs approach \$5.8 billion. If the reduction in output in these industries were to increase to 50%, the total cost would jump to \$29.1 billion. This reflects not only the decline in visitors but also the lower prices paid by patrons.

## Oil and Gas Extraction

First, if the government sidelines offshore workers by imposing a six-month moratorium on new deep water drilling, the direct economic impact will primarily affect Louisiana and Texas. These states have significant concentrations of workers in this capital-intensive industry. In Louisiana, the sector's GDP to employment ratio is over \$2 million per employee per year, and employees received over \$1 billion in total compensation. Any reduction in employment in this industry will have a large direct impact on the local economies. Other potential costs could arise from new regulatory burdens that may result in lower domestic oil supply and higher production costs. In addition, increased uncertainty could have long-term damaging effects on private investment in this industry, which would imply lower employment and real wage growth.

## Bottom Line

The largest component of lost value added will come from reductions in tourism services, as the reductions in spending will multiply throughout the economy. Total costs in the short-term could fluctuate from \$7.5 billion to nearly \$30 billion. These total costs could be even higher if we add the effects of a moratorium on oil and gas drilling, and we consider long-term destruction to the Gulf's ecosystem. Of course, the total impact is unknown, and it will vary by length of time the oil remains on beaches, the efficiency of the cleanup effort and the speed at which businesses can return to normal in the Gulf Coast region.

# Industry Focus: Hospitals

In the 1Q10 Regional Outlook we examined the dynamic ambulatory healthcare services industry. That industry is creating jobs as it flourishes and expands treatment options for patients. As a complement to that analysis, we delve into the latest trends and present our outlook for hospitals. Over the next 10-20 years, we envision several trends that will change how hospitals treat patients.

## Industry Characteristics

The composition of the hospital sector continues to evolve dramatically. Three major categories define the sector: general medical and surgical hospitals, psychiatric and substance abuse hospitals and specialty hospitals. In 2007, there were over 5,100 general hospitals, 560 psychiatric hospitals and 800 specialty hospitals in the U.S.<sup>1</sup> All of these types of hospitals provide a range of medical, diagnostic and treatment services, as they generally have access to the latest specialized equipment and technologies for disease detection, analysis and surgical procedures. Hospitals currently have a competitive advantage as the principal providers of inpatient services, and many hospitals increasingly provide outpatient services as well. General medical hospitals provide a public service and generate positive externalities in their communities: many of these hospitals maintain advanced trauma departments, and the law requires that nearly all of these establishments treat anyone who needs emergency care.<sup>2</sup> Specialty hospitals serve patients with specific medical conditions such as cancer, or they may provide long-term care or rehabilitation services.

## Ownership Structure and Dynamism

The fragmented ownership structure of U.S. hospitals inhibits a comprehensive analysis with publicly available data. Private companies and federal, state and local governments own and operate hospitals. In the case of private ownership, many hospitals are non-profit institutions and are controlled by community boards. Several large U.S. companies operate the majority of the for-profit private hospitals. Approximately half of total hospitals in the U.S. are classified as non-government not-for-profit community hospitals, which exempts them from paying different kinds of taxes. To receive this federal tax exemption, non-profit hospitals are required to care for Medicare and Medicaid beneficiaries. Over 83% of general medical and surgical hospitals are non-profit entities, although this share declined by 3% between 2002 and 2007. In contrast, over 65% of specialty hospitals are for-profit establishments, and this share has increased nearly 9% from 2002-2007.

The graph that follows reveals the vital role that for-profit hospitals have to drive industry growth.

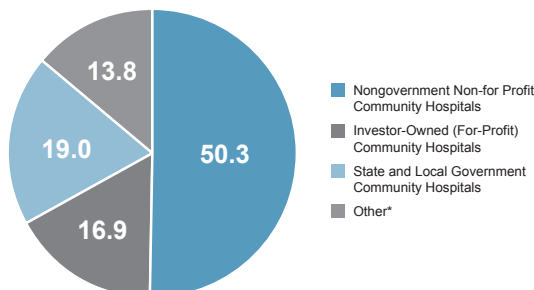
1. Specialty hospitals are adding establishments at the fastest rate: in excess of 6% per year (on average).
2. The total number of general hospitals continues to decline.
3. For-profit hospitals are growing fervently. For general hospitals, the growth rate of for-profit establishments is accelerating, and they are increasing their share. For-profit specialty hospitals continue to lead the industry segment's rapid growth.

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1: U.S. Census Bureau, 2007 Economic Census.

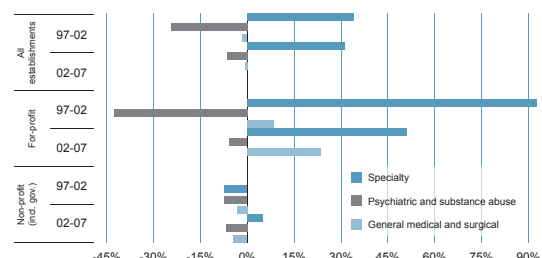
2: 1986 Federal Emergency For Profit Medical Treatment and Active Labor Act (EMTALA) applies to hospitals that accept medicare payments; there are some exceptions.

Graph 22  
**Hospital Ownership Structure in the United States, 2008**



Source: American Hospital Association (AHA)

Graph 23  
**Establishment Growth of Hospital Industry Segments, by Tax Status and Industry Segment**



Source: Census Bureau

### Economic Contribution

Hospitals make a significant contribution to the U.S. economy. They are the largest component of the healthcare sector, employing more than 5 million workers in 2009, and they have been one of the largest sources of private sector job creation. From 2002-2007, employment in general hospitals increased over 7% and over 19% in specialty hospitals. In the for-profit segment alone, job creation was even more robust: employment grew 13% in general hospitals and 21% in specialty hospitals over the same time period. Their operating activities also have spillover effects in the rest of the economy. According to the American Hospital Association (AHA), every dollar spent by a hospital generates \$2.3 in other business activities. For a local community, a hospital attracts high-wage medical professionals and provides employment for workers at all skill levels. Additionally, the hospital stimulates commercial real-estate with the co-location of doctors' offices and ambulatory care firms. Considering both direct and second-round effects, hospitals support around \$2 trillion of economic activity, equivalent to 16% of GDP.<sup>3</sup>

### The Recession's Impact

After a relatively long period of stable operating margins, the financial crisis and the ensuing recession have negatively shocked hospitals' profitability. Available information shows that the percentage of total hospitals with negative total margins increased to 32.4% in 2008, the highest in nine years.<sup>4</sup> Economic and financial turbulence affects hospital margins in various ways. The AHA estimates that for every percentage point that the unemployment rate increases, around 2.5 million people lose their employer-sponsored health insurance.<sup>5</sup> Using this estimate, from December 2007 to May 2010, approximately 11.8 million people lost their current coverage and must transition to a new insurance plan. Thus, substantial job losses and high unemployment increase the number of patients without insurance who are often unable to cover the full cost of their treatment. Furthermore, the increasing enrollment of the long-term unemployed in state programs such as Medicaid puts downward pressure on hospital margins as government programs tend to pay less than the full cost of treatment.

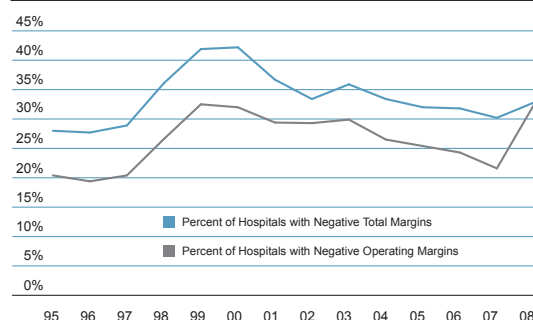
3: American Hospital Association, "The Economic Contribution of Hospitals", available online: [www.aha.org/aha/content/2008/pdf/08affordability-econcontrib.pdf](http://www.aha.org/aha/content/2008/pdf/08affordability-econcontrib.pdf)

4: American Hospital Association, "Trends Affecting Hospitals and Health Systems, Chapter 4: Trends in Hospital Financing", available online: <http://www.aha.org/aha/research-and-trends/chartbook/ch4.html>

5: Steinberg, Caroline Rossi, "Even as Health Reform Takes Center Stage, Economic Challenges Remain", November 2009, Health and Hospital Trends, AHA, available at <http://www.aha.org/aha/research-and-trends/health-and-hospital-trends/2009.html>

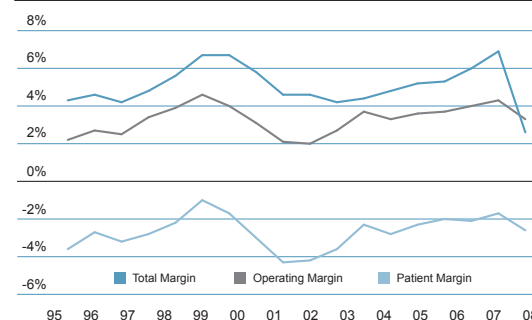
As credit availability tightened, the financial crisis deprived hospitals of not only the necessary operating liquidity but also the long-term funding to maintain capital spending. Consequently, many investment projects have been scaled back, delayed or even canceled. As of August 2009, 71% of hospitals affiliated with the AHA reduced capital spending, 40% scaled back projects planned or already in process, 49% canceled projects and 8% stopped projects already in process.<sup>6</sup> Ultimately, the recession has hindered hospitals' modernization and investment in technology that will drive productivity growth.

Graph 24  
**Percentage of Hospitals with Negative Total and Operating Margins, 1995-2008**



Source: AHA

Graph 25  
**Aggregate Total Hospital Margins, Operating Margins, and Patient Margins 1995-2008**



Source: AHA

## Forces that Drive Industry Profitability

As the economy emerges from the recession, the hospital industry is approaching a precipice. Rapid technological change, an aging population and new regulatory burdens present substantial challenges for the current hospital model in the United States. Some of these same factors, however, can combine to stimulate the growth of private, for-profit hospitals that are driving the industry and changing the landscape of medical treatment.

### Trend: Increasing reliance on outpatient procedures

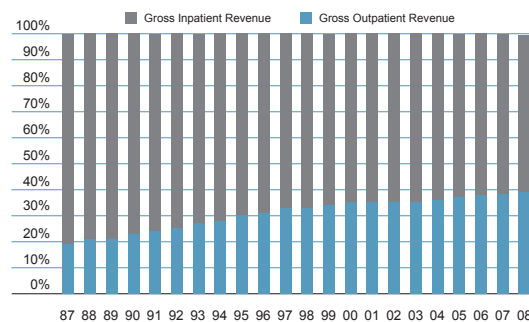
Technological advances have resulted in targeted, less invasive and more effective outpatient treatment procedures. These outpatient services have become increasingly important to a hospital's bottom line. From 1987 to 2008, gross receipts from inpatient services declined from 81.0% to 60.5% of total income, while revenues from outpatient services jumped from 19.0% to 39.0%. This trend stems from both supply and demand considerations. First, on the demand side, outpatient procedures are more comfortable for the patient, as they eliminate the need for a hospital stay or they reduce the patient's length of stay in the hospital. Thus, with less demand and shorter stays, hospitals' excess capacity has increased.

On the supply side, hospitals have strong incentives to shift patients toward these outpatient services, as they seek to minimize an inpatient's length of stay due to differences in the payment rates between private insurers and government programs. Hospitals receive per-diem rates for inpatient care from private insurers. For example, suppose that a hospital receives \$1,500 per day from a private insurance company for an admitted patient. If the hospital does an MRI on that patient, the insurer will not make an additional payment for that MRI. Thus, it may be more profitable for hospitals to discharge an inpatient and conduct the medical procedures on an outpatient basis.

6: *Ibid.*

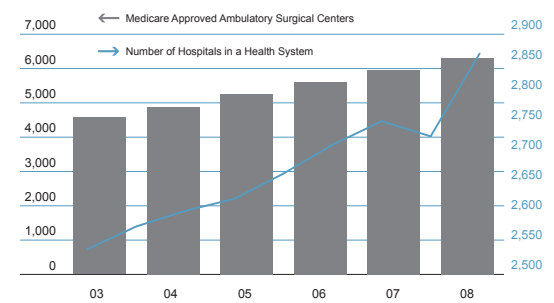
Medicare and Medicaid payment schemes add even more distortions. These programs pay according to the diagnosis-related groups (DRG) schedule based on the primary diagnosis. This payment scheme, however, means that a hospital will receive a fixed payment regardless of the length of the inpatient's stay. For example, the hospital will receive \$1,200 for a Medicare patient with a chronic heart failure class I diagnosis regardless of his length of stay. Clearly, the shorter the stay, the more net revenue the hospital receives because each additional day only adds to the cost of treating that patient. At a general medical hospital, Medicare and Medicaid patients combined can comprise the vast majority of inpatients (near 60%). By treating these patients on an outpatient basis, they can be paid per procedure rather than a fixed rate. These incentives are partly responsible for the change in the distribution of revenue that we observe, and push hospitals toward more intensive delivery of outpatient services.

Graph 26  
**Distribution of Revenues: Outpatient and Inpatient, 1987-2008**



Source: Avalere Health analysis of American Hospital Association Annual Survey data, 2008, for community hospitals.

Graph 27  
**Numbers of Medicare-approved Ambulatory Surgical Centers and Hospitals in Health Systems, 2003-2008**



Source: AHA, Avalere Health Analysis and Centers for Medicare and Medicaid

### **Trend: Rising competition from outpatient care centers and specialty clinics**

As research and technology generate more flexible treatments that do not require hospitalization, increasing numbers of outpatient procedures can be done outside hospitals in doctors' offices and specialty care centers. This reality presents financial challenges for hospitals, as their increased reliance on outpatient services for revenue leaves them more susceptible to competitive forces from ambulatory care centers.

Hospitals' outpatient services have many substitutes in the market. On the supply side, ambulatory care centers such as imaging centers, diagnostic laboratories, retail health clinics and emergency clinics are popping up on street corners in suburban neighborhoods throughout the country, as the fixed costs of operating these establishments has declined. In some markets, the proliferation of these ambulatory healthcare facilities restrains the ability of hospitals to increase and receive higher payments for identical services. With higher fixed costs than doctors' offices and ambulatory care centers, the proliferation of these low-cost alternatives limits hospitals' ability to serve an increasing number of patients at their facilities and lower their costs through economies-of-scale and scope.

On the demand side, the relatively inexpensive cost of travel and relatively high cost of medical treatments has created a new medical tourism industry. Patients can literally shop around the world to find the best place to receive the type of care that they need. Additionally, many insurance plans currently incentivize patients to patronize these ambulatory care clinics over hospitals. For example, a plan may waive a deductible, offer lower or zero co-payments, and/



or provide 100% coverage (no co-insurance payment) to visit a 24-hour care emergency clinic versus a general hospital's emergency room. As these incentives proliferate, patients will shift toward using these competing centers.

#### **Trend: General hospitals face inpatient care competition from specialty hospitals**

Competition from specialty hospitals is intense and is done primarily through differentiation. In order to attract large amounts of patients, hospitals must first have an accessible location and second, they should be able to gain a competitive advantage in terms of quality and scope of their services, pricing and technology. Building strong relationships with physicians is also a key factor in the fight for market share, as patients tend to trust references from their doctors.

As doctors affiliate to form new specialty hospitals, however, general medical and surgical hospitals will increasingly have to compete directly with these specialty hospitals for inpatient care. These rapidly growing specialty hospitals are smaller and more flexible, and they offer a competing range of services such as cardiac surgery. Both large firms and doctors' groups are forming these establishments, and because they often operate as a for-profit specialty hospital, they are not required by law to serve Medicare and Medicaid beneficiaries (participation in these programs is voluntary, but required for a federal tax exemption). As a consequence, they can choose the most profitable patients to serve. Because profitable inpatients remain a vital cross-subsidy for general hospitals, these specialty hospitals threaten to further erode the profit margins of general medical and surgical hospitals.

#### **Trend: Increasing consolidation among general medical hospitals**

Hospitals operate in a highly fragmented industry in which the largest firms comprise less than 10% of the total market share. Substantial barriers to entry related to both the economics of building a new hospital and regulatory hurdles along with the non-profit status of many hospitals are largely responsible for this fragmentation. Today, in most cases, it would be extremely difficult for an unaffiliated new hospital to enter a market and become profitable.

First, 36 states currently have a Certificate of Need (CON) legal requirement and hospital planning commissions that must approve the construction of a new hospital in a market area.<sup>7</sup> These planning boards assess the number of beds in a market area, and approve new projects if they believe the area can support more beds. The CON requires companies to demonstrate the need for a new hospital before beginning construction. Between 1974 and 1987, all 50 states had such regulation in place; only since then have 14 states eliminated the certificate of need requirements, but some have retained planning commissions. Certainly, as states continue to ease restrictions and reliance on planning boards, we will see further consolidation. Second, compliance with federal and state government operating regulations and participation in the Medicare and Medicaid programs entails large administrative and learning-by-doing costs for a new entrant.

Construction of a new hospital requires large sums of capital that only local governments, big firms or organizations can obtain through raising equity or financing debt. Once that hurdle is crossed, new entrants should expect minimal or negative profitability in the short term, as the fixed costs are high. New hospitals must develop a positive local reputation and market themselves to attract a sufficient number of patients to become profitable. Many patients feel secure with well-regarded institutions that have years of experience. Finally, unaffiliated hospitals have little leverage when bargaining with private insurance companies over payment rates. Large hospital systems or companies that operate many establishments exert more

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7: National Conference of State Legislatures, "Certificate of Need: State Health Laws and Programs," available online: <http://www.ncsl.org/Default.aspx?TabId=14373>

bargaining power, and they can more effectively negotiate to maximize their revenue. Certainly, in many markets, a new entrant would face competition from these large firms or hospital systems that may already operate profitable hospitals, and the rise in consolidation makes entry even more challenging. While a new for-profit hospital entrant would not enjoy the tax exemption that a non-profit private or local government competitor would have, the for-profit hospital may have more flexibility to optimize its patient base, as it would not face a legal requirement to serve Medicare and Medicaid patients.

Faced with increasing competition from ambulatory care services, specialty hospitals and for-profit hospitals, we should expect more of the many non-profit general medical hospitals to merge into larger hospital systems. Additionally, we expect smaller, regional firms that operate for-profit hospitals to merge with national firms. Mergers and acquisitions will continue as hospitals respond to declining margins and limited bargaining power. Pressures on hospital margins will continue as input costs increase, and government and private insurance companies push for lower costs. By merging, hospitals can achieve more bargaining power, reduce overhead administrative costs and implement best practices from a broader array of knowledge.

#### **Trend: Pressure to contain costs as supply prices rise and government payment rates decline**

Hospitals face the largest fixed costs in the healthcare industry. Facilities and equipment require maintenance regardless the number of patients receive treatment at the hospital, thus capacity optimization is a priority. And, the latest high-tech medical equipment can be a significant investment. Variable costs are comprised of labor and disposable medical supplies. Labor accounts for roughly 50% of total industry costs. Hospitals' Employment Cost Index continues to expand faster than the national industry average, although its y-o-y pace has slowed down recently. The rising labor costs are due mainly to shortages of skilled professionals and regulation. Estimates suggest that there will be a shortage of 1,000,000 nurses by 2020, and state regulated nurse-to-staff ratios continue to drive up the wages for these skilled workers<sup>8</sup>. Non-labor variable costs such as medical equipment and pharmaceutical supplies continue to increase faster than the industry average, although their rate of growth slowed in 2008. Price pressures on these inputs are expected in the future as demand for healthcare services increases with the aging population.

Hospital revenues come primarily from Medicare, Medicaid and private insurance companies. Certainly, as the government continues to see its healthcare bill for entitlements climb, Congress and elected officials will continue to press for further reductions. Private insurance companies already furiously negotiate to reduce their payment rates. While an aging population means an increase in the number of patients and thus revenue, it also means a greater share of Medicare patients and leaves hospitals and other healthcare providers more vulnerable to government decisions. Between 1980 and 2008, private payers' share of total costs went down from 41.8% to 36.8%, while Medicare and Medicaid increased their share from 44.2% to 53.6%.<sup>9</sup>

Although the average hospital relies primarily on Medicare and Medicaid for revenue, these programs typically underpay hospitals: payment-to-cost ratios for Medicare and Medicaid were 90.9% and 88.7% respectively in 2008. Unfortunately, this revenue shortfall means that private insurance must pay 128.3% of cost for a comparable procedure.<sup>10</sup>

In this environment, hospitals will increasingly need to optimize their capacity for providing services. Over-capacity creates a poor cost-structure for hospitals, as they are unable to service the fixed costs associated with that excess. Furthermore, excess capacity makes potentially cost-reducing investments or new hospital construction unattractive. In an attempt to control

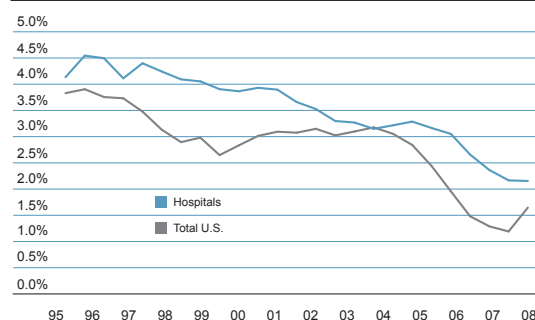
8: National Center For Health Workforce Analysis, Bureau of Health Professions, Health Resources and Services Administration. (2004). What Is Behind HRSA's Projected Supply, Demand, and Shortage of Registered Nurses? Available online: <ftp://ftp.hrsa.gov/bhpr/workforce/behindshortage.pdf>.

9: American Hospital Association, Trends Affecting Hospitals and Health Systems, Chapter 4: Trends in Hospital Financing, *Op. Cit.*

10: *Ibidem*

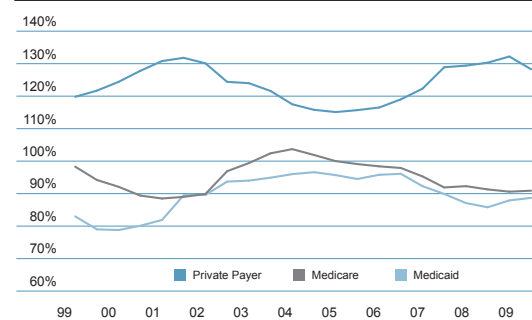
their costs, hospitals are experimenting with new business models. In most hospitals, doctors have privileges and work independently of the hospital administration. In this environment, doctors can order any test or procedure to be done on demand, and the hospital staff is expected to fulfill the order. This model presents challenges for capacity and staffing management; independent physicians have little incentive to consider the costs to the hospital. Thus, hospitals are increasingly employing physicians directly, where, as employees of the hospital, they can benefit or suffer the consequences of positive or negative profitability.

Graph 28  
**Employment Cost Index,  
Seasonally Adjusted, Y-o-Y Change**



Source: BLS

Graph 29  
**Aggregate Hospital Payment-to-Cost  
Ratios for Private Payers, Medicare and  
Medicaid, 1999-2009**



Source: AHA Survey Data 2008

### Trend: The rise of for-profit hospital companies

Our research led us to several national and regional for-profit hospital companies that own or lease and operate general medical and surgical hospitals. The largest multi-state companies operate over 520 hospitals in 36 states, and they continue to add hospitals through acquisition or new construction<sup>11</sup>. These hospitals will increasingly compete with non-profit private and government general hospitals. The largest multi-state for-profit companies include Hospital Corporation of America (HCA), Community Health Systems (CYH), Tenet Healthcare (THC), Health Management Associates (HMA), Lifepoint Hospitals (LPNT) and Universal Health Systems (UHS). Smaller companies include Sunlink Health Systems (SSY), IASIS Healthcare (IASIS) Vanguard Health Systems, and the California-based Integrated Healthcare Holdings (IHCH).

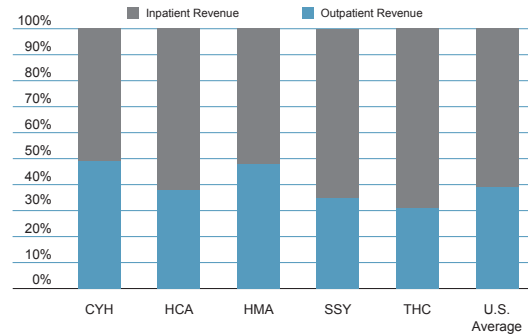
The operating companies of general hospitals have been quite active: they continue to acquire hospitals at a fervent pace. The largest hospital companies exhibit some distinct statistics compared to the aggregate statistics. First, they have been reducing their reliance on Medicare and Medicaid payments to less than 40% of revenue, while the remaining 60% comes from self-pay and private insurance. This is the opposite trend of many non-profit community hospitals. Additionally, their hospitals tend to be smaller than non-profit hospitals, and they are striving to increase their occupancy rates in excess of 50% to reduce their fixed costs.<sup>12</sup> We expect these companies to target high-growth areas and areas with high entry barriers that are currently operating inefficient hospitals.

11: Company Annual Financial Reports from Bloomberg and BBVA Research

12: Company Quarterly and Annual Financial Reports from Bloomberg and BBVA Research

Graph 30

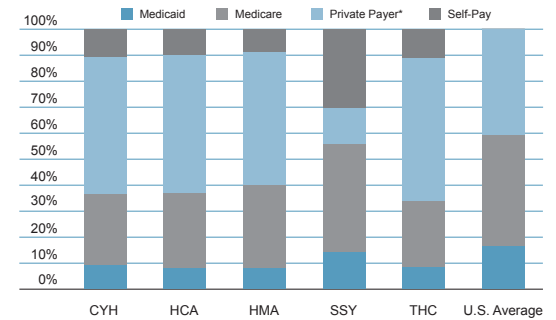
**Distribution of Revenues in top for-profit general hospital companies: Outpatient vs Inpatient, 2008**



Source: Bloomberg and AHA

Graph 31

**Distribution of Revenues in top for-profit general hospital companies: By payer, 2008**



Source: Bloomberg; U.S. Average estimated from cost sources presented by the AHA

\* Private Payer includes self-pay for the U.S. Average

## Outlook and Risks

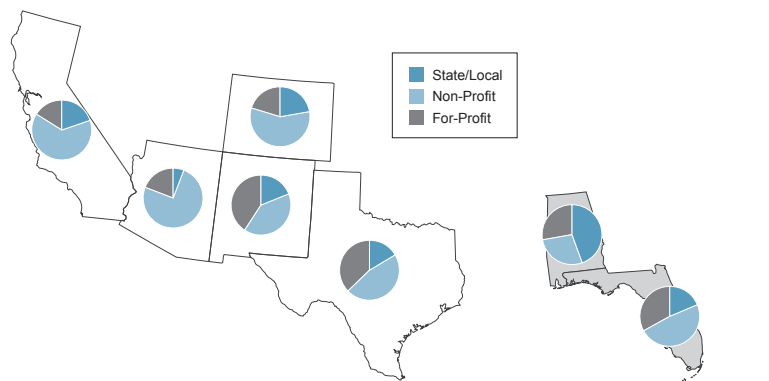
### Outlook

Across the BBVA Compass Sunbelt Region, we see ample opportunity for continued expansion and growth. Out of the seven states in our region, only Alabama and Florida have Certificate of Need (CON) programs that limit the construction of new hospitals. In these states, the primary method of expansion will come through mergers and acquisitions, as the total number of beds per 1,000 residents in these states is high at 3.3 and 2.9, respectively. Arizona, California, Colorado, New Mexico and Texas eliminated the Certificate of Need in the mid-1980s, and are fertile places for expansion.

The aforementioned large multi-state companies that operate for-profit general hospitals have 47% of their hospitals in the BBVA Compass Sunbelt Region. New Mexico has the highest share of privately-owned beds, followed by Texas, and as the population continues to grow in the Sunbelt, we expect privately-owned hospital companies to continue to increase their shares.

Figure 3

**Distribution of Community Hospital Bed by Ownership, 2008. Shaded states indicate states with a CON.**



Source: statehealthfacts.org

## Risks

A weak economic recovery has the potential to further erode hospitals' bottom lines. With more unemployed and uninsured patients, the share of uncompensated and charity care may increase. Uninsured patients who receive treatment are less likely to be able to pay their bills: thus, hospitals must either write down or write off the cost of those procedures. Furthermore, as hospitals on average have become more dependent on payments from government entitlement programs, proposed reductions in payment rates may further reduce revenue. In the short term, risks to costs remain tempered, as hospital supply price inflation has slowed, and real wages are stable. But, long-term risks to costs are elevated, as rising demand for medical services and rising average real wages will cause healthcare to consume larger shares of our budgets. Lower net profit streams may increase hospitals' borrowing costs, which hinders their access ability to maintain leading facilities and invest in technology. Much innovation will come from hospital systems that experiment with new, profitable business models.

Widespread fiscal distress presents challenges for public hospitals, as without proper investment, they will lose their competitive advantage. Some of these hospitals, however, may become targets for the for-profit companies and their sale may be beneficial to local governments.

While the exact impact of the recent healthcare legislation remains unclear, providing universal insurance coverage should help to reduce the amount of uncompensated care that hospitals provide. If uninsured individuals who currently use hospitals' emergency rooms for non-emergency treatments begin to use ambulatory care centers and visit doctors' offices, hospitals should be able to better manage their high-overhead emergency room capacity.

The speed of reorganization in the industry will be slow in many states, as there are many stakeholders to appease, and it is difficult to measure a hospital's productivity. The hospital industry is increasingly working hard to develop consistent quality and performance measures across their lines of business; however, these metrics are nascent and standardization and evaluation will take time. Appropriate performance and quality benchmarks can potentially lower costs, as best practices can be determined and implemented.

## Bottom line

In summary, hospitals remain a vital part of our healthcare system and they provide an important service. As the majority of hospitals have a non-profit status, the industry will undergo significant reorganization as the competition from for-profit ambulatory care centers and hospitals becomes more intense. Hospital systems are scrutinizing the current business model in which physicians operate as independent contractors; new business models may employ physicians directly.

Finally, increased dependency on government entitlements threatens the revenue streams of non-profit hospitals. Across the BBVA Compass Sunbelt Region, a positive environment for for-profit companies, we see ample room for hospital expansion; the region's projected higher than U.S. average population growth will support additional hospital investment over the long term.

## MSA Level Industrial Production

Industrial production includes the manufacturing, mining and the electric and gas utilities sectors. According to the Federal Reserve Bank, these sectors, along with the construction sector, explain much of the cyclical variation in national output. Economists analyze these statistics for individual industries and the U.S. economy as a whole because they are the most current and timely indicator of sector-level industrial performance. These indexes, however, do not offer a regional perspective of industrial activity. To the extent that different states and metropolitan areas specialize in production, we expect that their individual business cycles will be defined in part by their own industrial cycle.

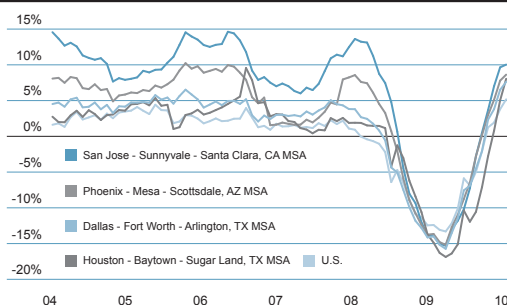
### Construction of the Regional Index

The Federal Reserve computes the aggregate U.S. index as a value-added weighted sum of sector-level indexes. Thus, to construct a regional index of industrial production, we need to estimate a set of weights that are proportional to the industry's share of value added in each region. The Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) program releases its estimates for industries across all Metropolitan Statistical Areas (MSAs) with a six-month lag. The data begins in 1990, and the availability of more disaggregated industry information increases in later years. Although much data is redacted due to privacy concerns (in smaller MSAs and at detailed industry classifications), we employ procedures to reliably estimate the shares of employment and wages paid for each year across 26 classified industries in 371 MSAs.

For the aggregate U.S. economy, wages comprise approximately 2/3 of total value added GDP. The remaining 1/3 of value added is attributed to returns on production capital. As the Federal Reserve uses the share of industry value added to GDP to compute the weights for the U.S. index, we too prefer an industry measure of value added at the MSA level. As we do not have this exact statistic, we use the share of the industry's total wages paid as a proxy for value added. Alternatively, we could use employment shares; however, employment shares may mask the actual contribution of the industry to the local economy in high-productivity industries. Industrial sectors tend to be some of the most productive industries (defined as value added per worker) in the U.S. economy. When we cross these shares with the national industry-specific index (all have a base year of 2002), we generate a consistent time-series of MSA industrial production.

Graph 32

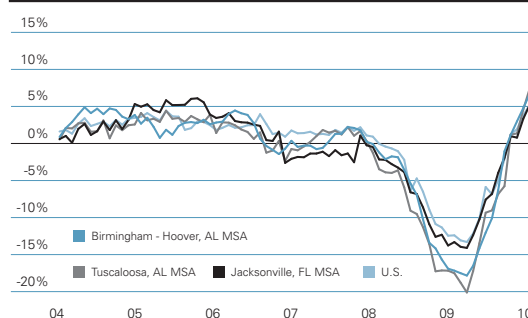
#### MSA Industrial Production Indexes (Selected MSAs, Texas and West U.S.), Y-o-Y Change



Source: BBVA Research, BLS and Fed

Graph 33

#### MSA Industrial Production Indexes (Selected MSAs, Alabama and Jacksonville, FL), Y-o-Y Change



Source: BBVA Research, BLS and Fed



## Rebound in Production

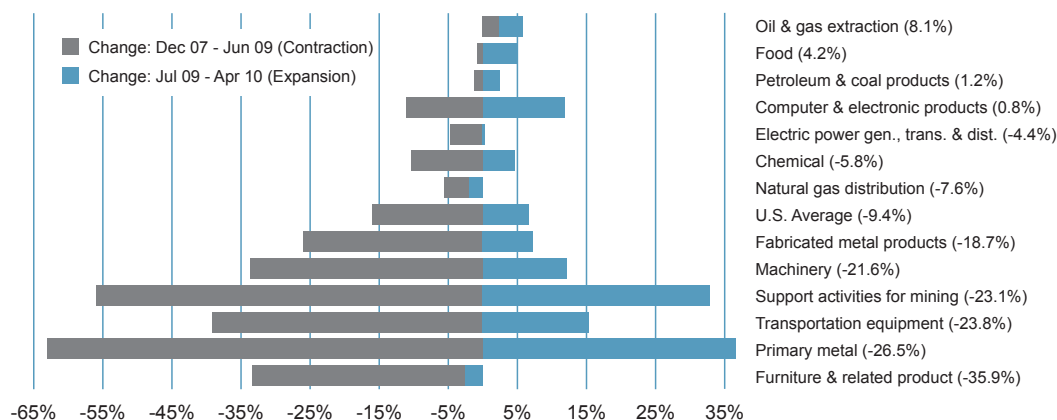
The U.S. Industrial production began to decline in December 2007 with the start of the recession, and it began to increase steadily in July 2009 as the recovery began. We define the period between these dates as the contraction, and the period after July 2009 to present as the expansion. During the contraction, the U.S. industrial production index fell by 16.3%, and it has increased 6.6% during the expansion.

## Industry Performance

Before we analyze the MSAs, we highlight the best and worst performing industries. Oil and gas extraction (lead by natural gas and followed by petroleum) has boosted industrial production with an 8% increase between December 2007 and April 2010. It is the only sector whose index did not decline during the contraction period. As its rate continued to increase during the recovery, this industry has helped Texas to lead the U.S. recovery. The top-performing industries during the expansion period were also the industries which experienced the steepest fall during the contraction. Their rapid recovery reflects federal stimulus spending decisions, robust foreign demand and changes in spot-market pricing in the iron-ore market. Iron-ore mining has led the expansion with a cumulative 150% increase, followed by motor homes, light trucks and automobile manufacturing.

Graph 34

### Percent Change in Industrial Production Indexes by Selected Industries (Dec. 07-Apr. 10 cumulative change)

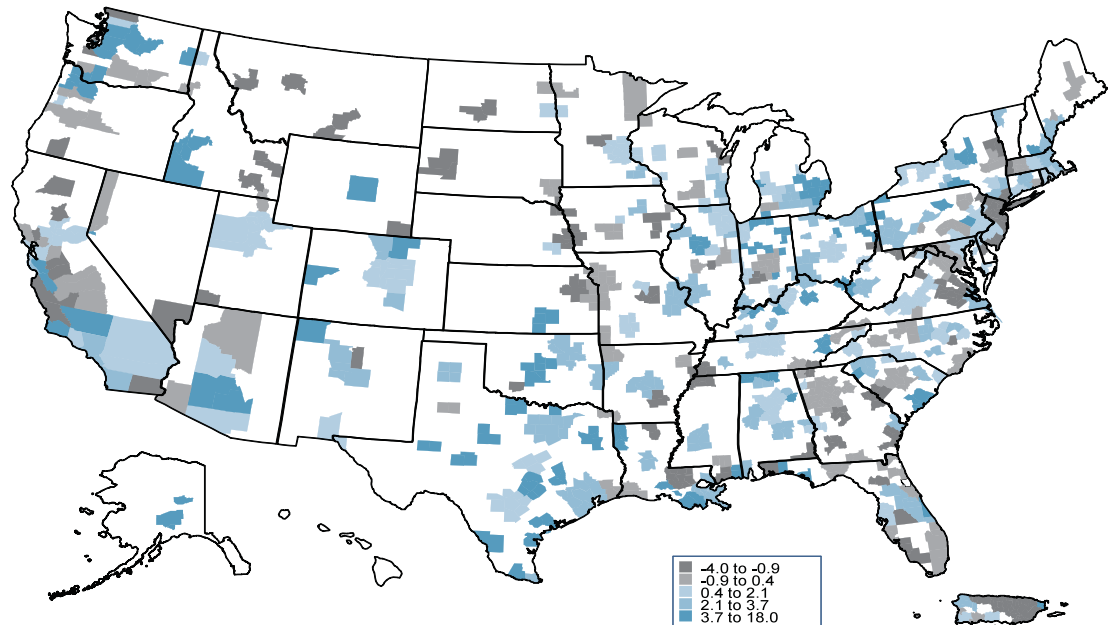


Source: Federal Reserve

## The Resurgence Across MSAs

This new index reveals MSAs whose sector concentrations have aided their recovery. Among the largest 52 MSAs (population >1 mil.), 4 exceeded the U.S. average IP growth between December 2007 and April 2010 by more than 5%: San Jose, CA, Austin, TX, Portland, OR and Phoenix, AZ. We can attribute their stable IP growth to their investments in technology sectors. In the graphic below, we present the national picture of MSA expansion performance by quintiles, relative to the U.S. average. MSAs that have high concentrations of the fastest growth industries since mid-2009 have rebounded rapidly. This picture helps illustrate expectations of this year's growth, although some of the best-performing areas suffered the worst contractions. The numerical scale indicates the growth difference relative to the U.S. decline.

Figure 4

**Resurgence in Industrial Production Across the U.S., by quintile.**  
**Percent change in MSA IP index relative to the U.S., June 2009-April 2010**

Source: BBVA Research

# How Do Monetary Policy Shocks Affect BBVA Compass Sunbelt States?

Until the 1990s, monetary policy shocks have been examined without paying attention to structural differences among regions. However, the introduction of the role of credit market imperfections in the monetary transmission mechanism and concerns of the monetary policy effects on each European Monetary Union member increased the interest on this issue. Since then, economics literature has shown that due to differences in regions, monetary policy shocks might have diverse effects on each region's economy. This article implements an econometric methodology to estimate the heterogeneous effects of the Fed's monetary policy on BBVA Compass Sunbelt States.

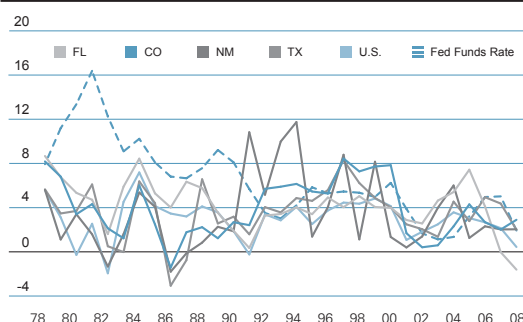
## The Federal Reserve's Monetary Policy Affects Individual States Heterogeneously

Once the monetary shock hits the economy, the direct effect on each state is expected to be more or less similar since the interest rate would be same for all states. However, regional differences change the impact of a monetary policy shock. For example, manufacturing industries are more sensitive to interest rates and therefore, states whose economy rely more on manufacturing industries are expected to be negatively affected. Additionally, it is harder for small firms to obtain loans and credit during economic downturns. Therefore, states with more small firms are likely to be affected more than states in which large firms are dominant. Moreover, the structure of the financial sector in each state also determines the transmission mechanism. During tight monetary conditions, small banks and financial companies might have a harder time finding funding for their loans and credits. Therefore, small banks would be unwilling to finance projects in that region which would increase the downturn of the state's economy. For these reasons, when calculating the effects of monetary policy shocks to an economy, we should look at the impact of monetary policy shocks to each state separately.

Although the growth dynamics in each state in the BBVA Compass Sunbelt Region are very similar, they are far from identical. Due to differences in industries, population, natural resources and other factors, the responses to macroeconomic shocks (i.e. productivity, monetary policy) are different. The graphs below depict the annual growth rates in real Gross Domestic Product (GDP) for each state and the effective federal funds rate. The graphs indicate that some of the Sunbelt states (i.e. New Mexico) have experienced more volatile economic growth than the remaining states which might be due to differences in New Mexico's responses to unexpected macroeconomic shocks.

Graph 35

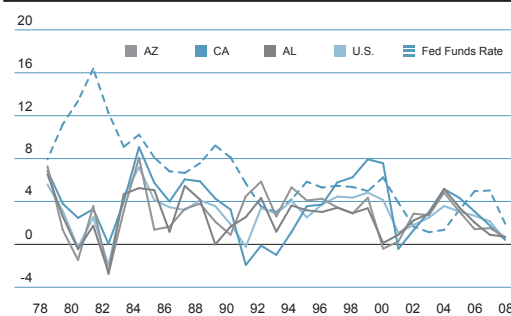
### Economic Growth in BBVA Compass Sunbelt Region and Federal Funds Rate



Source: BEA

Graph 36

### Economic Growth in BBVA Compass Sunbelt Region and Federal Funds Rate



Source: BEA

Although there has been progress, the literature on the issue remains limited. Carlino and DeFina (1998)<sup>1</sup> present one of the first attempts on this subject. They investigate Bureau of Economic Analysis (BEA) U.S. regions and show that monetary policy shocks have different effects on U.S. regions. Using state level data, Carlino and DeFina (1999)<sup>2</sup> found substantial within-region and cross-region differences. More recently, Owyang and Wall (2006)<sup>3</sup> estimated a Vector Autoregression (VAR) with a standard lower-block recursive model using the fed funds rate, Consumer Price Index CPI, real Personal Income, 10-yr Tbill and commodity price index for 19 regions in the U.S. They found that a one-time unexpected monetary policy shock has variable impacts on each state's economy. Their results indicate that the share of the manufacturing industry, the share of the small firms and the concentration of the banking sector in the state's economy affect the transmission mechanism.

### Data and Estimation Results

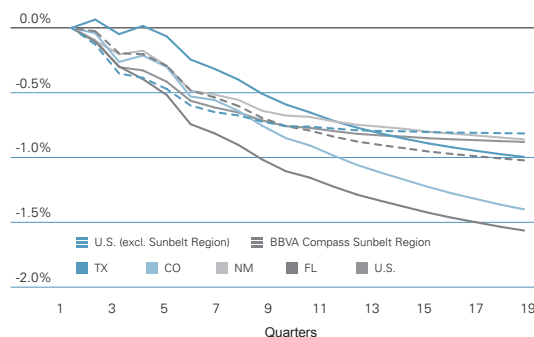
We investigate the impact of an unexpected monetary shock on states in the BBVA Compass Sunbelt Region by employing a VAR model in order to account for feedbacks between all variables used in the model. Similar to the literature, we include real income growth in each state, real income growth in states other than BBVA Compass Sunbelt, real income growth in the remaining states in the region, change in relative price of energy, change in core inflation, growth rate of U.S. real GDP and federal funds rate. The sample period is 2Q70-4Q09 and the model is estimated using quarterly data series.

As in most recent empirical studies, a monetary policy shock is modeled as a change in the short-term interest rate (i.e. federal funds rate) and it affects aggregate demand through a large set of variables such as cost of capital, exchange rate, income, wealth and credit availability. Since state or regional Personal Consumption Expenditure price indexes (PCE) are unavailable, we use national PCE to deflate nominal personal income. Core PCE represents core inflation and is measured as PCE excluding food and energy prices. The relative price of energy is included to control for energy prices and is estimated by dividing Producer Price Index (PPI) into the PPI of Energy.

The estimation assumes that the federal funds rate responds to changes in real personal income contemporaneously, although real personal income is affected by rate hikes with a 1 quarter lag. We have calculated a VAR model with 4 lags to avoid non-serially correlated residuals.

Graph 37

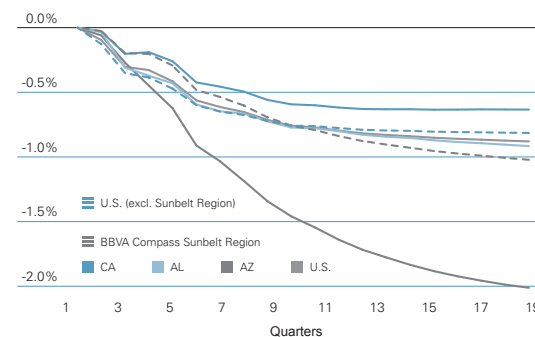
#### Effects of Monetary Policy Shocks on BBVA Compass Sunbelt Region States



Source: BBVA Research

Graph 38

#### Effects of Monetary Policy Shocks on BBVA Compass Sunbelt Region States



Source: BBVA Research

1: Carlino, Gerald, and Robert DeFina. 1998. "The Differential Regional Effects of Monetary Policy." *Review of Economics and Statistics*, 80: 572-87.

2: Carlino, Gerald, and Robert DeFina. 1999. "The Differential Regional Effects of Monetary Policy: Evidence from the U.S. States." *Journal of Regional Science*, 39: 339-58.

3: Owyang, Michael T., and Howard J. Wall. 2006. "Regional VARs and the Channels of Monetary Policy." Federal Reserve Bank of St. Louis Working Paper 2006-002A.

The results indicate that the effects of monetary policy are significantly different in each state. The previous graphs depict the cumulative impulse response functions of real personal income to a one standard deviation interest rate hike. In the short term (i.e. 9 quarters), BBVA Compass Sunbelt states are affected less than the rest of the U.S. However, in the long term states in the region feel the downturn more than other states. On the other hand, not all states in the region are affected similarly. Arizona, for instance, is the most affected state from an unexpected interest rate hike. Texas is affected positively for the first two quarters but at the end of the fifth year, the total decrease in real personal income reaches 1%. Colorado and Florida are also affected more than the U.S. and BBVA Compass Sunbelt weighted average. Contrary to other states, California is affected the least. California's real Personal Income responds to monetary policy shock 0.2% at the end of the first year and 0.6% at the end of the fifth year which is significantly less than the U.S. and Sunbelt Region. Our analysis suggests that the economic diversity in Texas and California, and the relatively high government sector share in New Mexico buffer the cumulative impact of a monetary shock in these economies.

### Methodology

Assume that data generation process of the linear model is

$$A_0 Z_t = A_1 Z_{t-1} + \dots + A_p Z_{t-p} + u_t \quad (1)$$

where  $u_t$  is a white noise process and  $Z_t$  is a  $n \times 1$  vector which includes variables included in the estimation. Consistent with literature, we assume that fundamental shocks are mutually independent and its variance normalized to 1,  $E u_t u_t' = I$ .

The structural model (1) is estimated by the following reduced form

$$Z_t = B_1 Z_{t-1} + \dots + B_p Z_{t-p} + \epsilon_t, \quad E \epsilon_t \epsilon_t' = \Sigma \quad (2)$$

where  $B_i = A_0^{-1} A_i$ ,  $\epsilon_t = A_0^{-1} u_t$  and  $\epsilon_t$  is the one-step ahead prediction error with variance-covariance matrix,  $\Sigma$ . The reduced form model (2) can also be estimated in terms of reduced-form moving average (MA)

$$Z_t = (I - B_1 L - \dots - B_p L^p Z_{t-p})^{-1} \epsilon_t \quad (3a)$$

$$Z_t = (I + C_1 L + C_2 L^2 + \dots + \infty) \epsilon_t \quad (3b)$$

where  $L$  is the lag operator and the representation of the structural MA model is

$$Z_t = (A_0 - A_1 L - \dots - A_p L^p Z_{t-p})^{-1} u_t \quad (4a)$$

$$Z_t = (D_0 + D_1 L + D_2 L^2 + \dots + \infty) u_t \quad (4b)$$

Although the reduced model (2) can be estimated with the previous equation, it is not possible to get  $A_0$  coefficients which are necessary to calculate Impulse Response Functions (IRFs). To identify the model, we use Cholesky decomposition which imposes recursive ordering in  $A_0$ . For example, a shock to the first variable in  $Z_t$  affects the remaining variables contemporaneously. However, a shock to remaining variables affects the first variable no sooner than one lag. Similarly, a shock to the second variable affects all but the first variable contemporaneously. The last variable in the model is affected by all variables contemporaneously but a shock in that variable affects the other variables only with a lag.

The response of a variable to a shock is calculated with IRFs. The correspondence between structural model (4b) and reduced-form MA model (3b), and  $\epsilon_t = A_0^{-1} u_t$  imply that  $D_0 = A_0^{-1}$  and  $D_i = C_i D_0$  for  $\forall i$ , where  $C_i$  is estimated in the reduced MA model<sup>4</sup>. Given that  $Z_t$  is non-stationary and suppose that its first difference is stationary, the IRFs of the model can be shown as

$$\frac{\partial Z_{t+k}}{\partial u_t} = \sum_{i=0}^k D_i, \quad \lim_{k \rightarrow \infty} \frac{\partial Z_{t+k}}{\partial u_t} = \sum_{i=0}^{\infty} D_i = D(1)$$

# Impact of 2005 Base Realignment and Closure (BRAC) on Alabama

By Ahmad Ijaz and Carolyn Trent, Center for Business and Economic Research, The University of Alabama

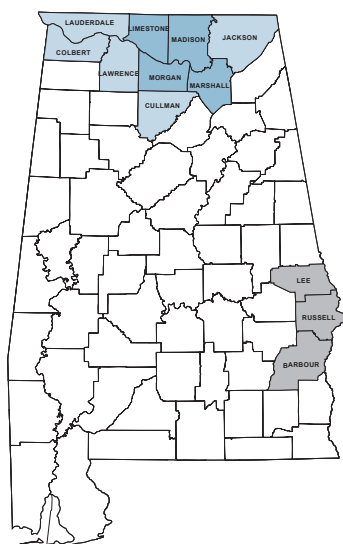
This article examines the economic impact of Base Realignment and Closure (BRAC) transfers to Redstone Arsenal in the Huntsville, Alabama area, and the spillover effect of transfers to Fort Benning, Georgia.

The Arsenal will gain over 4,600 military and government civilian personnel with an average annual income of around \$80,000, more than double the \$38,055 average earnings of an Alabama worker in 2008. The move also includes military construction of 1.9 million square feet at a cost of approximately \$360 million and residential construction of 3,610 units, costing about \$620 million. All BRAC-related projects, including construction, relocations and replacement hiring, should be completed by the mandated September 15, 2011 deadline; the largest movement to Redstone is occurring in 2010. Approximately \$20 billion in new contracts are also expected to be awarded, creating as many as 5,000 private sector contractor jobs. Effects of the moves will be concentrated in Madison County, but will also have a sizeable impact on neighboring counties, including Limestone, Marshall and Morgan counties.

In another BRAC move, the Army is relocating its Armor School from Fort Knox, Kentucky to Fort Benning, Georgia. It will combine with Fort Benning's Infantry Center to become the Maneuver Center of Excellence. Spillover effects will be felt in eastern Alabama, primarily in Barbour, Lee and Russell counties, including the Phenix City area. Over 4,700 military personnel and almost 1,900 government civilian workers will be moving into the area; the Army is spending \$3.5 billion on new construction on the base. Both of these BRAC-related moves will have ripple effects across most economic sectors of their North and East Alabama impact areas.

Figure 5

## Alabama BRAC Impact Counties



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



**Redstone Arsenal BRAC Impact on Four-County Region**

**Construction** To serve population growth of around 30,000 residents, about 3,600 housing units will be built at a cost of \$685 million for the transferred and new workers and their families; over \$360 million in military construction will also be undertaken. This will result in one-time economic impacts on Alabama of approximately \$2 billion in GDP (Gross Domestic Product), \$525 million in household earnings and nearly 17,000 direct and indirect jobs. Most of these impacts will be in the Huntsville region, including a \$1.5 billion increase in the area's GDP, an additional \$390 million in household earnings and 10,500 direct and indirect jobs. Nearly \$40 million in income and sales taxes will accompany these impacts: over \$20 million in state income tax, approximately \$9 million in state sales tax and about \$6 million in regional sales tax revenues.

Table 2

**BRAC 2005 Units Relocating to Redstone Arsenal**

	Jobs
2nd Recruiting Brigade	130
Army Materiel Command	1,340
Aviation Technical Test Center	323
Missile Defense Agency	2,248
Rotary Wing Air Platform	50
Security Assistance Command	340
Space & Missile Defense Command	180
<b>2005 Total BRAC Moves</b>	<b>4,611</b>
Additional DoD Contractors	est. 5,000

Source: Chamber of Commerce of Huntsville/Madison County

Table 3

**Arsenal BRAC 2005 Construction Phase Economic Impacts**

Total Impact*	Alabama	Region
GDP (billions)	\$2.0	\$1.5
Earnings (millions)	\$525	\$390
Employment (jobs)	17,000	10,500

\* Includes military and residential construction.

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

**BRAC Payroll** The Redstone Arsenal BRAC 2005-related payroll alone will generate annual GDP impacts of \$460 million across Alabama, including \$375 million on the Huntsville region. In addition, every \$100 million of noncontract nonpayroll expenditure delivered to final demand will create GDP impacts of about \$165 million for the state and \$135 million for the region. Earnings impacts are estimated to be \$458 million statewide and \$374 million for the region. Employment impacts are 5,500 jobs in the state, with close to 5,000 jobs for the region. Fiscal impacts are over \$27 million in state taxes; including \$19 million in income tax, \$8 million in state sales tax and \$500,000 to \$700,000 in property taxes. Tax receipts for the region will total \$9 to \$11 million; with about \$6.5 million in sales and \$3 to \$4 million in property taxes.

**BRAC Contracts** Every \$1 billion of BRAC 2005-related contract expenditures that are fully expended in Alabama will produce statewide economic and fiscal impacts of about \$2 billion in state GDP, nearly \$500 million in earnings, and about 11,000 direct and indirect jobs. Regional impacts are approximately \$1.8 billion in GDP, \$367 million in additional earnings and 7,600 direct and indirect jobs. The average annual income for these jobs is close to \$50,000, but almost 2,500 are direct jobs that will earn over \$80,000. Fiscal impacts are estimated to be about \$30 million for the state (almost \$20 million in income taxes, \$8.5 million in sales tax receipts, and about \$1 million in property taxes). Tax impact on the region is estimated to be around \$11 to \$13 million, comprising over \$6 million in sales taxes and \$4.5-6.5 million in property taxes. The annual total impact for every \$1 billion in contracts resulting from BRAC is \$43 to \$46 million in additional tax receipts.

The four-county region's population is expected to rise to almost 652,000 in 2015, up 6.2 percent since 2010, and surpass 718,000 by 2030. Employment in the region is forecasted to increase 7.3

percent between 2010 and 2015 to about 412,400; jobs will climb another 37.6 percent to nearly 610,000 in 2030. The high income BRAC 2005-related jobs should raise average and median incomes for all workers and their families.

Table 4

#### Arsenal BRAC 2005 Operation Phase Economic Impacts

Payroll Impacts	Alabama	Region
GDP (millions)	\$460	\$375
Earnings (millions)	\$458	\$374
Employment (jobs)	5,500	4,700
\$100M Nonpayroll Expenditure Impact		
GDP (millions)	\$165	\$135

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

Table 5

#### Arsenal BRAC 2005 Operation Phase Fiscal Impacts

Fiscal Impacts (millions)	Alabama	Region
Income Tax	\$19.0	\$0.0
Sales Tax	\$8.0	\$6.5
Property Tax	\$0.6	\$3.5
Total Tax	\$27.6	\$10.0

Note: The midpoint of the property tax forecast is used.  
Source: Center for Business and Economic Research,  
The University of Alabama

### Fort Benning, Georgia BRAC Spillover Impact

The Fort Benning BRAC-related transfers will have significant impacts on the economies of six Georgia counties and on Barbour, Lee and Russell counties, including Phenix City, in East Alabama. Fort Benning is estimated to gain 11,400 direct and indirect jobs and nearly \$4 billion in new capital investment. Over 6,800 families are expected to relocate to the region, generating contributions to the local economies of almost \$25 million per month. The largest influx will be in 2011; once the relocations are complete, the region will have over 28,000 new residents. Fort Benning will have a monthly payroll of around \$100 million and award about \$250 million in contracts per month. The monthly economic impact of BRAC is estimated to be \$20 to \$25 million.

Table 6

#### Fort Benning, Georgia: U.S. Army Maneuver Center of Excellence BRAC 2005-Related Job Gains

Growth Estimates	Jobs
Military	4,712
Govt. Civilians	1,889
Contractors	4,802
Total	11,403

Source: U.S. Army, May 2010 BRAC 2005 Fort Benning Update

Table 7

#### Fort Benning, Georgia: U.S. Army Maneuver Center of Excellence BRAC 2005-Related Population Gains

Growth Estimates	Adults	Children	School Age Children	Total
Military	7,445	4,386	2,771	11,831
Govt. Civilians	3,400	1,451	1,096	4,851
Contractors	7,443	3,963	2,972	11,406
Total	18,288	9,800	6,839	28,088

Source: U.S. Army, May 2010 BRAC 2005 Fort Benning Update

### Conclusions

While each of these BRAC transfers will benefit Alabama's economy, potentially large infrastructure investments are required to meet expected future demand associated with this growth. It will be important for the state as a whole, and the impacted regions in particular to devote additional resources for investment in infrastructure, principally with respect to housing needs, road and highway networks, schools, medical care and other amenities.

# Arizona's Exports to Mexico: Beyond and Above Official Export Statistics

*By Vera Pavlakovich-Kochi, Ph.D., Senior Regional Scientist, Economic and Business Research Center, Eller College of Management, The University of Arizona*

For decades, Mexico has been Arizona's number one export destination. In 2009, Arizona exported to Mexico more than \$4.5 billion worth of goods, which accounted for 32.4% of its total exports to foreign markets.<sup>1</sup> The actual value of Arizona's goods and services that are exported to Mexico is significantly higher, although it has not been reported in the official export statistics. This article reflects on a recent University of Arizona study of economic impacts of Mexican visitors<sup>2</sup> and shows that Mexico is a significantly more important economic partner of Arizona than has been captured in a standard record keeping of exporting activity.

## Exports and Tourism

By definition, tourism activity is considered an export activity. Tourists, i.e., visitors from out-of-the-area bring new money into the local economy, and through spending on lodging, restaurants and bars, gifts and entertainment, generate jobs. The key here is "new money," that is, the money earned elsewhere and brought into a region, where through the mechanism of multipliers, it generates additional jobs. Thus, both an exporting manufacturing company and a hotel catering to foreign tourists infuse new money into a local economy; the difference is that a manufacturing company ships its products to another region, while a hotel sells services to consumers who arrive from another region.

Documenting exports is more common for manufacturing and agricultural products. Data on origin, destination and dollar value are typically collected through export declaration and other documentation that exporters fill out before the products are shipped to a foreign country. It is more difficult if not impossible to track exports that occur through foreign visitors' spending. First, tourist activity encompasses a multitude of economic sectors from lodging, restaurants, to retail and transportation. Second, data on individual expenditure patterns can be collected only through surveys, which are very expensive and time consuming.

## Retail Export Industry

Studies of Mexican visitors to U.S. border states have shown that shopping in U.S. stores is the primary reason for border crossings. Because of that, the retail sector has traditionally been the major beneficiary of Mexican spending in the U.S. A group of research economists with the Federal Reserve Bank of Dallas<sup>3</sup> have studied this phenomenon for some time and concluded that cross-border retail sales represent an important component of commercial sector activity in U.S. border cities and towns. "The Mexican shoppers are big business for U.S. cities on or near the border," they say. Moreover, they argue that "stores in Laredo, El Paso, Nogales and other border towns are actually an export industry – in most years contributing to a U.S. trade surplus in cross-border shopping."

1: L. Mwaniki-Lyman and R. Christopherson, "Arizona's 2009 Exports reflect Recessionary Environment," Arizona's Economy, Spring Issue, April 2010.

2: V. Pavlakovich-Kochi and A.H. Charney, Mexican Visitors to Arizona: Visitor Characteristics and Economic Impacts, 2007-08, University of Arizona Eller College of Management, December 2008. Prepared for the Arizona Office of Tourism. <http://ebr.eller.arizona.edu>

3: J. Cañas, R. Coronado and K. Phillips, "Border benefits from Mexican Shoppers," Southwest Economy, 2006 (May/June): 11-13.

Empirical studies in San Diego, the largest border city, have shown that the impact of purchases by Mexican citizens accounts for 7.1 percent of retail sales<sup>4</sup>. Elsewhere along the U.S. border, purchases by Mexican shoppers are even more noticeable. In the four largest Texas border cities, El Paso, Brownsville, Laredo and McAllen, Mexican residents account for between 20 and 50 percent of retail sales.<sup>5</sup> As a general rule, the portion of retail sales that is attributable to Mexican shoppers is larger in smaller cities with less diversified economies.

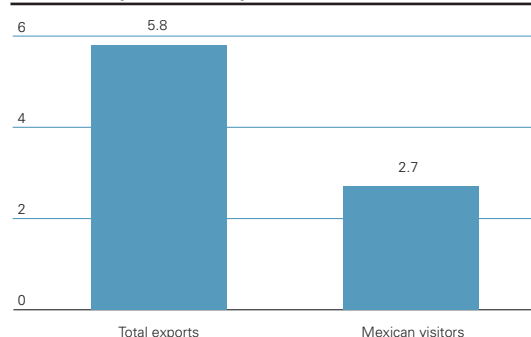
Significance of the retail export industry in border cities is that it provides employment for workers with low and moderate skills, and helps explain why job growth in some areas along the border has been among the fastest in the nation since the 1980s. Also, due to cross-border retail sales, U.S. retail sectors in border cities and towns are larger than is strictly needed to service the U.S. population base.

### Arizona's Retail Exports to Mexico

The University of Arizona study estimated that Mexican visitors to Arizona spent directly an estimated \$2.7 billion during a 12-month period during 2007-2008. In comparison, Arizona's exports of manufacturing and agricultural products combined amounted to \$5.8 billion during the same period<sup>6</sup>.

Graph 39

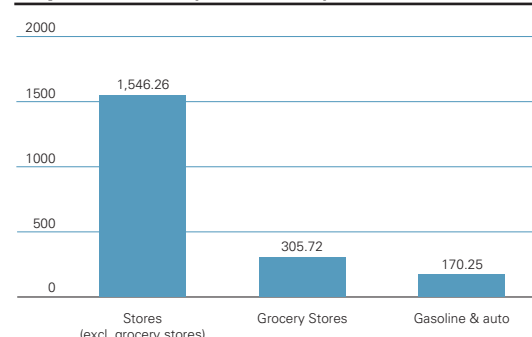
#### Arizona's Exports to Mexico 2007-08 (\$ billions)



Source: USITA and University of Arizona Survey 2007-08

Graph 40

#### Mexican Visitors to Arizona: Retail Expenditures (\$ millions)



Source: University of Arizona Survey 2007-08

Of the total spending by Mexican visitors in Arizona, more than \$2 billion or 75.2 % was spent in retail sectors such as clothing and accessories stores, electronics and appliance stores, furniture and home furnishing stores, food and beverage stores, and gasoline stations. The remaining \$666 million or 24.8% of total expenditures was spent on lodging, transportation, restaurants, entertainment, medical services and business.

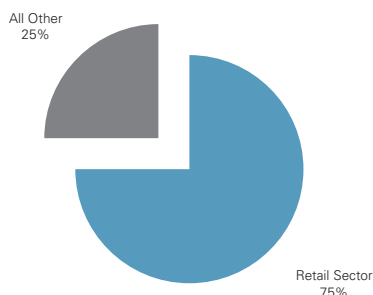
Merchandise stores, most notably those in shopping malls, were the primary beneficiaries of Mexican visitors' spending of more than \$1.5 billion. About \$305 million was spent in grocery stores, while gasoline stations reaped another \$170 million.

4: San Diego Dialogue 2004, cited in Anderson and Gerber 2008.

5: J. M. Patrick and W. Renforth, "The Effects of Peso Devaluation on Cross-Border Retailing," Journal of Borderlands Studies, 1996, 25-41.

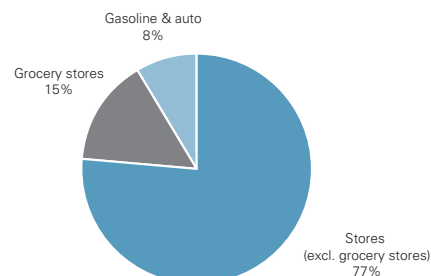
6: Note that 2009 Arizona exports to Mexico were about 23% lower than in 2008.

Graph 41

**Mexican Visitors to Arizona:  
Expenditure Categories (%)**

Source: University of Arizona Survey 2007-08

Graph 42

**Mexican Visitors to Arizona: Major Retail  
Expenditure Categories (%)**

Source: University of Arizona Survey 2007-08

**Metropolitan Malls – Major Attractions for Mexican Shoppers**

The Arizona Mills mall in Tempe is the number one shopping attraction for Mexican visitors who come to Phoenix metropolitan area. An overwhelming majority – more than 85% of visitors to Phoenix area – shop in this mall. Besides the Arizona Mills, Mexican shoppers also visit one or more of the following in the top ten Phoenix metro area shopping malls: Desert Sky Mall, Fiesta Mall, Arizona Center, Biltmore Fashion Park, Superstition Springs Mall, Arrowhead Towne Center, Borgata at Scottsdale and Cabela's.

In the Tucson metro area, two malls stand out as the major shopping attractions: Tucson Mall and Park Place Mall; more than 70% of visitors shop in Tucson Mall, while 56% shop in Park Place Mall. Other shopping places include Foothills Mall, Plaza Palomino, El Con Mall, St. Phillips Plaza and La Encantada, although less than 15 percent shop in one or all of these places.

**“Big Boxes” and Discount Stores in Arizona’s Border Cities**

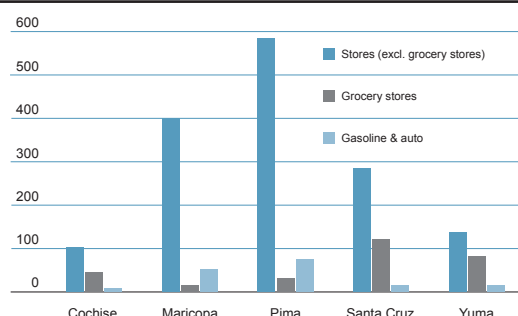
Wal-Mart stores are the main shopping destination for Mexican shoppers in Arizona's border cities. For example, 49% of Mexican visitors to Nogales shop in Wal-Mart, while 54% of those coming to Douglas shop in Douglas/Sierra Vista Wal-Mart stores. Other popular shopping places are food and merchandise discount stores such as Food City, Factory 2-U, Family Dollar, Dollar Tree and Ross.

Department stores, such as JC Penney, Mervyn's and grocery stores like Safeway and Albertson's also cater to Mexican border shoppers.

**Metro Tucson and Metro Phoenix – Major Arizona’s Retail Exporters to Mexico**

Mexican visitors spent close to \$585 million in Tucson area malls and other non-mall stores, in addition to \$31 million in grocery stores and \$75 million at gas stations. With a total of \$691 million of retail sales to Mexican visitors, Metro Tucson (Pima County) is Arizona's number one retail exporter to Mexico.

Graph 43

**Retail Expenditures by Destination  
County (\$ millions)**

Source: University of Arizona Survey 2007-08

Metro Phoenix (Maricopa and Pinal Counties) follows in second place with a total of \$462 million in retail exports to Mexico, including merchandise stores, grocery stores and gasoline stations.

The Nogales Micropolitan area (Santa Cruz County) follows with a total of \$421 million in retail exports to Mexico, followed by the Yuma Metropolitan area with \$232 million and the Sierra Vista-Douglas Micropolitan area (Cochise County) with \$156 million. What distinguishes border cities from Phoenix and Tucson metro areas is the prevalence of day-visitors and relatively more spending on food items; of all direct sales in Arizona's grocery stores, which account for a total of \$294 million, 84% is spent in three border counties – Santa Cruz, Yuma and Cochise. In contrast, 65% of all sales to Mexican visitors in mall and non-mall stores occur in Tucson and Phoenix metros.

**Importance of Mexican Visitors' Spending in Local Economies**

In combination with a multiplier effect, the total number of jobs in Arizona associated with Mexican visitors' spending during 2007-08 is estimated at 30,350.<sup>7</sup> A lion's share of jobs is generated in Tucson and Phoenix, where 12,500 and 8,060 jobs respectively depend on Mexican visitors. While the number of Mexican visitors-dependent jobs in Santa Cruz, Yuma and Cochise counties is smaller (4,500; 2,460 and 1,760 respectively) the significance in local economies of these border counties is larger due to overall smaller number of employees in comparison with the two largest metro areas. This is also reflected in the percentage of taxable sales that are attributable to Mexican visitors' spending. A staggering 48.6% of taxable sales in Santa Cruz County is due to Mexican visitors; in all other border counties it is between 5 and 6%, while in Maricopa County, which accounts for the largest share of Arizona's economy and population, the contribution to the overall taxable sales is less than 1%.

**Volatility of Retail Exports to Mexico**

A number of factors influence variation in the number of Mexican visitors and their spending habits from one year to the next. In the past, devaluation of the Mexican peso was a major fear of U.S. border retailers; today, it is more about new laws and regulations in the U.S. in association with border security. Increasingly it is the time and money required to obtain new documents for entering the United States, and the increased waiting time for border crossings that are reflected in the recently-declining number of border crossings. What impact, if any, the new Arizona immigration law (SB1070) will have on this important contribution to Arizona's economy, is not yet clear.

<sup>7</sup>: The impacts are based on total expenditures, i.e. retail and non-retail.



# Automobile Loans: An Attractive, but Crowded, Lending Market

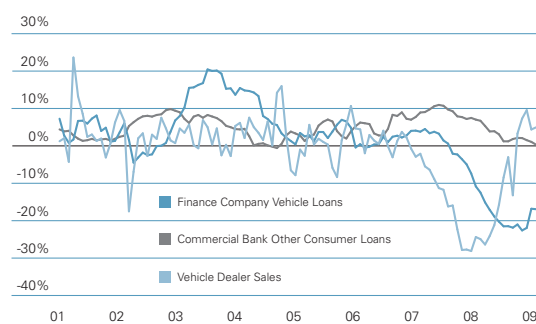
The consumption of durable goods declined dramatically during the crisis months of late 2008. Consumers feared for the future and sharply curtailed their purchases of long-term items like automobiles. At the same time households made a decision based on a shock to their net worth, firms that provided financing for long-term durable goods sharply curtailed their extension of credit due to the turmoil in the markets, which comprised their primary funding source. With a sense of recovery in both the economy and financial markets, we explore in this brief the state of automobile lending in the post-crisis setting. Many of the firms severely affected by the financial market turmoil – for example, finance companies and asset-backed securities issuers – will eventually return to automobile loans, returning this lending segment to its usual high state of competition. The regulatory framework for automobile lending is evolving, but we detail how it will only marginally alter the interaction of players in the market.

## The Shape of the Market

In the United States, automobiles are the most commonly held nonfinancial asset, with 87% of U.S. households in 2007 owning an automobile, according to the Federal Reserve Survey of Consumer Finances. Since most individuals borrow in order to purchase an automobile, auto loans feature as one of the most prevalent forms of household borrowing. Recent studies found that around 80% of new vehicle transactions are financed or leased and that vehicles occupy 51.7% of total household installment debt. As such, the market for auto loans demonstrates high penetration in the United States. Used cars are also actively traded and financed, but firms typically view used car loans as higher risk and charge a higher rate of interest than for new cars. It is possible to segment the market for auto loans into two channels: direct and indirect. Direct loans are made between a lender and the individual purchasing an auto loan. Indirect loans represent financing to an auto dealer, often termed wholesale loans or “floor plan” financing. In addition to these two channels, a wide variety of institutions extend auto loans: finance companies, commercial banks, finance wings of automobile manufacturers and credit unions.

Graph 44

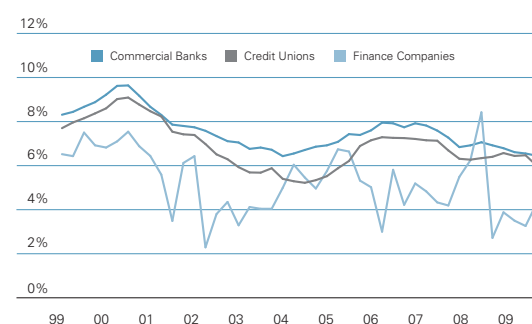
### Dealer Sales and Loan Growth Y-o-Y Change



Source: BEA and Federal Reserve

Graph 45

### New Car Interest Rates



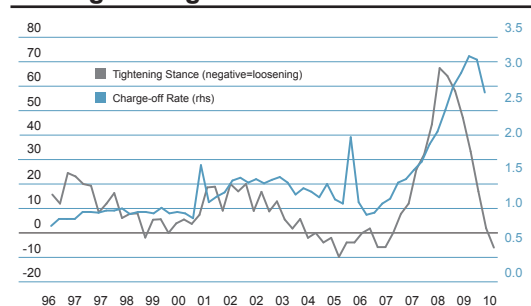
Source: Bloomberg and Federal Reserve

These different competing firms revolve around the car dealer, who can tap a few different sources of financing in addition to the car manufacturer's own finance arm. Automobile manufacturers may offer incentive finance pricing in order to boost car sales. Manufacturers are able to afford low rates of finance as they generate a margin on the sale of the car or the dealer gains on the sale of a warranty associated with the sale. Large commercial banks, on the other hand, may offer the dealer faster service or decisions through an integrated information technology platform. Smaller commercial banks and credit unions may offer dealers more personalized service and pricing options, depending on various circumstances. In addition to all the menu options offered by different firms, the incentives to dealers may vary by a markup over the terms of financing or a flat fee paid. The interest rates for finance companies as reported by the Federal Reserve include captive and noncaptive finance companies, so their interest rate will appear lower than credit unions and commercial banks as a result of incentive financing by captive finance companies. Overall, the interest rates offered by these three types of firms will be closely related. Moreover, the funding cost for 6-month commercial paper by finance companies and the 6-month bank certificate of deposit rate typically are essentially the same over the long run. These three firms' interest rates strongly move together, underscoring the degree of competition.

In other words, the market for automobile loans can be viewed as a highly competitive industry where consumers engage in considerable comparison shopping. Since these loans are so ubiquitous in the United States, their performance will be related to the health of the macroeconomic environment. In general, an improving employment situation and higher personal income growth will provide a more fertile ground for auto loan growth, which is essentially tied to the pace of auto sales and inventory management at car dealers. The crisis pushed many consumers to rethink their spending patterns. For example, from 1995 to 2005 the average holding time for an automobile declined from 63 months to 50 months. In 2006, this holding time increased to 52 months and further increased during the crisis, which saw auto sales decline dramatically from its long term trend. From 1999 to 2007 the seasonally adjusted annual rate (SAAR) of light vehicle sales averaged 16.5 million per year. During the recession, the monthly annualized rate of sales dropped to a low of 9.5 million (SAAR) and have now slowly recovered to 11.8 million units in March. Similarly, the household annual expenditure on automobiles adjusted for the Consumer Price Index deviated strongly from a very stable trend during the most recent crisis, but it is now showing signs of recovery. While we do not expect automobile expenditures to progress as robustly as during the boom years and with consumers slightly extending their holding period, we still expect automobile sales to return to 11-12 million units per year. This mostly reflects the realities of demographics: both population and the need to replace old cars create a fundamental demand for the product and for loans.

Graph 46

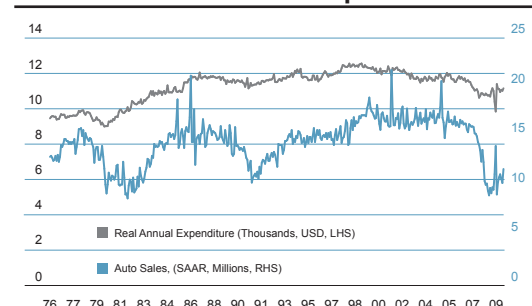
#### Other Consumer Loan Charge-off Rate and Tightening Stance



Source: Federal Reserve

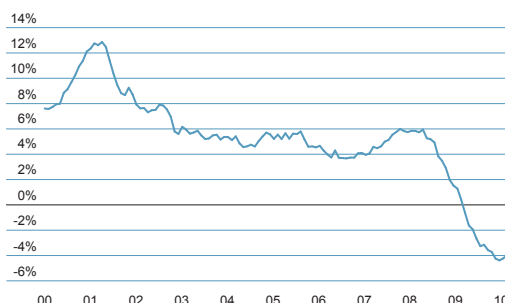
Graph 47

#### Auto Sales and Annual Expenditures



Source: BBVA Research and Bloomberg

Graph 48

**Total Consumer Credit, Y-o-Y Change**

Source: Federal Reserve

Graph 49

**Auto Sales to Population Ratio**

Source: BBVA Research and BEA

From the perspective of conditions in the banking system, consumer charge-off rates on loans are already declining, suggesting that banks over time will become increasingly comfortable with extending loans to households for consumption. Recent data from the Federal Reserve's Senior Loan Officer Survey partially confirms this issue, as the survey suggested that commercial banks loosened their lending standards on "other" consumer loans, which include auto loans. Improved conditions in the financial system also ameliorate pressures on issuers of asset-backed securities and finance companies, which rely predominantly on market financing, as opposed commercial banks' funding through deposits. A smoother functioning of financial markets will enable lending from these two types of firms and increase the pace of lending and competition in the auto loan market. However, the ability of these firms to extend loans will be partially circumscribed by a changing regulatory environment.

### The Regulatory Angle

A changing regulatory framework often results in significant changes to the competitive environment since legal changes may raise the relative costs of one business model versus another. However, it is our expectation that financial regulatory reform will not radically alter the mix of firms and strategies in the market for auto loans. The major regulatory changes affecting auto loans relate to credit risk retention, capital and liquidity requirements, consumer protection laws and rules governing industrial loan companies. Overall, we expect only marginal changes to occur that will not adversely imbalance the auto loan industry towards one business model or another.

It is important to note that the reform effort is extremely fluid. With regard to consumer protection, the current iteration of the proposed consumer protection focuses on greater disclosure and transparency rather than requiring certain products or mechanisms within a product. Moreover, auto dealers and other small businesses are lobbying for exemption from the proposed consumer protection agency. Credit risk retention is another fluid area of financial reform. The current state of reform efforts places a 5% retention policy for consumer asset-backed securities, often used for auto loans by banking institutions and finance companies alike. It is our expectation that this level of credit risk retention will only marginally affect the securitization market going forward.

Another regulatory area of concern relates to corporate structure. Industrial loan companies (ILCs) are typically owned by commercial firms to provide financing or leases to customers' purchases. They are distinct from banks because they do not offer demand deposits. While they may be supervised by the Federal Deposit Insurance Corporation (FDIC), ILCs are not subject to the same level of regulation as bank holding companies. An ILC allows commercial firms to engage in payment or transaction services, to issue credit cards, to hold escrow

deposits or other banking services related to commerce. Although the flexibility of the ILC allowed for new corporate strategies, some of these ILCs grew quite large. Between 1995 and 2006, total ILC assets grew from \$12 billion to \$213 billion, according to the Federal Reserve. In the most recent crisis, some of these ILCs encountered financial difficulties, either from exposure to the declining economy or from a focus on mortgages associated with the housing bubble. For example, the Federal government provided capital injections to Chrysler Financial and GMAC. As a result of these developments, Congress is taking a close look at ILCs in conjunction with financial regulatory reform legislation pending in the House and Senate.

At the beginning of the reform process, some initiatives proposed banning the use of the thrift charter and placing a moratorium on allowing ILCs. However, after an iterative consultation process, both the House and the Senate versions of financial regulatory reform will preserve the use of ILCs, but with a temporary moratorium on establishing new charters while regulators study the subject further, especially the role of various exemptions in the Bank Holding Company Act applicable to ILCs. A temporary moratorium is not expected to influence matters greatly as ILCs are typically from large firms and market share is highly concentrated.

### **Bottom line**

The automobile loan industry in the United States is extremely well-developed in terms of size and prevalence. With a return to economic growth, increasing car sales and improving personal income will provide an impetus for auto loan issuance. While the market for auto loans will grow, the existing penetration is already high, suggesting it is a highly mature lending segment. Although the crisis of 2008 severely shocked firms dependent on the markets for financing, such as finance companies and ABS issuers, we expect these firms to return to the market alongside credit unions and commercial banks. We can expect captive finance companies to continue offering incentive financing to consumers. With the return of all these entities to the market, we can expect a highly competitive environment for auto loans in the future. Commercial banks, in particular, will try to differentiate themselves in terms of technology, service provision and relationship management. Since commercial banks usually follow a “universal banking” strategy whereby cross-selling and a variety of products are offered to consumers, auto loans feature as a useful tool in a menu of choices offered to commercial bank customers. Commercial banks may also bundle auto loans with other products and leverage their pool of knowledge on customers to further develop their bottom line on auto loans.

## Fact Sheet

## Adult Attendance at Sports Events by Frequency, Fall 2008

Event	Attend one or more times a month		Attend less than once a month	
	Thousand	Percent	Thousand	Percent
Auto racing - NASCAR	2,124	0.95	15,052	6.73
Auto racing - other	2,196	0.98	12,770	5.71
Baseball	8,584	3.84	25,744	11.51
Basketball:				
College games	4,212	1.88	14,336	6.41
Professional games	3,959	1.77	15,795	7.06
Bowling	1,750	0.78	10,534	4.71
Boxing	1,118	0.50	10,053	4.49
Equestrian events	950	0.42	10,539	4.71
Figure skating	601	0.27	9,929	4.44
Fishing tournaments	881	0.39	10,152	4.54
Football:				
College games	6,387	2.86	17,053	7.62
Monday night professional games	2,775	1.24	11,473	5.13
Weekend professional games	4,553	2.04	16,885	7.55

## Adult Attendance at Sports Events by Frequency, Fall 2008

Event	Attend one or more times a month		Attend less than once a month	
	Thousand	Percent	Thousand	Percent
Golf	2,379	1.06	11,709	5.24
High school sports	12,282	5.49	13,683	6.12
Horse racing:				
Flats, runners	1,262	0.56	11,176	5.00
Trotters and harnesses	773	0.35	10,072	4.50
Ice hockey	2,491	1.11	13,579	6.07
Motorcycle racing	1,037	0.46	10,398	4.65
Pro beach volleyball	387	0.17	9,780	4.37
Rodeo/Bull riding	929	0.42	11,215	5.01
Soccer	3,330	1.49	11,252	5.03
Tennis	1,429	0.64	10,675	4.77
Truck and tractor pull/mud racing	960	0.43	10,910	4.88
Wrestling professional	1,289	0.58	10,270	4.59

Source: U.S. Census, Mediamark Research &amp; Intelligence, LLC, New York, NY.

\* Percent is based on total projected adult population of 220,847,000.

## State Motor Fuel Tax Receipts and Gasoline Tax Rates, 2007

	Revenue (\$ thousand)	State Tax (Cents per Gallon)	State Tax Quartile
Alabama	\$619,628	18.0	1
Arizona	\$716,847	18.0	1
California	\$3,266,398	18.0	1
Colorado	\$567,680	22.0	3
Florida	\$2,233,129	15.3	1
New Mexico	\$289,138	18.9	2
Texas	\$3,064,997	20.0	2

Source: U.S. Federal Highway Administration, Highway Statistics

## Update on ARRA Federal Stimulus Dollars

	Cumulative Totals, February 17, 2009 – March 31, 2010					Jobs Created in 1Q10
	Totals and Local Amount in Millions of Dollars					
	Number of Awards	Total Funds Awarded	Funds Awarded Per Capita	Total Funds Received	Local Amount	
Alabama	3020	\$3,036	\$651	\$861	\$2,933	11,780
Arizona	3098	\$4,275	\$658	\$1,302	\$4,293	6,889
California	16440	\$21,978	\$598	\$8,777	\$22,075	70,187
Colorado	2885	\$3,697	\$749	\$1,124	\$3,706	10,255
Florida	6082	\$9,117	\$497	\$2,185	\$9,190	38,496
New Mexico	2333	\$2,173	\$1,095	\$526	\$2,143	4,856
Texas	11267	\$13,080	\$538	\$2,887	\$13,129	43,551
Region	45125	\$57,356	-	\$17,662	\$57,469	186,015

Source: Recovery.gov

**Forecast, YoY % change**

	2009	1Q10	2Q10	3Q10	4Q10	2010	2011	2012		2009	1Q10	2Q10	3Q10	4Q10	2010	2011	2012
<b>US</b>									<b>Alabama</b>								
Real GDP	-2.4	2.5	3.4	3.4	2.6	3.0	2.5	2.4	Real GDP	-2.3	2.6	2.5	2.4	2.5	2.5	2.3	2.2
Nonfarm Employment	-4.3	-2.3	-0.6	0.6	1.3	-0.3	1.6	1.5	Employment	-5.3	-3.4	-1.1	0.8	1.6	-0.5	1.4	1.2
Nom. Personal Income	-1.7	1.5	1.3	2.0	1.7	1.6	3.7	5.6	Real Personal Income	-2.2	2.3	0.7	1.9	2.2	1.8	1.6	1.8
Home Price Index	-4.6	-3.1	1.6	2.0	2.8	0.8	3.2	2.9	Home Prices	-0.9	-1.9	1.0	1.1	2.2	0.6	3.1	1.9
Home Sales	2.5	8.6	11.0	2.6	6.8	7.1	5.7	6.2	Home Sales	-10.8	-26.1	-1.1	3.5	-3.4	0.0	2.6	2.3
<b>Arizona</b>									<b>California</b>								
Real GDP	-3.6	3.3	3.2	3.1	2.5	3.0	2.8	2.6	Real GDP	-3.1	3.2	3.1	3.0	2.9	2.9	2.7	2.5
Employment	-7.2	-4.2	-0.8	0.7	1.6	-0.7	2.0	1.7	Employment	-6.0	-4.0	-1.8	0.1	1.0	-1.2	1.4	1.3
Real Personal Income	-3.7	0.6	0.5	0.7	0.4	0.5	0.4	1.5	Real Personal Income	-3.7	0.3	0.4	1.7	2.0	1.1	1.9	1.7
Home Price Index	-18.0	-13.0	-4.4	-2.1	0.3	-5.0	2.3	2.1	Home Price Index	-12.1	2.8	2.2	1.8	2.3	2.3	2.8	2.6
Home Sales	31.4	0.1	1.5	2.1	1.0	3.6	5.5	10.2	Home Sales	15.5	-5.6	5.1	-3.0	-5.0	-2.3	1.2	1.1
<b>Colorado</b>									<b>Florida</b>								
Real GDP	-0.5	2.9	2.5	2.2	2.0	2.4	2.5	2.6	Real GDP	-2.2	3.3	3.1	3.0	2.7	3.0	2.8	2.7
Employment	-4.5	-3.7	-2.0	-1.0	-0.4	-1.8	1.0	1.2	Employment	-6.2	-2.9	-0.9	0.4	1.5	-0.5	2.5	2.0
Real Personal Income	-3.5	-0.1	0.7	0.4	0.6	0.4	1.7	2.1	Real Personal Income	-3.9	0.6	0.4	0.4	-0.1	0.3	0.0	1.7
Home Price Index	0.2	1.5	2.1	1.7	1.7	1.8	1.7	2.4	Home Price Index	-15.9	-6.9	-3.2	-0.6	1.9	-2.3	2.1	2.3
Home Sales	-9.8	5.3	10.1	1.5	-3.1	3.1	1.9	1.5	Home Sales	35.8	35.0	31.1	26.6	15.5	26.1	14.4	15.2
<b>New Mexico</b>									<b>Texas</b>								
Real GDP	-1.8	2.5	2.6	2.1	2.2	2.2	2.5	2.4	Real GDP	-0.4	3.4	3.3	2.8	3.5	3.3	3.1	3.0
Employment	-4.0	-2.5	-1.6	-0.6	0.1	-1.2	1.9	1.8	Employment	-2.8	-2.0	0.1	1.7	2.6	0.6	2.1	1.8
Real Personal Income	-1.2	2.7	1.9	2.2	2.0	2.2	1.7	2.0	Real Personal Income	-2.9	1.0	0.8	2.0	2.7	1.6	3.3	3.2
Home Price Index	-4.6	-0.9	-1.8	0.2	1.0	-0.4	1.4	2.4	Home Price Index	0.1	0.5	1.0	1.5	1.9	1.2	2.0	2.3
Home Sales	-3.0	19.1	6.2	3.7	2.8	7.2	3.1	4.5	Home Sales	-6.8	5.8	3.0	-0.5	-0.1	1.9	0.2	2.2

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

**Economic Structure**

	US	AL	AZ	CA	CO	FL	NM	TX
GDP (2008 \$ Billions)	14,441	170	249	1,847	249	744	80	1,224
Population (2009 Thousands)	307,007	4,709	6,596	36,962	5,025	18,538	2,010	24,782
Labor Force (2Q10 Thousands)	154,283	2,091	3,178	18,326	2,670	9,278	966	12,217
Non-Farm Payroll (2Q10 Thousands)	137,088	1,873	2,414	13,891	2,204	7,215	801	10,334
Unemployment Rate (2Q10)	9.7	10.9	9.6	12.5	8.0	11.9	8.6	8.3
Total Building Permits, Monthly Rate* (2Q10)	48,500	1,100	1,059	3,179	853	3,354	458	7,844
Change in Building Permits (2Q10, YoY (%))	6.2	-7.2	-17.4	4.1	-9.1	21.5	14.8	6.4
Home Ownership Rate (2009)	67.4	66.8	68.5	68.4	70.5	70.9	69.1	65.4
Home Price (1Q10 YoY Change (%))	-3.1	-1.9	-13.0	2.8	1.5	-6.9	-0.9	0.5
Exports of Goods (1Q10 \$ Billions)	296.6	3.4	3.8	33.0	1.4	12.5	0.4	46.6
Change in Exports (1Q10 YoY Change (%))	20.2	24.0	9.4	19.4	-1.6	10.3	34.6	28.0

Source: BEA, BLS, Census, WiserTrade and FHFA

\* Estimated



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